School of Psychology, Faculty of Health Sciences and Wellbeing, University of Sunderland, SR1 3SD

#### **ACADEMIC POSITIONS & EDUCATION**

Lecturer in Psychology. University of Sunderland (September 2019 – Present).

Post-doctoral Research Fellow. Abertay University (September 2016 – August 2019).

**Project Title:** Literacy Acquisition in Situations of Dialect Exposure.

Principal Investigator: Prof. Vera Kempe.

Research Assistant. University of Dundee (April 2016 – September 2016).

Principal Investigator: Dr. Yuki Kamide.

PhD Doctoral Research in Psychology. University of Dundee (September 2012 – June 2016).

Thesis Title: Language-mediated Event Representations.

Advisor: Dr. Yuki Kamide.

Summary of research: Several eye-tracking experiments addressed how space is represented when understanding narrative events, and the influence this has on accessibility for information during language comprehension. This research established that, in the absence of an overt task, comprehenders maintain a categorical representation of space; segmenting information into separate 'event models' on a room-by-room basis. This resulted in (i) reduced accessibility for potential referents within a visual scene if a protagonist was described as moving outside of the scene, (ii) interference on access for an object described as moving from one location to another if this movement occurred between two rooms rather than one, and (iii) reduced competition between semantic competitors if narratives described the competitors in separate locations rather than the same location. Largely, these findings supported and expanded upon recent models of event cognition.

MRes Language & Cognition: Distinction. Northumbria University (September 2011 – September 2012).

**Dissertation Title:** Embodying Abstract Concepts.

BSc Psychology (Hons): First Class. Northumbria University (September 2008 – July 2011). Dissertation Title: Evaluative Reactions of Regional Accents: An Evolutionary Perspective.

## PROFESSIONAL QUALIFICATIONS

Post-graduate Certificate in Higher Education Teaching. Abertay University (September 2017 – June 2019).

## RESEARCH INTERESTS

Language comprehension, mental models, language learning, language variation, embodied cognition.

## PEER-REVIEWED JOURNAL ARTICLES

Buchanan, E. M., Maxwell, N. P., Montefinese, M., Taylor, J. E., Valentine, K. D., Cuccolo, K.,...Coles, N. (submitted). SPAML: Semantic priming across many languages. *Nature Human Behavior*.

Dunne, S., Williams, G. P., Rafferty, S., Ellison, A., & Lane, A. R. (under review). The gamification of visual search through leaderboard-induced competition. *Quarterly Journal of Experimental Psychology* 

Williams, G. P., Kempe, V., & Panayotov, N. (2021). Exposure to dialect variation in an artificial language prior to literacy training impairs reading of words with competing variants but does not affect decoding skills. *Journal of Experimental Psychology: Learning, Memory, & Cognition*. Open access preprint retrieved from https://doi.org/10.31234/osf.io/xmzth.

Williams, G. P., Panayotov, N., & Kempe, V. (2020). How does dialect exposure affect learning to read and spell? An artificial orthography study. *Journal of Experimental Psychology: General*, 149(12), 2344-2375. https://doi.org/10.1037/xge0000778. Retrieved from https://psycnet.apa.org/record/2020-29825-001. Open access postprint retrieved from https://psyarxiv.com/b8zn6/.

- Williams, G. P., Kukona, A., & Kamide, Y. (2019). Spatial narrative context modulates semantic (but not visual) competition during discourse processing. *Journal of Memory and Language*, 108, 104030. https://doi.org/10.1016/j.jml.2019.104030. Retrieved from https://www.sciencedirect.com/science/article/pii/S0749596X19300610. Open access postprint retrieved from https://psyarxiv.com/hvnym/.
- Chen, S-C., Szabelska, A., Chartier, C. R., Kekecs, Z., Lynott, D., Jones, B., ... Parveen, N. (2018, November 1). Investigating object orientation effects across 14 languages. Provisionally accepted at *Psychonomic Bulletin and Review*. Open access preprint retrieved from https://psyarxiv.com/t2pjv/.
- Moshontz, H., Campbell, L., Ebersole, C. R., IJzerman, H., Urry, H. L., Forscher, P. S., ... Chartier, C. R. (2018). The Psychological Science Accelerator: Advancing psychology through a distributed collaborative network. Advances in Methods and Practices in Psychological Science, 1-15. Retrieved from http://journals.sagepub.com/doi/abs/10.1177/2515245918797607

