

Aja Altenhof

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Education

2023 – Present	University of Wisconsin–Madison <i>PhD in Linguistics</i> Advisors: Dr. Gary Lupyan, Dr. Jenny Saffran
2021 – 2022	University of Edinburgh <i>MSc in the Evolution of Language and Cognition, with Distinction</i> Dissertation: A Weak Bias Against Strong Synonymy Advisor: Dr. Kenny Smith
2017 – 2021	University of Pennsylvania <i>BA in Linguistics and Cognitive Science, magna cum laude</i> Honors Thesis: Sufficient Information for the Differentiation of Near Synonyms Advisor: Dr. Gareth Roberts

Experience

2022 – 2023	The 1kD Project, Princeton University <i>Research Specialist</i>
2021	The Child Language Lab, University of Pennsylvania <i>Research Assistant</i>
2019 – 2021	The Cultural Evolution of Language Lab, University of Pennsylvania <i>Research Assistant</i>

Publications

2023	Altenhof, A. & Roberts, G. (2023). Information quality, not quantity, impacts the differentiation of near-synonyms. <i>Language and Cognition</i> , 15(4), 854–883
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Preprints

2026	Raviv, H., Hasenfratz, L., Gousios, K., Faryna, M., Beaty, R., Johnson, D., Chen, B., Altenhof, A. , Ryan, B., Greenberg, C. A., Hong, Z., Assayag, G., Tsyhanov, A., Malakhov, V., Rosenwein, T., Raviv, O., Lew-Williams, C., & Hasson, U. (2026). The First 1,000 Days (1kD) Project: Collecting and analyzing an ultra-dense naturalistic dataset of human baby development. <i>bioRxiv</i>
	Raviv, H., Tsyhanov, A., Gousios, K., Altenhof, A. , Wang, H., Chen, B., Raviv, O., Rosenwein, T., Lew-Williams, C., Hasenfratz, L., & Hasson, U. (2026). The First 1000 Days: An agent-based model of early language acquisition. <i>bioRxiv</i>

Proceedings Papers

- 2026 | **Altenhof, A.***, Breeden, K.*, & Lupyan, G. (2026). Finding the conceptual glue: Ad-hoc categorization in people and LLMs. *Proceedings of the 48th Annual Conference of the Cognitive Science Society*
- | Bergey, C.*, **Altenhof, A.***, Burnham, C. V., Lee, O., & Hawkins, R. (2026). Making room for new words. *Proceedings of the 48th Annual Conference of the Cognitive Science Society*
- | Flanigan, E., **Altenhof, A.**, & Lupyan, G. (2026). Semantics in action: Nameability predicts verb extension. *Proceedings of the 48th Annual Conference of the Cognitive Science Society*
- 2025 | **Altenhof, A.** & Lupyan, G. (2025). The role of contrast in category learning. *Proceedings of the 47th Annual Conference of the Cognitive Science Society*
- 2023 | **Altenhof, A.** (2023). A weak bias against strong synonymy? *Proceedings of the 45th Annual Conference of the Cognitive Science Society*
- 2021 | **Altenhof, A.** & Roberts, G. (2021). Labels, even arbitrary ones, facilitate categorization. *Proceedings of the 43rd Annual Conference of the Cognitive Science Society*

