

Rachel A. Ryskin

Department of Cognitive & Information Sciences | University of California, Merced
rryskin@ucmerced.edu | 847.915.0965 | <http://raryskin.github.io>

Academic Positions

2025 - *present*. Associate Professor. Cognitive & Information Sciences.
University of California, Merced
Affiliate, Center for Interdisciplinary Neuroscience
Affiliate, Health Sciences Research Institute

2020 - 2025. Assistant Professor. Cognitive & Information Sciences
University of California, Merced
Affiliate, Center for Interdisciplinary Neuroscience
Affiliate, Health Sciences Research Institute

2019 - 2020. Postdoctoral Associate. Brain & Cognitive Sciences
Massachusetts Institute of Technology.
Advisor: Evelina Fedorenko

2016-2019. NIH NRSA Postdoctoral Fellow.
Massachusetts Institute of Technology. Brain & Cognitive Sciences
Boston University. Speech, Language, & Hearing Sciences
Advisors: Edward Gibson (MIT) & Swathi Kiran (BU)

Education

2016. Ph.D. Cognitive Psychology
University of Illinois at Urbana-Champaign
Advisor: Sarah Brown-Schmidt

2010. B.A. Cognitive Science & European Studies
Northwestern University

Awards & Fellowships

2023. UC Merced Senate Faculty Award for Distinguished Early Career Research
2023. Fellow of the Psychonomic Society
2020. Infinite Kilometer Postdoctoral Award. MIT School of Science
2016-2019. NIH/NIDCD F32 Ruth L. Kirschstein National Research Service Award
Role: PI (Co-sponsors: Ted Gibson, Swathi Kiran)
Title: *Mechanisms of adaptation in (healthy and aphasic) noisy-channel comprehension*
2018. Preregistration Challenge Prize. Center for Open Science
2016. Sarah C. Mangelsdorf Award. Psychology, University of Illinois at Urbana-Champaign
2016. Alumni Advisory Board Graduate Student Travel Award. Psychology, UIUC
2015. Cognitive Science / AI Award. Beckman Institute for Advanced Science and Technology

2015. William Brewer Teaching Award. Psychology, UIUC
2015. Nancy Hirschberg Memorial Award. Psychology, UIUC
2012. University Fellowship. Psychology, UIUC
2009. Undergraduate Summer Research Fellowship. Cognitive Science, Northwestern U

Grants

2025-2026. UC Multicampus Research Programs and Initiatives Program. Planning/Pilot Award
Leveraging California's linguistic diversity to improve large language models
Role: co-PI. (PI: Matthew Wagers)

2024-2029. NSF PAC 2336304
*CAREER: Tracking correlation or inferring causation:
How human language processing adapts to the environment*
Role: PI. (Total costs: \$674,197)

2023-2024. UC Merced Academic Senate Faculty Research Grant
The Role of Prefrontal Cortex in Predictive Sentence Processing
Role: co-PI with David Noelle. (Direct costs: \$14,880)

2021-2024. NIH/NIA R15 AG073948
Prediction in language across the lifespan
Role: PI. (Direct costs: \$300,000)

Publications

* indicates advisee

Peer-Reviewed Journal Articles

1. Cain, E.* & Ryskin, R. (in press) Semantic representations are updated across the lifespan reflecting diachronic language change. *Open Mind*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4883002
2. Cain, E.*, Ryskin, R., & Chen, Y. (2025). Cross-Situational Statistics Present in an Early Language Learning Context: Evidence from Naturalistic Parent-Child Interactions. *Cognitive Science*. <https://doi.org/10.1111/cogs.70078>
3. James, A. N., Ryskin, R., Hartshorne, J. K., Backs, H., Bala, N., Barcenas-Meade, L., Bhattarai, S., Charles, T., Copoulos, G., Coss, C., Eisert, A., Furuhashi, E., Ginell, K., Guttman-McCabe, A., Hoban, L., Hwang, W. A., Iannetta, C., Koenig, K. M., Lo, C., ... de Leeuw, J. R. (2025) What paradigms can webcam eye-tracking be used for? Attempted replications of five cognitive science experiments. *Collabra: Psychology*. <https://doi.org/10.1525/collabra.140755>
4. Ryskin, R., Gibson, E. & Kiran, S. (2025). Noisy-Channel Language Comprehension in Aphasia: A Bayesian mixture modeling approach. *Psychonomic Bulletin & Review*. <https://doi.org/10.3758/s13423-025-02639-z>

