

MAGDALENA KACHLICKA

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EDUCATION

- 2023 *PhD in Psychology*, Birkbeck University of London
Thesis: Perceptual strategies underlying second language acquisition
Supervisors: Prof Adam Tierney, Prof Kazuya Saito, and Prof Fred Dick
Examiners: Dr Emma Holmes (UCL) and Prof Sven Mattys (University of York)
- 2020 *MPhil in Cognitive Science*, University College London
Thesis: Mapping acoustic and semantic dimensions of auditory perception
Supervisors: Prof Jian Kang and Prof Fred Dick
Examiners: Prof Maria Chait (UCL) and Dr Pyoung-Jik Lee (University of Liverpool)
- 2018 *MSc in Psychological Research Methods (Distinction)*, Birkbeck University of London
Thesis: Individual differences in auditory processing in second language learning
Supervisor: Prof Adam Tierney
- 2017 *BSc in Psychology (First Class)*, University of Nicosia
Thesis: Adaptation of the BHI-R questionnaire from Polish to Greek and English languages
Supervisor: Dr Marios Adonis

RESEARCH POSITIONS

- Nov 2025 – ... *Postdoctoral Researcher*
Institute for Computer Science, University of Bern
Project: Intrinsic timescales in the extended auditory network
- Jul–Sep 2025 *Wellcome Trust IFRC Research Fellow*
School of Psychological Sciences, Birkbeck University of London
Project: Foundations of environmental sound perception in healthy listeners and cochlear implant users (as a PI)
- 2023–2025 *Postdoctoral Researcher*
School of Psychological Sciences, Birkbeck University of London
Project: Dimension-selective attention and second language acquisition
- Jul–Oct 2022 *Research Collaborator (contract)*
University of Social Sciences and Humanities (Poznan, Poland)
Project: Speech acoustics and contents of narrative reconstructions of past events as indicators of cognitive processing of trauma and posttraumatic growth
- 2020–2023 *Research Assistant*
Institute of Education, University College London
Project: Does having a good ear promote successful second language speech learning
- 2020–2023 *PhD Researcher*
School of Psychological Sciences, Birkbeck University of London
- 2018–2020 *MPhil Researcher*
Institute for Environmental Design and Engineering, University College London
Project: Soundscape Indices (SSID)
- Jan–Apr 2017 *Research Intern*
Experimental Psychology Lab at University of Cyprus (Nicosia, Cyprus)
Project: The impact of visual imagery on the experience of pain: a comparison between altered visual feedback and distraction strategy

2015–2020 *Research Collaborator (contract)*
University of Social Sciences and Humanities (Poznan, Poland)
Project: Meaning of life and personal growth as a result of trauma: a longitudinal study.

