

# Chao Han

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## DEGREES

- 2023 Ph.D., Linguistics  
University of Delaware, Newark, USA  
Committee: Arild Hestvik (supervisors), William Idsardi, Irene Vogel, and Zhenghan Qi
- 2014 M.A., Linguistics and Applied Linguistics  
Beijing Foreign Studies University, Beijing, China  
Committee: Yaping Chen (supervisors), Chun Lan, and Yan Yi
- 2009 B.A., International Economics and Trade  
Beijing Foreign Studies University, Beijing, China

## EMPLOYMENT

- 2024/1-now **Postdoctoral Researcher**  
Department of Language Studies, University of Toronto Scarborough, Canada
- 2023/8- **Adjunct Professor**  
2023/12 Department of Linguistics and Cognitive Science, University of Delaware, USA

## ACADEMIC HISTORY

### Research Grant

- 2021-2023 NSF BCS-2041266, Doctoral Dissertation Research Improvement Grants (\$19,200 USD)  
Role: Co-PI (PI: A. Hestvik).

### Working Manuscripts

- Han, C.**, Hestvik, A., Idsardi, B. (under review) No exclusive access to phonemes with the varying-standards MMN paradigm.

### Journal Articles

- Dong, Z., **Han, C.**, & Li, S. (in press). Feedback explicitness, working memory, and explicit knowledge in classroom-based second language Mandarin tone learning. *Language Teaching Research*. <https://doi.org/10.1177/13621688251378559>
- Asami, D., **Han, C.**, Burger, J., Dunlop, D., Lu, Y., Yahya M Morad, E., Zhao, C., & Hestvik, A. (2025). “Negation-blind” N400 effect disappears when lexical priming is controlled. *Experiments in Linguistic Meaning*, 3, 19–31. <https://doi.org/10.3765/elm.3.5800>

- Shinohara, Y., **Han, C.**, & Hestvik, A. (2023). English Vowel Discrimination and Perceptual Assimilation by Japanese Listeners. *Language and Speech*, 67(4), 945–960. <https://doi.org/10.1177/00238309231209311>
- Dong, Z. R., **Han, C.**, Hestvik, A., & Hermon, G. (2023). L2 processing of filled gaps: Non-native brain activity not modulated by proficiency and working memory. *Linguistic Approaches to Bilingualism*, 13(6), 767-800. <https://doi.org/10.1075/lab.20058.don>
- Shinohara, Y., **Han, C.**, & Hestvik, A. (2022). Discriminability and prototypicality of non-native vowels. *Studies in Second Language Acquisition*, 44(5), 1260–1278. <https://doi.org/10.1017/S0272263121000978>
- Rhodes, R., Avcu, E., **Han, C.**, & Hestvik, A. (2022). Auditory predictions are phonological when phonetic information is variable. *Language, Cognition and Neuroscience*, 37(9), 1099–1114. <https://doi.org/10.1080/23273798.2022.2043395>
- Rhodes, R., **Han, C.**, & Hestvik, A. (2019). Phonological memory traces do not contain phonetic information. *Attention, Perception, & Psychophysics*, 81(4), 897–911. <https://doi.org/10.3758/s13414-019-01728-1>

### Conference Papers

- Hestvik, A., Morlet, T., Nagao, K., & **Han, C.** (2023). Auditory processing disorder targets phonetics, not phonology. In P. Gappmayr & J. Kellogg (Eds.), *Proceedings of the 47th Annual Boston University Conference on Language Development, Somerville, MA: Cascadia Press* (pp. 356-365).
- Han, C.**, Vogel, I., Yuan, Y., Athanasopoulou, A. (2020). Perceptual confusion of Mandarin tone 3 and tone 4. *University of Pennsylvania Working Papers in Linguistics*, 26(1), 12, 97-103.
- Rhodes, R., **Han, C.**, Hestvik, A. (2019). Ad hoc phonetic categorization and prediction. In S. Calhoun, P. Escudero, M. Tabain, & P. Warren (Eds.), *Proceedings of the 19th International Congress of Phonetic Sciences, Melbourne, Australia* (pp. 1223-1227).
- Shinohara, Y., **Han, C.**, Hestvik, A. (2019). Effects of perceptual assimilation: The perception of English /æ/, /ʌ/, and /ɑ/ by Japanese speakers. In S. Calhoun, P. Escudero, M. Tabain, & P. Warren (Eds.), *Proceedings of the 19th International Congress of Phonetic Sciences, Melbourne, Australia* (pp. 2344-2348).
- Vogel, I., Athanasopoulou, A., **Han, C.**, Yue, Y. (2019). How perceptible is the difference between tone 3 and tone 4 in Mandarin Chinese? In S. Calhoun, P. Escudero, M. Tabain, & P. Warren (Eds.), *Proceedings of the 19th International Congress of Phonetic Sciences, Melbourne, Australia* (pp. 2027-2031).
- Athanasopoulou, A., Vogel, I., **Han, C.**, Yue, Y. (2019). Confusability of Mandarin tone 3 and tone 4: effects of focus and syllable position. In S. Calhoun, P. Escudero, M. Tabain, & P. Warren (Eds.), *Proceedings of the 19th International Congress of Phonetic Sciences, Melbourne, Australia* (pp. 442-446).

