# Daniel Brenner, Ph.D
Phonetics | NLP | Data Science

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GitHub: https://www.github.com/dbqpdb
PGP key: 25B4F806

## Education

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| 2015 | Ph.D, Department of Linguistics, University of Arizona, Tucson. Phonetics, Cognitive Science. |
| 2011 | M.S., Department of Linguistics, University of Arizona, Tucson. Human Language Technology. |
| 2008 | M.A., Department of East Asian Studies, University of Arizona, Tucson. Japanese Linguistics. |
| 2003 | B.A., Department of East Asian Studies, Oakland University, Rochester, Michigan. East Asian Studies. |
| 2003 | Certification, Teaching English as a Second Language, Department of Linguistics, Oakland University, Rochester, Michigan. |
| 2000 – 2002 | Exchange student, Nanzan University, Nagoya, Japan. Japanese language and cultural studies. |

**Employment**

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| 2015 –2017 | *Postdoctoral Research Fellow*, Alberta Phonetics Laboratory, University of Alberta, Edmonton, Canada. Speech production and perception research. |
| 2009 – 2010 | *Research Fellow*, Radboud University, Nijmegen, the Netherlands; Sound to Sense project, European Union Marie Curie Research Training Network. Preparation of spontaneous speech corpora for phonetic research, development of automated methods of speech labeling. |
| 2007 – 2010 | *Instructor* (summer and winter sessions), East Asian Studies Department, University of Arizona, Tucson. "TRAD 101: Writing Systems of the World". |
| 2006 – 2008 | *Independent Japanese Translator.* Various corporate and private translations. |
| 2005 | *Long-term Substitute Instructor of Japanese and Mandarin*, Hutchins Middle School, Detroit, MI, U.S.A. |
| 2004 – 2005 | *Teaching Coordinator and English Instructor*, Guangxi University, Nanning, P.R. China. |
| 2003 – 2004 | *English Instructor*, Guizhou University, Guiyang, P.R. China. |
| 2003 | *Para-pro*, Birmingham Public Schools, Birmingham, Michigan. Japanese interpreting and care for autistic children. |

## Other Academic Positions

2014 – 2015    *Graduate Research Associate*, Auditory Cognitive Neuroscience Experience Lab (Headed by Andrew Lotto), University of Arizona, Tucson. Auditory perception research.

2013           *Research Fellow*, American National Science Foundation East Asia and Pacific Summer Institutes (EAPSI), Beijing, P.R. China. Mandarin tone production and perception research, Chinese Academy of Social Sciences Laboratory of Phonetics and Speech Science.

2011 – 2014    *Graduate Research Associate*, "Cross-linguistic Language Variation", Douglass Phonetics Laboratory (Headed by Natasha Warner), University of Arizona, Tucson. Phonetics research.

2010 – 2014    *Graduate Research Associate*, "Instrumental and Experimental Analysis of Scottish Gaelic Sound Structures" (Headed by Andrew Carnie), University of Arizona, Tucson. Phonetic and psycholinguistic research.

2006 – 2010    *Graduate Assistant in Teaching*, Linguistics & East Asian Studies Departments, University of Arizona, Tucson.

## Dissertation

Daniel Brenner. *The phonetics of Mandarin tones in conversation.* PhD thesis, University of Arizona, 2015.

## Publications

Benjamin V Tucker, Daniel Brenner, D Kyle Danielson, Matthew C Kelley, Filip Nenadić, and Michelle Sims. The massive auditory lexical decision (MALD) database. *Behavior Research Methods*, pages 1–18, 2018.

Adam Ussishkin, Natasha Warner, Ian Clayton, Daniel Brenner, Andrew Carnie, Michael Hammond, and Muriel Fisher. Lexical representation and processing of word-initial morphological alternations: Scottish gaelic mutation. *Laboratory Phonology*, (22), 2017.

Natasha Warner, Daniel Brenner, Jessamyn Schertz, Andrew Carnie, Muriel Fisher, and Michael Hammond. The aerodynamic puzzle of nasalized fricatives: Aerodynamic and perceptual evidence from Scottish Gaelic. *Laboratory Phonology*, 6(2):197–241, 2015.

## Proceedings

Ayushi Mrigen, Daniel Brenner, and Benjamin V Tucker. What do forced alignment likelihood scores tell us about the aligned speech? *Canadian Acoustics*, 44(3), 2016.

