

PROFILE

I am a PhD student in the Department of Psychology at the University of York. I am interested in speech perception of native and non-native speech, especially when the speech signal is degraded. Specifically, I am interested in isolating the role of informational interference (content of distracting speech) in speech perception from lower-level energetic (e.g. noise) and informational masking (e.g. sound source allocation and speaker characteristics).

I am currently part of the Leverhulme Trust-funded project *Cognitive Listening: Investigating speech perception in noise within a cognitive framework*, led by Prof. Sven Mattys.

EDUCATION & TRAINING

PhD Psychology 2019 – present
University of York, UK

BSc (Hons) Psychology and Language Sciences 2016 – 2019
2:1. University College London (UCL), UK

UK A-level & GCSE qualifications 2010 – 2012
Shenley Brook End School, Milton Keynes, UK
A2 Physics: A* A2 Mathematics: A* A2 Further Mathematics: A* AS Chemistry: B
13.5 qualifications with grades attained between A* - B, including English, Maths, IT and French.

RESEARCH ACTIVITIES

Research Assistant May 2018 – Sep 2019
Speech, Hearing and Phonetic Sciences | Department of Psychology and Language Sciences, UCL, UK
Recruitment and data collection with normal-hearing young adults (aged 18-25) and adults aged between 45-60 with substantial quantity of noise exposure. Techniques include otoscopy, tympanometry, audiometry, in addition to behavioural and electro-encephalography (EEG) data recording of performance in speech-in-noise tasks. Research titled: *Determinants of speech recognition in noise in normal and impaired hearing*.

Junior Researcher (Junior Researcher Program) Jul 2018 – June 2019
Early Learning and Cognition Lab | University of California, San Diego, USA
Member of international research team investigating *How does language and culture influence the development of abstract reasoning?* Involved in planning data collection and analysis, alongside writing and presenting a methods paper for publication.

Research Assistant Apr 2018 – Jul 2018
Language and Cognition | Department of Psychology and Language Sciences, UCL, UK
Recruitment and data collection of children's performance on foreign language learning software, investigating naturalistic second-language learning and whether there is benefit of early classroom second-language teaching. Research titled: *Acquisition of Mandarin Tones: Does explicit information about the pitch change help?* and *The role of variability in linguistic generalization: Evidence from a computerized language training game with 7-year olds*.

Research Assistant (Hon) Nov 2016 – Mar 2018
Linguistics | Department of Psychology and Language Sciences, UCL, UK
Maintaining code for data collection; communicating with research participants and managing data collection. Data processing, coding and analysis of collected data. Research titled: *Architectures and Mechanisms of Language Processing*.

Nuffield Foundation Scholarship Jul 2011 – Aug 2011
Nanotechnology | Cranfield University, UK
Awarded *Gold CREST Award* for research titled: *The sociophysics of dishonesty*. Undertaking research under supervision, report writing and a poster presenting. Developed communicative skills through poster, report and verbal presentations, requiring strict self-motivation and organisation to meet the required deadlines professionally.

PEER-REVIEW PAPERS

Mephram, A., Bi, Y., & Mattys, S. L. (in prep.). Release in linguistic masking changes over time: Differences between native and non-native listeners (working title).

CONFERENCE PRESENTATIONS

Mephram, A., & Evans, B. G. (2019, September 3). *Hæ? Exploring factors influencing the identification and categorisation of Norwegian dialects*. Poster presented at the 12th UK Language Variation and Change Conference, QMUL, London, UK.

Mephram, A., & Evans, B. G. (2019, March 25). *Hæ? Exploring factors influencing the identification and categorisation of*

Norwegian dialects. Paper presented at the 6th University College London Faculty of Brain Sciences Undergraduate Conference, London, UK.

Carstensen, A., Davison, C., **Mepham, A.**, Saponaro, C., Tavera, F., Vig, A., Zafar, B., & Walker, C. M. (2019, February 9). *Early Influences on Abstract Reasoning: A Cross-Cultural Comparison*. Poster presented at the 5th Annual Junior Researcher Programme jMeeting, Madrid, Spain.

Mepham, A., & Ramsden, J. (2011, August). *The sociophysics of dishonesty*. Poster presented at the Nuffield Foundation Scholarship Conference, Stevenage, UK.

MEMBERSHIPS

Psychonomic Society 2020 – present.

British Psychological Society (BPS) 2019 – present.

Association for Psychological Science (APS) 2018-2019.

TEACHING ACTIVITIES

Graduate Teaching Assistant, University of York, UK

Language and Development I: *Statistical Learning*

Perception and Cognition I: *Hearing: Pitch Perception*

Perception and Cognition II: *Attention: Missing Change*

Total marking hours: 35.0 hours

Sep 2019 – present

Mar 2020

Nov 2019

Nov 2019

Sep 2019 – present

Community Engagement

Delivered talk about *The Science of Hearing* and my research to date to sixth form students

Delivered talk titled *The Science of Hearing* at York Researchers' Night (YorNight) 2020

Delivered lecture titled *Pitch Perception* to 200+ Year 9 students (Roots to Success series)

Dec 2019 -- present

11 Mar 2020

08 Feb 2020

06 Dec 2019

SKILLS, LANGUAGES & AWARDS

Data Analysis: R: Frequentist/Descriptive Statistics, Data Visualisation (ggplot2, tidyverse), Fourier Analysis, Bayesian Statistics, Machine Learning, Structural Equation Modelling, Mixed Effects Modelling, R Markdown (including LaTeX).

SPSS: Equivalent competency. **Excel:** Equivalent competency.

Programming languages: Python (including PsychoPy), MATLAB (basic).

Speech-specific software: Praat, Audacity©.

Microsoft Office Programs: Excel: Pivot tables, Vlookup, Logic statements (ifs), Frequentist/Descriptive Statistics, Data Visualisation (using in-built graphical software), Macros. Also skilled and proficient in **Word** and **PowerPoint**.

Gold CREST Award (Aug 2011) Gold Award attained for conducting research at Cranfield University into social influence (see Nuffield Foundation Scholarship).

Norwegian Language Proficiency A2 grade in writing and B1 grade in speaking, reading and listening attained according to the Common European Framework of Reference for Languages (CEFR), equivalent to A-level standard proficiency. Additional equivalent understanding of Swedish (verbal and written) and Danish (written).

OTHER COMMUNITY ENGAGEMENT & PERSONAL INTERESTS

University of York Graduate Student Academic Representative

Representing the 2019 PhD entry cohort of students in the Department of Psychology.

Oct 2019 – present

Standing Up for Science Workshop

CPD workshop about communicating research findings with and disseminating through traditional media outlets.

Mar 2020

York Researchers' Night (YorNight) 2020

Exhibiting a stall demonstrating how one's voice sounds when listening through a cochlear implant. Also delivered a talk titled *The Science of Hearing* about how our hearing and speech perception is affected in various noisy environments.

Feb 2020

Volunteer at the International Convention of Psychological Science (ICPS), Paris, France

Assisting with any queries from conference delegates. Directing delegates to required locations.

Mar 2019

UCL Student Academic Representative 2017-2018

Representing the 2016-2019 cohort of students in the Psychology and Language Sciences Department (PaLS), most notably through the University and College Union (UCU) strikes in Feb – Mar 2018.

Oct 2017 – Jun 2018

The Maytree Respite Centre

A volunteer befriender, spending time listening to guests experiencing suicidal thoughts and feelings. Also taking calls with potential guests, writing up notes of their situation and processing their individual file.

May 2017 – Nov 2017

Referees available upon request.