# Maria Korochkina, PhD

I am a cognitive neuroscientist studying language and memory, with **advanced technical skills** in data analysis and statistics. I have a strong commitment to **open science** and am actively involved in promoting transparency and reproducibility in research. I am passionate about **making research accessible** to the wider community and strive to **engage diverse voices in research** to drive meaningful societal change.

## **Education and qualifications**

PhD in Cognitive Science

Joint degree from Macquarie University (Australia) and Universities of Potsdam (Germany),

Newcastle upon Tyne (UK), Groningen (Netherlands), Trento (Italy), IDEALAB PhD programme

2015 − 2018

MSc in Experimental and Clinical Linguistics

University of Potsdam, Germany, IECL programme

2010 − 2015

BA & MA in Philology

Lomonosov Moscow State University, Russia

## **Academic employment**

# Teaching and educating

■ **Instructor**, 31st annual meeting of the Society for the Scientific Study of Reading 10/07/2024 Pre-registration & Open Materials: The What, Why, & How Workshop "Opening up Open Science: Nuts and Bolts for Beginners" 27/03/2023 **Workshop instructor**, Royal Holloway, University of London Bayesian Linear Mixed Effects and Distributional Regression models with brms 7/11/2022 – ongoing Instructor, ReproducibiliTea journal club, 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 **Workshop instructor**, Macquarie University Data analysis using (generalised) linear mixed effects models in R 21-25/09/2020 Instructor, Introduction to R Software Carpentry workshop, Macquarie University

### **Publications**

Pre-registrations, data, materials, analysis code, and pre-prints for all papers are available on OSF (https://osf.io/zf8px/).

#### **Under review**

- **Korochkina**, M., & Rastle, K. (2024a). Morphology in children's books: What's there and what's useful for learning? [Pre-print]. https://doi.org/10.31219/osf.io/63pb4
- **Korochkina**, **M.**, & Rastle, K. (2024b). The vocabulary barrier in the General Certificate of Secondary Education (GCSE) in English Literature [Pre-print]. https://doi.org/10.31219/osf.io/vg8c3

#### Peer-reviewed

- 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., 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 [Published online ahead of print]. *Quarterly Journal of Experimental Psychology*. https://doi.org/10.1177/17470218241229694
- 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
- 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**

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

#### **Talks**

Korochkina, M. (2024d, June). What does it take to read and understand the GCSE English Literature texts? Working Together: Research and Practice event 2024, The South East Research Network for Schools, Egham, UK. https://www.royalholloway.ac.uk/research-and-teaching/departments-and-schools/psychology/research/serns/serns-events/2024/

**Korochkina**, **M.**, & Rastle, K. (2024e, September). *Words in books: A challenge, a blessing, or both?* (Invited talk). ResearchED National Conference, London, UK. <a href="https://researched.org.uk/event/researched-national-conference-2024/">https://researched.org.uk/event/researched-national-conference-2024/</a>

### Academic and administrative service

Peer-review Reviewer for 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

Equality, diversity, & inclusion Postdoc representative in a successful bid for the Athena Swan Silver award, Royal Holloway, University of London

## Awards and funding

2023	Student Researcher Credibility Prize, The British Neuroscience Association
	Read the media announcement here.
2021	<b>■ Funding award</b> for an 8-week Instructor Training with The Carpentries, Macquarie University
2020	Postgraduate Research Fund, Macquarie University
-2022	■ International Research Excellence PhD Scholarship, Macquarie University
2019	Conference travel & participant recruitment awards, University of Potsdam

2018–2019 PhD Scholarship, University of Potsdam
2012 & 2014 Student exchange awards, University of Vienna, Austria

### **Scientific societies**

- The British Neuroscience Association
- The Experimental Psychology Society
- Society for the Scientific Study of Reading
- The European Society for Cognitive Psychology

Languages

■ The Psychonomic Society

### Skills

2019-

Experimental techniques Behavioural, EEG, eye-tracking, fNIRS Corpus linguistics, computational modelling

Programming languages & software MATLAB, Python, R, Stan, Presentation Neurobehavioural Systems Stata, HTML, OpenSesame, ŁTEX

English, German, Russian, Swedish, Icelandic (beginner)
British Sign Language (beginner)

## Selected talks

A full list of talks and posters (including slide decks) is available on my website (https://mariakna.github.io).

- **Korochkina**, M. (2024b, July). 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.
- **Korochkina**, **M.** (2024c, July). What can children learn about English morphology through book reading? Talk given at the annual meeting of the Experimental Psychology Society, York, UK.
- **Korochkina**, **M.** (2023a, September). 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.
- **Korochkina**, **M.** (2023b, January). *Behavioural and electrophysiological markers of integration in novel word learning*. Talk given at the annual meeting of the Experimental Psychology Society, London, UK.
- Korochkina, M. (2023c, September). 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 23<sup>rd</sup> meeting of the European Society for Cognitive Psychology, Porto, Portugal.
- **Korochkina**, **M.** (2023d, July). 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.
- **Korochkina**, **M.** (2023e, December). *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.
- **Korochkina**, **M.** (2023f, September). 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.
- **Korochkina**, **M.** (2021, October). Behavioural and electrophysiological markers of integration in novel word learning. Talk given at the annual meeting of the Society for the Neurobiology of Language, online attendance.
- **Korochkina**, **M.** (2020a, October). *A behavioural and electrophysiological investigation of novel word learning*. Talk given at the Words in the World conference, online attendance.

# Most recent training and development

- 2024 Storytelling with Impact: Visual storytelling workshop, Nifty Fox Creative
  - Storytelling with Impact: Unleash the power of narrative workshop, Duncan Yellowlees Training
  - Storytelling to success: Developing your Narrative CV workshop, University of Leeds
- 2023 Effective Grant Writing workshop, Royal Holloway, University of London
- 2022 Introduction to Natural Language Processing in Python, MOOC, DataCamp
  - The 6<sup>th</sup> Summer School on Statistical Methods for Linguistics and Psychology Bayesian Advanced Track, University of Potsdam
- 2021 **Badged Instructor** training, The Carpentries
- 2020 Understanding the Brain: The Neurobiology of Everyday Life, MOOC, University of Chicago