

Lindsay A. Krebs

Research Interests

My research interests include language and cognitive processes, and I am currently investigating how figurative language can be used to enhance the teaching of science concepts. I am also interested in linguistic relativity and bilingualism. In addition I am enthusiastic about open science practices, quality science communication, and the application of psychological findings in law, social media, public policy, and other areas.

Education

- **August 2022 - present, University of Arizona, Tucson, Arizona**
 - PhD student, Cognitive Neuroscience of Language laboratory (Advisor: Vicky T. Lai)
- **October 2019 - March 2022, University of Tübingen, Tübingen, Germany**
 - Achieved Master of Science in Cognitive Science
 - Summer - Fall 2021, lab practical *Underpinnings of the valence weighting bias* evaluating MPT model with BeanFest
 - Master's Thesis: *Oh? You're Approaching Me? - Controlling the influence of approach-avoid paradigms on subsequent ratings of facial attractiveness* (Advisor: Mandy Hütter)
- **October 2018 - May 2019, Tübingen, Germany**
 - Intensive German Courses at Volkshochschule Tübingen and Vivat Lingua Tübingen
 - Passed Telc Deutsch C1 Hochschule Examination in May 2019
- **September 2014 - May 2018, Reed College, Portland, Oregon**
 - Achieved Bachelor of Arts in Psychology
 - Bachelors' Thesis: *Who did it again? Linguistic relativity and eyewitness memory in English speakers, Spanish speakers, and bilinguals* (Advisor: Enriqueta Canseco-Gonzalez)

Publications

- Yu Y., Krebs L., Beeman M., & Lai V. (in submission). Aha! moments in metaphor generation – implications for learning outcomes and creative outputs

Teaching and Mentoring Experience

- **Spring 2023-present, Mentoring**
 - Mentored three students sponsored by the Western Alliance for Expansion of Student Opportunity (WAESO) in EEG data collection (Spring 2023); trained undergrad RAs in annotated of linguistic response data (Fall 2023 & Spring 2024)
- **August 2022 - present, Graduate Teaching Assistant**
 - PSY 360, Social Psychology; PSY 489, History and Systems of Psychology; PSY 407, Language and Thought

Research Experience

- **Spring 2023 - present, Learning science concepts through metaphor comprehension, production, and conversation: Behavioral, neural and artificial intelligence measures, Cognitive Neuroscience of Language lab**
 - NSF grant funded series of studies investigating metaphor and science education in high school students
- **Fall 2022 - present, Metaphor and Creativity Project, Cognitive Neuroscience of Language lab**
 - EEG data collection and behavioral data analysis, working with collaborating PhD student at Northwestern University
- **February 2021 - March 2022, Graduate Research Assistant (Wissenschaftliche Hilfskraft) with “Digbindiff - Digital Internal Differentiation: Integration of Linguistic and Cognitive Measures for Adaptive Support” (DigBindiff - Digitale Binnendifferenzierung: Integration sprachlicher & kognitiver Maße zur adaptiven Förderung) at the Institute of School Psychology (Arbeitsbereich Schulpsychologie), Eberhard Karls Universität Tübingen**
 - Member of project aiming to help German schoolchildren to learn English with the help of an adaptive algorithm that gives personalized exercises and feedback
 - Creation of online questionnaires, analysis of data from pilot study, administered psychological and language assessments in German classrooms

Service, Outreach, and Volunteer Experience

- **2024, Outreach with University of Arizona Flandrau Science Center: Psychology Discovery**
 - Live demo of EEG recording to 6th through 12th grade students
- **2023, Outreach with Tucson Magnet High School**
 - Developed a 3 week Outreach program introducing high school students to Psychology as a science and to EEG methodology
- **2023, Secondary Reviewer for Human Sentence Processing 2023**
- **2019, Citizen Diplomat at Deutsch-Amerikanisches Institut (DAI) Tübingen**
 - Part of the “Rent-an-American” program, visited classrooms in Germany to facilitate cross-cultural contact
- **2014-2018, Reed College, Portland Oregon, Audio/Visual Student Assistant**
 - Assisted professors and other college staff with presentation of audio and visual materials, working with computers, projectors, and speakers

Academic and Professional Skills

- **Academic Skills**
 - Experience with data collection, analysis, and visualization tools: Qualtrics, SuperLab, DrRacket, Survey Monkey, SurveyGizmo, Amazon’s Mechanical Turk, Soscisurvey, Prolific, STATA, R, PyCharm, Jupyter Notebooks, Github
 - Experience in programming: Racket, R, Python, MATLAB
 - Practical experience with electroencephalography (EEG) experiment design and data collection; Theoretical knowledge of fMRI physics and practical experience with fMRI data preprocessing and analysis using SPM12, ITK-SNAP, Conn Toolbox, Surfice, etc
- **Professional Skills**

- Literacy in basic computer programs (LaTeX, Word, Powerpoint, Excel, Google equivalents)
- Taken part in Global Citizenship and cultural sensitivity workshop as part of Citizen Diplomat training
- Experience giving one-on-one tutoring and mentoring

Honors & Awards

- 2023, Lynn Nadel Graduate Fellowship Recipient - University of Arizona
- 2015/16 and 2017/18, Commendation for Academic Excellence - Reed College's Office of the President

Languages

- English (native); German, (C1); Spanish (approx. A2-B1)