Dr Aislinn Keogh

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Employment

2025 – present

Postdoctoral Research Associate

Department of Psychology, Durham University, UK

- Working on ERC Starting Grant Children as Agents of Cultural Evolution (PI: Dr Sheina Lew-Levy)
- Developing agent-based computational models of social learning in children and adults
- Conducting observational and experimental research on children's peer-to-peer language use
- Using Approximate Bayesian Computation to fit models to field data

Education

2021 - 2025

PhD in Linguistics and English Language

Centre for Language Evolution, University of Edinburgh, UK

- Thesis title: Language adapts to pressures from production: Experimental and computational evidence
- Supervisors: Professors Jennifer Culbertson and Simon Kirby
- · Including a 6-week research visit with Professor Gary Lupyan (Department of Psychology, University of Wisconsin-Madison)

2020 - 2021

MSc with Distinction in Evolution of Language and Cognition

University of Edinburgh, UK

- Dissertation: Do memory limitations provide a selective pressure for languages to develop compositional structure? An experimental investigation
- Supervisor: Professor Simon Kirby

2010 - 2013

BA with First Class Honours in Linguistics

Newcastle University, UK

- Dissertation: An evolutionary perspective on the role of memory in language processing and production
- Supervisor: Professor Maggie Tallerman

2003 - 2010

High school education

Rugby High School, Warwickshire, UK

- A Levels: English Language (A*), French (A*), Classical Civilisation (A), English Literature (A)
- 12 GCSEs (A*-B)

Skills

English (first language), French (B1), Spanish (A2), Norwegian Bokmål (A2), Languages

British Sign Language (beginner)

Programming | Python, R, JavaScript, Markdown, LTEX, HTML

Data analysis | Frequentist methods (1me4), Bayesian methods (brms), tidyverse, pandas, MySQL

Experiments | isPsych, Prolific, Amazon Mechanical Turk

Other | Git, Microsoft Office

2023 - 2025

Training Fellow

Centre for Data, Culture & Society, University of Edinburgh, UK

Contributing to the Centre's training programme which aims to grow capacity for data-led and computational research across the arts, humanities and social sciences. Developing and delivering courses including:

- Introduction to Bayesian Statistics
- Introduction to coding for data analysis (Python in Jupyter Notebooks)
- Regression and mixed effects modelling in R
- Null hypothesis testing in R
- · Data simulation
- · Version control with Git and GitHub
- Effective data visualisation
- Open research
- Pre-registration
- · Crowdsourcing research data
- Building websites with GitHub pages
- Introduction to Markdown

202I - 2024

Tutor

School of Philosophy, Psychology and Language Sciences, University of Edinburgh, UK

Teaching on the following courses, offered to advanced undergraduate and postgraduate students:

- Online Experiments for Language Scientists, a practical course on developing behavioural experiments in JavaScript (using the jsPsych library). My role on this course involves providing practical coding support during lab sessions and I-I drop-ins, and marking two assignments: an annotated bibliography, and a coding project and accompanying report.
- **Simulating Language**, a course using agent-based Bayesian models (written in Python) to test hypotheses about language learning and evolution. My role on this course involves providing practical coding support during lab sessions and marking assignments encompassing both theoretical and practical short-answer questions.
- Origins and Evolution of Language, a highly interdisciplinary course covering the basics of evolutionary biology, animal communication and cognition, fieldwork on emerging sign languages, and computational models and experimental studies of language evolution. My role on this course involves delivering discussion-based tutorials and marking essays.
- Introduction to Programming with Turtles and Intermediate Programming in Python, notfor-credit programming courses available to all staff and students in my school. My role on these courses involves providing practical coding support during drop-in classes.

2021 - 2022

Skills Centre Tutor

School of Philosophy, Psychology and Language Sciences, University of Edinburgh, UK

1-1 writing consultation appointments with undergraduate and masters students

Publications

- Keogh, A., Culbertson, J., & Kirby, S. (2025). The lexicon adapts to competing communicative pressures: Explaining patterns of word similarity. *PsyArXiv Preprints*.
- Keogh, A., Kirby, S., & Culbertson, J. (2024). Predictability and variation in language are differentially affected by learning and production. *Cognitive Science*, 48(4), e13435.
 - **Keogh**, **A.**, & Pankratz, E. (2024). Simulation as a tool for formalising null hypotheses in cognitive science research. *Proceedings of the Annual Meeting of the Cognitive Science Society, 46*, 4486–4492.
 - **Keogh**, **A.**, Culbertson, J., & Kirby, S. (2024). Communication and learning pressures result in clustered lexicons. *Proceedings of the Annual Meeting of the Cognitive Science Society, 46.*
 - **Keogh**, **A.**, & Lupyan, G. (2024). Who benefits from redundancy in learning noun class systems? *The Evolution of Language: Proceedings of the 15th International Conference (Evolang XV)*.
 - Pankratz, E., **Keogh**, **A.**, Kirby, S., & Culbertson, J. (2024). For learning morphological rules, production tasks are no better than comprehension. *OSF Preprints*.
- Keogh, A., Pankratz, E., Kirby, S., & Culbertson, J. (2023). Does production facilitate learning morphosyntactic generalisations? *Proceedings of the Annual Meeting of the Cognitive Science Society, 45*, 3919.
- Keogh, A., Kirby, S., & Culbertson, J. (2022). In search of a unified mechanism for regularisation of linguistic variation. *Proceedings of the 23rd Amsterdam Colloquium*, 360–366.

