

Muxuan He

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EDUCATION

- 2021-2027 **University of Southern California**
(Expected) Ph.D. in Linguistics
Dissertation: *Resource-rational Language Comprehension*
Committee: Elsi Kaiser (Chair), Deniz Rudin, Alexander LaTourrette
- 2023 **University of Southern California**
M.A. in Linguistics
Thesis: *“Just right” is not always right: Asymmetrical effects of informativity in affirmative and negative sentences*
Committee: Elsi Kaiser (Chair), Deniz Rudin, Zuzanna Fuchs
- 2017-2020 **Shanghai Jiao Tong University** Shanghai, China
M.A. in Linguistics (with honors), *specialized in Second Language Acquisition*
- 2013-2017 **Central South University** Changsha, China
B.A. in English Language (with honors), *specialized in Corpus Linguistics*

PUBLICATIONS

Journal Articles

- 2026 **He, Muxuan**, & Elsi Kaiser. “Just-Right” Is (Not) Always Right: Joint Effects of Typicality and Informativity During Real-Time Sentence Processing. *Cognitive Science*, 50: e70217. <https://doi.org/10.1111/cogs.70217> [[link](#)]
- 2024 **He, Muxuan**, Zheng, L., & Chang, H. L2 Chinese Acquisition of the Scope of Negation by Korean-speaking Learners. *Chinese Teaching in the World* 38(1), 111-125. [[link](#)]

Manuscript

- 2026 **He, Muxuan**, & Elsi Kaiser. What’s uttered vs. what’s described: effect of communicative form and how sentence polarity modulates it. In prep for submission to *Cognition*.

Conference Proceedings

- 2026 **He, Muxuan**, Deniz Rudin, & Elsi Kaiser. Revisiting the context-update potential of negation at the level of speaker rationality. In: Sebastian Walter*, Lennart Fritzsche*, Kurt Erbach, Cécile Meier, and Manfred Sailer (eds.), *Proceedings of Sinn und Bedeutung* 30. Frankfurt: Goethe University Frankfurt, 431–447. [[link](#)]
- 2025 **He, Muxuan**, & Elsi Kaiser. Affirmatives vs. Negatives: A complementary relation in probabilistic sentence processing. *Proceedings of Chicago Linguistic Society* 58. [[link](#)]
- 2025 **He, Muxuan**, & Elsi Kaiser. Communication form modulates sentence interpretation:

- (A)typicality inferences from descriptions vs. direct speech. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 47. [\[link\]](#)
- 2025 **He, Muxuan**, Elsi Kaiser, & Khalil Iskarous. Modeling sentence polarity asymmetries: Fuzzy interpretations in a possibly wonky world. *Society for Computation in Linguistics* 8(1): 22. [\[link\]](#)
- 2024 Hao, Hailin, **Muxuan He**, & Zuzanna Fuchs. Greta is a female director: When gender stereotypes interact with informativity expectations. In *Proceedings of the Annual Meeting of the Cognitive Science Society (Vol. 46)*. [\[link\]](#)
- 2023 Hao, Hailin, & **Muxuan He**. *Can Large Language Model Surprisal Capture the Informativity Bias in Human Language Processing?*. In International Symposium on Distributed Computing and Artificial Intelligence (pp. 178-185). Cham: Springer Nature Switzerland. [\[link\]](#)

INVITED TALKS

- 2026 **He, Muxuan**, Wang Bill Zhu & Yue Chen. *Simulating Language Impairment via Causal Head Ablation*. **Invited** talk at the HEAT Lab (Health, Educational, & Assistive Technology Lab), Keck School of Medicine, University of Southern California.

PRESENTATIONS

- 2025 **He, Muxuan**, Deniz Rudin & Elsi Kaiser. Sinn und Bedeutung 30. *Revisiting the context-update potential of negation at the level of speaker rationality*. Talk at Special session on negation, 2025, Goethe University Frankfurt, Germany.
- 2025 **He, Muxuan**, & Elsi Kaiser. CogSci. *Communication form modulates sentence interpretation: (A)typicality inferences from descriptions vs. direct speech*. Talk at Cognitive Science Society, 2025, San Francisco, USA.
- 2025 **He, Muxuan**, Elsi Kaiser, & Khalil Iskarous. CogSci. *Irrational Speaker or Wonky World: Modeling Prior Revision and Prior Update*. Poster presented at Cognitive Science Society, 2025, San Francisco, USA.
- 2025 **He, Muxuan**, Elsi Kaiser, & Khalil Iskarous. SCiL 8. *Modeling sentence polarity asymmetries: Fuzzy interpretations in a possibly wonky world*. Talk presented at Society for Computation in Linguistics 8, 2025, University of Oregon, USA.
- 2025 **He, Muxuan**, & Elsi Kaiser. HSP 38. *What's described vs. what's uttered: Communication form modulates effects of typicality*. Poster presented at Human Sentence Processing 38, 2025, University of Maryland, USA.
- 2025 **He, Muxuan**, Elsi Kaiser, & Khalil Iskarous. NAACL 2025. *Modeling Pragmatic Accommodation: A [Rational, Irrational] Speaker in a [Wonky, Normal] World*. Virtual poster presented at Workshop on Cognitive Modeling and Computational Linguistics (CMCL), North America chapter of the Association for Computational Linguistics, 2025, New Mexico, USA.

