

The Effects of Conceptual and Semantic Crosslinguistic Influence in Explicit L2 Instruction of Temporal Adpositions

Robert H. Taferner
Hiroshima University
rhtafern@hiroshima-u.ac.jp

Keywords: crosslinguistic influences, explicit instruction, temporal prepositions, adpositions

This study investigates the correlation between general language proficiency and explicit knowledge of English temporal prepositions and the effects of crosslinguistic conceptual and semantic influence in second language instruction. Temporal adpositions (e.g., English prepositions of time and Japanese post-position particles) have shown to be one of the most difficult aspects of language acquisition. Thus, there is a clear need to examine and understand the effects of explicit instruction of temporal prepositions to improve pedagogical approaches for enhancement of second language learning (Jarvis & Pavlenko, 2008; Jarvis, 2011; Suzuki & DeKeyser, 2017).

To accomplish these research objectives, a study with 86 1st-year Japanese university students was initiated to promote the usage of nine frequent one-word prepositions of time: *at*, *by*, *for*, *from*, *in*, *of*, *on*, *to*, and *within*, with two experimental treatment groups: Participants_{Low} ($n = 35$) and Participants_{High} ($n = 35$), and a comparison Control group ($n = 16$). Accuracy of temporal prepositions was promoted through *focus on form* treatment exercises including visual representations of the scenes depicted in the treatment items. Pretest, immediate post-test, and delayed post-test results were examined in order to scrutinize the hypothesis that as a second language develops, general language proficiency and prepositional accuracy can develop concurrently. The second hypothesis this study proposes is that the effects of instruction on prepositions of time, as revealed by the grammar test, are constrained by differences in the influence of crosslinguistic conceptual and semantic features, which may be revealed through the observation of crosslinguistic influences, discrepancies in developmental-accuracy orders, and individual differences.

The results show a significant lack of correlation between participants' language proficiency scores and their ability to understand temporal prepositions. Improvements in explicit knowledge due to the treatment were maintained and statistically significant for the experimental treatment groups. In particular, gains in accuracy of *to* for expressing the endpoint, duration, or the beginning of another event could be easily represented by the use of the Japanese post-position particle *made*. Another outcome of this study was the further confirmation that conceptual and semantic influences of Japanese particles (for example *ni*, see Kabata, 2016) play a significant role in approximating correct usages of English prepositions; e.g., utilizing *ni* (a specific point in time) for *at*, *in*, and *on* (indicating a specific point in time within a time continuum).

The implications of this investigation illustrate that the learning of adpositions may be seen as a distinct cognitive area not necessarily parallel to gains in general language proficiency (e.g., Granena, Jackson & Yilmaz, 2016). In addition, crosslinguistic transfer, lexicalization, and semantic extension may all have an influence on individual differences in learning of English prepositions of time and that focus on form treatment exercises with the incorporation of semantic and conceptual visual illustrations and can be generalized to other second language learning contexts and used to enhance the teaching of temporal adpositions.

References

- Granena, G., Jackson, D.O., & Yilmaz Y. (Eds.). (2016). *Cognitive differences in second language processing and acquisition* (pp. 327-349). Amsterdam, Netherlands: John Benjamins. doi.org/10.1075/bpa.3.15yil
- Jarvis, S. (2011). Conceptual transfer: Crosslinguistic effects in categorization and construal. *Bilingualism: Language and Cognition*, 14(1), 1-8. doi.org/10.1017/S1366728910000155
- Jarvis, S., & Pavlenko, A. (2008). *Crosslinguistic influence in language and cognition*. New York, NY: Routledge.
- Kabata, K. (2016). A usage-based account of learner acquisition of Japanese particles *ni* and *de*. In K. Kabata, & K. Toratani (Eds.), *Cognitive-functional approaches to the study of Japanese as a second language* (pp. 89-112). Boston, MA: Mouton de Gruyter. doi.org/10.1515/9781614515029-007
- Suzuki, Y., & DeKeyser, R. (2017). The interface of explicit and implicit knowledge in a second language: Insights from individual differences in cognitive aptitudes. *Language Learning*, 67(4), 747-790. doi.org/10.1111/lang.12241