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KUAN-JUNG HUANG

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September, 2024 – Current

Post-doctoral Research Associate, Department of Hearing and Speech Sciences, University of Maryland College Park. PI: Dr. Yi Ting Huang

September, 2024 – Current

Visiting Scholar, Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology. Faculty host: Dr. Roger Levy

Education

September, 2018 – September, 2024

Ph.D. in Cognitive Psychology, University of Massachusetts Amherst
Advisor: Dr. Adrian Staub
Committee: Dr. Charles Clifton, Dr. Lori Astheimer, Dr. Brian Dillon, Dr. Simon Liversedge
Dissertation title: "Stored multiword representations and their usages during Chinese reading"

February, 2021 – September, 2024

Graduate certificate in Data Science, University of Massachusetts Amherst

September, 2021 – September, 2022

Visiting scholar at Computation and Psycholinguistics Lab, Linguistics, New York University

September, 2018 – May, 2021

M.S. in Cognitive Psychology, University of Massachusetts Amherst

September, 2012 – June, 2016

B.A. in Foreign Languages and Literature, National Cheng Kung University

Teaching/Research Assistantships, Lectureships, and Fellowships

Teaching Assistant, February, 2024 – May, 2024

Cognitive Psychology (UMass); Instructor: Dr. Kyle Cave

Lecturer, Summer 2022 & 2023 (online)

Cognitive Psychology, University Without Wall (UMass)

Teaching Assistant, September, 2022 – January, 2024

Statistics in Psychology (undergraduate-level, UMass); Instructor: Dr. Adrian Staub

Research Assistant, September, 2020 – May, 2022

Testing quantitative predictions of sentence processing theories with a large-scale eye-tracking database. PIs: Dr. Brian Dillon (UMass) & Dr. Tal Linzen (NYU)

Teaching Assistant, September, 2019 – May, 2020

Statistical Inference in Psychology (graduate-level, UMass); Instructor: Dr. Andrew Cohen

Research Assistant, February, 2019 – August, 2019

Effects of lexical predictability on parafoveal and foveal processing in reading.
PI: Dr. Adrian Staub (UMass). Co-PI: Dr. Lisa Sanders (UMass).

Graduate Fellow, September, 2018 – January, 2019

UMass Amherst College of Natural Sciences (CNS) Graduate Fellowship

Grants and Awards

Gibson-Fedorenko young scholar's award for the plenary talk *An infrequent, large cost underlies garden path effects: an RT distribution approach* at 2023 Human Sentence Processing.

The 7th Keith Rayner Memorial Graduate Student Research Fund, Psychological and Brain Sciences, University of Massachusetts Amherst (1500$ USD): *Morphosyntactic processing of compound words in Chinese reading*

Predissertation Research Grant, University of Massachusetts Graduate School (990$ USD): *The effect of trigram frequency on misreading*

Research grant for college students, Ministry of Science and Technology, Taiwan (48000$ NTD = 1600$USD) (advisor: Aleck Shi-Wei Chen): *The Impact of Language Characteristics on Metalinguistic Awareness for Bilingual Pupils* 104-2815-C-006-050-H

Publications

Huang, K. J., Arehalli, S., Kugemoto, M., Muxica, C., Prasad, G., Dillon, B., & Linzen, T. (2024).

Large-scale benchmark yields no evidence that language model surprisal explains syntactic disambiguation difficulty. Journal of Memory and Language. https://doi.org/10.1016/j.jml.2024.104510

Zhang, Q., Huang, K. J., & Li, X. (2024). Competition between parts and whole: A new approach to Chinese compound word processing. *Journal of Experimental Psychology: Human Perception and Performance.* https://doi.org/10.1037/xhp0001198

Huang, K.J. & Staub, A. (2022) The transposed-word effect does not implicate parallel word processing: Failure to notice transpositions with serial presentation of words. *Psychonomic Bulletin and Review*. https://doi.org/10.3758/s13423-022-02150-9

Huang, K.J. & Staub, A. (2021a) Using eye tracking to investigate failure to notice word transpositions in reading. *Cognition*. https://doi.org/10.1016/j.cognition.2021.104846

Huang, K.J. & Staub, A. (2021b) Why do readers fail to notice word transpositions, omissions, and repetitions? A review of recent evidence and theory. *Language and Linguistics Compass*. https://doi.org/10.1111/lnc3.12434

Huang, K.J. (2018). On Bilinguals' development of metalinguistic awareness and its transfer to L3 learning: the role of language characteristics. *International Journal of Bilingualism*. https://doi.org/10.1177/1367006916681081

Conference Proceedings

Huang, K.J., & Staub, A. (2022) Readers do not strongly rely on full-context information, but might utilize local word statistics, when 'correcting' word transposition errors in text. *Proceedings of the 44th Annual Conference of Cognitive Science Society, 64-70*. https://escholarship.org/content/qt3xs699w8/qt3xs699w8.pdf

Conference and Invited Talks

Huang, K.J., Levy, P. R., & Huang, Y. (upcoming talk, Nov 6-9, 2025) Using neural language model surprisal to study child sentence processing. The 50th Conference on Language Development (BUCLD).

Domanski, S., Harvey, J., **Huang, K.J.**, & Huang, Y. (upcoming talk, Nov 6-9, 2025) Unreliable Estimates: Child-Level Differences in LENA Adult Word Count Accuracy. The 50th Conference on Language Development (BUCLD).