#### PEER-REVIEWED JOURNAL ARTICLES IN PREPARATION

- Declerck, M., Williams, G. P., & Kirk, N. (in prep). Standard language production influences regional dialect use: Evidence from the blocked language order effect.
- Hodgetts, S., Williams, G. P., & Butler, J. (in prep). Videogaming effects on mental health outcomes during three COVID-19 national lockdowns.
- Dunne, S., Fletcher, A., Bradbury, C., & Williams, G. P. (in prep). Lockdown Loneliness: Comparison of pandemic-induced loneliness in stroke survivors and neurotypicals.
- Dunne, S., Williams, G. P., & Knight, H. (in prep). Gamification-induced intrinsic motivation changes in visual foraging.
- Williams, G. P., Kukona, A., & Kamide, Y. (in prep). Representing spatial shifts in discourse processing.

## **PREPRINTS**

Panayotov, N., Williams, G. P., Kirk, N. W., & Kempe, V. (2020, January 7). Implicit sequence learning in applied game design. https://doi.org/10.31234/osf.io/wujsn

## BOOKS

Williams, G. P. (2018). R for Psych. Web-book aimed at teaching R for data manipulation, analysis, and presentation for psychological research. Retrieved from http://glennwilliams.me/r4psych/

#### PEER-REVIEWED CONFERENCE PROCEEDINGS

- Williams, G. P., Kukona, A., & Kamide, Y. (2015). Event structure influences on object accessibility during competitive retrieval. In Ansorge, U., Ditye, T., Florack, A., & Leder, H. (Eds). Abstracts of the 18th European Conference on Eye Movements, 2015, Vienna. *Journal of Eye Movement Research*, 8(4):1, 56. Retrieved from http://www.jemr.org/online/8/4/1)
- Williams, G. P., Kukona, A., & Kamide, Y. (2014). Representing spatial shifts in event processing. In Bello P., Guarini M., McShane M., & Scassellati, B. (Eds.) *Proceedings of the 36<sup>th</sup> Annual Conference of the Cognitive Science Society* (3107-3112). Austin TX: Cognitive Science Society.

