### Yoichi Mukai

#### **Current Position**

Faculty, Department of Modern Languages, Vancouver Island University Email: yoichi.mukai@viu.ca;

Website: https://yoichimukai.rbind.io; http://wordpress.viu.ca/japanese/

# Citizenship

Citizenship: Japan; Permanent residence: Canada

#### Research interests

Phonetics; Psycholinguistics; Pupillometry; Second language pronunciation and comprehension; Japanese Linguistics; Quantitative research method; R; Data analysis and visualization

#### Education

2014-20 PhD in Linguistics, University of Alberta, Canada.

Dissertation: "Production and perception of reduced speech and the role of phonological-orthographic consistency" Supervisors: Dr. Benjamin V. Tucker and Dr. Juhani

Järvikivi

MA in Applied Linguistics and Discourse Studies, Carleton University, Canada. Thesis: "The processability hierarchy in second language acquisition: Advanced learners of Japanese as a second language" Supervisor: Dr. David Wood

2009-10 Teachers of English as a Second/Foreign Language Certification Program, Algonquin College, Canada

BA (Honors) in Community Policy, Aichi Gakusen University, Japan

# Additional Programs

Visiting PhD student, Nagoya University, Japan

2015 Linguistic Society of America Institute, University of Chicago, USA

2015,16 Spring Training in Experimental Psycholinguistics, University of Alberta, Canada

# **Teaching Experiences**

2019- Instructor: JAPA 100, 101, 200, 201, Basic Japanese I & II, Intermediate Japanese I & II, and LING 111, Intro to Descriptive Linguistics

Department of Modern Languages, Vancouver Island University

2018,19 Instructor: LING 205, Phonetics

Department of Linguistics, University of Alberta

Teaching Assistant: LING 101, Introduction to Linguistics; LING 205, Phonetics Department of Linguistics, University of Alberta

2014 Instructor: Conversational Japanese

School of Linguistics and Language Studies & Summer Institute of Language and

	Culture, Carleton University
2014	Instructor: Elementary Japanese Interlanguages Language School, the Canadian Foreign Service Institute, the Learning Institution of the Global Affairs Canada
2012	Instructor: Introduction to Japanese Université du Québec en Outaouais
2011-14	Teaching Assistant: Japanese School of Linguistics and Language Studies, Carleton University
2010-14	Instructor: Japanese (Elementary to Advanced) Ottawa Japanese Language School
	Research Experiences
2018	Research Assistant for Dr. Esther S. Kim: Preprocessed, analyzed and visualized pupillometric data of person with aphasia, Department of Communication Science and Disorders, University of Alberta
2017-18	Editorial Assistant for Linguistics Abstract Online: Formatted and entered journal abstracts of scholarly articles in online database, Department of Linguistics, University of Alberta
2015-16	Research Assistant for Dr. Benjamin V. Tucker: Assisted in developing an interactive online phonetics course and lab activities for the project "Developing Interactive Online Lab Activities and an Online Course for Phonetics", Department of Linguistics, University of Alberta
2014-15	Research Assistant for Dr. Benjamin V. Tucker: Designed a pupillometry experiment for the project "Pupillary Responses to the Comprehension of Speech Variability and Spontaneous Speech", Department of Linguistics, University of Alberta
2014	Research Assistant for Dr. David Wood: Transcribed and translated spoken data (Japanese & English), and analyzed it quantitatively and qualitatively for the project "Idiodynamic analysis of speech fluency and willingness to communicate in a second language", School of Linguistics and Language studies, Carleton University
	Professional Service
2019	Journal reviewer, The Journal of the Acoustical Society of America; PLOS ONE
2018	Local organizing and scientific review committee, conference proceedings editor, The 11th International Conference on the Mental Lexicon, University of Alberta
2017-18	Research commitee, Prince Takamado Japan Centre, University of Alberta
2017	Graduate student volunteer, Alberta District Japanese Language Speech Contest, Prince Takamado Japan Centre, University of Alberta
2016-17	Writer, Aichi Gakusen University alumni newspaper (short articles about linguistics (in Japanese), Aichi Gakusen University
2016	Planning commitee, Spring Training in Experimental Psycholinguistics, University of Alberta
2012	Graduate student valunteer Applied Linguistics and Discourse Studies Thesis Pro-

# **Conference Proceedings Papers**

- **Mukai, Y.**, Järvikivi, J., & Tucker, B. V. (2018). The effect of phonological-orthographic consistency on the processing of reduced and citation forms of Japanese words: Evidence from pupillometry. In Emily Dmyterko (ed), *Proceedings of the 2018 annual conference of the Canadian Linguistics Association*.
- Mukai, Y., & Tucker, B. V. (2017). The phonetic reduction of nasals and voiced stops in Japanese across speech styles. *Proceedings of the 31th General Meeting of the Phonetic Society of Japan*, Tokyo: The Phonetic Society of Japan.
- Mukai, Y., & Tucker, B. V. (2015). Rhythm metrics and spontaneous speech in Japanese and English. *Canadian Acoustics*, 43(3), 114-115.