Helena Spilková, Daniel Brenner, Anton Öttl, Pavel Vondřička, Wim Van Dommelen, and Mirjam Ernestus. The Kachna L1/L2 picture replication corpus. In *Seventh conference on International Language Resources and Evaluation (LREC)*, pages 2432–2436. European Language Resources Association (ELRA), 2010.

**Software**

`auditoryMaskedPrimingStimGenerator`, Praat script performing acoustic manipulations to construct auditory masked priming stimuli (Kouider & Dupoux 2005).

`EenTweeDrie`, a wrapper and framework for forced alignment of speech corpora using Young et al.'s (2009) Hidden Markov Model Toolkit.

Other assorted scripts at:
    `http://www.u.arizona.edu/~dbrenner/scripts.php`
    `https://www.github.com/dbqpdb`

**Oral Presentations**

Daniel Brenner.  Exploring individual differences in auditory lexical decision.  In *Auditory Cognitive Neuroscience Society meeting*, volume 11, Gainesville, Florida, USA, January 2017.

Benjamin V Tucker and Daniel Brenner. Massive auditory lexical decision: Going big in the auditory domain. In *International Conference on the Mental Lexicon*, volume 10, Ottawa, ON, Canada, Oct 20 2016.

Viktor Kharlamov, Daniel Brenner, and Benjamin V Tucker. The acoustics of conversational fricatives in mid-Western American English. In *LabPhon: "Reduction" special section*, Cornell University, Ithaca, NY, USA, July 13 2016.

Benjamin V Tucker, Daniel Brenner, and Viktor Kharlamov. The acoustics of conversational fricatives in mid-Western American English. In *NorthWest Phonetics & Phonology Conference (NoWPhon)*, Eugene, OR, U.S.A., 2016.

Daniel Brenner. Getting friendly with the giants: The phonetics of Mandarin conversational tones. In *University of Alberta Linguistics Colloquium*, Edmonton, Alberta, Canada, March 11 2016.

Natasha Warner, Ian D Clayton, Andrew Carnie, Muriel Fisher, Daniel Brenner, and Mike Hammond. The effect of Gaelic initial consonant mutation on spoken word recognition. In *Celtic Linguistics Conference*, volume 8, Edinburgh, UK, June 6 2014.

Alejandra Baltazar Molina, Yamile Andrea Díaz Gutiérrez, , and Daniel
    Brenner. Una perspectiva estudiantil de las investigaciones fonéti-
    cas realizadas por estudiantes de la universidad de arizona [a stu-
    dents' perspective of phonetic research at the University of Ari-
    zona]. In *Autonomous University of Querétaro*, Querétaro, Mexico,
    Mar 21 2014.

Daniel Brenner. Tone production & perception in conversation. In
    *China-U.S. Young Scientists Forum*, Beijing, PR China, Aug 2 2013.

Natasha Warner, Daniel Brenner, and Andrew Carnie. Nasal fricatives
    vs. approximants in Scottish Gaelic. In *Celtic Linguistics Conference*,
    volume 7, Rennes, France, June 2011.

Daniel Brenner, Natasha Warner, Andrew Carnie, Muriel Fisher, Di-
    ana Archangeli, Michael Hammond, Micaya Clymer, Andréa Davis,
    Colin Gorrie, Julia Fisher, Lionel Mathieu, Jessamyn Schertz, and
    Jae-Hyun Sung. Fitting the phonetically impossible into phonology:
    Nasalized fricatives in Scottish Gaelic. In *Department of Linguistics
    Spring Datablitz*, University of Arizona, Tucson, AZ, USA, Feb 11
    2011.

Natasha Warner, Andrew Carnie, Daniel Brenner, Micaya Clymer, Li-
    onel Mathieu, Jae-Hyun Sung, Jessamyn Schertz, Diana Archangeli,
    Michael Hammond, Muriel Fisher, and Colin Gorrie. Nasalization
    and frication in Scottish Gaelic. In *International Congress of Celtic
    Studies*, volume 14, Maynooth, Ireland, August 2011.

