

Effects of Prototypicality on the Acquisition of Prepositions by Japanese Learners of English

Japanese learners of English (hence JLEs) experience difficulties in using English prepositions appropriately and go through a different acquisitional path from that of first language acquisition. Native speakers of English learners acquire spatial usages of English prepositions at a very early stage, but AUTHOR (2002) revealed that JLEs acquire some of spatial usages of English prepositions the earliest, but the other spatial usages are acquired later than temporal and metaphorical relations. The following sentences are examples of the two types of spatial relations: topological and functional relations.

a. Topological relations:

Ken wa sono jiko ga okotta toki kuruma no naka ni ita
Ken SUBJ the accident SUBJ happened when car post p Top N post p was
“Ken was in a car when the accident happened.”

b. Functional relations:

Ken wa sono jiko ga okotta toki gakko ni ita
Ken SUBJ the accident SUBJ happened when school post p was
“Ken was *at* school when the accident happened.”

Both English sentences use prepositions to encode the spatial relationships between two entities, but in Japanese, different coding patterns are used. In topological relations, a spatial relation is encoded by a topological nominal and postpositions, but in functional relations, it is encoded by a postposition alone.

This study first discusses the results of the prototypicality judgment tests by JLEs and native speakers of English. We claim that two coding patterns of spatial relations roughly correspond to the prototypical and non-prototypical usages of English prepositions. JLEs experience a bigger cognitive gap between prototypical and non-prototypical usages than native speakers do. In order to fill the cognitive gaps between prototypical and non-prototypical usages, this study introduces the instructional approach based on the image-schema approach to English prepositions and investigates whether the image-schema approach is more effective in teaching prepositions in the EFL classroom setting than traditional instructions. This study adopted two types of instructional approach: the cognitive approach based on the framework of cognitive linguistics and the traditional approach based on the traditional pedagogical grammar. A total of 46 Japanese college students who were in the lower-intermediate level were divided into two classes and received different instructions. All the participants received 40-minute instruction and took three tests to see the instructional effects: a pretest, a posttest taken immediately after the instruction, and a long-term posttest, which was administered 6-week after the instruction. The results show that the cognitive approach is effective for both topological (*Wilk's Lamda* = 4.62, *df* = 3, 42, *p* = 0.01, *partial eta squared* = 0.25) and functional relations (*Wilk's Lamda* = 7.25, *df* = 3, 42, *p* = 0.00, *partial eta squared* = 0.34), and that the effects of cognitive approach lasted 6-week after the instruction. Based on the results, we claim that the cognitive approach is an effective instruction for filling the cognitive gaps between prototypical and non-prototypical usages in the EFL classroom setting.

References:

AUTHOR. (2002). A Cognitive Linguistic Approach to the Acquisition of English Prepositions. *JACET Bulletin*, 35, 63-78.