5. Ball, L., Mak, M., Ryskin, R., Curtis, A., Rodd, J., Gaskell, G. (2024) The Contribution of Learning and Memory Processes to Verb-Specific Syntactic Processing. *Journal of Memory and Language*. <https://doi.org/10.1016/j.jml.2024.104595>.
6. Ryskin, R., & Nieuwland, M. (2023). Prediction during Language Comprehension: What's next? *Trends in Cognitive Sciences*. <https://doi.org/10.1016/j.tics.2023.08.003>
7. Ricciardi, G.*, Ryskin, R., & Gibson, E. (2023). Assessing the inferential strength of epistemic 'must'. *Language* <https://doi.org/10.1353/lan.2023.a914190>
8. Chen, S., Nathaniel, S.*, Ryskin, R., & Gibson, E. (2023). The Effect of Context on Noisy-Channel Sentence Comprehension. *Cognition* <https://doi.org/10.1016/j.cognition.2023.105503>
9. Poliak, M.*, Ryskin, R., Braginsky, M., & Gibson, E. (2023). It's Not What You Say but How You Say It: Evidence from Russian Shows Robust Effects of the Structural Prior on Noisy Channel Inferences. *Journal of Experimental Psychology: Learning, Memory, & Cognition*. <https://doi.org/10.1037/xlm0001244>
10. Ryskin, R., Salinas, M.*, Piantadosi, S. & Gibson, E. (2023). Real-time inference in communication across cultures: evidence from a non-industrialized society. *Journal of Experimental Psychology: General*, 152(5), 1245–1263. <https://doi.org/10.1037/xge0001345>
11. Chen, X., Affourtit, J., Ryskin, R., Regev, T., Norman-Haignere, S., Jouravlev, O., Malik-Moraleda, S., Kean, H., Varley, R., & Fedorenko, E. (2023). The human language system , including its inferior component in “Broca’s area,” does not support music perception. *Cerebral Cortex*. <https://doi.org/10.1101/2021.06.01.446439>
12. Zhang, Z.*, Bergen, L., Paunov, A., Ryskin, R., & Gibson, E. (2023). Scalar Implicature is Sensitive to Contextual Alternatives. *Cognitive Science*. <http://doi.org/10.1111/cogs.13238>
13. Zhang, Y.*, Ryskin, R., & Gibson, E. (2023) A Noisy-Channel Approach to Depth-Charge Illusions. *Cognition*, 232. 105346. <https://doi.org/10.1016/j.cognition.2022.105346>
14. Fedorenko, E., Ryskin, R. A., & Gibson, E. (2022). Agrammatic output in non-fluent/Broca’s aphasia as a rational behavior. *Aphasiology*. <https://doi.org/10.1080/02687038.2022.2143233>
15. Rezaii, N., Mahowald, K, Ryskin, R., Dickerson, B. & Gibson, E. (2022). A Syntax-Lexicon Trade-off in Language Production. *Proceedings of the National Academy of Sciences*, 119. e2120203119. <https://doi.org/10.1073/pnas.2120203119>
16. Liu, Y.*, Ryskin, R., Futrell, R. & Gibson, E. (2022). A Verb-frame Frequency Account of Constraints on Long-Distance Dependencies in English. *Cognition*, 222, 104902. <https://doi.org/10.1016/j.cognition.2021.104902>
17. Ryskin, R., Stearns, L., Bergen, L., Eddy, M., Fedorenko, E. & Gibson, E. (2021). An ERP index of real-time error correction within a noisy-channel framework of human communication. *Neuropsychologia*, 158. 107855. <https://doi.org/10.1016/j.neuropsychologia.2021.107855>
18. Ryskin, R., Levy, R., & Fedorenko, E. (2020). Do domain-general executive resources play a role in linguistic prediction? Re-evaluation of the evidence and a path forward. *Neuropsychologia*, 136. 107258. <https://doi.org/10.1016/j.neuropsychologia.2019.107258>
19. Ryskin, R. A., Ng, S., Mimnaugh, K., Brown-Schmidt, S., & Federmeier, K. D. (2020). Talker-specific predictions during language processing. *Language, Cognition, & Neuroscience*, 35. 797-812. <https://doi.org/10.1080/23273798.2019.1630654>

