Categorization and Generalization in Second Language Acquisition: Evidence from resultative constructions in L2-English/L1-Portuguese

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In this presentation we take a construction grammar view on productivity and conservatism in language acquisition based on exemplar-based-abstraction to examine the generalizations of argument structure constructions (ASC) in L2 learning. According to Goldberg (2019), adults can productively use a new word in a different ASC than the one they originally heard it "as long as the word's meaning and the ASC are compatible and appropriate in the context." Children on the other hand are much more conservative and "tend to produce only minor variations of the formulations that they witnessed in the input" (p.98). By extending this observation into categorization (Goldberg, 2006), one could assume that the "lack of conservatism" in adults might impact the way they categorize new elements in the input, especially in L2[1]. Goldberg (2006) argues that speakers "classify the instances they hear into categories. Verb-centered categories are categorized together, ultimately resulting in general, abstract argument structure constructions." Thus, it seems worth exploring the role that productivity could play in categorization while learning different constructions.

This study looks into the acceptability rates of resultative constructions in L2-English by adult speakers of Brazilian Portuguese (L1-BP). The exact nature of resultative constructions has received numerous accounts (e.g., Goldberg, 1995; Müller, 2002; Boas, 2003; Kratzer, 2005), and their grammatical status is notoriously elusive to native speakers, as attested by Boas (2003), who also presents many event-frames to capture their meanings.

In our study, one control group with 23 native speakers of English (NS), and two experimental groups with 18 L2-English immersed bilinguals (IB) and 20 L2-English non-immersed bilinguals (NIB) performed a timed acceptability judgment task with 111 sentences, 24 of which comprised our target grammatical[2] (RSLT) and ungrammatical (UNGR) resultatives plus our control depictive sentences (DPCT), as in (1).

(1) a. Paul cleaned the metal and hammered it flat. (grammatical - RSLT)
b. *Rachel bought a cat and fed it sick. (ungrammatical - UNGR)
c. Junior lost his phone and found it broken. (depictive - DPCT)

The predictor variables were the ASC types and the participants' linguistic profile. The outcome variable was the acceptability judgment ratings. A comparison with nested models indicated that both participant profiles ($\chi^2 = 63.726, p<.001$) and constructions ($\chi^2 = 81.513, p<.001$), as well as their interaction ($\chi^2 = 49.342, p<.001$), contribute significantly to the model. The pairwise comparisons using Tukey's HSD test with the best adjusted model indicated that the groups of speakers only differed regarding their acceptability of the ungrammatical resultatives ($p<.01$), with significantly lower acceptability ratings by NS (figure 1). Also, NS were the only group to rate the grammatical resultatives differently from the ungrammatical ones ($p<.001$). Thus, L2 speakers were less sensitive than NS to the violations in the resultative predicate, and immersion did not play a significant role in their sensitivity to this type of violation.

In our presentation, we argue that the adult ability to generalize ASCs is actually hindering their L2 capability to constrain the idiosyncratic variations observed by Boas (2003) in his corpus study. Using a SBCG description (Sag, 2012; Michaelis, 2010), we postulate that, at least temporarily, L2 learners license resultative constructions with a generic frame such as in (2), which allows them to map adjectival and prepositional constructions less conservatively to the meaning of the third verbal argument. We believe our results and interpretations match those found by Tachihara & Goldberg (2019), who argue that L2 learners accept novel interpretable sentences more readily than NS.

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1 As Ellis (2013) points out, there are many factors that will affect the learning of form-meaning pairs in L2, such as frequency, salience, significance, prototypicality, generality, redundancy, surprise value, automaticity, transfer, overshadowing, and blocking. Some of them interact with the data and analysis we present, but we do not have space to discuss them here.

2 Similar constructions do not exist and cannot be licensed in the experimental groups' L1 (Portuguese).

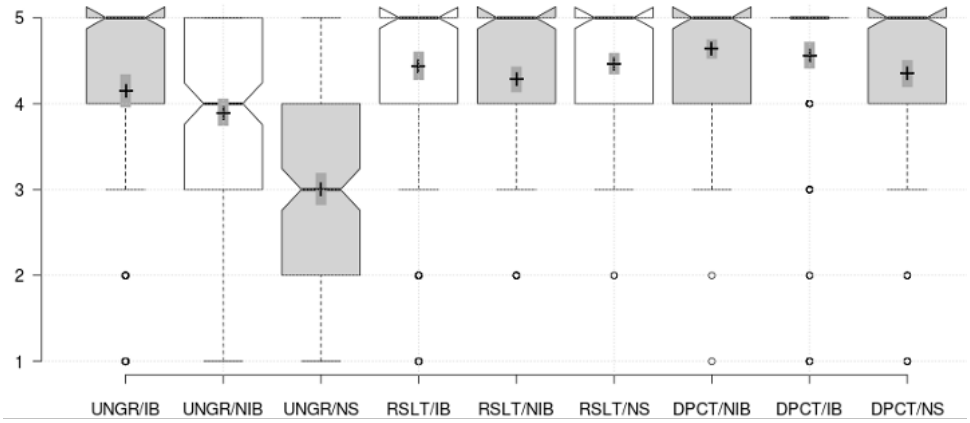

Figure 1: Results

(2) Resultative Lexeme

$$\textit{resultative-lexeme} \Rightarrow \begin{bmatrix} \textit{resultative-verb-lxm} & \\ \text{arg-st} & \langle \text{NP}_x, NP_z, Adj \wedge PP_y \rangle \\ \text{sem} \mid \text{frames} & \begin{bmatrix} \textit{resultative-fr} \\ \text{actor } x \\ \text{theme } z \\ \text{changed } y \end{bmatrix} \end{bmatrix}$$

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