Van Horne, A., Oppenheimer, K., Koppy, A., Weatherford, S., Domanski, S., Hiebert, L., Blair, M., Kanaby, M., Van Horne, S., **Huang, K.J.**, May, H., Morini G., Huang, Y. (upcoming symposium, Nov 20-22, 2025) Use of Recast Therapy and Syntax Stories to Treat Noncanonical Sentences in Children with DLD. The American Speech-Language-Hearing Association Convention.

Huang, K.J. (Feb, 2024) Multiword representation and its utilization in Chinese reading. Invited talk at the FALCoN Lab, U of Georgia.

Huang, K.J. & Dillon, B. (Nov, 2023) Modeling garden path effects. Invited talk at the Language Processing Lab, U of Chicago.

Huang, K.J. & Staub, A. (Oct, 2023) Rational inference in correcting word transpositions: the role of trigram frequency. Invited talk at the Computational Psycholinguistics Lab, MIT.

Huang, K.J. & Dillon, B. (2023) An infrequent, large cost underlies garden path effects: an RT distribution approach. Plenary talk at The 36th Conference on Human Sentence Processing.

Huang, K.J. & Staub, A. (2022) Readers do not strongly rely on full-context information, but might utilize local word statistics, when 'correcting' word transposition errors in text. Session Talk at The 44th Annual Conference of Cognitive Science Society.

Huang, K.J. & Staub, A. (Feb, 2022) What might be a robust factor that determines failure to notice word transposition in text. Invited talk at the Vision Lab, Barnard College.

Huang, K.J., Arehalli, S., Kugemoto, M., Muxica, C., Prasad, G., Dillon, B., & Linzen, T. (2022) SPR mega-benchmark shows surprisal tracks construction- but not item-level difficulty. Plenary talk at The 35th Conference on Human Sentence Processing.

Manuscripts in Preparation

Huang, K.J. & Staub, A. (under review) Word trigram frequency predicts failure to detect word transpositions: implications for rational inference in reading.

Huang, K.J., Levy, P. R., & Huang, Y. (in prep) What can small language models tell us about sentence processing.

Timkey W., **Huang, K.J.**, Oh, BD, Prasad, G., Arehalli, S., Linzen, T., & Dillon, B.(in prep) Eye-movements during the reading of complex sentences reveals a dissociation between prediction and structural processing.

Posters

Huang, K.J., Levy, P. R., & Huang, Y (2025) Surprisal and developmental sentence processing: exploring the role of language exposure through neural language models. The 47th Annual Meeting of the Cognitive Science Society.

Van Horne, A., **Huang, K.J.**, Blair, M., Kanaby, M., May, H., Oppenheimer, K., Van Horne, S., & Huang, Y. (2025) Understanding real-time syntactic parsing in typical development and developmental language disorder: A visual-world study. The 38th Conference on Human Sentence Processing.

Huang, K.J. (2024) Parallel processing of Chinese words depends on both n-gram frequency and structure. The 37th Conference on Human Sentence Processing.

Timkey, W., Arehalli, S., **Huang, K.J.**, Prasad, G., Linzen, T., Dillon, B. (2024) Large-scale eye-tracking while reading benchmark shows surprisal captures early fixations, but not regressions. The 37th Conference on Human Sentence Processing.

Huang, K.J. & Staub, A. (2023) The Effect of Phrase Frequency on Failure to Notice Word Transpositions. The 64th Annual Meeting of Psychonomic Society.

Huang, K.J. & Staub, A. (2021) Limits on failure to notice word transpositions during sentence reading. The 34th CUNY Conference on Human Sentence Processing.

Huang, K.J. & Staub, A. (2020) Eye movements when failing to notice word transpositions. The 33rd CUNY Conference on Human Sentence Processing.

Huang, K.J. & Staub, A. (2019) Eye movements in reading sentences with transposed words. The 60th Annual meeting of the Psychonomic Society.

Huang, K.J., Hu, J.-F., & Rajkovic, A. (2017). Processing of filler-gap dependency in island constraints and its relation to working memory for non-native speakers of English. The 39th Annual Meeting of the Cognitive Science Society.

Academic Services

I have served as an ad-hoc reviewer for the following journals/conference:

Journal of Experimental Psychology: Language, Memory, and Cognition
Journal of Experiment Psychology: General
Conference on Human Sentence Processing
Research Methods in Applied Linguistics
Language, Cognition, and Neuroscience
Attention, Perception, Psychophysics
Journal of Memory and Language
Psychonomic Bulletin and Review
Glossa: Psycholinguistics
Cognitive Processing

Cognition

Other Services

Departmental Anti-racism Action Group (2020-2021)

Graduate Student Diversity Committee Undergraduate Mentoring Program (2024 Spring)

Project Tyra (Taiwanese NGO) Mentors for oversea graduate school applications (2024, 2025)

References

Prof. Yi Ting Huang: ythuang1@umd.edu; Post-doc advisor (Hearing and Speech Sciences, UMD)

Prof. Adrian Staub: astaub@umass.edu; Ph.D. advisor (Psych and Brain Sciences, UMass Amherst)

Prof. Brian Dillon: bwdillon@umass.edu; PI of research assistantship (Ling, UMass Amherst)

Prof. Tal Linzen: linzen@nyu.edu; PI of research assistantship (Ling & Data Science, NYU)