20. Ryskin, R. A., Kurumada, C., & Brown-Schmidt, S. (2019). Information integration in the modulation of pragmatic inferences during online language comprehension. *Cognitive Science*, 43. e12769. <https://doi.org/10.1111/cogs.12769>
21. Ryskin, R. A., Futrell, R., Kiran, S. & Gibson, E. (2018). Comprehenders model the nature of noise in the environment. *Cognition*, 181. 141-150. <https://doi.org/10.1016/j.cognition.2018.08.018> [**Center for Open Science Preregistration Challenge Prize**]
22. Ryskin, R. A., Qi, Z., Covington, N., Duff, M., & Brown-Schmidt, S. (2018). Knowledge and learning of verb bias in amnesia. *Brain and Language*, 180-182. 62-83. <https://doi.org/10.1016/j.bandl.2018.04.003>
23. Ryskin, R. A., Qi, Z., Duff, M., & Brown-Schmidt, S. (2017). Verb biases are shaped through lifelong learning. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 43. 781-794. <https://dx.doi.org/10.1037/xlm0000341>
24. Ryskin, R. A., Wang, R. F., & Brown-Schmidt, S. (2016). Listeners use speaker identity to access representations of spatial perspective during online language comprehension. *Cognition*, 147. 75-84. <https://doi.org/10.1016/j.cognition.2015.11.011>
25. Ryskin, R. A., Benjamin, A. S., Tullis, J., & Brown-Schmidt, S. (2015). Perspective-taking in comprehension, production, and memory: an individual differences approach. *Journal of Experimental Psychology: General*, 144. 898-915. <https://psycnet.apa.org/doi/10.1037/xge0000093> [**Coverage in Psychology Today:** <https://www.psychologytoday.com/intl/blog/ulterior-motives/201510/is-perspective-taking-skill1>]
26. Ryskin, R. A., Brown-Schmidt, S., Canseco-Gonzalez, E., Yiu, L., & Nguyen, E. (2014). Visuospatial perspective-taking in conversation and the role of bilingual experience. *Journal of Memory and Language*, 74. 46-76. <https://doi.org/10.1016/j.jml.2014.04.003>
27. Ryskin, R. A. & Brown-Schmidt, S. (2014). Do adults show a curse of knowledge in false-belief reasoning? A robust estimate of the true effect size. *PLoS ONE*, 9(3): e92406. <https://doi.org/10.1371/journal.pone.0092406>
28. Rapp, D.N., Hinze, S.R., Kohlhepp, K., & Ryskin, R.A. (2014). Reducing reliance on inaccurate information. *Memory and Cognition*, 42, 11-26. <https://doi.org/10.3758/s13421-013-0339-0>

Peer-reviewed Conference Proceedings

29. Chao, A.*, Cain, E.* & Ryskin, R. (2025). Language experience and prediction across the lifespan: evidence from diachronic fine-tuning of language models. *Proceedings of the Cognitive Science Society*, San Francisco, CA.
30. Li, J.*, Ortega, A.*, Futrell, R. & Ryskin, R. (2025). Adaptation to noisy language input in real time: Evidence from ERPs. *Proceedings of the Cognitive Science Society*, San Francisco, CA.
31. Gokcen, Y.*, Noelle, D., & Ryskin, R. (2025). The Role of Context Gating in Predictive Sentence Processing. *Proceedings of the Cognitive Science Society*, San Francisco, CA.
32. Ryskin, R., Gawel, O.*, Tanzer, O.*, Pailo, V.*, & Kello, C. (2025). Efficient Audience Design in LLMs. *Proceedings of the Cognitive Science Society*, San Francisco, CA.

33. Cain, E.* & Ryskin, R., (2024) Diachronic change in verb usage statistics predicts differences in sentence processing across the lifespan. *Proceedings of the Cognitive Modeling and Computational Linguistics Workshop*, Bangkok, Thailand.
34. Williams, T.*, Setzler, M., Kim, M., Ryskin, R., Spivey, M. & Marghetis, T. (2024). Professional Jazz Musicians Explore and Exploit a Space of Sounds. *Proceedings of the Cognitive Science Society*, Rotterdam, Netherlands.
35. Cain, E.* & Ryskin, R. (2023). Diachronic Language Change and Its Influence on Lexico-semantic Representations Across the Lifespan. *Proceedings of the Cognitive Science Society*, Sydney, AUS.
36. Cain, E.,* Ryskin, R., & Yu, C. (2022). Quantifying cross-situational statistics during parent-child toy play. *Proceedings of the Cognitive Science Society*, Toronto, CA.
37. Ryskin, R., Stevenson, S. & Heller, D. (2020). Probabilistic weighting of perspectives in dyadic communication. *Proceedings of the Cognitive Science Society*, Toronto, CA.
38. Liu, Y.*, Ryskin, R., Futrell, R. & Gibson, E. (2019). Verb Frequency Explains the Unacceptability of Factive and Manner-of-speaking Islands in English. *Proceedings of the Cognitive Science Society*, Montreal, CA.
39. Ryskin, R. A. & Brown-Schmidt, S. (2011). The impact of gender and bilingualism on cognition: the case of spatial perspective-taking. *Proceedings of the 15th annual workshop on the semantics and pragmatics of dialogue (SemDial)*, Los Angeles, CA.

Chapters and Commentaries

40. Ryskin, R. & Spivey, M. (2023) Toward sophisticated models of naturalistic language behavior. *Physics of Life Reviews*. Commentary on target article: “Beyond Simple Laboratory Studies” by A. Maselli et al.
41. Ryskin, R. & Fang, X.* (2021). The Many Timescales of Context in Language Processing. In K. D. Federmeier & L. Sahakyan (Eds.), *Psychology of Learning and Motivation: The Context of Cognition: Emerging Perspectives*, Vol. 75, pp. 201–243. San Diego, CA: Elsevier Academic Press. <https://doi.org/10.1016/bs.plm.2021.08.001>
42. Ryskin, R. A. & Brown-Schmidt, S. (2017). The malleability of linguistic representations poses a challenge to the priming-based experimental approach. *Behavioral and Brain Sciences*, 40, E309. Commentary on target article: *An Experimental Approach to Linguistic Representation*. <https://doi.org/10.1017/s0140525x17000577>
43. Ryskin, R. A., Yoon, S., & Brown-Schmidt, S. (2015). Language, memory, and perspectives, in *Emerging Trends in the Social and Behavioral Sciences* (eds.) Robert Scott and Stephen Kosslyn, Hoboken, NJ: John Wiley and Sons. <https://doi.org/10.1002/9781118900772.etrds0200>
44. Brown-Schmidt, S., Yoon, S., & Ryskin, R. A. (2015). People as contexts in conversation. In B. H. Ross (Ed.), *Psychology of Learning and Motivation*, Vol. 62. San Diego, CA: Elsevier Academic Press. <https://doi.org/10.1016/bs.plm.2014.09.003>