### Presentations

- Han, C.**, Lim, T., Kim, S.Y., Idsardi, W., Monahan, P.J. (2025). Language-specific phonological patterning shapes neural encoding of phonetic categories. Poster at *Society for the*

*Neurobiology of Language 17<sup>th</sup> Annual Meeting*, Gallaudet University, Washington DC, September 2025.

- Han, C.**, Ma, K., Kang, Y., Monahan, P.J. (2025). Pre-attentive phonological encoding does not track phonetic cue weighting. Poster at *Society for the Neurobiology of Language 17<sup>th</sup> Annual Meeting*, Gallaudet University, Washington DC, September 2025.
- Patil, K.N., **Han, C.**, Monahan, P.J. (2025). Wait, who said that?: Talker accent modulates neural processing of Mandarin-English code-switched speech. Poster at *Society for the Neurobiology of Language 17<sup>th</sup> Annual Meeting*, Gallaudet University, Washington DC, September 2025.
- Burger, J., Hestvik, A., Idsardi W., **Han, C.**, Knox, A., Hill, T. (2025). Separating acoustics from phonology with rotated speech. Poster at *Society for the Neurobiology of Language 17<sup>th</sup> Annual Meeting*, Gallaudet University, Washington DC, September 2025.
- Burger, J., Hestvik, A., **Han, C.**, Hill T., Idsardi W., Knox, A., Alromihi, A. (2025). Neural Investigation of underspecification with rotated speech. Talk at *Thirteenth North American Phonology Conference*, Concordia University, Canada, May 2025.
- Han, C.**, Ma K., Monahan, P.J., Kang, Y. (2025). Neurophysiological encoding of VOT and F0 in voicing perception. Talk at *The [mot<sup>h</sup>] Phonetics/Phonology 2025 workshop*, Toronto, Canada, April 2025.
- Hong, L., **Han, C.**, Monahan, P.J.. (2024). The accented brain: An EEG study on talker variability. Poster at *The Psychonomic Society's 65th Annual Meeting*, New York City, USA, November 2024.
- Han, C.**, Hestvik, A., & Idsardi, W. (2024). Memory trace retention of acoustic details with a category. Talk at the *10<sup>th</sup> Mismatch Negativity Conference*, Salamanca, Spain, September 2024.
- Han, C.**, Hestvik, A., & Idsardi, W. (2023). Memory trace retention of acoustic details with a category. Talk at *PhonolEEGy2, Linguistics Society of America Summer Institute*, UMASS/Amherst, USA, June 2023.
- Hestvik, A., Morlet, T., Nagao, K. & **Han, C.** (2022). Auditory processing disorder targets phonetics, not phonology. Talk at *The 47<sup>th</sup> Boston University Conference on Language Development*, Boston, USA, November 2022.
- Han, C.**, Hestvik, A., Rhodes, R., & Idsardi, W. (2022). Symbolic vs. gradient phonemes. Poster at *The 14th Annual Meeting of the Society for the Neurobiology of Language*, Philadelphia, USA, October 2022.
- Han, C.**, Hestvik, A., & Rhodes, R. (2022). What does varying the standards in an MMN paradigm really do? Poster at *The 14th Annual Meeting of the Society for the Neurobiology of Language*, Philadelphia, USA, October 2022.
- Han, C.**, Rhodes, R., Idsardi W., & Hestvik A. (2022). Symbolic vs. gradient phonemes. Poster at *The 9th Mismatch Negativity conference*, Fukushima, Japan, September 2022.
- Han, C.**, Yuan, Y., & Vogel, I. (2019). Perception of Mandarin tone 3 and tone 4: Effects of syllable position and focus. Talk at *The 43rd Penn Linguistics Conference*, Philadelphia, PA.
- Avcu, E., Rhodes, R., **Han, C.**, & Hestvik, A. (2019). P300 as an index of phonotactic violation. Poster at *The 93rd Annual Meeting of the Linguistic Society of America*, New York, NY.

