

## Exploring gradient judgements: a study on the impact of bilingualism and age on the perception of L1 gradience

Keywords: bilingualism, age, markedness, ungrammaticality, gradient acceptability

Gradient acceptability characterizes constructions which are partially acceptable within a given population of speakers. The cognitive underpinnings of gradient acceptability are yet to be fully understood, and the relevant literature is limited. In this presentation we share insights from a study where we investigated the causes of gradient acceptability from a language-external, speaker-oriented perspective. Specifically, we tested whether the mono- and bilingual status (Dewaele and Li, 2013; Hicks and Dominguez, 2019; Sorace, 2005, 2019) and age play a role in the perception of partially acceptable subject-oriented possessive pronouns and post-verbal adverb placement in Polish. While the former construction, which is prescriptively ungrammatical (cf. Bańko, 2009), represents the syntax-semantics interface, the latter one, grammatical but marked, is more syntactic in nature. Crucially, in both cases fully grammatical constructions were tested alongside ungrammatical (for possessives) and marked (for adverbs of frequency) constructions (1-2):

- 1a Jan<sub>1</sub> znalazł swoje<sub>1</sub> klucze. =unmarked, grammatical  
Jan found self keys
- 1b \*Jan<sub>1</sub> znalazł jego<sub>1</sub> klucze. =ungrammatical  
Jan found his keys
- 2a Jan rzadko czyta e-booki. =unmarked, grammatical  
Jan seldom reads e-books
- 2b Jan czyta rzadko e-booki. =marked, grammatical  
Jan reads seldom e-books

Our main research question asked whether acceptability judgements for ungrammatical and marked constructions are influenced by age and bilingual status. In order to answer it, we performed an acceptability judgement task involving four groups of native speakers of Polish (N = 99), differing in bilingual status (monolingual vs. bilingual) and age (young adult vs. middle-aged). The task consisted of 10 experimental items per condition, which the participants assessed on a five-point Likert scale. This task was followed by a Cambridge General English placement test, whose aim was to verify the participants' knowledge of L2 (second language) English, thus operationalizing bilingual status.

We analyzed the data with mixed-effects ordinal logistic regression models, using the R software (R Core Team 2022). We considered both variables as continuous in our statistical analyses, which were performed separately for the two constructions under investigation. The results showed that only age was a significant predictor of the ratings of ungrammatical sentences with subject-oriented possessive pronouns. Conversely, the ratings of marked sentences with post-verbal adverb placement were significantly influenced by bilingual status. We attribute the findings to different language-internal sources of partial acceptability in the

two tested constructions, but they also show that age and bilingual status impact different areas of cognitive processing.

#### References:

- Bańko, M. (2009, July 13). Mój i swój. Poradnia Językowa PWN.  
<https://sjp.pwn.pl/poradnia/haslo/moj-iswoj;10404.html>.
- Dewaele, J.-M., & Wei, L. (2013). Is multilingualism linked to higher tolerance of ambiguity. *Bilingualism: Language and Cognition*, 16, 231–240.
- Hicks, G., & Dominguez, L. (2019). A model for L1 grammatical attrition. *Second Language Research*, 36(2), 1–23.
- R Core Team. (2022). R: A language and environment for statistical computing [Computer software]. R Foundation for Statistical Computing. <https://www.R-project.org/>.
- Sorace, A. (2005). Selective optionality in language development. In L. Cornips, K. P. Corrigan (Eds.), *Syntax and variation: Reconciling the biological and the social*. (pp. 55–80). John Benjamins.
- Sorace, A. (2019). L1 attrition in a wider perspective. *Second Language Research*, 36(2), 1–4.