Preprints and Manuscripts

45. Ryskin, R., Bergen, L., & Gibson, E. (preprint). Agreement errors are predicted by rational inference in sentence processing. *PsyArXiv*. <https://doi.org/10.31234/osf.io/uaxsq>

46. Billot, A., Jhingan, N., Varkanitsa, M., Blank, I., Ryskin, R., Kiran, S., & Fedorenko, E. (preprint) The language network ages well: Preserved selectivity, lateralization, and within-network functional synchronization in older brains. *bioRxiv*. <https://www.biorxiv.org/content/10.1101/2024.10.23.619954v1>
47. Williams, T.*, Setzler, M., Aswamenakul, C., Ryskin, R., Spivey, M. J., Kim, M., & Marghetis, T. (preprint). Musical improvisation reveals the fine-grained foraging dynamics of collective innovation. *OSF*. https://doi.org/10.31234/osf.io/2uwka_v1.
48. Williams, T.*, Ostrand, R., Montiel, A.*, & Ryskin, R. (accepted pending data collection). Registered Report: Speaker-specific syntactic expectations. *Journal of Cognitive Neuroscience*

Presentations

Conference Talks

1. Gawel, O.* & Ryskin, R. (2025) The Role of Discourse Context and Noise in Language Comprehension under Memory Load. *California Meetup on Psycholinguistics*, UC Davis.
2. Chao, A.*, Cain, E.*, & Ryskin, R. (2025) Language Experience and Prediction Across Age Groups: Evidence from Language Models. *California Meetup on Psycholinguistics*, UC Davis.
3. Cain, E.*, Chao, A.*, & Ryskin, R., (2025) Diachronic language change explains apparent age-related differences in information-theoretic efficiency. *Rational Approaches in Language Science*, Saarbruecken, Germany.
4. Gokcen, Y.*, Noelle, D., & Ryskin, R., (2024) The role of context gating in predictive sentence processing. *California Meetup on Psycholinguistics*, UC San Diego.
5. Cain, E.*, Chao, A.*, & Ryskin, R., (2024) Stability in the production of syntactic attachment across the lifespan. *California Meetup on Psycholinguistics*, UC San Diego.
6. Cain, E.* & Ryskin, R., (2024) Diachronic change in verb usage statistics predicts differences in sentence processing across the lifespan. *Cognitive Modeling and Computational Linguistics Workshop*, Bangkok, Thailand.
7. Williams, T.*, Ostrand, R., Montiel, A. & Ryskin, R. (2024) Investigating ERP Indices of Syntactic Adaptation. *California Meetup on Psycholinguistics*, Stanford, CA
8. Cain, E.*, Brown-Schmidt, S. & Ryskin, R. (2023) Diachronic Verb Usage Statistics and Sentence Processing Across the Lifespan. *Annual Meeting of the Psychonomic Society*, San Francisco, CA
9. Varkanitsa, M., Billot, A., Small, H., Falconer, I., Panlilio, K., Jhingan, N., Combs, A., Ryskin, R., & Kiran, S. (2022) Social cognition in aphasia: Preliminary evidence. *Academy of Aphasia*.
10. Cain, E.*, Ryskin, R. & Yu, C. (2022). Quantifying cross-situational statistics during parent-child toy play. *Annual meeting of the Cognitive Science Society*, Toronto, CA.
11. James, A. et al. (2022). What paradigms can webcam eye-tracking be used for? Attempted replications of 5 “classic” cognitive science experiments (as part of the symposium on ‘Automated gaze-tracking and gaze-annotation for online studies of cognition and development’). *Cognitive Development Society*, Madison, WI.