### Selected manuscripts submitted or in preparation

**Mukai, Y.**, & Tucker, B. V. (submitted). Phonetic variability of stops and nasals in Japanese across a range of speaking styles.

Wilson.C., **Mukai, Y.**, Figeys, M., Suleman, S., Garcia, R., & Kim, E.S. (in preparation). Examining cognitive control in people with aphasia.

**Mukai, Y.**, & Tucker, B. V. (in preparation). Rhythm metrics and the timing pattern of read and spontaneous speech: The case of Japanese, English, and L2 English.

**Mukai, Y.**, Järvikivi, J., & Tucker, B. V. (in preparation). Perception of reduced speech and the role of phonological-orthographic consistency: Evidence from pupillometry.

**Mukai, Y.**, Järvikivi, J., & Tucker, B. V. (in preparation). The effect of phonological-orthographic consistency in the recognition of reduced speech for L2 speakers: Evidence from pupillometry.

**Mukai, Y.**, & Järvikivi, J. (in preparation). Pupillometry and processing of morphologically (pseudo) complex words.

#### Presentations

- Pawlenchuk, M., **Mukai, Y.**, Tucker, B.V. (2019) Reduced flaps in English processed by non-native speakers. *2019 Acoustics Week in Canada*, Edmonton, Alberta, October 11-13.
- Mukai, Y. (2019) The effect of phonological-orthographic consistency and phonetic reduction in spoken word recognition. *The Department of Linguistics' 50th anniversary Conference*, University of Alberta, Edmonton, Alberta, April 13.
- Taylor, J., **Mukai, Y.**, & Miwa, K. (2018) Comparing the time courses of lexical processes in L1 and L2 word recognition: A lexical decision eye tracking study with Japanese-English bilinguals. The 17th International Conference on the Processing of East Asian Languages and the 9th Conference on Language, Discourse, and Cognition (ICPEAL 17 CLDC 9), National Taiwan University, Taiei, Taiwan, October 19-21.
- 2018 Mukai, Y. (2018) Does reduction influence the effect of phonological-orthographic

- consistency? Insights from pupillometry. *The 31st Japan Studies Association of Canada Annual Conference*, The University of Alberta, Edmonton, Canada, October 11-14.
- Taylor, J., Miwa, K. & **Mukai, Y.** (2018) Cross-linguistic similarity effects in L1 and L2 word recognition. The 11th International Conference on the Mental Lexicon, Edmonton, Canada, September 25-28.
- Mukai, Y., Järvikivi, J., & Tucker, B. V. (2018) The phonological-orthographic consistency effect on reduced word forms in Japanese: Evidence from pupillometry with a delayed naming task. *The 11th International Conference on the Mental Lexicon*, Edmonton, Canada, September 25-28.
- Mukai, Y., Tucker, B. V. & Järvikivi, J. (2018) The effect of phonological-orthographic consistency on the processing of reduced and citation forms of Japanese words: Evidence from pupillometry. The Annual Conference of the Canadian Linguistic Association, The University of Regina, Regina, Saskatchewan, May 30-June 1.
- Mukai, Y., Wood, D. & Tucker, B.V. (2018) Rhythm and fluency: Durational variability as a perceptual correlate of fluency in L2 speech. *The Annual Conference of the Canadian Association of Applied Linguistics*, The University of Regina, Regina, Saskatchewan, May 28-30.
- Mukai, Y., & Tucker, B. V. (2017). The phonetic reduction of nasals and voiced stops in Japanese across speech styles. *The 31th Generals Meeting of the Phonetic Society of Japan*, The University of Tokyo, Japan, September 30-October 1.
- Mukai, Y. (2017) Durational variability as perceptual correlates of fluency in L2 conversational speech. *MLCS Graduate Student Conference:*(Dis)Connections, University of Alberta, Edmonton, Alberta, February 2.
- Mukai, Y. (2017) Pupillometry and processing of morphologically complex words. Generals Paper Conference Colloquium, University of Alberta, Edmonton, Alberta, January 13.
- Porretta, V., **Mukai, Y.** & Tucker, B. V. (2016) What big eyes you have: Pupillary response to reduced speech. *The Tenth International Conference on the Mental Lexicon*, University of Ottawa, Ottawa, Canada, October 19-21.
- Mukai, Y. (2016) Comparison of timing patterns between read and spontaneous speech in Japanese, English, and L2 English using rhythm metrics. *Generals Paper Conference Colloquium*, University of Alberta, Edmonton, Alberta, February 5.
- Mukai, Y. & Tucker, B.V. (2015). Speech timing of spontaneous and read speech in Japanese and English. *The Alberta Conference on Linguistics*, Lethbridge, Alberta, October 31.
- Mukai, Y. & Tucker, B. V. (2015) Rhythm metrics of spontaneous speech and accent in Japanese and English. *The Annual Conference of the Canadian Acoustical Association*, Halifax, Nova Scotia, October 6-8.

