The facilitatory role of L1 syntax in the initial learning of L2 syntax

The Competition Model (MacWhinney, 1992), the Full Transfer/Full Access Model (Schwartz & Sprouse, 1996) and the Shared Syntax Account (Hartsuiker & Bernolet, 2017) assume that first language (L1) syntax facilitates the learning of similar second language (L2) structures. Previous studies have found evidence supporting this claim (e.g. Tokowicz & MacWhinney, 2005; Chang & Zheng, 2015). This study seeks to contribute to the literature by exploring whether when two constructions are available to convey the same meaning in the L2, one similar to an L1 structure and the other unique to the L2, the rule underlying first one is learnt with greater ease than the rule underlying the second.

Our hypothesis claimed that the similar rule would be learnt more easily than the unique one due to positive transfer from the L1. To test this hypothesis, 44 L1 speakers of Spanish with no previous knowledge of Galician learnt a semi-artificial language with a Spanish-Galician cognate vocabulary and Galician-based syntax. Participants learnt two types of subject subordinate clauses (in brackets in 1). One of these constructions also exists in Spanish (1a), but the other does not (1b). The rule underlying the similar construction stated that when a subordinate clause is introduced by the complementizer "que" (*that*), the verb has to be in the present subjunctive (SUBJ). The rule underlying the unique construction said that when the complementizer does not introduce the subordinate clause, the verb has to be in the infinitive (INF). Ungrammatical sentences were derived from grammatical ones by changing the [±Tense] feature of the subordinate verb (1a', b').

Participants were first exposed to the language while performing a rule-search task. Then, learning of the similar and unique rules was tested in a grammaticality judgement task (GJT) with feedback. Finally, a verbal report assessed awareness of the rules and possible learning strategies. Learning was measured by accuracy and d' scores on the GJT. Results showed that participants were significantly more accurate when classifying sentences complying with or violating the similar rule (1a + 1a') than when classifying sentences complying with or violating the unique rule (1b + 1b'), p < .001. Sensitivity to violations of the similar rule was also greater than to violations of the unique rule (p < .01). The verbal report suggested that rule knowledge was conscious for 68% of participants and that, overall, they tended to pair the structures based on the presence/absence of the complementizer.

In conclusion, learning was greater for the rule that was similar in the L1 and the L2 than for the rule that was unique to the L2. This result goes in line with previous studies supporting the facilitatory role of L1 syntax in L2 syntax learning and shows that the salutary effects of syntactic transfer also extend to those cases in which the learning target are two equivalent rules differing in their similarity with L1 syntax.

- (1) a. É importante [que Francisco lea o libro]
 it.is important that Francisco read.SUBJ the book
 a'. *É importante [que Francisco ler o libro]
 it.is important that Francisco read.INF the book
 "It is important that Francisco reads the book."
 - b. É importante [Francisco ler o libro]
 it.is important Francisco read.INF the book
 b'. *É importante [Francisco lea o libro]
 it.is important Francisco read.SUBJ the book
 "It is important that Francisco reads the book."

References

- Chang, H. & L. Zheng (2015). The Role of L1 in the Acquisition of Chinese Causative Constructions by English-speaking Learners. In L. Yu & T. Odlin (Eds.), *New Perspectives on Transfer in Second Language Learning* (pp. 145-168). Bristol: Multilingual Matters.
- Hartsuiker, R. J. & S. Bernolet (2017). The development of shared syntax in second language learning. *Bilingualism: Language and Cognition*, 20(2), 219-234.
- MacWhinney, B. (1992). Transfer and Competition in Second Language Learning. In R. Harris (Ed.), *Cognitive Processing in Bilinguals* (pp. 371-390). Amsterdam: Elsevier.
- Schwartz, B. D. & R. A. Sprouse (1996). L2 cognitive states and the Full Transfer/Full Access model. *Second Language Research*, 12(1), 40-72.
- Tokowicz, N. & B. MacWhinney (2005). Implicit and explicit measures of sensitivity to violations in second language grammar: An Event-Related Potential investigation. *Studies in Second Language Acquisition*, 27(2), 173-204.