12. Zhang, Y.*, Ryskin, R. & Gibson, E. (2021). A Noisy-channel Explanation for Depth-charge Illusions. Architectures and Mechanisms of Language Processing (AMLaP), Paris, France
13. Fang, X.* & Ryskin, R. (2021). Talker-specific and talker-general learning in speech comprehension. California Meetup on Psycholinguistics, Irvine, CA
14. Liu, Y.*, Ryskin, R., Futrell, R. & Gibson, E. (2021). The role of construction frequency in listeners' noisy-channel inferences. 45th Penn Linguistics Conference, Philadelphia, PA
15. Rezaii, N., Mahowald, K., Ryskin, R., Dickerson, B. & Gibson, E. (2021). Syntactic Rule Frequency as a Measure of Syntactic Complexity: Insights from Primary Progressive Aphasia [short talk] Virtual CUNY Conference on Human Sentence Processing, Philadelphia, PA
16. Ricciardi, G.*, Ryskin, R., & Gibson, E. (2021). English locative inversions are not special in terms of their discourse function [short talk] Virtual CUNY Conference on Human Sentence Processing, Philadelphia, PA
17. Ryskin, R., Stevenson, S., & Heller, D. (2020). Probabilistic weighting of perspectives in dyadic communication. Cognitive Science Society, Toronto, CA
18. Ricciardi, G.*, Ryskin, R., & Gibson, E. (2020). Epistemic 'must p' is literally a strong statement. Experiments in Linguistic Meaning (ELM), Philadelphia, PA
19. Liu, Y.*, Ryskin, R., Futrell, R., & Gibson, E. (2019). Verb Frequency Explains the Unacceptability of Factive and Manner-of-speaking Islands in English. To be presented at the 41st Annual Meeting of the Cognitive Science Society, Montréal, Canada.
20. Ricciardi, G.*, Gibson, E., & Ryskin, R. A. (January, 2019). Experiment on epistemic must. Presented at the 93rd Annual Meeting of the Linguistic Society of America. New York, NY
21. Ryskin, R. A., Gibson, E., & Kiran, S. (October, 2018). Adaptation to the noise in aphasic sentence comprehension. Academy of Aphasia 56th Annual Meeting, Montréal, Canada.
22. Ryskin, R. A., Qi, Z., Duff, M., & Brown-Schmidt, S. (March, 2018). The effects of aging on verb bias use and learning. 31st Annual CUNY Conference on Human Sentence Processing, Davis, CA.
23. Ryskin, R. A., Futrell, R., & Gibson, E. (July, 2017). Comprehenders model the nature of noise in the environment. 39th Annual Meeting of the Cognitive Science Society, London, UK.
24. Ryskin, R. A., Qi, Z., Duff, M., & Brown-Schmidt, S. (March, 2017). Syntactic variability between and within speakers: When to adapt, when to generalize? 30th Annual CUNY Conference on Human Sentence Processing, Cambridge, MA.
25. Ryskin, R. A., Kurumada, C., & Brown-Schmidt, S. (March, 2016). Bottom-up adaptation of on-line pragmatic inferences to variability of speakers. 29th Annual CUNY Conference on Human Sentence Processing, Gainesville, FL.
26. Ryskin, R.A., Brown-Schmidt, S., Tullis, J., & Benjamin, A. (March, 2015). Perspective-taking: a domain-general cognitive ability? 28th Annual CUNY Conference on Human Sentence Processing, Los Angeles, CA.
27. Ryskin, R. A. & Brown-Schmidt, S. (November, 2012). A bilingual disadvantage in linguistic perspective adjustment. 53rd annual meeting of the Psychonomic Society, Minneapolis, MN.

28. Ryskin, R. A. & Brown-Schmidt, S. (October, 2012). Contributions of gender and bilingualism to spatial perspective-taking. 3rd annual UIC Bilingualism Forum, Chicago, IL
29. Rapp, D.N. & Ryskin, R. (November, 2010). Proofreading fosters resistance to the effects of inaccurate information. 51st annual meeting of the Psychonomic Society, St. Louis, MO.

Conference Posters

1. Gawel, O.* & Ryskin, R. (2025) Noisy Channel Inference in Large Language Models. *California Meetup on Psycholinguistics*, UC Davis.
2. Hosseinpour, H., Aguirre-Munoz, Spivey, M., Castro, S., Ryskin, R., & Padilla, L. (2025) The Immediate Sensorimotor Feedback Loop in Language Comprehension and Decision-Making. *California Meetup on Psycholinguistics*, UC Davis.
3. Chao, A.*, Cain, E.*, & Ryskin, R. (2025) Language experience and prediction across age groups: evidence from diachronic fine-tuning of language models. 63rd Annual Academy of Aphasia Meeting, San Diego.
4. Ryskin, R., Gawel, O.*, Tanzer, O.*, Pailo, V.*, & Kello, C. (2025). Efficient Audience Design in LLMs. Annual Meeting of the Cognitive Science Society (CogSci), San Francisco.
5. Li, J.*, Ortega, A.*, Futrell, R. & Ryskin, R. (2025). Adaptation to noisy language input in real time: Evidence from ERPs. Annual Meeting of the Cognitive Science Society (CogSci), San Francisco.
6. Gokcen, Y.*, Noelle, D., & Ryskin, R. (2025). The Role of Context Gating in Predictive Sentence Processing. Annual Meeting of the Cognitive Science Society (CogSci), San Francisco.
7. Chao, A.*, Cain, E.*, & Ryskin, R. (2025) Language experience and prediction across the lifespan: evidence from diachronic fine-tuning of language models. Annual Meeting of the Cognitive Science Society (CogSci), San Francisco.
8. Naik, S.*, Ryskin, R., & Marghetis, T. (2025) Mathematics as visual skill: Evidence from eye movements during algebraic reasoning. Annual Meeting of the Cognitive Science Society (CogSci), San Francisco.
9. Hosseinpour, H. , Aguirre-Muñoz, Z., Spivey, M., Castro, S., Ryskin, R., & Padilla, L. (2025) Eye Movement Patterns Influence Investment Decision Making. Annual Meeting of the Cognitive Science Society (CogSci), San Francisco.
10. Cain, E.*, Chao, A.*, & Ryskin, R., (2024) Diachronic language change explains apparent age-related differences in information-theoretic efficiency. *California Meetup on Psycholinguistics*, UC San Diego
11. Liu, C.*, Ryskin, R. & Aguirre-Muñoz, Z. (2023). Effects of context and proficiency on processing difficulty during L2 reading. *California Meetup on Psycholinguistics*, Stanford, CA
12. Li, J.*, Ortega, A.*, Futrell, R. & Ryskin, R. (2023). Do ERP indices of rational inference in real-time comprehension track the noise rate in the environment? *Architectures and Mechanisms of Language Processing (AMLaP) - Asia*, Hong Kong
13. Gokcen, Y.*, Noelle, D., & Ryskin, R., (2023). The role of working memory in predictive language processing. Annual Meeting of the Psychonomic Society, San Francisco, CA