PUBLICATIONS

- [18] Ghooch Kanloo AH, **Kachlicka M**, Saito K, Tierney AT (2026) Individual differences in perception of prosody in Mandarin-accented speech are linked to pitch perception, melody memory, musical training, and neural encoding of sound. *Brain and Language*, 273, 105689.
- [17] **Kachlicka M**, Symons AE, Dick F, Saito K, Tierney AT (2025) Early neural encoding of pitch drives cue weighting during speech perception. *Imaging Neuroscience*.
- [16] Correia S, dos Santos Rato AA, Fernandes JD, Ge Y, **Kachlicka M**, Saito K, Rebuschat P (2025) Effects of implicit perceptual training and cognitive aptitude on the perception and production of non-native contrasts. *Studies in Second Language Acquisition*, 47, 440-457.
- [15] **Kachlicka M***, Symons AE*, Saito K, Dick F, Tierney AT (2024) Tone language experience enhances dimension-selective attention and subcortical encoding but not cortical entrainment to pitch. *Imaging Neuroscience*, 2, 11-19.
- [14] **Kachlicka M**, Tierney AT (2024) Voice actors show enhanced neural tracking of pitch, prosody perception, and music perception. *Cortex*, 178, 213-222.
- [13] **Kachlicka M**, Patel AD, Liu F, Tierney AT (2024) Weighting of cues to categorization of song versus speech in tone language and non-tone-language speakers. *Cognition*, 246, 105757.
- [12] Saito K, **Kachlicka M**, Suzukida Y, Mora-Plaza I, Ruan Y, Tierney AT (2024) Auditory processing as perceptual, cognitive, and motoric abilities underlying successful second language acquisition: Interaction model. *Journal of Experimental Psychology: Human Perception and Performance*, 50(1), 119–138.
- [11] Saito K, Petrova K, **Kachlicka M**, Suzukida Y, Tierney A (2022) Training auditory processing promotes second language speech acquisition. *Journal of Experimental Psychology: Human Perception and Performance*, 48(12), 1410-1426.
- [10] Saito K, **Kachlicka M**, Suzukida Y, Petrova K, Lee BJ, Tierney AT (2022) Auditory precision hypothesis-L2: Dimension-specific relationships between auditory processing and second language segmental learning. *Cognition*, 229, 105236.
- [9] Saito K, Hanzawa K, Petrova K, **Kachlicka M**, Suzukida Y, Tierney AT (2022) Incidental and multimodal high variability phonetic training: Potential, limits, and future directions. *Language Learning*, 72(4), 1049-1091.
- [8] **Kachlicka M**, Laffere A, Dick F, Tierney AT (2022) Slow phase-locked modulations support selective attention to sound. *NeuroImage*, 252, 119024.
- [7] Saito K, Macmillan K, **Kachlicka M**, Kunihara T, Minematsu N (2022) Automated assessment of second language comprehensibility: Review, training, validation, and generalization studies. *Studies in Second Language Acquisition*, 45(1), 234-263.
- [6] Saito K, Macmillan K, Kroeger S, Magne V, Takizawa K, **Kachlicka M**, Tierney AT (2022) Roles of domain-general auditory processing in spoken second language vocabulary attainment in adulthood. *Applied Psycholinguistics*, 43(3), 581-606.
- [5] Saito K, Sun H, **Kachlicka M**, Alayo J, Nakata T, Tierney AT (2022) Domain-general auditory processing explains multiple dimensions of L2 acquisition in adulthood. *Studies in Second Language Acquisition*, 44(1), 57-86.
- [4] Mitchell A, Oberman T, Aletta F, **Kachlicka M**, Lionello M, Erfanian M, Kang J (2021) Investigating urban soundscapes of the COVID-19 lockdown: A predictive soundscape modeling approach. *The Journal of Acoustical Society of America*, 150, 4474–4488.
- [3] Saito K, **Kachlicka M**, Sun H, Tierney AT (2020) Domain-general auditory processing as an anchor of post-pubertal second language pronunciation learning: Behavioural and neurophysiological

investigations of perceptual acuity, age, experience, development, and attainment. *Journal of Memory and Language*, 115, 104168.

- [2] Mitchell A, Oberman T, Aletta F, Erfanian M, **Kachlicka M**, Lionello M, Kang J (2020) The Soundscape Indices (SSID) protocol: A method for urban soundscape surveys – questionnaires with acoustical and contextual information. *Applied Sciences*, 10(7), 2397.
- [1] **Kachlicka M**, Saito K, Tierney AT (2019) Successful second language learning is tied to robust domain-general auditory processing and stable neural representation of sound. *Brain & Language*, 192, 15-24.

SUBMITTED OR UNDER REVIEW

- [6] Haydock D, Leech R, **Kachlicka M**, Dick F (2025, November) Auditory cortical gradients integrate bottom-up and top-down structure during natural sound categorisation.
- [5] Nash M*, **Kachlicka M***, Pearce M, Pathirana P, Tierney AT (2025, September) Attention is required for prediction from short-term but not long-term learning of musical structure.
- [4] **Kachlicka M**, Jasmin K, Symons AE, Saito K, Dick F, Tierney AT (2025, July) English Prosody Database for investigating English prosody acquisition. Submitted to *Studies in Second Language Acquisition*.
- [3] Symons AE*, **Kachlicka M***, Dick F, Saito K, Tierney AT. (2025, July) Strong primary cue weighting is linked to robust dimension-selective attention. Under review in *Cognition*.
- [2] Saito K, Tierney AT, Takizawa K, Dardon D, Li C, **Kachlicka M**, Sugiura M, Jeong H (2025, March). Individual difference in motor and auditory activation in L2 speech learning: Roles of domain-general auditory processing. Under review in *Journal of Experimental Psychology: General*.
- [1] **Kachlicka M**, Symons AE, Ruan, Y., Saito K, Dick F, Tierney AT (2025, February). Effects of targeted perceptual training on L2 prosodic cue weighting strategies. Accepted for publication in *Bilingualism: Language and Cognition*.