* Equal contribution

Posters and Presentations

- 2026 | **Altenhof, A.***, Breeden, K.*, & Lupyan, G. (2026). *Finding the conceptual glue: Ad-hoc categorization in people and LLMs*. Poster at the 48th Annual Meeting of the Cognitive Science Society (CogSci 2026), Rio de Janeiro.
- | Bergey, C.*, **Altenhof, A.***, & Hawkins, R. (2026). *Making room for new words*. Poster at the 48th Annual Meeting of the Cognitive Science Society (CogSci 2026), Rio de Janeiro.
- | Flanigan, E., **Altenhof, A.**, & Lupyan, G. (2026). *Semantics in action: Nameability predicts verb extension*. Poster at the 48th Annual Meeting of the Cognitive Science Society (CogSci 2026), Rio de Janeiro.
- | **Altenhof, A.** & Roberts, G. (2026). *What is needed for stable synonymy?* Talk at the 16th International Conference on the Evolution of Language (EVOLANG 2026), Plovdiv.
- | Bergey, C., **Altenhof, A.**, & Hawkins, R. (2026). *New words are assumed to have specific and atypical meanings*. Talk at the 16th International Conference on the Evolution of Language (EVOLANG 2026), Plovdiv.
- 2025 | Mankewitz, J., **Altenhof, A.**, Bergey, C., & Hawkins, R. (2025). *Not-a corpus: Characterizing parents' use of contrast in negated utterances*. Talk at the 50th Annual Boston University Conference on Language Development (BUCLD 2025), Boston.
- | **Altenhof, A.** & Lupyan, G. (2025). *The role of contrast in category learning*. Talk at the 47th Annual Meeting of the Cognitive Science Society (CogSci 2025), San Francisco.
- 2024 | **Altenhof, A.** & Roberts, G. (2024). *The emergence of non-absolute synonymy*. Talk at the 15th International Conference on the Evolution of Language (EVOLANG 2024), Madison.
- 2023 | **Altenhof, A.** (2023). *A weak bias against strong synonymy*. Poster at the 45th Annual Meeting of the Cognitive Science Society (CogSci 2023), Sydney.
- 2022 | **Altenhof, A.** & Roberts, G. (2022). *Quality not quantity in synonymy avoidance*. Talk at the Joint Conference on Language Evolution (JCoLE 2022), Kanazawa.
- | **Altenhof, A.**, Kazaka, S., Chen, S., Peiyuan, L., Tabachnikoff, P., Zhou, R., & Kirby, S. (2022). *A natural order for adpositions?* Talk at the 28th Annual University of Edinburgh Linguistics and English Language Postgraduate Conference (LELPGC 2022), Edinburgh.
- | Chen, Y., **Altenhof, A.**, & Schuler, K. (2022). *Adults regularize unpredictable variation when variants resemble possible speech errors*. Talk at the 96th Annual Meeting of the Linguistic Society of America (LSA 2022), Washington, DC.

- 2021 | **Altenhof, A.** & Roberts, G. (2021). *Labels, even arbitrary ones, facilitate categorization*. Poster at the 43rd Annual Meeting of the Cognitive Science Society (CogSci 2021), Vienna.
- 2019 | **Altenhof, A.**, McGrath, M., & Roberts, G. (2019). *The role of labels in the categorization of novel objects*. Talk at the Fourth Annual Berkeley Undergraduate Linguistics Symposium, Berkeley.

Teaching

PSYCH 210: Basic Statistics for Psychology, Teaching Assistant (Fall 2025, Spring 2026, Fall 2026)

PSYCH 601: Psychology of Language, Guest Lecturer (Fall 2025)

LING 213: Language Emergence, Guest Lecturer (Spring 2024)

Honors and Awards

Psychology Department Service Award (2026)

L&S Community of Graduate Research Scholars Fellowship (2024)

Kemper K. Knapp University Fellowship (2023)

Henry Hoenigswald Prize in Linguistics for Undergraduates (2021)

Penn Undergraduate Research and Mentorship Program (PURM) grant (2019)

Service

International Child Phonology Conference, Organizing Committee (2025)

Conference Reviewer: Workshop in General Linguistics (WiGL), Annual Conference of the Cognitive Science Society

Skills

Programming Languages: Java, JavaScript, R, Python

Certificates: Machine Learning Specialization (Stanford, DeepLearning.AI)

Technical Software: Qualtrics, JsPsych, LaTeX, Adobe InDesign, Illustrator and Premiere

Languages: English, Intermediate Spanish, Beginning German