14. Gokcen, Y.*, Noelle, D., & Ryskin, R., (2023). Sandbox Series: The role of working memory in predictive language processing. Society for Neurobiology of Language. Marseille, France
15. Ball, L., Mak, M., Ryskin, R., Rodd, J., & Gaskell, G. (2023). The Time Course of Verb-Specific Priming. Society for Neurobiology of Language. Marseille, France
16. Cain, E.* & Ryskin, R. (2023). Diachronic Language Change and Its Influence on Lexico-semantic Representations Across the Lifespan. Annual Meeting of the Cognitive Science Society (CogSci), Sydney, AUS.
17. Billot, A., Jhingan, N., Varkanitsa, M., Falconer, I., Carvalho, N., Blank, I., Ryskin, R., Fedorenko, E., & Kiran, S. (2023) Robust dissociation between the language and domain-general (multiple demand) networks in aging and after a stroke. Organization for Human Brain Mapping (OHBM), Montréal, CA.
18. Cain, E.*, & Ryskin, R. (2022). Diachronic language change and meaning across the lifespan. Architectures and Mechanisms of Language Processing (AMLaP). York, UK
19. Poliak, M.*, Ryskin, R., Braginsky, M. & Gibson, E. (2022). Effects of the structural prior on noisy-channel inference: evidence from Russian. Human Sentence Processing. University of California, Santa Cruz
20. Ryskin, R. & Nicolette-Sanchez, V.* (2021). Linguistic prediction across the lifespan. Annual Meeting of the Psychonomic Society, New Orleans, LA.
21. Zhang, Z.*, Bergen, L., Ryskin, R., Paunov, A. & Gibson, E. (2021). How People Talk Affects the Implications That Others Make. Architectures and Mechanisms of Language Processing (AMLaP), Paris, France
22. Weng, Y.*, Ryskin, R., & Qi, Z. (2020). Neural representation of syntactic prediction: A simultaneous eye-tracking and EEG study. Society for the Neurobiology of Language
23. Ryskin, R. & Fedorenko, E. (2020). Individual-subject functional localization does not benefit ERP analyses. Society for the Neurobiology of Language.
24. Liu, Y.*, Ryskin, R., Futrell, R., & Gibson, E. (2020). The role of construction frequency in listeners' noisy-channel inferences. Architectures and Mechanisms of Language Processing (AMLaP), Potsdam, Germany
25. Ryskin, R., Stevenson, S., & Heller, D. (2020). Probabilistic weighting of perspectives in dyadic communication. Cognitive Modeling and Computational Linguistics (CMCL) workshop
26. Liu, Y.*, Ryskin, R., Futrell, R., & Gibson, E. (2020). Structural Frequency Effects in Comprehenders' Noisy-Channel Inferences. CUNY Conference on Human Sentence Processing, Amherst, MA
27. Weng, Y.* Nguyen, A. Ryskin, R. & Qi, Z. (2020). Stronger prediction leads to greater processing cost during sentence ambiguity resolution: A simultaneous eye-tracking and EEG study. CUNY Conference on Human Sentence Processing, Amherst, MA
28. Ricciardi, G.*, Ryskin, R., & Gibson, E. (2020). The distribution of locative inversions: testing structural vs processing accounts. CUNY Conference on Human Sentence Processing, Amherst, MA

