

## **Passives are difficult to process, but can be learnt: Sentence comprehension by adult Chinese-speaking learners of Korean**

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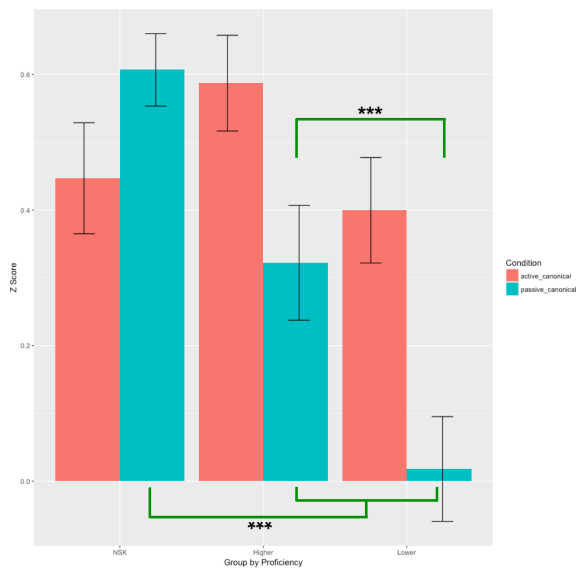
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The acquisition delay in passives has been well-attested in L1 settings<sup>[1]</sup> but has not been actively addressed in second language (L2) contexts<sup>[2]</sup>. One possible explanation for the difficulty of passives by L2 learners (L2ers) involves mapping discrepancy between prototypical event representations (*agent-theme*) and non-prototypical syntactic representations (*subject-oblique*), leading to increased processing difficulty<sup>[3]</sup>. The current study investigates the degree to which processing difficulty arises by learner proficiency and how it affects L2ers' comprehension of suffixal passives in Korean.

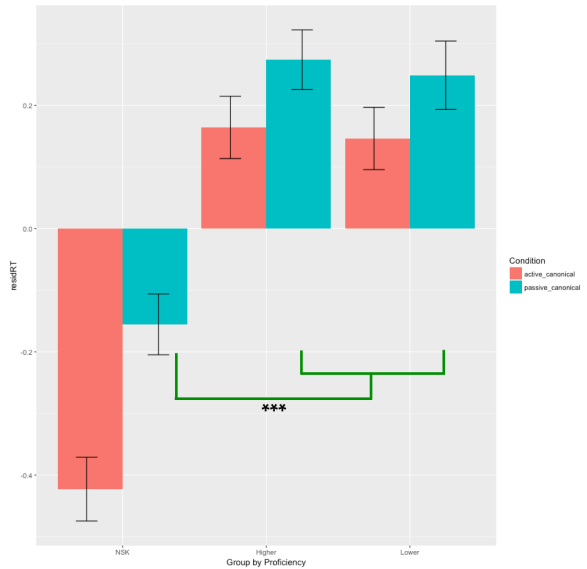
**Method.** 30 adult native speakers of Korean (NSKs) and 56 adult Chinese-speaking L2ers of Korean (25 higher and 31 lower proficiency groups) participated in the experiment. Eight simple transitive actives and eight suffixal passives were created by using canonical word order of each construction with animate nominal arguments. Using the items and fillers, an acceptability judgment task (AJT) using a 4-point Likert scale was conducted via Qualtrics. Participants' reaction times (RTs) were also collected as a measure of processing difficulty during AJT.

**Prediction.** We predicted that L2ers will accept passives less (with longer RTs) than NSKs due to the mapping discrepancy inherent in passives. We also predicted the same tendency between proficiency groups, yielding less acceptance (and longer RTs) of passives by the lower group than the higher group.

**Results.** Data from AJT (Z-transformed) and RTs (log-transformed and residualised) were submitted to linear mixed-effects models<sup>[4][5]</sup>. Results showed that L2ers rated passives lower than NSKs with longer RTs, and that the lower group accepted passives less than the advanced group (Figures 1 and 2), confirming our prediction. However, no significant difference was found in RTs between the proficiency groups (Figure 2), which implies L2ers' general difficulty in processing passives. Taken together, those findings suggest that, although L2ers have difficulty processing Korean suffixal passives in general, language knowledge on passives may grow as proficiency increases.



**Figure 1.** Acceptability Judgment (Z score)



**Figure 2.** Reaction Time (residualised)

## References

- [1] Deen, K. U. (2011). The acquisition of the passive. In J. De Villiers & T. Roeper (Eds.), *Handbook of generative approaches to language acquisition* (pp. 155–187). Springer Science & Business Media.
- [2] Jeong, H. (2014). Processing and acquisition of Korean passive voice by Chinese L2 learners. *Korean Education*, 25(2), 165–186.
- [3] O’Grady, W., & Lee, M. (2005). A mapping theory of agrammatic comprehension deficits. *Brain and Language*, 92(1), 91–100.
- [4] Bates, D. (2007). *Linear mixed model implementation in lme4*. Manuscript: University of Wisconsin-Madison (January 2007).
- [5] Barr, D. J., Levy, R., Scheepers, C., & Tily, H. J. (2013). Random effects structure for confirmatory hypothesis testing: Keep it maximal. *Journal of Memory and Language*, 68(3), 255–278.