

Jason W. Gullifer

McGill University
Department of Psychology
2001 Avenue McGill College
Montréal, QC H3A 1G1 Canada

phone: 1.438.868.1859
e-mail: jason.gullifer@mail.mcgill.ca
website: <http://www.jasonwgullifer.com>
scholar: <https://goo.gl/dPaVVd>

*cognitive psychology – cognitive neuroscience – bilingualism – psycholinguistics
behavioral methods – eyetracking – statistics – resting state fMRI*

Employment

Postdoctoral Researcher (2018 – present)

*Department of Psychology; Center for Research on Brain, Language, and Music;
McGill University
Supervisor: Debra Titone*

NIH Ruth L. Kirschstein NRSA Postdoctoral Fellow (2015 – 2018)

*Psychology Department; Center for Research on Brain, Language, and Music;
McGill University
Supervisors: Debra Titone & Denise Klein*

Research Technologist (2007 – 2009)

*Psychology Department; Department of Spanish, Italian, and Portuguese;
Center for Language Science; The Pennsylvania State University
Supervisors: Judith Kroll & Paola Dussias*

Education

Ph.D., Psychology and Language Science (2011 – 2015)

*Psychology Department; Center for Language Science; The Pennsylvania State University
Dissertation: Using syntactic priming to identify cross-language constraints in bilingual
language processing
Advisors: Judith Kroll & Paola Dussias*

M.S., Psychology (2009 – 2011)

*Psychology Department; Center for Language Science;
The Pennsylvania State University
Thesis: The effect of syntactic constraints on parallel activation of words in the bilingual's
languages
Advisors: Judith Kroll & Paola Dussias*

B.A., Linguistics and Psychology (2003 – 2007)

*Department of Linguistics; University of Massachusetts, Amherst
Thesis: Processing Reverse Sluicing
Advisors: Charles Clifton & Lyn Frazier*

Funding and Awards

Social Sciences and Humanities Research Council Insight Development Grant, 430-2016-01037 (Co-PI: Debra Titone): *Uncovering the Predictive Power of Multilingual Social Networks: Longitudinal Impacts on Language Ability and Educational Outcomes*, 2016-2018 (\$65,752).

National Institutes of Health Ruth L. Kirschstein National Research Service Award (NRSA), 1F32HD082983-01A1 (Co-PIs: Debra Titone, Denise Klein): *Determining the Neurocognitive Consequences of a Natural Switch in Language Immersion Context: Evidence from the Uniquely Bilingual City of Montreal*, 2015-2018 (\$158,805).

Bilingualism: Language and Cognition International Symposium on Bilingualism 10 Poster Prize: *Using syntactic priming to identify cross-language constraints in bilingual language processing*, 2015 (Second Place).

National Science Foundation Doctoral Dissertation Research Grant, BCS- 1251896 (PI: Judith F. Kroll, Co-PI: Paola Dussias): *Using syntactic priming to identify cross-language constraints in bilingual language processing*, 2013-2014 (\$17,513).

Penn State University Liberal Arts College Dissertation Support Grant (RGSO): *Using syntactic priming to identify cross-language constraints in bilingual language processing*, 2013 (\$5,000).

Penn State University Center for Language Science PIRE Fellowship: *The effect of immersion on cross-language activation during visual word recognition*, 2011 (Travel Award).

National Science Foundation Graduate Research Fellowship Program (GRFP): *The effect of syntactic constraints on parallel activation of words in the bilingual's languages*, 2011 (Honorable Mention).

Publications

Gullifer, J. W., Kroll, J. F., Dussias, P. E., Berry, G. M., & Navarro-Torres, C. (in preparation). What about the syntax? Bilingual word recognition in sentence context.

Gullifer, J. W. & Titone, D. (under review). Characterizing the social diversity of bilingualism using language entropy.

Gullifer, J. W. & Titone, D. (under revision). The impact of a momentary language switch on bilingual reading: Intense at the switch but merciful downstream for L2 but not L1 readers.