29. Ricciardi, G.*, Ryskin, R., & Gibson, E. (2020). Epistemic 'must p' is literally a strong statement. CUNY Conference on Human Sentence Processing, Amherst, MA
30. Rezaii, N., Ryskin, R., Cordella, C., Dickerson, B. & Gibson, E. (2020). An Information-Theoretic Characterization of Language Production in Primary Progressive Aphasia. CUNY Conference on Human Sentence Processing, Amherst, MA
31. Ryskin, R., Futrell, R. Kiran, S., & Gibson, E. (2019). Comprehenders aggregate over speakers when adapting to the noise in the input. Architectures and Mechanisms of Language Processing, Moscow, RU.
32. Ryskin, R., Salinas, M.*, Piantadosi, S., Rubio-Fernandez, P. & Gibson, E. (2019). Pragmatic inferences are modulated by informativity across cultures. 32nd Annual CUNY Conference on Human Sentence Processing, Boulder, CO.
33. Ryskin, R., Gibson, E., & Kiran, S. (2019). Noisy-channel sentence comprehension in aphasia: the role of noise in the context. 32nd Annual CUNY Conference on Human Sentence Processing, Boulder, CO.
34. Liu, Y.*, Ryskin, R., Futrell, R., & Gibson, E. (2019). Factive and manner-of-speaking islands are an artifact of nonlinearity in the acceptability judgment task. 32nd Annual CUNY Conference on Human Sentence Processing, Boulder, CO.
35. Campbell, R.*, Ryskin, R. & Kiran, S. (October, 2018). A novel eye tracking paradigm for assessing semantic and phonologic activation in aphasia. Academy of Aphasia 56th Annual Meeting, Montréal, Canada.
36. Nathaniel, S.*, Ryskin, R. A., & Gibson, E. (March, 2018). Investigating the effect of context on sentence comprehension. 31st Annual CUNY Conference on Human Sentence Processing, Davis, CA.
37. Ryskin, R. A., Fine, A., & Brown-Schmidt, S. (March, 2017). Do listeners learn speaker/accent-specific syntactic biases? 30th Annual CUNY Conference on Human Sentence Processing, Cambridge, MA.
38. Ryskin, R. A., Qi, Z., Covington, N., Duff, M., & Brown-Schmidt, S. (March, 2017). Knowledge and learning of verb biases in amnesia. 30th Annual CUNY Conference on Human Sentence Processing, Cambridge, MA.
39. Ryskin, R. A., Ng, S., Mimnaugh, K., Brown-Schmidt, S., & Federmeier, K. (March, 2017). Speaker-specific predictions about category membership during language comprehension. Cognitive Neuroscience Society 24th annual meeting, San Francisco, CA.
40. Ryskin, R. A., Kurumada, C., & Brown-Schmidt, S. (November, 2016). Information integration in online modulation of pragmatic inferences during language comprehension. 57th annual meeting of the Psychonomic Society, Boston, MA.
41. Ryskin, R. A., Qi, Z., Duff, M. & Brown-Schmidt, S. (March, 2016). Constraints on adaptation to syntactic variability between and within speakers. 29th Annual CUNY Conference on Human Sentence Processing, Gainesville, FL.
42. Ryskin, R. A., Qi, Z., & Brown-Schmidt, S. (November, 2015). Rapid learning of verb bias. 56th annual meeting of the Psychonomic Society, Chicago, IL.

43. Ryskin, R. A., Brown-Schmidt, S., & Kurumada, C. (March, 2015). Adaptation of pragmatic inferences transfers across contrastive domains. 28th Annual CUNY Conference on Human Sentence Processing, Los Angeles, CA.
44. Ryskin, R. A., Wang, R.F., & Brown-Schmidt, S. (November, 2014). How do listeners encode spatial perspectives? 55th annual meeting of the Psychonomic Society, Long Beach, CA.
45. Ryskin, R. A. & Brown-Schmidt, S. (November, 2013). Do adults show a curse of knowledge in false-belief reasoning? A robust estimate of the true effect size. 54th annual meeting of the Psychonomic Society, Toronto, Canada.
46. Ryskin, R. A., Canseco-Gonzalez, E, Yiu, L., Nguyen, E., Lopez, L., Hammond-Oakley, C. B., & Brown-Schmidt, S. (May, 2013). A bilingual disadvantage in linguistic perspective adjustment. International Workshop for Bilingualism and Cognitive Control, Krakow, Poland.
47. Ryskin, R. A. & Brown-Schmidt, S. (May, 2012). Contributions of gender and bilingualism to spatial perspective-taking. 2nd Annual Midwest Cognitive Science Conference, Bloomington, IN.
48. Ryskin, R. A. & Brown-Schmidt, S. (September, 2011). The impact of gender and bilingualism on cognition: The case of spatial perspective-taking. 15th annual workshop on the semantics and pragmatics of dialogue (SemDial), Los Angeles, CA.
49. Kohlhepp, K., Ryskin R., & Rapp, D.N. (May, 2011). Editing what's wrong to avoid learning it: Proofreading as intervention. Midwestern Psychological Association, Chicago, IL.

