

**Moving A Psycholinguistic Research Online during the Pandemic:
Exploring L2 Sentence Processing Strategies of Late Learners and Heritage Speakers
Abstract**

The COVID-19 pandemic is forcing many graduate students to move their research online since in-person studies are all restricted by most of the universities.

This presentation reports on the transition of a sentence processing study from eye-tracking to an online Maze experiment (Forster et al., 2009). Previous findings support that data of Grammatical-Maze (G-Maze) experiments could indicate processing costs when reading sentences with different ambiguity resolution (Witzel et al., 2012). Using Psychopy as the builder, a G-Maze experiment of reading ambiguous sentences with relative clause attachment and adverb phrase attachment is published online through Pavlovia.org. Specifically, in a G-Maze trial, subjects are asked to serially put together an eight-section sentence like *The son, of the actress, who, shot, herself, in the theatre, was, under investigation* through selection between the correct phrase and a distractor. Key-press durations are recorded as the final data and saved on Pavlovia server, which can be downloaded freely.

Exploring different strategies of Mandarin L1 speakers processing English sentences, this study investigates whether late L2 learners of English and heritage speakers of English process differently. Heritage speakers, L2 learners, and native speakers as a control group are being compared. Considering age of acquisition and second language (L2) dominance, this study intends to test the Shallow Structure Hypothesis (SSH) (Clahsen & Felser, 2006b, 2006a, 2018) on Heritage Speakers and late L2 learners. Observing some early data indicates a longer reading time of late learners than native speakers, showing early indications for the SSH for late L2 learners.

References

- Clahsen, H., & Felser, C. (2006a). Continuity and shallow structures in language processing. *Applied Psycholinguistics*, 27(1), 107–126. <https://doi.org/10.1017/S0142716406060206>
- Clahsen, H., & Felser, C. (2006b). Grammatical processing in language learners. *Applied Psycholinguistics*, 27(1), 3–42. <https://doi.org/10.1017/S0142716406060024>
- Clahsen, H., & Felser, C. (2018). Some notes on the Shallow Structure Hypothesis. *Studies in Second Language Acquisition*, 40(3), 693–706. <https://doi.org/10.1017/S0272263117000250>
- Forster, K. I., Guerrero, C., & Elliot, L. (2009). The maze task: Measuring forced incremental sentence processing time. *Behavior Research Methods*, 41(1), 163–171. <https://doi.org/10.3758/BRM.41.1.163>
- Witzel, N., Witzel, J., & Forster, K. (2012). Comparisons of Online Reading Paradigms: Eye Tracking, Moving-Window, and Maze. *Journal of Psycholinguistic Research*, 41(2), 105–128. <https://doi.org/10.1007/s10936-011-9179-x>