

Agata Dymarska

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EDUCATION

Lancaster University, UK 2017-2022
PhD Cognitive Psychology
(*"The role of language and sensorimotor information in memory for concepts"*)
Supervisors: Professor Louise Connell and Dr. Briony Banks

University of Reading, UK 2016-2017
MSc Language Sciences (with Distinction)
(*"Grammatical gender acquisition in Polish heritage speakers in the UK"*)
Supervisor: Professor Theo Marinis

Cardiff University, UK 2013-2016
BSc (Hons) Psychology
(*"The effect of lexical competition on unfamiliar accent adaptation"*)
Supervisor: Dr. Todd Bailey

RESEARCH EXPERIENCE

Adam Mickiewicz University in Poznań, Poland 06.2023 – current
Postdoctoral Researcher, Faculty of English, Psychophysiology of Language and Affect Laboratory

- Led recruitment and data analysis of EEG hyperscanning studies investigating neural correlates of semantic processing, second language use, semantic memory.
- Employed data driven Hierarchical General Linear Modelling techniques to identify significant effects of experimental manipulation on the brain activity

Lancaster University, Lancaster, UK 06.2021 – 06.2023
Postdoctoral Researcher, School of Psychology, Embodied Cognition Laboratory

- Conducted large scale online studies investigating how semantic information is organised and retrieved from memory.
- Analysed data using advanced Bayesian methods and longitudinal analysis.
- Published the results, including a Registered Report, in high impact journals.

Lancaster University, Lancaster, UK 06.2018 – 08.2018
Research Assistant, School of Psychology

- Performed data coding for a study on medical language comprehension among non-native English speakers.

University of Reading, Reading, UK 09.2016 – 06.2017
Research Intern, School of Psychology and Clinical Language Sciences

- Supported Bilingualism Matters public outreach events with parents of bilingual children and the general public.
- Assisted with eye-tracking data collection.

Cardiff University, Cardiff, UK 06.2015 – 08.2015
Research Intern, School of Psychology

- Led recruitment and data collection on a large-scale study of recognition memory.

TEACHING EXPERIENCE

Adam Mickiewicz University in Poznań, Poland

02.2025 - current

Lecturer, Faculty of English

- Designed a cognitive psychology course, developing syllabus content and assessment methods (tests, Q&A and student presentation).
- Delivered lectures integrating foundational theories of cognitive science and modern challenges involving development and use of technology.
- Moderated student discussions on neuroscientific methods and their implications for language processing research

Lancaster University, Lancaster, UK

01.2018 – 02.2020

Graduate Teaching Assistant, School of Psychology

- Assisted undergraduate students learning statistical methods, experimental programming and data analysis.
- Introduced and discussed psychological theories to supplement lecture materials.

PUBLICATIONS

Dymarska, A., Connell, L., & Lynott, D. (2025). The role of sensorimotor variables in word recognition. In H. Nesi, P. Milin & D. Filipović Đurđević (Eds.), *International Encyclopaedia of Language and Linguistics*, (3rd Edition). Elsevier. *Invited chapter; under review*.

Dymarska, A. (2025). Frequency over semantic richness: word recognition in non-native English speakers. *Bilingualism: Language & Cognition*, 1-11. <https://doi.org/10.1017/S1366728925000239>

Dymarska, A., & Connell, L. (2025a). Free word association is driven by local response chaining of linguistic and sensorimotor relationships. *Cognition*, 260: 160127. <https://doi.org/10.1016/j.cognition.2025.106127>

Dymarska, A., & Connell, L. (2025b). Sensorimotor effects in surprise word memory – a Registered Report. *Cortex*, 186, 99-115. <https://doi.org/10.1016/j.cortex.2025.03.010>

Dymarska, A., Connell, L., & Banks, B. (2023a). More is not necessarily better – how different aspects of sensorimotor experience affect recognition memory for words. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 49 (10), 1572–1587. <https://doi.org/10.1037/xlm0001265>