Gullifer, J. W., Chai, X. J., Whitford, V., Pivneva, I., Baum, S., Klein, D., & Titone, D. (2018). Bilingual experience and resting-state brain connectivity: Impacts of L2 age of acquisition and social diversity of language use on control networks. *Neuropsychologia*, 117, 123-134. doi: 10.1016/j.neuropsychologia.2018.04.037

- Vingron, N., **Gullifer, J. W.**, Hamill, J., Leimgruber, J., & Titone, D. (2018). Using eye tracking to investigate what bilinguals notice about linguistic landscape images. *Linguistic Landscape*, 3, 226-245. doi: 10.1075/ll.17014.vin
- Titone, D., **Gullifer, J.**, Subramaniapillai, S., Rajah, N., & Baum, S. (2017). History-inspired reflections on the bilingual advantages hypothesis. In Bialystok, E. & Sullivan, M. D. (Eds.), *Growing Old with Two Languages: Effects of Bilingualism on Cognitive Aging* (pp. 265-295). Amsterdam: John Benjamins Publishing.
- Dussias, P., **Gullifer, J.**, & Poepsel, T. J. (2016). How psycholinguistics can inform contact linguistics: converging evidence against a decreolization view of Palenquero. In Schwegler, A., & McWhorter, J., Ströbel, L. (Eds.), *The Iberian Challenge: Creole Languages Beyond the Plantation Setting* (pp. 181-204). Madrid/Frankfurt: Iberoamericana/Vervuert Verlag.
- Kroll, J.F., **Gullifer, J.**, & Zirnstein, M. (2016). Literacy in adulthood: Reading in two languages. In Nicoladis, E., & Montanari, S. (Eds.), *Lifespan Perspectives on Bilingualism* (pp. 225-245). Washington, DC: American Psychological Association. doi: 10.1037/14939-013.
- Kroll, J. F., **Gullifer, J. W.**, McClain, R., Rossi, E., & Martín, M.C. (2015). Selection and control in bilingual comprehension and production. In J. Schwieter, (Ed.), *Cambridge Handbook of Bilingualism* (pp. 485-507). Cambridge: Cambridge University Press. doi:10.1017/CBO9781107447257.021
- Kroll, J. F., **Gullifer, J. W.**, & Rossi, E. (2013). The multilingual lexicon: The cognitive and neural basis of lexical comprehension and production in two or more languages. In C. Polio (Ed.), *Annual Review of Applied Linguistics* (Vol. 33, pp. 102–127). Cambridge: Cambridge University Press. doi:10.1017/S0267190513000111
- Gullifer, J. W.**, Kroll, J. F., & Dussias, P. E. (2013). When language switching has no apparent cost: Lexical access in sentence context. *Frontiers in Psychology*, 4, 1–13. doi:10.3389/fpsyg.2013.00278

Software packages

- Gullifer, J. W.**, & Titone, D. (2018). Compute language entropy with {languageEntropy}. Retrieved from <https://github.com/jasongullifer/languageEntropy>. doi:10.5281/zenodo.1403272
- Gullifer, J. W.** (2009). Compute measures of word similarity. Retrieved from <https://github.com/jasongullifer/wordSimilarity>.

Organized Sessions and Symposia

Gullifer, J. W., & Titone, D. (2017). Scaling up: Psycholinguistic investigations of real-world bilingualism. Session organized at the 11th International Symposium on Bilingualism (ISB11). Limerick, Ireland.

Conference Presentations

Gullifer, J. W., Chai, X., Whitford, V., Pivneva, I., Baum, S., Klein, D., & Titone, D. (2018). The relationship between resting state networks and bilingual reading: A preliminary investigation. Poster presented at the 10th annual meeting of the Society for the Neurobiology of Language (SNL2018). Quebec City, Quebec.

Tiv, M., **Gullifer, J.**, Otto, R., & Titone, D. (2018). The Impact of Second Language Age of Acquisition and Language Usage Entropy on Reinforcement Learning among Bilingual Adults in a Non-Verbal Decision Making Task. Poster presented at the 10th annual meeting of the Society for the Neurobiology of Language (SNL2018). Quebec City, Quebec.