- 2024 **He, Muxuan,** & Elsi Kaiser. CLS 58. *Affirmatives vs. Negatives: A complementary relation in probabilistic sentence processing*. Talk presented at Chicago Linguistic Society 58, 2024, University of Chicago, USA.
- 2024 Hao, Hailin, **Muxuan He,** & Zuzanna Fuchs. CogSci. *Greta is a female director: When gender stereotypes interact with informativity expectations*. Poster presented at Cognitive Science Society, 2024, Netherlands.
- 2024 Hao, Hailin, **Muxuan He,** & Zuzanna Fuchs. CAMP. *Are Informativity-Based Linguistic Predictions Driven by Gender Stereotypes?* Poster presented at the California Meeting on Psycholinguistics, 2024, Stanford, USA.
- 2023 **He, Muxuan,** & Elsi Kaiser. AMLaP. *How informative do we need to be? Asymmetry effects of informativity in the processing of affirmative and negative sentences*. Talk presented at AMLaP 2023, San Sebastián, Spain.
- 2023 Hao, Hailin, & **Muxuan He.** AMLaP. *Can Large Language Model Surprisal Capture the Informativity Bias in Human Language Processing?*. Poster presented at Architectures and Mechanisms for Language Processing 2023, San Sebastián, Spain.
- 2023 Hao, Hailin, & **Muxuan He.** DACI. *Can Large Language Model Surprisal Capture the Informativity Bias in Human Language Processing?*. Virtual talk presented by Hailin Hao at the Distributed Computing and Artificial Intelligence Conference 2023.
- 2023 **He, Muxuan,** & Elsi Kaiser. HSP 36. *Not Too Surprising, Not Too Boring? The Goldilocks Effects of Likelihood on Real-time Processing*. Virtual poster presented at Human Sentence Processing 2023, University of Pittsburgh, USA.
- 2023 **He, Muxuan,** & Elsi Kaiser. CAMP. *Not Too Surprising, Not Too Boring? The Goldilocks Effects of Likelihood on Real-time Processing in English*. Virtual talk presented at the California Meeting on Psycholinguistics, 2023, UCLA.
- 2022 **He, Muxuan.** NWAV Asia-Pacific. *-men or not -men: It does not seem to be a question*. Talk presented at New Ways of Analyzing Variation Asia-Pacific 7, Chulalongkorn University, Thailand.
- 2021 **He, Muxuan.** *The Syntax-semantics Interface in L2 acquisition: The scope of Negation in Tagalog-Chinese interlanguage Grammars*. Virtual Poster presented at the International Conference on Theoretical East Asian Psycholinguistics 3, National Tsing Hua University.
- 2019 **He, Muxuan.** *Acquiring the Scope of Negation in L2 Chinese: An Interface Approach*. Talk presented at *Acquisition of Chinese: Bilingualism and Multilingualism*, University of Cambridge, UK.
- 2018 **He, Muxuan.** *The Syntactic Distribution of bu and mei: A Syntax-semantics Interface Approach*. Talk presented at the International Conference of Formal Linguistics 8, Zhejiang University, China.
- 2018 **He, Muxuan,** & Hui Chang. *The Acquisition of the Scope of Negation in L2 Chinese: An Interface Approach*. Talk presented at the 8th International Symposium on Second Language Acquisition Research, Qingdao, China.

TEACHING EXPERIENCE

Instructor of Record

- 2016 **Shanghai Jiaotong University**, Department of Chinese Language
College English
- Designed class plans, course materials, assignments for undergraduate-level English classes, graded assignments and exams

Teaching Assistant

- 2022- **University of Southern California**, Department of Linguistics
2026 *LING 115 Language and Society (Fall 2025, Spring 2025)*
LING 285 Human Language and Technology (Spring 2024, Fall 2026)
LING 275 Language and Mind (Fall 2022, Fall 2023)
- Led weekly discussion sections, led review sessions, developed instructional materials, held weekly office hours, graded assignments and exams

Training

- 2026 *Future Faculty Teaching Institute* at the Center of Excellent in Teaching, **University of Southern California**
- A 14-week training program for graduate students intended to prepare future faculty to pursue excellence in their teaching
- 2022 *LING 593x: Practicum in Teaching the Liberal Arts: Linguistics*, **University of Southern California**

RESEARCH EXPERIENCE

- 2018- **Research Assistant** at Shanghai Jiao Tong University
2019 Supervisor: Prof. Chang Hui
Sentence Processing of L2 Chinese Learners: An Eye-tracking Project
Funded by China's National Social Science Fund
- Summer **Lead Investigator** at Fuxing, Hunan, China
2016 Field work on the language deficit of left-behind children
Funded by Central South University

AWARDS and FELLOWSHIPS

- July 2026 Research Development Award, Department of Linguistics, University of Southern California
- Apr 2026 Summer Writing and Research Grant, University of Southern California
- July 2025 Student Travel Award, Society for Computation in Linguistics
- May 2025 Dornsife Ph.D. Academy Research Fund, University of Southern California
- Mar 2025 EASC Summer Fellowship, University of Southern California
- July 2024 Linguistics Department Summer Research Funding, University of Southern California
- Sep 2023 GSC Professional Development Fund, University of Southern California
- 2022-2025 Teaching Assistantship, University of Southern California
- 2021/2026 Ph.D. Student Fellowship, University of Southern California
- Jun 2019 Kaiyuan Excellence Scholarship, Shanghai Jiao Tong University

Dec 2015 National Excellence Scholarship, Central South University

SERVICE

2022- **Journal Reviewer** @*Cognition*

2026 **Abstract Reviewer** @AMLaP 2026, @Cog Sci 2025-2026, @CLS 61-62, @CAMP 6-8

Student Organizer @ Southern California Annual Meeting on Phonology 2026, @ North American Summer School in Logic, Language, and Information 2022 and @ Workshop on Theoretical East Asian Linguistics 2025 at USC

Student Mentor @ SCiL 8

MEMBERSHIPS

Cognitive Science Society (2025, 2026) , Association for Computational Linguistics (2025, 2026)

SKILLS

Languages Mandarin Chinese (native), English (fluent)

Technical Python, R, Praat, SQL