- Han, C.**, Pereira, O., Walter, C., Morlet, T., Hestvik, A., & Nagao, K. (2018). Phoneme identification of children with various auditory processing deficits. Talk at *The 12th Mini-Conference on Acoustic*, Washington, DC.
- Han, C.**, Yuan, Y., & Vogel, I. Perceptual confusion of Mandarin tone 3 and tone 4. (2018). Poster at *The International Forum on Frontiers in Linguistics*, Beijing, China.
- Avcu, E., Rhodes, R., **Han, C.**, & Hestvik, A. (2018). Neurophysiological signature of phonotactic rule-learning. Poster at *The 59th Annual Meeting of Psychonomic Society*, New Orleans, LA.
- Avcu, E., Rhodes, R., **Han, C.**, & Hestvik, A. (2018). Neural underpinnings of phonotactic rule Learning. Poster at *The 49th Annual Meeting of the North East Linguistic Society*, New York, NY.
- Rhodes, R., & **Han, C.** (2018). Phonetic content of auditory representations. Poster at *The 10th Annual Meeting of the Society for the Neurobiology of Language*, Québec City, Canada.
- Pereira, O., **Han, C.**, Hestvik, A., Morlet, T., & Nagao, K. (2018). Phonetic vs. phonological MMN: A novel approach to detect auditory processing deficit in children. Poster at *The 8th Mismatch Negativity Conference*, Helsinki, Finland.
- Rhodes, R., **Han, C.**, & Hestvik, A. (2018). No ad hoc perceptual grouping of speech sounds in the varying standards oddball paradigm. Poster at *The 8th Mismatch Negativity Conference*, Helsinki, Finland.
- Rhodes, R., **Han, C.**, & Hestvik, A. (2017). The ad hoc perceptual grouping of speech sounds in the varying standards oddball paradigm. Poster at *The 24th Annual Meeting of the Cognitive Neuroscience Society*, San Francisco, CA.
- Pereira, O., Hestvik, A., Morlet, T., **Han, C.**, Scharf, S., Sklar, R., Nemith, J., DeVore, B., & Nagao, K. (2017). Using the mismatch negativity paradigm to explore the deficits in children with auditory processing disorder. Poster at *The DE-CTR ACCEL 4th Annual Meeting*, Newark, DE.
- Han, C.**, & Chen, Y. (2013). Are Chinese people facing Past? Experimental evidence for Chinese spatiotemporal representations. Talk at *The 2nd International Conference on Psycholinguistics*, Fujian, China.
- Han, C.**, & Chen, Y. (2013). Psychological reality of space-time metaphors in the horizontal and the vertical dimensions in Mandarin. Talk at *The 3rd National Forum on Neurolinguistics and Second Language Acquisition*, Beijing, China.

## TEACHING

### *As Instructor*

- |             |  |
|-------------|--|
| CGSC420/620 | Research Methods in Cognitive Science<br>Fall 2023 |
| CGSC496/696 | Psycholinguistics<br>Spring 2022                   |
| CGSC433/633 | Introduction to Acoustic Phonetics<br>Spring 2020  |

CGSC470/670 Elements of Cognitive Science  
Fall 2019

*As Teaching Assistant*

CGSC420/620 Research Methods in Cognitive Science  
Fall 2021

PSYC209 Measurement and Statistics  
Fall 2018, Spring 2019

CGSC433/633 Introduction to Acoustic Phonetics  
Spring 2018

PYSC390 Social Psychology  
Fall 2017

CGSC170 Introduction to Cognitive Science  
Spring 2017, Fall 2022

LING403/603 Introduction to Phonology  
Fall 2016

PYSC100 General Psychology  
Spring 2016

## SERVICE

**Lab Manager** Experimental Psycholinguistics Lab, University of Delaware

**Reviewer** *Bilingualism: Language and Cognition*  
*Language and Speech*  
*Language, Cognition and Neuroscience*

**Conference Organization** Linguistics Colloquium Series, University of Delaware (2017-2018)  
The 47th Linguistic Symposium on Romance Languages (2017)  
Linguistics Reading Salon, Beijing Foreign Studies University (2012-2013)  
Linguistics and Cognitive Science Student Conference, University of Delaware (2018)

## HONORS

2015-2022 Summer Research Grant, University of Delaware

2017-2018 Professional Development Award, University of Delaware

2012 Xu Gehui Alumni Scholarship, Beijing Foreign Studies University

## SKILLS

**Programming:** R, MATLAB, Python, Praat

**Language:** Mandarin Chinese (native), Wu Chinese (native), English (fluent), Japanese (intermediate)