Gullifer, J. W., & Titone, D. (2018). *Capitalizing on variability in bilingual language experience: Language entropy predicts L2 abilities and brain organization.* Poster presented at the 2018 meeting of the Canadian Society for Brain, Behaviour, and Cognitive Science (CSBBCS). St. John's, Newfoundland.

Gullifer, J., Chai, X., Whitford, V., Pivneva, I., Baum, S., Klein, D., & Titone, D. (2017). *Bilingual experience shapes language control networks: the role of L2 AoA and social context of language usage.* Poster presented at the 9th annual meeting of the Society for the Neurobiology of Language (SNL2017). Baltimore, Maryland.

Titone, D., Tiv, M., Vingron, N., Chubala, C.M., Heard, A., Robin, J., **Gullifer, J.**, & Pexman, P. (2017). Introducing Women in Cognitive Science Canada (WiCS-Canada): An Extension of “Women in Cognitive Science (WiCS)” from the U.S. to the Canadian Context. Poster presented at the 11th annual meeting of the Gender Summit North America. Montreal, Quebec.

Vingron, N., **Gullifer, J.**, Whitford, V., Friesen, D., Debra, J., & Titone, D. (2017). *Using Eye Movements to Investigate Cross-Language Syntactic Activation During Natural Reading.* Poster presented at the 19th European Conference on Eye Movements (ECM2017). Wuppertal, North Rhine-Westphalia.

Gullifer, J., Chai, X., Pivneva, I., Whitford, V., Baum, S., Klein, D., & Titone, D. (2017). *Interactional context of bilingualism shapes language control networks.* Paper presented at the 11th International Symposium on Bilingualism (ISB11). Limerick, Ireland.

Vingron, N., Rouillard, V., **Gullifer, J.**, Leimgruber, J.R.E. & Titone, D. (2017). *What The Eyes Tell Us About How Bilinguals Visually Encode Linguistic Landscapes.* Paper presented at the 11th

International Symposium on Bilingualism (ISB11). Limerick, Ireland.

Vingron, N., **Gullifer, J.**, Whitford, V., Friesen, D., Debra, J., & Titone, D. (2017). *Cross-language syntactic activation during natural reading: Evidence from Adjective-Noun Constructions*. Paper presented at the 2017 Canadian Society for Brain, Behaviour, and Cognitive Science (CSBBCS). Regina, Saskatchewan.

Vingron, N., **Gullifer, J.**, Hamill, J., Leimgruber, J.R.E. & Titone, D. (2017). *Un regard sur le traitement des paysages linguistiques par les bilingues*. Poster presented at the 85e Congrès de l'Acfas. McGill University, Montréal, Canada.

Aguila, K. A., **Gullifer, J.**, Vingron, N., Rouillard, V., Palenski, P., Li, K., Titone, D. (2017). *Bilingualism and Your Social Life: Is There A Relationship?* Poster presented at the Annual McGill Psychology Undergraduate Research Day.

Gullifer, J., & Titone, D. (2016). *The impact of single-word code switching on bilingual sentence reading – Intense at the switch but merciful downstream*. Paper presented at 57th Annual Meeting of the Psychonomic Society. Boston, Massachusetts.

Gullifer, J. W., Chai, X., Pivneva, I., Whitford, V., Baum, S., Klein, D., & Titone, D. (2016). *Context of bilingualism shapes intrinsic functional connectivity*. Paper presented at the 2016 Canadian Society for Brain, Behaviour, and Cognitive Science (CSBBCS). Ottawa, Ontario.

Vingron, N., Hamill, J., **Gullifer, J. W.**, Leimgruber, J., & Titone, D. (2016). *What the Eyes Tell Us About How Bilinguals Encode Real-World Linguistic Landscapes*. Poster presented at the 2016 Canadian Society for Brain, Behaviour, and Cognitive Science (CSBBCS). Ottawa, Ontario.

Gullifer, J. W., Berry, G. M., Navarro-Torres, C. A., Kroll, J., Dussias, P. E. (2016). *What about the syntax? Bilingual word recognition in sentence context*. Poster presented at the International Meeting of the Psychonomic Society. Granada, Spain.