Invited Talks

2025. Language comprehension adapted to the environment. *Conference on Rational Approaches in Language Science (RAILS)*, Saarbruecken, Germany.
2025. Language comprehension adapted to the environment. *Cognitive Science of Language*, University of Toronto.
2024. Language comprehension adapted to the environment. *McGovern Institute Special Seminar*, MIT.
2024. Language comprehension adapted to the environment. *Cognitive Science Colloquium*, Northwestern University.
2024. Language comprehension adapted to the environment. *Cognitive Psychology Colloquium*, UC Santa Cruz.
2024. Language adaptation across timescales. *Linguistics Colloquium*, UC Davis
2023. Language adaptation across timescales. *CBS Research Seminar*, The Hong Kong Polytechnic University
2023. Conversation: a dialogue between cognition and culture. *Center for Language, Interaction, and Culture Workshop*, UCLA
2023. Language adaptation across timescales. *CHaB Lab meeting*, UCLA
2022. Lifelong learning of language representations. *Sleep, Language, & Memory Lab*, York U.
2021. Communication in context across timescales. *Computational Cognitive Science Lab*, U. of Edinburgh
2021. Lifelong learning and contextual inference underlie language understanding. *Developmental Psychology Colloquium*, UC Merced
2021. Human language processing is adapted to noise. *HCI group meeting*, UC Merced
2020. Real-time pragmatic inference across cultures: evidence from a non-industrialized society. *Language Lab meeting*, MIT
2020. The role of context in predictive language processing, *Cognitive Psychology Colloquium*, UCLA

2020. The role of context in predictive language processing, *Cognitive Psychology Brownbag*, UIUC
2020. The role of context in predictive language processing. *Mind, Technology, & Society Talk Series*, UC Merced
2020. The role of context in predictive language processing. *Cognition & Language Workshop*, Stanford
2019. Lifelong Learning of Linguistic Representations. *Computational Linguistics Lab*. University of Pisa
2019. Lifelong Learning of Linguistic Representations. *Computation and Language Discussion Group*. MIT
2018. Error-correction in language comprehension: Implications for aphasia. *Speech, Language, and Hearing Sciences Colloquium*, Boston U.
2017. Syntactic processing is shaped by learning: The role of context and memory systems. *Language & Cognition Meeting*, Harvard
2017. Aphasia as rational inference over a noisy channel: Is the noise model malleable? *Language Processing and Recovery in Aphasia Symposium*. Center for Research in Sensory Communication and Emerging Neural Technology (CRESCENT), Boston U.
2017. Language comprehension in context. *Spring Cross-Program Gathering of the Sargent College Committee Enhancing Research and Collaboration in Health & Rehabilitation*, Boston U.
2016. Learning about how other people talk: The case of syntax. *Aphasia Research Mini-Symposium*, Department of Speech, Language, and Hearing Sciences, Boston U.
2014. How do listeners encode spatial perspectives? *Language processing talk series*, Beckman Institute, UIUC

Teaching

Introduction to Language & Linguistics (UG). Spring 2022, 2023.

Statistics for Cognitive Scientists (G). Spring 2021, 2022, 2023, 2024, Fall 2024

Language in Minds, Brains, & Machines (UG/G). Fall 2021, Spring 2024

Seminar in Cognitive Science (G). Spring 2021

Professional service

Editorial service

Consulting Editor. *Journal of Experimental Psychology: General* (2023 -)

Associate Editor. *Open Mind* (2023 -)

Ad hoc reviewing

Journals. Acta Psychologica. Applied Psycholinguistics. Bilingualism: Language & Cognition. Brain & Language. Cell Reports. Cerebral Cortex. Cerebral Cortex Communications. Child Development. Cognition. Cognitive Science. Cognitive Psychology. Communications Psychology. Current Biology. Dialogue & Discourse. Discourse Processes. Human Brain Mapping. Journal of Cognitive Neuroscience. Journal of Experimental Psychology: General. Journal of Experimental Psychology: Learning, Memory & Cognition. Journal of Memory & Language. Language, Cognition, & Neuroscience. Language & Linguistics Compass. Memory & Cognition. Nature Communications. Neuroimage. Neuropsychologia. Open Mind. PLOS One. Psychological Science. Proceedings of the National Academy of Sciences. Social, Cognitive, & Affective Neuroscience. Visual Cognition

Grants. European Research Council (ERC) Ad hoc. NIH Ad hoc panel (National Institute on Aging). NSF Ad hoc reviewing (Linguistics, Developmental Science). NSF Panel (Linguistics). PRELUDIUM

pre-doctoral grant, National Science Center, Poland.

Conferences. Architectures and Mechanisms of Language Processing (AMLaP). California Meetup on Psycholinguistics (CAMP). Cognitive Modeling and Computational Linguistics (CMCL) workshop. Cognitive Science Society (CogSci). Human Sentence Processing [formerly CUNY]. International Conference on Computational Linguistics. Meaning in Context Workshop at NeurIPS 2022. Society for the Neurobiology of Language (SNL)

Conference/Talk series organization

2017. Conference on Human Sentence Processing (formerly CUNY) at MIT. Organizing Committee
2022-2024. CROSSTALK talk series at UC Merced. Chair of organizing committee.

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