MANUSCRIPTS IN PREPARATION

- [5] **Kachlicka M**, Jasmin K, Saito K, Dick F, Tierney AT. Cue weighting and frontotemporal connectivity during speech perception in tonal and non-tonal language speakers. (Expected submission: Mid-2026)
- [4] **Kachlicka M**, van den Bosch J, Dick F. Representations of natural sound categories. (Expected submission: Mid-2026)
- [3] Symons AE, **Kachlicka M**, Wright E, Razin R, Dick F, Tierney AT. Dimensional salience varies across verbal and nonverbal domains. (Expected submission: Mid-2026)
- [2] Saito K, Suzukida Y, Hu R, Hosaka I, Magne V, **Kachlicka M**, Argyri, F, Tierney AT (2025, April) The bilingual advantage hypothesis revisited: Exploring the auditory processing abilities and executive function of bilingual and monolingual children with diverse biographical backgrounds. (Expected submission: Mid-2026)
- [1] **Kachlicka M**, van den Bosch J, Kang J, Dick F. A selection of environmental sounds for behavioural and neuroimaging research: Introducing EnviSounds dataset. (Expected submission: Early-2026)

CONFERENCE POSTERS & PRESENTATIONS

- [5] **Kachlicka M***, Jasmin K, Saito K, Dick F, Tierney AT. Neural mechanisms of pitch and prosody perception in tonal and non-tonal language speakers. *8th International Conference on Auditory Cortex* (14-18 Sept 2025, Maastricht, Netherlands)
- [4] **Kachlicka M***, van den Bosch J, Kang J, Dick F. A selection of environmental sounds for behavioural and neuroimaging research: Introducing EnviSounds dataset. *8th International Conference on Auditory Cortex* (14-18 Sept 2025, Maastricht, Netherlands)
- [3] **Kachlicka M***, Symons AE, Ruan Y, Saito K, Dick F, Tierney AT (2024) Effects of targeted perceptual training on L2 suprasegmental cue weighting strategies. *33rd Conference of the European Second Language Association* (3-6 July 2024, Montpellier, France)

- [2] **Kachlicka M***, Symons AE, Saito K, Dick F, Tierney AT (2023) Effects of first language background and musical experience on cue weighting, attention and dimensional salience in speech and music. *Society for the Neurobiology of Language 15th Annual Meeting* (23-26 October 2023, Marseille, France)
- [1] **Kachlicka M***, van den Bosch J, Kang J, Dick F (2022) Representations of natural sound categories. *FENS Summer School 'Artificial and natural computations for sensory perception'* (22-28 May 2022, Bertinoro, Italy)

CONFERENCE ABSTRACTS

- [2] Mitchell A*, Oberman T, Aletta F, Erfanian M, **Kachlicka M**, Lionello M, Kang J (2020) Making cities smarter with new soundscape indices. *The Journal of the Acoustical Society of America*, 146, 2873.
- [1] Aletta F*, Oberman T, Mitchell A, Erfanian M, Lionello M, **Kachlicka M**, Kang J (2019) Associations between soundscape experience and self-reported wellbeing in open public urban spaces: a field study. *The Lancet*, 394(S17).

TALKS

- [6] *Can you hear what I hear*, Institute of Sound Recording, University of Surrey (September 2025)
- [5] *EEG in educational neuroscience research*, the ENCoRe (Educational Neuroscience Collaboration and Research UK) pre-conference workshop (April 2025)
- [4] *Dimensionality in auditory perception*, University of Oxford (October 2024)
- [3] *How does prior experience change the way we listen to sounds and learn new languages*, UCL Institute of Education (September 2024)
- [2] *How does prior experience change the way we listen to sounds and learn new languages*, University of Miami, US (June 2024)
- [1] *Auditory processing in second language learning*, Brain & Language Seminar, University of Helsinki, Finland (February 2019)

