Constituent-order alternation phenomena in L2: Two multifactorial usage-based case studies

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For a long time, the study of constituent order alternations such as those in (1) or (2) has informed theoretical linguistics.

(1) a. the squirrel's nest genitive alternation

b. the nest of the squirrel

(2) a. the interesting clean Meerkat habitat adjective order

b. the clean interesting Meerkat habitat

Adopting a simplistic historical perspective, two to three different phases in the study of alternations can be distinguished. First, in earlier generative work, the semantic similarity between alternative constructions was taken to reflect their transformational relatedness. However, work on topics other than explicating the exact nature of this relatedness was rare, linguists usually studied made-up sentences. Second, more recent functionalist approaches shifted to semantic (e.g., animacy) and information-structural differences of the alternatives (related to, say, given-/newness) as well as data from natural conversations/narratives. In what may be considered a third, usage-based and psycholinguistically-informed phase, corpus studies are even more prominent, and more attention is paid to how language use and processing shape linguistic representations and constructional choices.

The vast majority of such studies are based on L1 data. With few exceptions, fairly little is known about how much notions such as online processing or variables such as animacy, complexity, or priming relevant in L1 contexts apply to L2 research. In this paper, we report on two case studies from different levels of syntactic granularity: the genitive alternation of (1) and adjective order of (2). Both phenomena have been explored from usage-based cognitive perspectives in L1 and involve a large variety of variables of the type mentioned above. On the basis of data from the ICLE corpus (Granger et al. 2009), we explore to which degree L2 learners are sensitive to the same variables and what that reveals about the cognitive mechanisms giving rise to, and shaping, L2 acquisition.

For the genitives, we extracted all instances of the two genitive constructions from the German component of the ICLE (G-ICLE) and annotated a random sample of 1,000 attestations for 11 variables (from Cooper & Ross 1975, Rosenbach 2002, Stefanowitsch 2003, among others). A logistic regression reveals a complex picture with many significant interactions, but also a very good classification accuracy (C=0.96). We will discuss the results and implications with a particular emphasis on (i) the cases where the model failed to predict the constructional choices and (ii) noteworthy deviations from L1 studies, such as the observed irrelevance of the NPs' activation status.

As for adjective order, we extracted 345 instances of two prenominal adjectives in the G-ICLE and annotated them for 12 variables (from Wulff 2003). Here, too, a logistic regression resulted in a significant and highly accurate model (*C*=0.85). It reveals that gradability, subjectivity, and frequency play the expected roles, but also a variety of interactions (e.g., frequency plays no role with certain degrees of gradability). We will discuss our findings in particular with regard to information-structural and processing-related variables and interpret them within a usage-based cognitive approach to L2 (cf. Ellis 2006 or Ellis & Robinson 2008).