Curriculum Vitae

XIN XIE

DEPARTMENT OF BRAIN AND COGNITIVE SCIENCES UNIVERSITY OF ROCHESTER 323 MELIORA HALL, ROCHESTER, NY 14627-0268 XXIE13@UR.ROCHESTER.EDU

RESEARCH INTERESTS

Speech perception and production, neural correlates of spoken language processing, perceptual learning, native and non-native speech communication, language plasticity, computational modeling, language acquisition, bilingualism, talker identification

EDUCATION

| Summer 2017 Kavli Summer Institute in Cognitive Neuroscience, UC Santa Barbara, Santa |
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| Barbara, CA. |

| 2009-2015 | Ph.D. in Experimental Psychology, | University of Connecticut |
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Advisors: Emily Myers and Carol Fowler

Dissertation: "Phonetic adaptation to foreign-accented speech"

Committee: Emily Myers (chair), Carol Fowler, Jim Magnuson, Rachel Theodore

2005-2009 B.S.E. in Systems Science and Engineering, Zhejiang University, China

RESEARCH POSITIONS

| 2016-present | Postdoctoral Associate. University of Rochester, Department of Brain and |
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| | Cognitive Sciences. PI: Florian Jaeger. |

2015-2016 Postdoctoral Researcher. University of Connecticut, Department of Speech, Language and Hearing Sciences. PI: Emily Myers.

PEER-REVIEWED PUBLICATIONS

- **Xie, X.** & Myers, E. B. (under review). LIFG sensitivity to phonetic competition in receptive language processing: a comparison of clear and conversational speech.
- **Xie, X.**, Earle, F. S. & Myers, E. B. (under review). Sleep facilitates generalization of accent adaptation to a new talker.

- Xie, X., & Myers, E. B. (2017). <u>Learning a talker or learning an accent: Acoustic similarity constrains generalization of foreign accent adaptation to new talkers.</u> *Journal of Memory and Language*, 97, 30-46.
- **Xie, X.**, Theodore, R.M., & Myers, E. B. (2017). <u>More than a boundary shift: perceptual adaptation to foreign-accented speech reshapes internal structure of phonetic categories. Journal of Experimental Psychology: Human Perception and Performance, 43, 206-217.</u>
- **Xie, X.** & Myers, E. B. (2015). The impact of musical training and tone language experience on talker identification. *Journal of the Acoustical Society of America, 137*, 419-432.
- Xie, X., & Myers, E. B. (2015). General language ability predicts talker identification. In Noelle, D. C., Dale, R., Warlaumont, A. S., Yoshimi, J., Matlock, T., Jennings, C. D., & Maglio, P. P. (Eds.), *Proceedings of the 37th Annual Meeting of the Cognitive Science Society*, (pp. 2697-2702). Austin, TX: Cognitive Science Society.
- **Xie, X.** & Fowler, C. A. (2013). <u>Listening with a foreign-accent: The interlanguage speech intelligibility benefit in Mandarin speakers of English. *Journal of Phonetics*, 41, 369-378.</u>

BOOK CHAPTERS

- Fowler, C. A., & Xie, X. (2016). Involvement of the speech motor system in speech perception. In P. van Lieshout, B. Maassen, and H. Terband (Eds.). *Speech motor control in normal and disordered speech: Future developments in theory and methodology* (pp. 1-24). Rockville, MD: ASHA Press.
- Myers, E., Johns, A.R., Earle, F.S., and **Xie, X.** (2017). Myers, E., Johns, A.R., Earle, F.S., and Xie, X. (in press). The Invariance Problem in the Acquisition of Non-Native Phonetic Contrasts: From Instances to Categories. In Lahiri, A. and S. Kotzor (Eds.). *The Speech Processing Lexicon: Neurocognitive and Behavioural Approaches* (pp. 52-84). Berlin: De Gruyter/Mouton.

