Language Proficiency and Instructional Effects: A Cognitive Linguistic Approach to the Count-Mass Distinction

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Keywords: explicit grammar instruction, boundedness, individuation, proficiency, count-mass distinction

This paper examines how the effect of explicit grammar instruction based on cognitive linguistic terms differ by language proficiency, looking at L2 learner's understanding the count-mass distinction in English. Boundedness and individuation are cognitive linguistic notions to characterise the countability of nouns (Croft & Cruse, 2004; Langacker, 2008). Although the application of such notions to language teaching has proven to be beneficial to some extent, there was a domain that the instruction partly failed to improve: flexible nouns (Cho and Kawase, 2011; Akamatsu, 2018; Ogawa et al. 2018). They are the type of nouns which can equally be count or mass depending on context (e.g., hair, stone). Akamatsu (2018) and Ogawa et al (2018) tested Japanese learners of English on the understanding of flexible nouns and found no positive effect of instruction on their count interpretation (e.g., I was surprised to find grey *hairs* in my beard.), while some improvement was observed with their use as mass (e.g., She has beautiful black *hair* and brown eyes.). The result indicates a potential transfer of cognitive preference from the L1 that Japanese native speakers prefer, by default, mass (unbounded, unindividuated) interpretation for an unknown entity (Imai & Gentner, 1997; Cook et al, 2006).

In order to see whether such a transfer is affected by the learner's proficiency, the current study administered cognitive linguistic instruction on two levels of proficiency groups and compared their outcomes. Participants were Japanese university students in an EFL environment, divided into basic (N=23), intermediate (N=18), and control groups (N=25). Procedures involved a pre-test, three sessions of explicit instruction based on boundedness and individuation, post- and delayed post-tests. Test items were typical count and mass nouns (e.g., book, cat, sand, bread), and flexible nouns. Results revealed a marginal interaction of Test, Noun type, and Learner group, suggesting different degrees of the effects by noun type and proficiency. In particular, intermediate learners improved significantly on both uses of flexible nouns (count and mass), whereas basic learners only showed better understanding on mass interpretation of flexible nouns. The findings indicate that learners need a certain level of proficiency to take full advantage of cognitive linguistic instruction which requires the application of abstract notions (i.e., boundedness, individuation) to form-meaning mappings in the L2. The study can also give an important pedagogical suggestion on at which proficiency level this type of instruction may best be introduced.

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