Gullifer, J., Kroll, J., Dussias, P., Navarro-Torres, C., Berry, G. (2015). *Using syntactic priming to identify cross-language constraints in bilingual language processing*. Poster presented at Multiple Perspectives on Bilingualism and the Brain. Montreal, Quebec.

Gullifer, J., Kroll, J., Dussias, P., Navarro-Torres, C., Berry, G. (2015). *Using syntactic priming to identify cross-language constraints in bilingual language processing*. Poster presented at the 10th International Symposium on Bilingualism (ISB10). New Brunswick, New Jersey.

Khan, K., **Gullifer, J.**, Kroll, J. (2013). *The relation between executive function skills and verbal fluency in monolinguals: Can we simulate the bilingual advantage?*. Poster presented at the 54th Annual Meeting of the Psychonomic Society. Toronto, Canada.

- Dussias, P., Poepsel, T., **Gullifer, J.** (2013). *Psycholinguistics in the Wild: Switching Costs in Spanish-Palenquero Word Switching*. Paper presented at the 2013 Münster Hispanistentag (Spanish in Contact with Other Languages). Münster, Germany.
- Gullifer, J.**, Dussias, P., Kroll, J. (2012). *Switching the Language of Sentence Context Produces No Apparent Costs to Lexical Access*. Poster presented at the 53rd Annual Meeting of the Psychonomic Society. Minneapolis, Minnesota.
- Gullifer, J. W.**, Dussias, P., Kroll, J. F. (2012). *When language switching has no apparent cost: Lexical access in mixed and blocked language context*. Paper presented at the 2012 Mental Lexicon Conference. Montreal, Canada.
- Gullifer, J. W.**, Dussias, P., Kroll, J. (2012). *Speaking words in sentences: When the language of production does not guide lexical access*. Poster presented at the 2012 International Workshop on Language Production. New York, New York.
- Gullifer, J.**, Kroll, J., Dussias, P. (2011). Can cross-language lexical activity be modulated by language-specific syntax? Paper presented at the 8th International Symposium on Bilingualism (ISB8). Oslo, Norway.
- Gullifer, J.**, Kroll, J., Dussias, P. (2010). *Does language-specific syntax modulate cross-language lexical processing?* Poster presented at the 51st Annual Meeting of the Psychonomic Society. St. Louis, Missouri.
- Rossi, E., **Gullifer, J.**, Dussias, P. E., Kroll, J. F. (2010). *Second language learners are not native speakers but they process some aspects of the syntax as if they were: Evidence from behavioral and ERP data*. Paper presented at the Donostia Workshop on Neurobilingualism. Donostia - San Sebastian, Spain,
- Gullifer, J.**, Kroll, J., Dussias, P. (2010). *Can bilinguals exploit language-specific syntax to modulate cross-language lexical activity?* Poster presented at the 16th Annual Conference on Architectures and Mechanisms for Language Processing (AMLaP 2010). York, England.
- Gullifer, J. W.**, Kroll, J. F., & Dussias, P. E.. (2010). *Bilingual sentence processing: The role of syntactic constraints in modulating cross-language lexical activity*. Poster presented at the 23rd Annual CUNY Conference on Human Sentence Processing. New York, New York.
- Valdés Kroff, J. R., Coffman, D., Dussias, P., Gerfen, C., **Gullifer, J.**, Guzzardo Tamargo, R. (2010). *Differential processing of grammatical gender in a sentential context: Eye-tracking evidence from Spanish monolinguals and Spanish-English bilinguals*. Poster presented at the 23rd Annual CUNY Conference on Human Sentence Processing. New York, New York.

