Item-based generalizations and argument structure acquisition: some relevant corpus findings

Goldberg (1995) defines Argument Structure Constructions (hereafter ASCs) as independent form-meaning pairs that associate a set of argument roles and their syntactic realization with a basic clausal meaning. Goldberg et al. (2004) further argue that the way the input is structured plays a major role in the acquisition of ASC. They report that the lexical distribution of child-directed speech is strongly skewed towards a “basic purpose verb” for each ASC, the meaning of which is closely related to that of the construction (e.g. give would be such a basic purpose verb for the ditransitive construction) and provide evidence from experiments with adults that such a skewed input indeed facilitates construction learning by prompting an item-based generalization that is essential for the acquisition of ASCs. Casenhiser and Goldberg (2005) obtained similar results from experiments with children.

In this study, we checked whether those claims could be taken at face value and be applied to corpus data, in the sense that a skewed verb distribution in corpus data would signal the presence of a construction and thus serve to identify constructions. This hypothesis would predict that items occurring most frequently with a given syntactic pattern should systematically correspond to an ASC, which we tested by analyzing the most frequent verbs occurring in the patterns Subject-Verb-Oblique and Subject-Verb-Object-Oblique in combination with various prepositions.

While the results of our study, based on the ICE-GB, were in line with some of our expectations, the skewed input hypothesis has not been fully borne out, and our results bring up other issues. Several cases seem to be in conflict with Goldberg et al.'s (2004) analysis that ASCs emerge from the item-based generalization of the semantic and syntactic properties of such constructional prototypes. For example, look is highly representative of the pattern Subject-Verb-Oblique+at (81% of occurrences). It could be argued that the skewed frequency of this verb gives rise to the conative construction (cf. Goldberg 1995:63), but the problem with this analysis is that while the syntactic properties of look are aligned with those of the conative construction, its meaning is evidently not: the meaning of the conative is a directed action and it arguably occurs with other different types of verbs than those of visual perception. We will present several similar examples, as well as cases of complementation patterns where several ASCs might be in competition.

On the basis of the results of this study, we argue that in addition to Goldberg's account – which may hold for language acquisition – other constraints seem to be at work in the further entrenchment of ASCs. One of the theoretical issues that is raised by our results concerns the status of constructions in the multi-varied system as it emerges from corpus data.

To complement our study and bring it closer to the initial claims made by Goldberg et al., we are currently applying the same type of analysis to the adult input in the CHILDES database, the results of which will be reported on as well.

References