Andrea Davis, Michael Hammond, Andrew Carnie, Muriel Fisher, Diana
    Archangeli, Natasha Warner, Daniel Brenner, Micaya Clymer, Julia
    Fisher, Colin Gorrie, Lionel Matthieu, Jessamyn Schertz, and Jae-
    Hyun Sung. Syllable count of epenthetic words in Scottish Gaelic.
    In *Department of Linguistics Spring Datablitz*, University of Arizona,
    Tucson, AZ, USA, Feb 11 2011.

Andrew Carnie, Diana Archangeli, Muriel Fisher, Michael Hammond,
    Natasha Warner, Daniel Brenner, Micaya Vance Clymer, Andrea
    Davis, Colin Gorrie, Lionel Mathieu, Jessamyn Schertz, and Jae-Hyun
    Sung. Scottish Gaelic experimental phonology: A preliminary re-
    port. invited plenary talk. In *Celtic Linguistics Conference*, volume 6,
    University College, Dublin, Ireland, Sep 12 2010. Plenary talk.

## Poster Presentations

Benjamin V Tucker and Daniel Brenner. MALD: Massive Auditory Lexical Decision. In *LabPhon*, volume 15, Cornell University, Ithaca, NY, USA, July 15 2016.

Daniel Brenner and Benjamin V Tucker. Acoustic reduction, context, and inter-stimulus interval in cross-modal priming. In $171^{st}$ *Meeting of the Acoustical Society of America*, Salt Lake City, UT, U.S.A., 2016.

Natasha Warner, Ian D Clayton, Andrew Carnie, Muriel Fisher, Daniel Brenner, and Mike Hammond. The effect of Gaelic initial consonant mutation on spoken word recognition. In *Celtic Linguistics Conference*, volume 8, Edinburgh, UK, June 6 2014.

Daniel Brenner. Acoustic separability of Mandarin tonal categories in careful and conversational speech. In *Acoustical Society of America meeting*, Providence, RI, USA, May 9 2014.

Benjamin V Tucker, Daniel Brenner, and Michelle Sims. Medial stop reduction and word recognition "in the wild". In *International Conference on the Mental Lexicon*, volume 9, Niagara-on-the-Lake, ON, Canada, Sep - Oct 2014.

Jae-Hyun Sung, Diana Archangeli, Ian Clayton, Daniel Brenner, Samuel Johnston, Michael Hammond, and Andrew Carnie. The articulation of lexical palatalization in Scottish Gaelic. In *Acoustical Society of America meeting*, Providence, RI, USA, May 9 2014.

Natasha L. Warner, Miguel Simonet, Benjamin V. Tucker, Daniel Brenner, Maureen Hoffmann, Alejandra Baltazar, Andrea Morales, and Yamile Diaz. Spontaneous speech variability across languages: Labial and velar stops. In *Acoustical Society of America meeting*, Providence, RI, USA, May 8 2014.

Daniel Brenner. The acoustics of Mandarin tones in careful and conversational speech. In *Acoustical Society of America meeting*, San Francisco, CA, USA, Dec 6 2013.

Miguel Simonet, Natasha L. Warner, Daniel Brenner, Maureen Hoffman, Andrea Morales, and Alejandra Baltazar Molina. Range of variability in native and non-native spontaneous speech intervocalic stops. In *Acoustical Society of America meeting*, San Francisco, CA, USA, Dec 6 2013.

Natasha L Warner, Ian Clayton, Andrew Carnie, Muriel Fisher, Daniel Brenner, Michael Hammond, Diana Archangeli, and Adam Ussishkin. Perception of Scottish Gaelic alternating (leniting) consonants. In *Acoustical Society of America meeting*, San Francisco, CA, USA, Dec 3 2013.

Ian D Clayton, Diana Archangeli, Dan Brenner, Andrew Carnie, Mike Hammond, Samuel Johnston, and Jae-Hyun Sung. The articulation of Scottish Gaelic plain and palatalized consonants. In *UltraFest*, volume 4, Edinburgh, UK, Nov 7 2013.

Samuel Johnston, Daniel Brenner, Rolando Coto, and Diana Archangeli. Probe skewing effects & kinect head-tracking in tongue contour imaging. In *UltraFest*, volume 4, Edinburgh, UK, Nov 6 2013.

Katherine M Carbonell, Daniel Brenner, and Andrew J Lotto. Discriminating languages with general measures of temporal regularity and spectral variance. In *Acoustical Society of America meeting*, Kansas City, MO, USA, Oct 24 2012.