Retrieved from http://mindmodeling.org/cogsci2014/papers/536/paper536.pdf

## PEER-REVIEWED CONFERENCE PRESENTATIONS

- Williams, G. P., Panayotov, N., & Kempe, V. (2019). Does dialect exposure impair literacy acquisition? Talk presented at the 25<sup>th</sup> Annual Architectures and Mechanisms for Language Processing (AMLaP) conference. Moscow Higher School of Economics, Moscow, Russia: September 2019.
- Williams, G. P., Panayotov, N., & Kempe, V. (2019). Does dialect exposure impair literacy acquisition? Talk presented at the Child Language Symposium. The University of Sheffield, Sheffield, UK: July 2019.
- Williams, G. P., Panayotov, N., & Kempe, V. (2018). The impact of dialect exposure on artificial literacy learning in transparent and opaque orthographies. Poster presented at the 3<sup>rd</sup> Psychonomics International conference. Beurs van Berlage, Amsterdam, the Netherlands: May 2018.
- Williams, G. P., Kukona, A., & Kamide, Y. (2017). Modulating conceptual (but not perceptual) competition in the visual world. Poster presented at the 23<sup>rd</sup> Annual Architectures and Mechanisms for Language Processing (AMLaP) conference. Lancaster University, Lancaster, UK: September 2017.
- Williams, G. P., Panayotov, N., & Kempe, V. (2017). Introducing the artificial literacy learning paradigm for literacy acquisition research. Poster presented at the 23<sup>rd</sup> Annual Architectures and Mechanisms for Language Processing (AMLaP) conference. Lancaster University, Lancaster, UK: September 2017.
- Williams, G. P., Panayotov, N., & Kempe, V. (2017). Does exposure to dialect variation help or hinder literacy acquisition? Symposium talk presented at the 20<sup>th</sup> Annual Conference of the European Society for Cognitive Psychology (ESCoP). The University of Potsdam, Potsdam, Germany: September 2017.
- Williams, G. P., Kukona, A., & Kamide, Y. (2015). Spatial effects on semantic competition in discourse comprehension. Poster presented at the 21<sup>st</sup> Annual Architectures and Mechanisms for Language Processing (AMLaP) conference. The University of Malta, Valletta, Malta: September 2015.
- Williams, G. P., Kukona, A., & Kamide, Y. (2015). Event structure influences on object accessibility during competitive retrieval. Talk presented at the 18<sup>th</sup> Biennial European Conference on Eye Movements (ECEM). The University of Vienna, Vienna, Austria: August 2015.
- Williams, G. P., Kukona, A., & Kamide, Y. (2014). Spatial influences on object accessibility in discourse processing. Poster presented at the 20<sup>th</sup> Annual Architectures and Mechanisms for Language Processing (AMLaP) conference. The University of Edinburgh, UK: September, 2014.
- Williams, G. P., Kukona, A., & Kamide, Y. (2014). Event structure influences on object updating: Accessing new representations in the visual world. Talk presented at the 7<sup>th</sup> Annual Embodied and Situated Language Processing (ESLP) conference. Rotterdam, The Netherlands: August, 2014.
- Williams, G. P., Kukona, A., & Kamide, Y. (2014). Representing spatial shifts in event processing. Poster presented at the 36<sup>th</sup> Annual Conference of the Cognitive Science Society. Quebec City, Canada: July, 2014.
- Williams, G. P., Kukona, A., & Kamide, Y. (2014). Event structure modulates accessibility for updated object representations during discourse processing. Talk presented at the Experimental Psychology Society (EPS) summer meeting. Newcastle University, Newcastle-Upon-Tyne, UK: July, 2014.
- Williams, G. P., Kukona, A., & Kamide, Y. (2013). Distinctive events outweigh distance: Rep-

resenting spatial-shifts in discourse processing. Poster presented at the 19<sup>th</sup> Architectures and Mechanisms for Language Processing (AMLaP) conference. Aix-Marseille Université, Marseille, France: September, 2013.

#### INVITED TALKS

- 2017: Are you more likely to find your key if the lock is in another room? Effects of spatial configuration on information retrieval in language comprehension. Talk presented at Northumbria University, Newcastle-upon-Tyne, UK: 10<sup>th</sup> May 2017.
- 2015: Representing space in discourse processing. Talk presented at the University of Glasgow, Glasgow, UK: 15<sup>th</sup> May 2015.

#### AWARDS, GRANTS, & SCHOLARSHIPS

- 2017: £10,000 Carnegie Trust Research Incentive grant application (unsuccessful): "Din-donian": Does Dundonian's distinctive sound make it more intelligible in background noise?, Kirk, N. W., & Williams, G. P.
- 2015: £400 Leng Trust Travel Award for conference attendance: ECEM 2015, University of Vienna, Vienna, Austria.
- **2015:** £120,128 Education Endowment Foundation grant application (unsuccessful; highly rated): Actively looking for learning, Williams, G. P., Taylor, L. J., & Tatler, B. W.
- 2014: £500 EPS Grindley Grant for conference attendance: EPS 2014, Newcastle University, Newcastle-upon-Tyne, UK.
- 2013: £500 EPS Grindley Grant for conference attendance: AMLaP 2013, Aix-Marseille Université, Marseille, France.
- **2012:** £51,500 Full doctoral scholarship covering course fees and monthly bursary: School of Psychology, University of Dundee.
- **2011:** £3,300 Full Masters scholarship covering course fees: Department of Psychology, Northumbria University.
- 2011: £1000 Undergraduate thesis award: Department of Psychology, Northumbria University.
- 2011: Award and prize for Best Student Performance in BSc Psychology: Northumbria University.

