The mass/count distinction in classifier languages: insights from ERPs on processing Korean number morphology

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While it has been argued that generalized classifier languages such as Korean and Chinese lack the syntactic count/mass distinction in their grammars (Chierchia, 1998, Krifka, 1995), others have claimed that the syntactic count/mass distinction is needed to account for the distribution count versus mass classifiers in Chinese (Cheng & Sybesma, 1998, 1999).

In the present study we investigated the question of whether Korean is also constrained by the count/mass distinction in its classifier system (Experiment 1). In Experiment2, we investigated the optional marking of plurality through the morpheme *TUL*, which we expect to be possible with count but not mass nouns if there is a syntactic count/mass distinction in Korean.

In Experiment 1, the collocation of mismatching classifiers (count noun + classifier for substances; mass noun + classifier for objects) elicited both N400 and P600, which implies that classifier mismatches are syntactically processed and not just semantically.

In Experiment 2, we examined ERPs responses to *TUL*-attached to nouns denoting objects and substances. If TUL-marking is constrained by the syntactic count/mass distinction, we expect the former to be well-formed, and the latter to be unacceptable. In our results, however, we found that adding plural marker *TUL* elicited an N400 regardless of whether it was attached to object-denoting or substance-denoting nouns. This implies that speakers of Korean take the combination of noun and the plural marker *TUL* to be marked, preferring to use a bare noun in the relevant contexts.

However, we found a significant interaction between classifier type and the plural marker *TUL*. Even though the difference was not significant, in the count category, the combination of noun and the plural marker *TUL* elicited P600 to a higher degree compared to bare nouns, while in the mass category, the bare form elicited P600 more than the combination of noun and the plural marker *TUL*. These results suggest that the plural marker *TUL* might not be processed syntactically by native Koreans.

We take these results to imply that the syntactic count/mass distinction exists in Korean, unlike Kanero et al (2015) who did not find evidence for it in the syntactic processing of classifiers in Japanese. The distinction manifests itself in the classifier system, which is a robust part of Korean grammar. As for why -*TUL*-marking is not fully constrained by the count/mass distinction, our answer is that it is not a fully grammaticized marker of plurality. We suspect that as more speakers use *TUL* as a grammaticized marker of plurality, its use may increasingly be constrained by the count/mass distinction.