Natasha L Warner, Daniel Brenner, Benjamin V Tucker, Jae-Hyun Sung, Mirjam Ernestus, Miquel Simonet, and Ana Gonzalez. Processing reduced speech across languages and dialects. In *Acoustical Society of America meeting*, Kansas City, MO, USA, October 2012.

Daniel Brenner. Durational properties of a coarse acoustic segmentation of read and conversational speech: Japanese, Korean, and mainland Mandarin. In *Acoustical Society of America meeting*, San Diego, CA, USA, November 2011.

Daniel Brenner, Natasha Warner, Mirjam Ernestus, Benjamin V Tucker, and Jaycie Martin. Parsing the ambiguity of casual speech: 'he was like' or 'he's like'? In *Acoustical Society of America meeting*, Seattle, WA, USA, May 2011.

Daniel Brenner, Natasha Warner, Mirjam Ernestus, and Benjamin V. Tucker. Integration of bottom-up and high-level cues in parsing spontaneous conversational speech. In *Arizona State University / University of Arizona Cognitive Science Conclave*, Tempe, AZ, USA, November 2010.

Natasha Warner, Daniel Brenner, Anna Woods, Benjamin V. Tucker, , and Mirjam Ernestus. 'Were we' or 'are we'?: Perception of reduced function words in spontaneous conversations. In *Acoustical Society of America meeting*, Portland, OR, USA, May 2009.

**Teaching**

*At the University of Alberta:*
Statistics practice group, Alberta Phonetics Lab. Summer, 2016.
Using Speech in Psycholinguistics, at Spring Training in Experimental Psycholinguistics (STEP), 16–21 May, 2016. Co-taught with Benjamin V. Tucker.

*At the University of Arizona:*
Linguistics 101: Language (formerly "Individuals and Societies 101: Mind, Self, & Language"), Online course.
Traditions and Cultures 101: Writing Systems of the World.
Traditions and Cultures 101: Languages and Cultures of East Asia (taught discussion sections only).
Japanese 101: Introductory Japanese.
Linguistics 123: Introduction to Mathematical Approaches to Language

*At Hutchins Middle School:*
Japanese.
Mandarin.

*At Guangxi University:*
English Conversation.
English Composition.
Current Events.

*At Guizhou University*
English Conversation.

**Reviewer for**

- Journal of the Acoustical Society of America

- Laboratory Phonology

- Language & Speech

- Speech Prosody

- Mental Lexicon

- Arizona Linguistics Circle

**Languages spoken with fluency**

- English

- Japanese

- Mandarin

**Other Service and Research Experience**

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| 2015 | *Curriculum Committee Member*, planning and materials development for the new course, LING 123 "Introduction to Mathematical Approaches to Language", Department of Linguistics, University of Arizona, Tucson. |
| 2012 -2013 | *Awards Committee Member*, Department of Linguistics, University of Arizona, Tucson. |
| 2012 | *Organizing committee chair*, Arizona Linguistics Circle Conference 6, University of Arizona, Tucson. |
| 2012 | *Editor*, Coyote Papers: Working Papers in Linguistics, University of Arizona Linguistics Circle, Tucson. |
| 2011 | *Organizing committee member*, Arizona Linguistics Circle Conference 5, University of Arizona, Tucson. |
| 2011 | *Organizing committee member*, West Coast Conference on Formal Linguistics 29, University of Arizona, Tucson. |
| 2011 | *Editor*, Coyote Papers: Working Papers in Linguistics, University of Arizona Linguistics Circle, Tucson. |

| 2010 | *Organizing committee member*, Arizona Linguistics Circle Conference 4, University of Arizona, Tucson. |
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| 2010 | *Treasurer*, Arizona Linguistics Circle, University of Arizona, Tucson. |
| 2007 – 2008 | *Laboratory manager*, Linguistics laboratory, Department of East Asian Studies, University of Arizona, Tucson. |
| 2007 – 2008 | *Departmental graduate representative*, Department of East Asian Studies, University of Arizona, Tucson. |
| 2002 – 2003 | *President*, China Club student organization, Oakland University, Rochester, Michigan. |
| 1999 – 2000 | *President*, Japan Club student organization, Oakland University, Rochester, Michigan. |