GRANTS

- 2025 *British Academy/Leverhulme Small Research Grant* (as a PI), £9918
‘Encoding of acoustic and linguistic information during language learning’
- 2025 *Birkbeck’s Wellcome Trust IFRC salary extension*, £18231
‘Foundations of environmental sound perception in healthy listeners and cochlear implant users’
- 2022 *Language Learning Dissertation Award*, research grant from *Language Learning* journal, \$2000
‘Perceptual strategies underlying second language acquisition’
- 2021 *Student Project Fund* research grant, University College London, £1120
‘Representations of natural sound categories’
- 2020 *Student Project Fund* research grant, University College London, £530
‘Perception of natural sound categories’

AWARDS

- 2022 *Albert Valdman Award* for outstanding publication in *Studies in Second Language Acquisition*

TRAVEL AWARDS

- 2025 *Scholarship*, Virtual Acoustics for Immersive Audio, CCRMA, Stanford University
- 2022 *Travel Award*, Computational Cognitive Modelling for Language, University of California Irvine
- 2019 *JUCE Diversity Scholarship*, Audio Developers Conference
- 2018 *Student Travel Award*, Real World Communication Workshop, University of Connecticut

SCHOLARSHIPS

- 2020–2023 *Bloomsbury Graduate Research Studentship*, Birkbeck University of London and UCL IOE
- 2018–2020 *ERC Graduate Research Studentship*, ERC Advanced Grant to Prof J Kang No. 740696
- 2017–2018 *Kenway Legacy Scholarship*, Birkbeck University of London
- 2016–2017 *Scholarship Based on Academic Performance*, University of Nicosia

TEACHING EXPERIENCE

- 2024–2025 *Mentor*, Polonium Foundation
- 2024 *Research design workshop tutor*, the IMPRS Cognitive Neuroimaging Summer School (PG), Faculty of Brain Sciences, University College London
- 2023–2024 *Guest lecturer*, Birkbeck Department of Psychological Sciences
PSYC034H6 Language (UG) – lecture on Speech Production
PSYC007H7 Neuroimaging Methods (PG) – lecture on EEG data processing and analysis
- 2020–2022 *Supervisor and project coordinator*, UCL Psychology and Language Sciences Department
PSYC0012 Research Methods in Psychology (2UG)
- 2019–2024 *Teaching assistant*, UCL Psychology and Language Sciences Department
PSYC0046 Introduction to Statistics with R (1UG & 2UG)
PSYC0005 Introduction to Psychological Experimentation (1UG)
- 2019–2023 *Teaching assistant*, UCL Interaction Centre, Department of Computer Sciences
COMP0016 Systems Engineering (2UG)
COMP0067 App Design and Engineering (PG)

EVENT ORGANIZING

- 2024–Present *Cognition and Natural Sensory Processing Initiative (CNSP)* – member of the organizing committee for the CNSP online workshop and hackathon
- 2019–2021 *Methods for Dummies Course*, Wellcome Centre for Human Neuroimaging, UCL Institute of Neurology – course organizer and content coordinator

PROFESSIONAL DEVELOPMENT

- 2025 Virtual Acoustics for Immersive Audio, CCRMA, Stanford University
- 2025 Siemens 3T MR Scanner operator training, Birkbeck/UCL Centre for Neuroimaging (BUCNI)
- 2024 Introduction to Bayesian Mixed-Effects Models, University of Reading
- 2024 BCI & Neurotechnology Spring School, g.tec Medical Engineering GmbH
- 2024 AFNI Bootcamp on fMRI Data Processing and Quality Control and Visualization, NIH, Bethesda, MD
- 2023 7th Summer School on Statistical Methods for Linguistics and Psychology, Universität Potsdam
- 2022 Computational Cognitive Modelling for Language Summer School, University of California Irvine
- 2022 Cognition and Natural Sensory Processing Workshop (CNSP)
- 2022 Artificial and Natural Computations for Sensory Perception Summer School, FENS
- 2021 Cognition and Natural Sensory Processing Workshop (CNSP)
- 2019 Visceral Mind Summer School, Bangor University
- 2019 SPM for EEG and fMRI Analyses Course, University College London
- 2019 Real World Eye Tracking Course, Royal Holloway University of London
- 2019 EEG Training at Jonas & Silas Lab, Middlesex University
- 2018 TMS for Cognitive Neuroscience Workshop, University College London
- 2017 Human Brain Anatomy Course, Neurocourses UK