Presentations

Oct 2020

University of Edinburgh

Talks

Dec 2024	Absurd how our preferred words can be so easily misheard: The evolution of phonetic clustering. Centre for Language Evolution talk series, University of Edinburgh
Sep 2024	Language production biases increase word similarity through cultural transmission. Cultural Evolution Society Conference (CES 24)
May 2024	Who benefits from redundancy in learning noun class systems? International Conference on the Evolution of Language (Evolang XV)
Oct 2023	Does redundancy make language more robust to individual differences in learning? Centre for Language Evolution talk series, University of Edinburgh
Sep 2023	Individual differences in generalization: the role of redundant cues. Goldin-Meadow Lab, University of Chicago
Feb 2023	Memory limitations and the regularisation of linguistic variation: learning or production effects? 31st Conference of the Student Organization of Linguistics in Europe
Dec 2022	In search of a unified mechanism for regularisation of linguistic variation. Workshop on Biases in Language and Cognition, 23rd Amsterdam Colloquium
Sep 2022	Do memory limitations provide a selective pressure for languages to become more regular as they evolve? Centre for Language Evolution talk series, University of Edinburgh

Working memory and its implications for language evolution. Cognitive Linguistics Research Group,

Posters

Sep 2024	Production and comprehension pressures jointly shape lexicon structure. Architectures and Mechanisms for Language Processing (30th AMLaP)
Jul 2024	Simulation as a tool for formalising null hypotheses in cognitive science research. Annual Meeting of the Cognitive Science Society (CogSci 2024)
Jul 2024	Communication and learning pressures result in clustered lexicons. Annual Meeting of the Cognitive Science Society (CogSci 2024)
Jul 2023	Does production facilitate learning morphosyntactic generalisations? Annual Meeting of the Cognitive Science Society (CogSci 2023)
Apr 2023	The role of production for morphosyntactic generalisation. 77th Language Lunch, University of Edinburgh (Winner: Best Poster)
Dec 2022	In search of a unified mechanism for regularisation of linguistic variation. Workshop on Biases in Language and Cognition, 23rd Amsterdam Colloquium
Dec 2022	Regularisation of linguistic variation arises from both learning and production biases. 76th Language Lunch, University of Edinburgh

Academic community

Peer review

2025	Annual Meeting of the Cognitive Science Society (CogSci 2025)
2024	Cognitive Science journal Annual Meeting of the Cognitive Science Society (CogSci 2024)
2023	International Conference on the Evolution of Language (Evolang XV)
2022	st Language and Interaction Network event, University of Edinburgh

Event organisation

22 | Edinburgh Lectures in Language Evolution

An annual four-part hybrid talk series with over 200 attendees, hosted by the Centre for Language Evolution in partnership with the UKRI Centre for Doctoral Training in Natural Language Processing.

Outreach

2025 | Being Human

A pop science workshop on human and animal communication, part of the *Monkeys: Our Primate Family* exhibition at the National Museum of Scotland.

2024 | Language Evolves!

A pop linguistics workshop to introduce 7-11 year old children to the scientific study of language evolution.

Open source software contribution

2025 | jsPsych Hackathon

Vassar College, USA

Collaboratively developing custom plugins at an NSF-funded event dedicated to extending the jsPsych ecosystem.

Professional service

2022 | Tutor Rep

Department of Linguistics and English Language, University of Edinburgh

Awards and Funding

2023 Overseas Institutional Visit training fund

Scottish Graduate School of Social Science

A £3,000 grant to enable me to undertake a 6-week research visit to the University of Wisconsin-Madison.

2020 – 2024 | ESRC-funded 1+3 studentship

Scottish Graduate School of Social Science

Full tuition fees and stipend for my Masters and PhD.

2013 | Barbara Strang Award

Newcastle University

Highest overall result across all English Language and Linguistics graduates

Memberships

2024 - present | Cultural Evolution Society
 2021 - present | Cognitive Science Society
 2013 - 2015 | European Human Behaviour and Evolution Association

Non-academic employment

Apr 2018 – Aug 2020

Senior Press Officer

Office for Students, Bristol, UK

- Proactive and reactive media relations with all national education correspondents, specialist sector press and student journalists, with a focus on fair access and participation policy
- Strategic communications planning for the National Student Survey, student engagement activity, and information, advice and guidance resources
- Line management of Media Assistant

May 2016 - Mar 2018

Press and Communications Adviser

Office for Fair Access, Bristol, UK

- Writing and distributing press releases and ghost writing pieces on behalf of senior staff
- Handling media enquiries and preparing media briefings for senior staff
- · Copy editing content for social media, website and publications

Dec 2013 - Apr 2016

Student Recruitment Officer

University Centre Weston, Weston College, Weston-super-Mare, UK

- Leading on outreach work in the region including strengthening links with feeder schools and colleges, and delivering IAG sessions to young people and their parents/guardians
- Organising on-campus events such as open and taster days
- Copywriting and editing content including prospectuses, web pages, and case studies