- Valdés Kroff, J. R., Coffman, D., Dussias, P.E., Gerfen, C., **Gullifer, J.**, & Guzzardo Tamargo, R. (2009). *Comprehension reflects production: Investigating eye-movements in Spanish-English code-switches*. Paper presented at the 15th annual Architectures and Mechanisms for Language Processing (AMLaP 2009). Barcelona, Spain.
- Dussias, P. E., Gerfen, C., Valdés Kroff, J. R., **Gullifer, J.**, & Guzzardo Tamargo, R. E. (2009). *Asymmetrical use of gender information during the processing of unilingual and code-switched speech*. Paper presented at the 2009 European Society for Cognitive Psychologists. Krakow, Poland.
- Valdés Kroff, J. R., Guzzardo Tamargo, R. E., Dussias, P. E., Gerfen, C., & **Gullifer, J.** (2009). *Comprehension reflects production: Gender processing of code-switched utterances by Spanish-English bilinguals*. Paper presented at the 2009 Hispanic Linguistics Symposium. Rio Piedras, Puerto Rico.
- Valdés Kroff, J. R., Guzzardo Tamargo, R. E., Dussias, P. E., Gerfen, C., & **Gullifer, J.** (2009). *Processing costs in Spanish-English codeswitches: An eye-tracking study*. Paper presented at the 2009 Hispanic Linguistics Symposium. Rio Piedras, Puerto Rico.
- Valdés Kroff, J. R., Guzzardo Tamargo, R. E., Dussias, P. E., Gerfen, C., & **Gullifer, J.** (2009). *Processing spoken code-switches by Spanish-English bilinguals: A visual world study*. Paper presented at the 7th International Symposium on Bilingualism (ISB7). Utrecht, The Netherlands.
- Dussias, P.E., Botezatu, R., **Gullifer, J.**, Kroll, J., & Schwartz, A. (2009). *Do syntactic constraints in sentence context eliminate parallel activation of words in the bilingual's languages?* Paper presented at the 7th International Symposium on Bilingualism (ISB7). Utrecht, The Netherlands.
- Valdés Kroff, J. R., Guzzardo Tamargo, R. E., Dussias, P. E., Gerfen, C., & **Gullifer, J.** (2008). *Processing grammatical gender in Spanish-English code-switches: A visual world study*. Paper presented at 2008 Second Language Research Forum (SLRF) Conference. Honolulu, Hawaii.
- Valdés Kroff, J. R., Guzzardo Tamargo, R. E., Dussias, P. E., Gerfen, C., & **Gullifer, J.** (2008). *The use of grammatical gender in the processing of spoken code-switches by adult Spanish-English bilinguals*. Poster presented at the International Conference on Models of Interaction in Bilinguals. Bangor, Wales, UK.
- Gullifer, J.** (2008). *Processing Reverse Sluicing: A Contrast with Processing Filler-Gap Dependencies*. Poster presented at the 21st CUNY Conference on Human Sentence Processing. Chapel Hill, North Carolina.
- Valdés Kroff, J. R., Guzzardo Tamargo, R. E., Dussias, P. E., Gerfen, C., & **Gullifer, J.** (2008). *Grammatical gender in processing of Spanish-English code-switches: A visual world study*. Poster presented at the 21st CUNY Conference on Human Sentence Processing. Chapel Hill, North Carolina.

Invited Lectures and Workshops

Workshop: Capitalizing on our communicative & neurocognitive diversity: (05/2018)
A selective overview of why and how we study individual differences in language processing

CCP Spring Training in Experimental Psycholinguistics

Department of Linguistics, University of Alberta

Co-lecturer with Debra Titone

Workshop: Introduction to R (03/2018)

Graduate Association of Students in Psychology

Department of Psychology, McGill University

Guest Lecture: Cognition (03/2018)

Department of Psychology, McGill University

“Introduction to bilingualism”

Professor: Signy Sheldon

Guest Lecture: Psychology of Bilingualism (02/2018)

Department of Psychology, McGill University

“Bilingualism and the brain”

Professor: Debra Titone

Workshop: Introduction to LMER models (11/2017)

Centre for Research on Brain, Language and Music

Workshop: Tools for Open Science (10/2017)

Graduate Association of Students in Psychology, McGill University

Guest Lecture: Cognition (03/2017)

Department of Psychology, McGill University

“Introduction to bilingualism”

Professor: Signy Sheldon

Workshop: R Programming for Beginners (10/2016)

Graduate Association of Students in Psychology, McGill University

Centre for Research on Brain, Language and Music

Guest Lecture: Cognition (03/2016)

Department of Psychology, McGill University

“Introduction to bilingualism”

Professor: Signy Sheldon

Guest Lecture: Psychology Theory (01/2016)

Department of Psychology, McGill University

“Introduction to R for data processing”