MANUSCRIPTS IN PREPARATION

- **Xie, X.,** Weatherholtz, K., Bainton, L., Rowe, E., Burchill, Z., Liu, L., & Jaeger, T. F. (in preparation). Revisiting rapid adaptation to foreign-accented speech and its limits.
- **Xie, X., &** Myers, E. B. (in preparation). Consistency matters: Effects of within-talker acoustic variability on rapid learning of foreign accents.
- **Xie, X., &** Myers, E. B. (in preparation). Contextual information aids perceptual adaptation to speakers of low intelligibility.
- Xie, X., Myers, E. B., Magnuson, J. S., Mencl, W. E., Irwin, J. R., Brancazio, L., & Rueckl, J. (in preparation). Encoding articulator information in the brain during speech perception.

CONFERENCE PRESENTATIONS

Xie, X., Myers, E. B. (Novemer, 2017). Inferior frontal gyrus activation is modulated by phonetic competition: An fMRI study of clear and conversational speech. Poster to be presented at *The Ninth Annual Meeting of the Society for the Neurobiology of Language*. Baltimore, ML.

- **Xie, X.,** Myers, E. B. (September, 2017). Inferior frontal gyrus activation is modulated by phonetic competition: An fMRI study of clear and conversational speech. Talk to be presented at *The 23rd Architectures and Mechanisms for Language Processing*. Lancaster, United Kingdom.
- Oye, L., Lee, C., Simon, E., **Xie, X.**, & Jaeger, T. F. (2017). Talker generalization of accent adaptation: Questioning its robustness. Poster to be presented at *The 23rd Architectures and Mechanisms for Language Processing*. Lancaster, United Kingdom.
- Lee, C., Oye, L., Simon, E., **Xie, X.**, & Jaeger, T. F. (2017). An Investigation into Audio Perception Studies on Amazon Mechanical Turk. Poster to be presented at *The 23rd Architectures and Mechanisms for Language Processing*. Lancaster, United Kingdom.
- Liu, L., Xie, X., Weatherholtz, K., & Jaeger, T. F. (2017). Talk presented at *The 30th Annual CUNY Conference on Human Sentence Processing*. Cambridge, MA.
- **Xie, X.,** Myers, E. B. (December, 2016). Sleep facilitates talker generalization of accent adaptation. Poster presented at *The 172nd Annual Meeting of the Acoustical Society of America*. Honolulu, HI.
- **Xie, X.,** Myers, E. B. (March, 2016). Learning a talker or learning an accent? Cross-talker generalization of phonetic adjustment to foreign-accented speech. Poster presented at *The 29th Annual CUNY Conference on Human Sentence Processing*. Gainesville, FL.
- **Xie, X.,** Theodore, R. M., Myers, E. B. (November, 2015). Perceptual adaptation to foreign-accented speech reshapes the internal structure of phonetic categories. Poster presented at *The 56th Annual Meeting of the Psychonomic Society*. Chicago, IL.
- **Xie, X.,** & Myers, E. B. (July, 2015). General language ability predicts talker identification. Poster presented at *The 37th Annual Meeting of the Cognitive Science Society*. Pasadena, CA.
- **Xie, X.** & Myers, E. B. (November, 2014). Individual differences in talker identification: Do musical experience and linguistic background matter? Poster presented at *The 55th Annual Meeting of the Psychonomic Society*. Long beach, CA.
- Xie, X. & Myers, E. B. (September, 2013). The role of language and musical experience in talker identification: investigating language familiarity effect. Poster presented at *The 19th International Conference of Architectures and Mechanisms for Language Processing* (AMLaP, 2013). Marseille, France.
- **Xie, X.** & Fowler, C. A. (July, 2013). Listening with a foreign-accent: The interlanguage speech intelligibility benefit in Mandarin speakers of English. Poster presented at *Linguistic Society of America, Summer Institute 2013 Workshop: How the brain accommodates variability in linguistic representations.* Ann Arbor, MI.

