

Junior Linguistic Researcher

Esme Fairfax



EXPERIENCE

Summer Research Assistant, University of Edinburgh, Phonetics Laboratory, Edinburgh Jun 2024 – Aug 2024

10 week paid research placement supporting Dr. Claire Nance's ESRC funded project on vowel change in Scottish English dialects.

- Recorded speech data from **45 participants** across 3 Scottish dialect regions using SpeechRecorder and a sound-treated booth
- Annotated **4,500 vowel tokens** in Praat, segmenting and labelling formant measurements (F1, F2, F3) for acoustic analysis
- Ran mixed effects regression models in R (lme4) on formant data, contributing to a **conference paper submitted to LabPhon 19**
- Maintained a **participant database** of 120 speakers across 3 rounds of data collection

Research Assistant (Part Time), University of Edinburgh, Department of Linguistics and English Language, Edinburgh Jan 2024 – May 2024

Assisted Prof. Graeme Trousdale with a corpus linguistics project on syntactic change in British English.

- Coded **80,000 tokens** in the International Corpus of English (ICE-GB) for 4 syntactic variables
- Used Python (NLTK) to extract and pre-process **12,000 concordance lines** for manual annotation
- Produced **8 data visualisations** in R (ggplot2) for the project's working paper

CERTIFICATIONS

Linguistic Society of Great Britain Student Member, Linguistic Society of Great Britain Sep 2023

PROJECTS

Dissertation: Regional Variation in the Scottish English GOOSE and GOAT Vowels Oct 2024 – Apr 2025

Investigated ongoing vowel changes in the GOOSE and GOAT lexical sets across 3 Scottish dialect regions (Central Belt, North East, Highlands).

- Recorded and analysed speech from **30 speakers** (10 per region, balanced for age and gender)
- Extracted **1,800 vowel tokens** and measured F1/F2 formants in Praat
- Found statistically significant **fronting of GOOSE** in Central Belt speakers under 25 ($p < 0.001$) but not in Highland speakers
- Presented at the **Edinburgh Linguistics Undergraduate Conference** to 40+ staff and students

EXTRA CURRICULAR ACTIVITY

Volunteer, Duolingo Scottish Gaelic Course (community contributor) Jan 2024 – Jun 2025

Contributed 50+ exercise suggestions and error reports to the Duolingo Scottish Gaelic course. Participated in monthly community review meetings with the course team.

PROFILE

Linguistics graduate from the University of Edinburgh with research experience at the Edinburgh Phonetics Laboratory. Annotated 4,500 audio samples in Praat, coded 80,000 tokens in the International Corpus of English, and tested 45 participants in a vowel perception experiment. Skilled in Praat, ELAN, R (lme4, ggplot2), and Python (NLTK). Interested in positions combining experimental phonetics with corpus-based analysis.

EDUCATION

BA (Hons) in Linguistics

University of Edinburgh, Edinburgh
Sep 2022 – Jun 2025

SKILLS

- Praat (acoustic analysis, annotation, scripting)
- ELAN (multimodal annotation)
- R (lme4, ggplot2, tidyverse)
- Python (NLTK, pandas)
- Corpus Annotation & Concordancing
- Phonetic Transcription (IPA)
- SpeechRecorder (data collection)
- Experimental Design & Participant Testing
- SPSS (descriptive statistics, ANOVA)
- LaTeX & R Markdown

LANGUAGES

- English (native)
- Scottish Gaelic (beginner, A2)
- French (intermediate, B1)

REFERENCES

Dr. Claire Nance

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Prof. Graeme Trousdale

Professor of Linguistics, University of Edinburgh, g.trousdale@ed.ac.uk, +44 7700 900 781