Maria Korochkina, PhD



• Personal website

© 0000-0002-8017-7855

S OSF

8 GoogleScholar

ResearchGate

BlueSky

I am a researcher interested in how we acquire linguistic knowledge and use language to facilitate learning and knowledge acquisition in other domains and across the lifespan. I study these questions using tools from cognitive science and neuroscience. I have a strong interest in applied statistics and am committed to promoting transparency and reproducibility in research. I am also passionate about making science accessible to the wider community and engaging diverse voices in research to drive meaningful societal change.

Education

■ PhD in Cognitive Science 2022

> Joint degree from Macquarie University (Australia) and Universities of Potsdam (Germany), Newcastle upon Tyne (UK), Groningen (Netherlands), Trento (Italy), IDEALAB PhD programme

MSc in Experimental and Clinical Linguistics 2018 University of Potsdam, Germany, IECL programme

■ BA & MA in Philology 2015

> Lomonosov Moscow State University, Russia 2012 & 2014, Non-EU student exchange, University of Vienna, Austria

Academic appointments

06/2022 – ongoing

Postdoctoral Research Fellow, Rastle Lab, Royal Holloway, University of London, UK

02/2020 - 06/2022

Academic Tutor, Macquarie University, Australia

07/2016 - 08/2018

Research Assistant, NOLA Lab & Vasishth Lab, University of Potsdam, Germany

Teaching and educating

27/03/2023

■ Instructor, Bayesian LME and Distributional Regression models with brms workshop Royal Holloway, University of London

7/11/2022 - ongoing

■ Instructor, ReproducibiliTea workshop series, Royal Holloway, University of London

02/2020 - 06/2022

Academic Tutor, Macquarie University

Session 1, 2021 & 2022: Design and Statistics III

Session 2, 2020 & 2021: Design and Statistics II

Session 2, 2020 & 2021: Acquired Speech and Language Disorders

Session 1, 2020: Exp Design and Data Analysis for the Cognitive and Brain Sciences

18/02/2021

Instructor, Data analysis using (generalised) linear mixed effects models in R workshop, Macquarie University

21-25/09/2020

Instructor, Introduction to R Software Carpentry workshop, Macquarie University

Publications

Pre-registrations, materials, data, and analysis code for all papers are available at https://osf.io/zf8px/.

Under review

Korochkina, M., Cooper, H., Brysbaert, M., & Rastle, K. (2025). Morpheme knowledge is shaped by information available through orthography. Pre-print at https://doi.org/10.31219/osf.io/ad3jh_v1.

Korochkina, M., & Rastle, K. (2024). *Morphology in children's books: What's there and what's useful for learning?* Pre-print at https://doi.org/10.31219/osf.io/63pb4.

Peer-reviewed

- **Korochkina**, **M.**, & Rastle, K. (In press). The vocabulary barrier in the General Certificate of Secondary Education (GCSE) in English Literature. *The Use of English*. Pre-print at https://doi.org/10.31219/osf.io/vg8c3.
- Crawford, M., Raheel, N., **Korochkina, M.**, & Rastle, K. (2024). Inadequate foundational decoding skills constrain global literacy goals for pupils in low- and middle-income countries. *Nature Human Behaviour*. https://doi.org/10.1038/s41562-024-02028-x
- Korochkina, M., Nickels, L., & Bürki, A. (2024). What can we learn about integration of novel words into semantic memory from automatic semantic priming? *Language, Cognition, and Neuroscience*, 39(4), 455–488. https://doi.org/10.1080/23273798.2024.2328586
- Korochkina, M., Marelli, M., Brysbaert, M., & Rastle, K. (2024). The Children and Young People's Books Lexicon (CYP-LEX): A large-scale lexical database of books read by children and young people in the United Kingdom. *Quarterly Journal of Experimental Psychology*, 77(12), 2418–2438. https://doi.org/10.1177/17470218241229694
- Lombard, A., Ulicheva, A., **Korochkina, M.**, & Rastle, K. (2024). The regularity of polysemy patterns in the mind: Computational and experimental data. *GLOSSA Psycholinguistics*, 3(1), 3, 1–24. https://doi.org/10.5070/G60111327
- **Korochkina, M.**, Sowman, P., Nickels, L., & Bürki, A. (2023). Neural correlates of encoding in novel word learning. *Collabra: Psychology*, 9(1), 57525. https://doi.org/10.1525/collabra.57525
- **Korochkina, M.**, Bürki, A., & Nickels, L. (2021). Apples and oranges: How does learning context affect novel word learning? *Journal of Memory and Language*, 120, 104246. https://doi.org/10.1016/j.jml.2021.104246

Outreach contributions

Publications

- **Korochkina, M.,** & Rastle, K. (2024). What makes GCSE English Literature so hard for students? *Tes.* https://www.tes.com/magazine/teaching-learning/secondary/what-makes-gcse-english-lit-so-hard-students
- **Korochkina, M.**, & Rastle, K. (2024). What words do children encounter when they read for pleasure? *Nomanis*, Issue 27. https://www.nomanis.com.au/blog/issue-17-june-2024. Also available here.

