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Acquisition of semantic and syntactic countability in a second language

Abstract:
The distinction between object and substances is realized as count and mass nouns in human language. However, this universal ontological distinction has been conceptualized differently in different languages. Children are aware of the distinction of object and substance. They also shift to the pattern in their native language at very early age (Imai & Gentner, 1997). Imai and Gentner (1997) found that both English and Japanese speakers extended novel names to complex objects based on shape. On the other hand, Japanese speakers extended novel names to substance based on material, while English speakers did so randomly; English extended novel names to simple objects by shape, Japanese speakers did so randomly. Tseng (1985) validated the psychological reality of count mass pair synonyms for adult English speakers. She found a positive correlation between syntactic and semantic countability for English native speakers. For example, they treated noodles [C] more like objects whereas spaghetti [U] more like substance. What will learners do when learning a second language at different proficiency levels? In this study, we investigated the acquisition of syntactic and semantic countability in English by speakers of Chinese, in which all nouns are mass (Hansen, 1983; Chierchia, 1998).

Two experiments were conducted for 60 college students in Taiwan, 30 with upper intermediate English proficiency and 30 with lower intermediate English proficiency. The material included 20 count and mass synonym pairs such as noodles and spaghetti (from Tseng, 1985). They were asked to choose the correct form (i.e., with the plural marker or not) to complete sentences in Study 1. In Study 2, they were asked about whether the denotations of the nouns possess semantic features including concrete, abstract, stable and malleable. Concrete and stable indicate count and abstract and malleable indicate mass. In Study 1, the mean accuracy rate for the high intermediate level is 66.13 (SD= 7.41) and 56.3 (SD= 5.43) for the low intermediate level. There is no correlation between the syntactic (Study 1) and semantic countability (Study 2) (r=0.175, p>0.05) for the high intermediate level while there is a positive correlation (r= 0.549, p<0.01) in the low intermediate level. Syntactic countability is intermediate correlated with semantic countability for low intermediate learners, but no correlation for high intermediate learners. Lower level learners rely more on semantics in learning syntax. That is, beginners rely more on ontological resources when learning a language.
References:


