Laura E. Gwilliams

laura.gwilliams@nyu.edu

Research Positions

Aug 2013 - Present Research Assistant, New York University Abu Dhabi

Supervisors: Dr. Alec Marantz and Dr. Liina Pylkkänen

July 2012 - Jan 2014 Research Assistant, Cardiff University

Supervisor: Dr. Lise Fontaine

Sept 2011 - June 2012 Graduate Research Team, Cardiff University

Education

M.Sc. <u>2012 - 2013</u>

Cognitive Neuroscience of Language

Basque Center on Cognition, Brain and Language (BCBL)

Grade: Excellent

Dissertation: Sensitivity to morphological composition

Supervisors: Dr. Arthur Samuel & Dr. Philip Monahan

B.A. 2009 - 2012

English Language, with specialisation in theoretical linguistics

Cardiff University

Grade: 1st Class with honours

Dissertation: Ambiguity of process-type selection in systemic functional linguistics

Supervisor: Dr. Lise Fontaine

Awards and Scholarships

Dell Hymes Commendation for Excellent Academic Achievement, Cardiff University, 2012

Description: Presented to the top graduating student within the department

Academic Service

Conference Assistant, Society for the Neurobiology of Language, October 2012

Editor of Centre for Language and Communication Research Newsletter, 2011 – 2012

Guest writer of Gair Rhydd's "Science" page, in Cardiff University's newspaper, 2011 - 2012

Student Representative, English Language Graduating Class of 2012, Cardiff University, 2009 - 2012

Software and Programming Skills

Research Methodologies: MEG, EEG, Behavioural, Eye-Tracking, fMRI (limited experience)

Data Analysis: MNE-Python, BESA, MATLAB (Fieldtrip), R, MEG160

Auditory Packages: Praat, Audacity

Experiment Presentation: MATLAB (Psychtoolbox), Presentation, DMDX

Programming: Python, Perl, Unix (bash, tcsh), HTML

Publications

Politzer-Ahles, S., & **Gwilliams, L**. (In Press). Involvement of prefrontal cortex in scalar implicatures: Evidence from magnetoencephalography. *Language and Cognitive Neuroscience*.

Gwilliams, L., Monahan, P., & Samuel, A. (In Press). Sensitivity to morphological composition: Evidence from grammatical and lexical decision tasks. *Journal of Experimental Psychology: Language, Memory and Cognition*. [PDF].

Manuscripts

Gwilliams, L. & Marantz, A. (Submitted). Tracking non-linear prediction in a linear speech stream: Influence of morphological structure on spoken word recognition. **[PDF].**

Gwilliams, L., Lewis, G. & Marantz, A. (In preparation). The visual word form before the visual word form area: Revealing the temporal, spatial and oscillatory dynamics of letter string perception.

Gwilliams, L. & Fontaine, L. (Under revision). Ambiguous process type selection in systemic functional linguistics: Evidence from an online classification task.

Posters and Presentations

Gwilliams, L. & Marantz, A. (2015, March). *Decomposition of spoken Arabic words into root morphemes during processing: Evidence from magnetoencephalography.* Presentation at the Linguistics in the Gulf 5 Conference, Doha, Qatar

Gwilliams, L. (2015, March). *Letter specific sensitivities in the brain: located in time, space and current direction*. Presentation at the Neuroscience of Language Workshop 2015, Abu Dhabi, UAE

Gwilliams, L., & Marantz, A. (2015, Febuary). *Non-linear processing of a linear speech stream.* Presentation at the NYUAD Annual Research Conference 2015, Abu Dhabi, UAE.

Gwilliams, L., Lewis, G., & Marantz, A. (2014, August). *Revealing the cortical dynamics of letter string perception*. Poster presented at the Society for the Neurobiology of Language Conference, Amsterdam, Netherlands. [PDF].

Linzen, T., Gaston, P., **Gwilliams, L**. & Marantz, A. (2014, August). *Competition and prediction in the auditory processing of morphologically complex words*. Poster presented at the Society for the Neurobiology of Language Conference, Amsterdam, Netherlands. [PDF].

Gwilliams, L. & Fontaine, L. (2014, July). *Ambiguity in process type selection in systemic functional linguistics*. Presentation at the 25th European Systemic Functional Linguistics Conference, Paris, France.

Brodbeck, C., **Gwilliams, L**. & Pylkkänen, L. (2014, February). *Reference resolution and prediction in a visual world: MEG evidence from English and Arabic*. Presentation at the NYUAD Annual Research Conference 2014, Abu Dhabi, UAE.

Gwilliams, L., Monahan, P, & Samuel, A. (2013, June). *Why an Avalanche is faster than an Explosion*. Poster presented at The 8th International Morphological Processing Conference, Cambridge, UK. [PDF].

Gwilliams, L., Monahan, P., & Samuel, A. (2013, March). *Decompositional processing of nominalisations*. Poster presented at the Basque Center on Cognition, Brain and Language (BCBL), San Sebastian, Spain.