Dymarska, A., Connell, L., & Banks, B. (2023b). Weaker than you might imagine: Determining imageability effects on word recognition. *Journal of Language and Memory*, 129: 104398. <https://doi.org/10.1016/j.jml.2022.104398>

Dymarska, A., Connell, L., & Banks, B. (2022). Linguistic bootstrapping allows more real-world object concepts to be held in mind. *Collabra: Psychology*, 8 (1): 40171. <https://doi.org/10.1525/collabra.40171>

Dymarska, A., Connell, L., & Banks, B. (2019). Working memory for object concepts relies on both linguistic and simulation information. In *Proceedings of the 41st Annual Conference of the Cognitive Science Society*, (pp. 1683-1689)

SELECTED CONFERENCE PRESENTATIONS

Free word association is driven by local response chaining of linguistic and sensorimotor relationships. Embodied & Situated Language Processing Conference (ESLP), Berlin, Germany, October 2024, talk.

Semantic effects in word processing in speakers of English as a second language. International Congress of Linguists, Poznań, Poland, September 2024, talk.

How language constrains communication of affect: an EEG hyperscanning study of language-emotion interaction during a live word exchange game. Conference on Multilingualism, Aix-en-Provence, France, June 2024, poster presentation.

Weaker than you might imagine: Determining imageability effects on word recognition. European Society for Cognitive Psychology (ESCoP) conference, Lille, France, August 2022, talk.

More is not necessarily better: How different aspects of sensorimotor experience affect recognition memory for words. Embodied & Situated Language Processing Conference (ESLP), Lille, France, August 2022, talk.

INVITED TALKS

How language constrains communication of words: an EEG hyperscanning study of word selection during a live word exchange game in bilinguals. Lancaster University, Language Learning research group, February 2025.

Weaker than you might imagine: Imageability and semantic effects in word recognition. Potsdam University, Language & Methods research group, December 2022.

Weaker than you might imagine: Imageability effects in word recognition and word memory. Radboud University, Narrative, Communication & Cognition research group, November 2021.

LEADERSHIP & OUTREACH

Reproducibility Lancaster 06.2022 – 06.2023
Co-lead

- Organised university-wide meetings and moderated discussions around Open Science practices

Polonium Foundation 06.2018 – 06.2023
Registration Officer; Scientific Content Manager

- Co-organised popular science conferences (Science: Polish Perspectives) bringing together Polish scientists in the UK and Europe.
- Organised public talks by scientists from Poland for the university staff and students and the general public at Lancaster University and University of Bristol (For Poland with Science).
- Supported recruitment and promotional activities for a mentoring programme for students.
- Contributed to a translation of previously unpublished letters between Marie Curie and Albert Einstein into Polish (now available in print) and English (in preparation).

TECHNICAL SKILLS AND CERTIFICATES

Programming & Data Analysis

- Languages: R, Python, MATLAB
- EEG Analysis: EEGLAB, LiMo
- Statistical Tools: JASP
- Experiment Builders: PsychoPy, E-Prime, Gorilla.sc

Professional Certifications

- Associate Fellow of the Higher Education Academy (Lancaster University)

ACADEMIC SERVICE

MA thesis examiner, Language Mind and Technology programme, Faculty of English, Adam Mickiewicz University

- *Neural dynamics of emotional words processing in Bilinguals: Insights from the P300 Component* (October 2024)
- *Investigating the (moral) foreign language effect in Virtual Reality* (June 2023)

Reviewer experience (ad-hoc reviewer, selected journals)

- Journal of Experimental Psychology: General
- Journal of Language and Memory
- Language and Cognition
- Language, Cognition and Neuroscience
- Cognition
- Psychonomic Bulletin & Review
- Cognitive Processing

LANGUAGES

- Polish (native speaker)
- English (native-like proficiency)
- French (intermediate)
- German (beginner)
- Hindi (beginner)