#### TEACHING EXPERIENCE

#### 2019 - Present

- Deputy Program Leader for the Integrated Foundation Year, University of Sunderland.
- Module leader for the Foundation Project and Statistics (FDN002), University of Sunderland: 6 hours of teaching per academic year distributed across 12 lectures. Tasked with developing materials and assessments and delivering content. Class size of approximately 30 for lectures.
- Module leader and instructor for level 1 Mind to World (PSY123) (cognitive, developmental, and social psychology), University of Sunderland: 25 hours of teaching per academic year distributed across 25 lectures. Tasked with developing materials and assessments and delivering content. Class size of approximately 200 for lectures.
- Instructor for level 1 Being a Psychologist (PSY140) (research methods and statistics), University of Sunderland: 96 hours of teaching per academic year distributed across 12 lectures,  $2\times2$ hr workshops for 18 weeks and  $2\times1$ hr workshops for 6 weeks. Class size of approximately 200 for lectures and 30 for workshops.

Deputy Module Leader for level 2 Research Methods and Statistics (PSY260) module, University of Sunderland: 153 hours of teaching per academic year distributed across 9 lectures, 3×2hr workshops for 16 weeks, 6×1hr workshops for 8 weeks. Tasked with developing examples, assessments, and delivering content related to experiment builder software and statistical programming. Class size of approximately 150 for lectures and 30 for workshops.

Instructor for level 4 Everyday Motivations and Biases (PSYM66) module, University of Sunderland: 4 hours of teaching per academic year distributed across 2 lectures. Class size of approximately 10 students.

Instructor for the Institute of Coding, University of Sunderland: 14 hours per academic year distributed across 3×2hr workshops and 5×1hr workshops. Tasked with developing and delivering materials for introduction to Data Science using R and Python workshops.

#### 2017 - 2018

Instructor and Module Creator for the R for Statistical Computing course for post-graduate students and staff, Abertay University: 20 hours of teaching per academic year. Tasked with developing and delivering a 10 lesson programme with workshop-based and online content. Class size of approximately 20 students.

Instructor for level 3 honours Developmental Psychology (PY302), Abertay University: 14 hours of teaching per academic year, distributed across 5 workshops and 2 lectures. Class size of approximately 30 students for workshops and 100 for lectures.

Instructor for level 2 honours Thoughts on Psychology (PY202), Abertay University: 10 hours of teaching per academic year. Class size of 14 students.

## 2012 - 2016

Adjunct faculty for Biological Psychology, Dundee University Access to Learning (DUAL) Summer School, University of Dundee: 5 hours of teaching per academic year distributed across 5 workshops, and 5 hours of direct contact per academic year. Class size of approximately 30 students.

Adjunct faculty for level 3 honours Cognitive Psychology (PY31001), University of Dundee: 10 hours of teaching per academic year distributed across 5 lectures, and 10 hours of direct contact per academic year. Tasked with developing and delivering a 5 lesson lecture programme.

Instructor and co-ordinator for the Cognitive Psychology, DUAL On-line Summer School, University of Dundee: 20 hours of direct contact per academic year. Class size of 11 students.

Demonstrator for level 2 honours Research Skills for Psychologists (PY22003), University of Dundee: 40 hours teaching and 10 hours of direct contact per academic year. Four classes per week with a class size of approximately 30 students.

## SUPERVISION EXPERIENCE

## 2019 - Present

MSc dissertation project. Kerry Vart (MSc Psychology; University of Sunderland): Narrative perspective and active engagement do not affect results of immediate tests of listening comprehension in 5 to 7-year olds.

MSc dissertation project. Kim Atherton (MSc Psychology; University of Sunderland): Biasing discourse context modulates phonological (but not semantic) competition: A mouse-tracking study.

BSc (Hons) dissertation projects for 13 students (University of Sunderland).

Topics include Memory, Psycholinguistics, Visual Perception, and Embodied Cognition.

#### 2015 - 2016

MSc practicum project. Kerlin Pedak (MSc Psychological Research Methods, University of Dundee): Eye-tracking and Psycholinguistics.

BSc (Hons) dissertation project. Hara Voulgarakis (University of Dundee): Eye-tracking and Psycholinguistics.