Professor: Debra Titone

Guest Lecture: Introduction to Linguistics (11/2012)

Program in Linguistics, Penn State University

“Putting the psycho in linguistics”

Workshop: The R statistical package (09/2008)

Center for Language Science, Penn State University

Workshop: Using SR-Research Experiment Builder software (02/2008)

Center for Language Science, Penn State

Teaching Experience

Data Processing and Analysis for Language (05/2013)

Scientists using the R Statistical Package

Department of Spanish, Italian, and Portuguese, Penn State University

Introduction to Linguistics (09/2012 – 12/2012)

Program in Linguistics, Penn State University

Teaching Assistant, MATLAB for Behavioral Scientists (01/2012 – 05/2012)

Psychology Department, Penn State University

Professor: David Rosenbaum

Teaching Assistant, Psychology as a Science and Profession (01/2012 – 05/2012)

Psychology Department, Penn State University

Professor: Andrew Peck

Academic Service

Graduate Student R-ticle Group – Co-founder (2009 – 2010)

Center for Language Science, Penn State University

Co-organized a student group dedicated to scholarly and professional growth of graduate students

interested in language science. The group held weekly meetings designed to review new and classic research in the field; to discuss statistical methods and practices; and to learn new software and programming packages such as the R language.

Young Scholar Speaker Series – Organizer

(01/2012)

Center for Language Science, Penn State University

Co-organized a student-led event focused on professional development. Invited a speaker, solicited funding from affiliated departments, organized travel, planned a poster session, and organized invited colloquia.

Ad hoc reviewer

Annual CUNY Conference on Human Sentence Processing

International Journal of Bilingualism

International Workshop on Bilingualism and Cognitive Control

Journal of Experimental Psychology: General

Journal of Experimental Psychology: Human Perception & Performance

Linguistic Approaches to Bilingualism

Memory and Cognition

Translation Spaces | A multidisciplinary, multimedia, and multilingual journal of translation

Press Releases and Media Coverage

Want to be smart? Learn a foreign language

08/2015

<http://brainblogger.com/2015/08/05/want-to-be-smart-learn-a-foreign-language/>

Zut alors! Being bilingual DOESN'T make you smarter:

08/2014

Cognitive benefits of speaking two languages are a 'myth', claim scientists

<http://www.dailymail.co.uk/sciencetech/article-2736928/Zut-alors-Being-bilingual-DOESNT-make-smarter-Cognitive-benefits-speaking-two-languages-are-myth-claim-scientists.html>

Why bilingualism strengthens your mental muscle

09/2013

<http://www.futurity.org/bilingualism-builds-mental-muscle/>

Time to Learn Another Language? Being Bilingual Makes You Smarter

09/2013

<http://thedailyneuron.com/are-you-bilingual-means-you-are-automatically-smarter/>

Bilingual Speakers Develop Mental Flexibility

09/2013

<http://psychcentral.com/news/2013/09/11/bilingual-speakers-develop-mental-flexibility/59404.html>

- Benefits of Bilingualism 09/2013
<https://imsc.achievesms.com/headofeducation/2013/09/20/9-20-13-benefits-of-bilingualism/>
- Think twice, speak once: Bilinguals process both languages 09/2013
http://www.nsf.gov/news/news_summ.jsp?cntn_id=129060&org=NSF&from=news
<http://www.sciencedaily.com/releases/2013/09/130910121521.htm>
<http://news.psu.edu/story/286926/2013/09/10/research/think-twice-speak-once-bilinguals-process-both-languages>
- Bilinguals have the remarkable ability to switch from one language to the other 06/2013
<http://www.frontiersin.org/Press.aspx?cat=publicrelations&stage=pressreleases#>
- When language switching has no apparent cost: Lexical access in sentence context 05/2013
http://www.sciencecodex.com/frontiers_news_briefs_may_30-113146
http://www.eurekalert.org/pub_releases/2013-05/f-fnb052913.php

Professional Memberships

Canadian Society for Brain, Behaviour and Cognitive Science
 Psychonomic Society
 Society for the Neurobiology of Language
 Women in Cognitive Science - Canada