Talks

- Words in books: A challenge, a blessing, or both? (September 2024, with Kathy Rastle). Invited talk, ResearchED National Conference, London, UK.
- What makes GCSE English Literature so hard for students? (June 2024). Working Together: Research and Practice meeting, The South East Research Network for Schools, Egham, UK.

Recent conference talks (selected)

A full list of talks and posters (along with slide decks) is available at https://mariakna.github.io.

2024

The graded nature of morphological information in text, and what it means for morpheme learning. Talk given at a meeting of the Forum for Research in Literacy and Language (FRiLL), Reading, UK.

- The nature of morphemic regularities in children's literature: What do British children learn about derivational morphology when they read? Talk given at the 31st annual meeting of the Society for the Scientific Study of Reading, Copenhagen, Denmark.
- What can children learn about English morphology through book reading? Talk given at the annual meeting of the Experimental Psychology Society, York, UK.

2023

- ▼ *Vocabulary and morphological complexity in books popular with British children*. Talk given at a meeting of the Forum for Research in Literacy and Language (FRiLL), Reading, UK.
- Apples and oranges: How does learning context affect novel word learning? Talk given at the Contextual Diversity Workshop organised by the Experimental Psychology Society, London, UK.
- What do children read as they transition into and through adolescence? Insights from CYP-LEX, a new large-scale lexicon of books for children and young people. Talk given at the annual meeting of the Cognitive and Developmental sections of the British Psychological Society, Bristol, UK.
- The Children and Young People's Books Lexicon (CYP-LEX): A lexical database of books directed at children and young adults. Talk given at the 23rd meeting of the European Society for Cognitive Psychology, Porto, Portugal.
- The Children and Young People's Books Lexicon (CYP-LEX): How does book language change as children transition into and through adolescence? Talk given at the annual meeting of the Experimental Psychology Society, Swansea, UK.
- Behavioural and electrophysiological markers of integration in novel word learning. Talk given at the annual meeting of the Experimental Psychology Society, London, UK.

Awards and funding

- Student Researcher Credibility Prize, The British Neuroscience Association Includes a £500 cash prize. Read the media announcement here.
- Funding award for an 8-week Instructor Training with The Carpentries (A\$1,500) Awarded by Macquarie University's Research and Innovation team
- Postgraduate Research Fund, Macquarie University (A\$5,000)

 Prestigious university-wide award for international conferences and lab visits
- 2019 Conference travel & participant recruitment awards, University of Potsdam (€2,500)
- 2018–2022 PhD Fellowship, IDEALAB
 Highly competitive fellowship providing full tuition, stipend, and travel costs
- Non-EU student exchange awards, University of Vienna, Austria Competitive awards providing tuition and stipend for 2 semesters

Skills

Experimental techniques

Programming languages & software

Languages

Behavioural, EEG, eye-tracking, fNIRS, NLP, comput. modelling

MATLAB, Python, R, Stan, Presentation Neurobehav. Systems, ETEX

English, German, Russian, Swedish, Icelandic, BSL (beginner)

Recent training and development (selected)

- 2024 Introduction to Research Impact, Social Science Impact Accelerator, Royal Holloway, Univ. of London
 - Storytelling with Impact: Visual storytelling, Nifty Fox Creative

Recent training and development (selected) (continued)

■ Storytelling with Impact: Unleash the power of narrative with Duncan Yellowlees

■ Storytelling to success: Developing your Narrative CV, University of Leeds

2022 Introduction to Natural Language Processing in Python, DataCamp

■ The 6th Summer School on Statistical Methods for Linguistics and Psychology, University of Potsdam

2021 **Badged Instructor** training, The Carpentries

2020 Understanding the Brain: The Neurobiology of Everyday Life, University of Chicago

Professional service

Peer-review

Reviewer for Psychological Science; Psychonomic Bulletin & Review; Behavior Research Methods; Journal of Memory and Language; Instructional Science; Language, Cognition, & Neuroscience; Journal of Research in Reading; Advances in Cognitive Psychology; Language and Speech; Psychology & Neuroscience; Applied Psycholinguistics

Conference abstract reviewer for the 2024 *Architectures and Mechanisms for Language Processing* (AMLaP) conference, Edinburgh, Scotland

Open science

■ **Organiser**, ReproducibiliTea meeting series Royal Holloway, University of London

Invited speaker, Opening up Open Science: Nuts and Bolts for Beginners Workshop at the 31st annual meeting of the Society for the Scientific Study of Reading, Denmark, 10 July 2024

Equality, diversity, & inclusion

■ **Postdoc representative** in a successful bid for the *Athena Swan Silver award*, Royal Holloway, University of London

Mentor for Inzresearch, supporting access to postgraduate research and career opportunities for individuals from low socioeconomic and underrepresented backgrounds in the UK