Laura E. Gwilliams

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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

 $Dissertation: {\it Sensitivity to morphological composition}$

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

Henry M. MacCracken Fellowship, New York University, 2015-2020

Description: Full funding of PhD tuition and maintenance

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

Description: Presented to the top graduating student within the department

Academic Service

Ad hoc reviewer for Psychonomic Bulletin and Review

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

Gwilliams, L. & Marantz, A. (2015). Tracking non-linear prediction in a linear speech stream: Influence of morphological structure on spoken word recognition. *Brain and Language*. [PDF].

Gwilliams, L., Monahan, P., & Samuel, A. (2015). Sensitivity to morphological composition: Evidence from grammatical and lexical decision tasks. *Journal of Experimental Psychology: Language, Memory and Cognition*. [PDF].

Politzer-Ahles, S., & **Gwilliams, L**. (2015). Involvement of prefrontal cortex in scalar implicatures: Evidence from magnetoencephalography. *Language and Cognitive Neuroscience*.

Manuscripts

Gwilliams, L. & Fontaine, L. (Submitted). Indeterminacy in process type classification.

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.

Linzen, T., Gaston, P., **Gwilliams, L**. & Marantz, A. (In preparation). Competition and prediction in the neural processing of morphologically complex spoken words.

Brodbeck, C., **Gwilliams**, L. & Pylkkänen, L. (In preparation). EEG can track the time course of reference resolution in small visual worlds.

Posters and Presentations

Gwilliams, L. & Marantz, A. (2015, June). Abstract representation of the root morpheme: A magnetoencephalography study of spoken Arabic. Presentation at the 9th Morphological Processing Conference, Potsdam, Germany.

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.