INVITED TALKS

The adaptive road to robust speech recognition: How do we accommodate phonetic variation in speech? *Department of Linguistics, University of California, Davis. January 2017.*

Encoding articulator information in the brain during speech perception. Alvin and Isabelle Liberman Memorial Workshop, University of Connecticut, June 2016.

Phonetic adaptation to foreign accents. *Department of Speech, Language and Hearing Sciences, Boston University, December 2015.*

Phonetic adaptation to foreign accents. *Bilingualism and Psycholinguistics Research Group, Northwestern University, October 2015.*

HONORS & AWARDS

| 2017 | Fellowship: Kavli Summer Institute in Cognitive Neuroscience, UC Santa Barbara |
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| 2015 | Psychonomic Society Graduate Student Travel Award, Psychonomic Society |
| 2014 | Doctoral Dissertation Fellowship: Graduate School, University of Connecticut |
| 2013 | Conference Travel Grant: Graduate School, University of Connecticut |
| 2013 | Student Travel Award: LSA 13 workshop "How the brain accommodates variability in linguistic representations" |
| 2009-2015 | Graduate Scholarship: Department of Psychology, University of Connecticut |
| 2009 | Award for Excellence in Undergraduate Thesis, Zhejiang University |

TEACHING EXPERIENCE

2012-2016 Research Mentor, 12 Undergraduates

Mentored undergraduate students who were research assistants and/or completing honors theses. Taught experimental design, acoustic analysis techniques, and other aspects of training in conducting research

Spring 2015 Coordinator, Language & Cognition Seminar

Coordinated seminar talks

Spring 2015 Teaching Assistant, Psychology of Language

Held office hours, graded exams, papers and assignments

Spring 2014 Instructor of Record, Psychology of Language

Gave lectures (~50 students), designed course materials, wrote and graded exams

2010-2013 Lab Instructor, Principles of Research in Psychology

Gave weekly lectures (~12-14 students), mentored group research projects, held office hours, graded papers and assignments, assisted student poster presentation at a department-level research event

2009-2010 Lab Instructor, General Psychology I

Gave weekly lectures (~20-25 students), held office hours, wrote/graded assignments

Fall 2009 Teaching Assistant, General Psychology I; Cognitive Psychology

Graded exams and assignments, prepared materials for online mini-experiments

PROFESSIONAL SERVICE & MEMBERSHIPS

Ad hoc reviewer: Journal of Experimental Psychology: Human Perception and Performance; Psychonomic Bulletin & Review; Cognition; Cognitive Science Society Annual Conference; The Quarterly Journal of Experimental Psychology; Journal of the Acoustical Society of America; Journal of Speech; Language and Hearing Research; language and Speech; Linguistics Vanguard; Laboratory Phonology

Memberships: Society for the Neurobiology of Language; Acoustical Society of America; Association for Laboratory Phonology; Psychonomic Society; International Speech Communication Association; Women in Cognitive Science

LANGUAGES

Mandarin Native English Proficient Cantonese Proficient Japanese Intermediate Spanish Basic vocabulary French Basic vocabulary

PROGRAMMING

PRAAT (Acoustic analysis)
SPSS
R
MATLAB
Python

REFERENCES

1) Florian Jaeger, Ph.D.

Department of Brain and Cognitive Sciences University of Rochester Meliora Hall, Rochester, NY 14627 fjaeger@bcs.rochester.edu 585-276-3611

3) Carol Fowler, Ph.D.

Department of Psychology University of Connecticut 406 Babbidge Road, Storrs, CT 06269 Carol.Fowler@yale.edu

2) Emily Myers, Ph.D.

Department of Speech, Language, and Hearing Sciences University of Connecticut 850 Bolton Road, Storrs, CT 06269 Emily.Myers@uconn.edu 860-486-2630

4) Rachel Theodore, Ph.D.

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