#### 2014 - 2015

Erasmus work placement scheme. Francesca Viscido (University of Tampere, Finland): Eye-tracking and Psycholinguistics.

MSc practicum project. Ruth Corps (MSc Psychology of Language, University of Dundee): Eyetracking and Psycholinguistics.

#### OTHER TEACHING-RELATED EXPERIENCE

- 2019 Present: Level 1 and 2 marking duties (143 hours per academic year), level 2 assessment moderation, (4 hours per academic year), level 3 dissertation moderation (8 hours per academic year), personal tuition (32 hours per academic year). University of Sunderland.
- 2017: Level 2 marking duties, Abertay University: 30 hours per academic year.
- 2012 2015: Level 1 and 2 marking duties, University of Dundee: 100 hours per academic year.
- **2014:** Level 2 and 3 examination invigilation, University of Dundee.

#### PUBLIC ENGAGEMENT

- 2018: The eyes and the mind. Presentation and discussion at the St Joseph's RC Primary School Careers Fayre. Dundee, UK. 6<sup>th</sup> June 2018.
- 2015: Using eye Movements in psychological research. Demonstration presented at the Psychology Department Open Day; a student recruitment program for the University of Dundee. Dundee, UK, 11<sup>th</sup> March 2015.
- **2014:** The visual world paradigm. Demonstration presented at the Psychology Department Open Day; a student recruitment program for the University of Dundee. Dundee, UK, 18<sup>th</sup> December 2014.
- 2014: Understanding eye movements (Workshop). Co-presented with Shane Lindsay and Ross Macdonald at Engage Dundee; a public engagement event for primary school children (aged 8-10 years). University of Dundee, UK, 6<sup>th</sup> May 2014.
- 2014: Eye movements and communication. Demonstration co-presented with Ross Macdonald at Test Drive Dundee; a student recruitment program for the University of Dundee. Dundee, UK, 29<sup>th</sup> April 2014.
- **2013:** Eye movements and the mind (Workshop). Co-presented with Shane Lindsay and Ross Macdonald at Engage Dundee; a public engagement event for primary school children (aged 8-10 years). University of Dundee, UK, 15<sup>th</sup> May 2013.

#### PROFESSIONAL CONTRIBUTIONS

- **2021 Present:** Reviews Editor on the Editorial Board of Language Sciences for *Frontiers in Psychology* and *Frontiers in Communication*.
- **2019 Present:** Methods reviewer for the *Psychological Science Accelerator*, and reviewer for *Current Psychology*.

2013 - 2014: Postgraduate representative, School of Psychology: University of Dundee.

2008 - 2011: Undergraduate representative, Department of Psychology: Northumbria University.

## TECHNICAL SKILLS

## **Experimental Creation and Design**

HTML, CSS, JavaScript, lab.js, jsPsych, Python, PsychoPy, Open Sesame, SR Research Experiment Builder, Audacity and Praat sound editing software, GIMP and Photoshop image editing suites.

## Eye-tracking Systems

Desk Mounted: Eyelink-1000, Eyelink-1000 Plus

Head Mounted: EyeLink-II Portable: Positive Science

# Data Analysis/Presentation

Python, R, Julia, SR Research Data Viewer, Yarbus, SPSS, JASP, Jamovi, Microsoft Excel, LATEX.

## ADDITIONAL TRAINING COURSES

**2020:** Moving research online: Tutorials on running your research over the Web.

2018: Teaching reproducible data analysis in R. University of Glasgow.

2017: Bayesian statistics: From concept to data analysis. University of California, Santa Cruz (via Coursera).

2017: Improving your statistical inferences. Eindhoven University of Technology (via Coursera).

2014: Growth curve analysis: A hands-on tutorial on using multilevel regression to analyze time course data. CogSci 2014, Quebec City: Canada.

 ${\bf 2013:}$  SUPPORT: Eye-tracking methodologies. University of St. Andrews.

2012: Advanced Excel – functions, tricks, and short-cuts. University of Dundee.

2012: Digital image manipulation – Photoshop. University of Dundee.

## REFERRALS

Available on request.