### **Poster Presentations**

Tucker, B. V., Porretta, V., & Mukai, Y. (2019) Investigating the comprehension and perception of reduced speech with pupillary response *The 177th Meeting of Acoustical Society of America*, Louisville, Kentucky, May 13-17.

- Mukai, Y., Järvikivi, J., & Tucker, B. V. (2018) The time-course of recognition of reduced Japanese words: Evidence from pupillometry with a Go-NoGo task *The* 176th Meeting of Acoustical Society of America and 2018 Acoustics Week in Canada, Victoria, BC, Canada, November 5-9.
- Mukai, Y. & Tucker, B. V. (2018) Phonetic variability of nasals and voiced stops in Japanese *The 175th Meeting of the Acoustical Society of America*, Minneapolis, Minnesota, May 7-11.
- Mukai, Y., Aoki, H. & Daiju, S. (2017) Acquisition of L2 Japanese rhythm: How does durational variability change over time?. The 9th Annual Pronunciation in Second Language Learning & Teaching Conference, University of Utah, Salt Lake City, UT, September 1-2.
- Mukai, Y., Järvikivi, J., Tucker, B. V., & Lõo, K. (2016) Pupil response as a processing measure of morphologically (pseudo) complex words. *The Tenth International Conference on the Mental Lexicon*, University of Ottawa, Ottawa, Canada, October 19-21.

### **Invited Presentations**

- The effect of speech style on phonetic reduction of nasals and voiced stops in Japanese, January 24, Brown-Bag Lunch Talks, Prince Takamado Japan Centre, University of Alberta.
- Analyzing linguistic data with linear mixed-effects modeling, generalized additive modeling, and random forest analysis, December 19, Graduate School of Humanities, Nagoya University.
- 2017 The effect of orthography in spoken word recognition, September 28, Graduate School of Letters, Arts and Sciences, Waseda University
- Pupillometry as a processing measurement of morphologically complex word and How much do durational variations matter? & Modeling the perception of fluency and accentedness in L2 speech using rhythm metrics, October 17, Colloquium: Speaker Series, School of Linguistics and Language Studies, Carleton University
- 2015 Rhythm of read and spontaneous speech in Japanese and English, November 12, Spoken Discourse Research Studio, Department of East Asian Studies, University of Alberta
- The processability hierarchy in second language acquisition: Advanced learners of Japanese as a second language, April 25, Second Language Research Group, Carleton University

### Grants, Scholarships and Awards

- 2016,17,18 The Queen Elizabeth II Graduate Scholarship (Doctoral), CAD\$22500 total, Alberta Province
- The Professionalization Funds, CAD\$500, Faculty of Arts, University of Alberta (with Filip Nenadić)
- The J Gordin Kaplan Graduate Student Award (Travel Award), CAD\$1500, University of Alberta

2015,16,17	Graduate Students Travel Funding Award, CAD\$1500 total, Department of Linguistics, University of Alberta
2016	Prince Takamado Japan Centre for Teaching and Research funding, CAD\$350, Prince Takamado Japan Centre, University of Alberta
2015	Green and Gold Student Leadership and Professional Development Grant, CAD $\$1500$ , University of Alberta
2015,16	Graduate Students' Association Professional Development Award, CAD\$1000 total, University of Alberta
2014	Doctoral Recruitment Scholarship, CAD\$10000, University of Alberta
2014-18	Graduate Assistantship, University of Alberta
2013,14	Outstanding Teaching Assistant Excellence Awards Nominee, Carleton University
2012-14	Teaching Assistantship, Carleton University
	Skills
	Language: Japanese (Native), English (Advanced)
	Software: R, Praat, Python (beginner; currently taking online courses), ŁŒZ, Microsoft Office, Microsoft Excel, SR Research Experiment Builder, EyeLink Data Viewer
	Laboratory Affiliations
2014-20	Alberta Phonetics Lab, University of Alberta
2014-20	Centre for Comparative Psycholinguistics, University of Alberta
	Professional Memberships
2018-19	The Acoustic Society of America
2015-16	Canadian Acoustical Association
2018-19	Canadian Linguistic Association
2018-19	Canadian Association of Applied Linguistics
2017-20	The Phonetic Society of Japan
2014-18	The Japan Experimental Linguistics Society

# References

### Dr. Benjamin V. Tucker

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### Dr. Juhani Järvikivi

Professor & Associate Chair of Graduate Studies Department of Linguistics, University of Alberta Office: 4-55 Assiniboia Hall, 1-(780)492-5697

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### Dr. David Wood

Professor of Applied Linguistics & Discourse Studies & School Director School of Linguistics and Language Studies, Carleton University

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