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Gradience in subject-verb number agreement: Can bilinguals tune in?

We investigated bilingual speakers' sensitivity to constraints that determine verbal agreement with pseudo-partitive subjects in German such as 'eine Tuete Bonbons' (a bag of sweets). Previous research has shown that the choice of a singular vs. plural verb form is influenced not only by number match between the verb and the subject head, but also by other factors such as the potential agreement controllers' proximity to the verb (e.g. Berg, 1998; Wegerer, 2012). The current study combines scalar acceptability ratings with Gradient Symbolic Computation (GSC) modelling (Smolensky, Goldrick & Mathis, 2014; Goldrick, Putnam, & Schwarz, 2016) to capture the way different constraints interact in determining native German speakers' (n=40) and native Turkish-speaking bilinguals' (n=41) agreement preferences. Our experimental materials included pseudo-partitives (n=48) headed by a singular or plural container noun (e.g. eine Tuete 'a bag' vs. zwei Tueten 'two bags') that was followed by either a singular or plural containee (e.g. Mehl 'flour' vs. Bonbons 'sweets').

Whilst for both participant groups, number match between the subject head (the container noun) and the verb was the strongest determinant of acceptability, the grammatical number of the containee noun affected our two participant groups' judgements in different ways. The GSC modelling results show that the constraint weightings that account for the control group's judgement pattern did not successfully predict the bilinguals' judgement pattern but instead required some adjustments. This was the case even for the subset of bilinguals (n=13) who had started acquiring German during their first three years of their lives. Taken together, our findings suggest that even early-onset bilinguals who grew up immersed in their second language diverge from monolingual constraint interaction in determining number agreement.

References:

Berg, T. (1998). The resolution of number conflicts in English and German agreement patterns. Linguistics 36, 41-70.

Goldrick, M., Putnam, M., Schwarz, L. (2016). Coactivation in bilingual grammars: A computational account of code mixing. Bilingualism: Language and Cognition 19, 857-876.

Smolensky, P., Goldrick, M., & Mathis, D. (2014). Optimization and quantization in gradient symbol systems: a framework for integrating the continuous and the discrete in cognition. Cognitive science, 38(6), 1102-1138.

Wegerer, M. (2012). Die Numeruskongruenz von Subjekt und finitem Verb im Deutschen. PhD Dissertation, University of Vienna.