

Metalinguistic knowledge influences the priming effect of dispreferred structures in heritage language children

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Cross-linguistic influence has been tested through acceptability ratings to investigate the tolerance of ungrammaticality in heritage language speakers [1]. Moreover, there is evidence that the exposure to a fully grammatical structure in one language facilitates the production and/or comprehension of the equivalent, but ungrammatical structure in the other language [2,3].

This study explores whether the acceptability rate of an ungrammatical/dispreferred structure in the heritage language (HL), modulates priming within- and across-languages in a group of Italian HL children with Greek as their Societal Language (SL). We focused on a structure available in the SL (Greek), but dispreferred in the HL (Italian), namely verb-subject-object (VSO) word-order.

We tested 36 HL children (7;5-11;10, M: 9;5) attending an Italian immersion school in Greece. They were simultaneous or sequential bilinguals (AoO between 0 and 4), and they were relatively balanced between Greek and Italian (based on a background questionnaire and a Vocabulary Test).

We conducted acceptability/metalinguistic awareness tasks in Greek and in Italian. Children had to choose between VSO/SVO sentences, along with grammatical/ungrammatical sentences, (e.g., S-V agreement mismatch), and explain their choice. The task included 10 VSO/SVO sentences and 20 fillers. The results showed that children performed at ceiling in both languages for the filler structures, and that VSOs are less accepted compared to SVOs in both languages. However, children chose them significantly more in Greek (11.95%; SD=0.32) than in Italian (7.78%; SD=0.27).

Afterwards, we conducted a within-language (Italian-to-Italian) and an across-languages (Greek-to-Italian) priming experiments. Children were asked to look at a picture, listen to a prime sentence, repeat it, and then describe a new picture (Figure 1). Primes were VSOs or SVOs and were either in Italian or in Greek (according to the task). Each task targeted the production of 40 sentences in Italian, 20 preceded by an SVO-prime and 20 by a VSO-prime.

We fit a generalized-linear mixed model of the probability of producing VSOs as an effect of prime (SVO vs. VSO), task (Italian-to-Italian vs. Greek-to-Italian) and the acceptability rate of VSOs in Italian. Children produced more VSOs after VSO-primers in each task ($\beta=1.72$, $SE(\beta)=.55$, $z=3.14$, $p<01$), and VSOs were mostly produced in the Greek-to-Italian task ($\beta=2.26$, $SE(\beta)=.51$, $z=4.47$, $p<001$). Moreover, children produced more VSOs in the Greek-to-Italian task the more they accepted them in Italian ($\beta=.07$, $SE(\beta)=.29$, $z=2.46$, $p<05$); Figure 2.

To conclude, the acceptance of a dispreferred structure in the HL (Italian) *per se*, does not modulate within-language priming (Italian-to-Italian), it is crucial only when the SL (Greek) in which this structure is available is activated. This is in line with an account of cross-linguistic influence in terms of activation not only of a syntactic structure, but also of a language in a bilingual's processing system. In addition, we suggest that formal instruction enhances the awareness of a given structure, influencing its acceptability. Therefore, such an explicit measure, boosted by education, could modulate the outcome of a more implicit measure, like priming. We speculate that this could lead to a lower possibility for an ungrammatical/dispreferred structure to be primed.

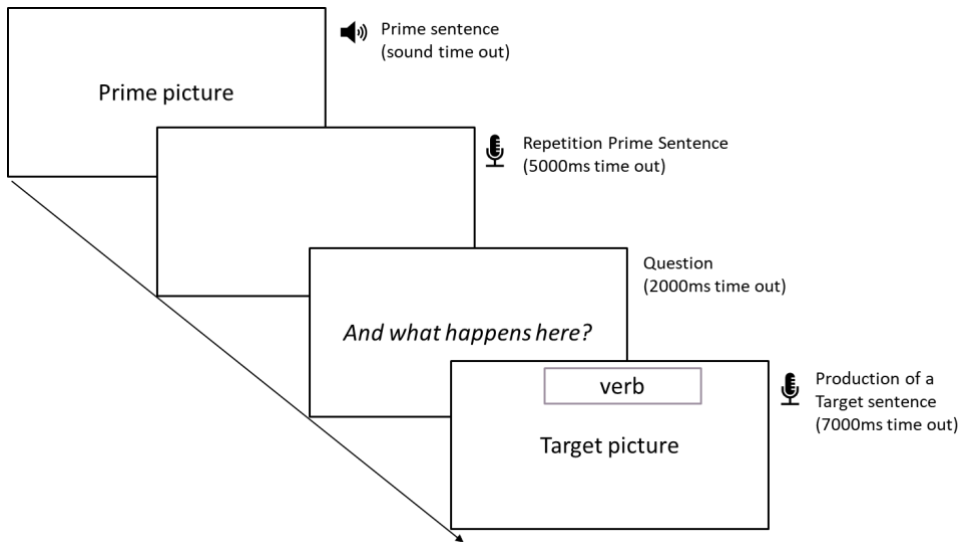


Figure 1: Design of the priming experiments.

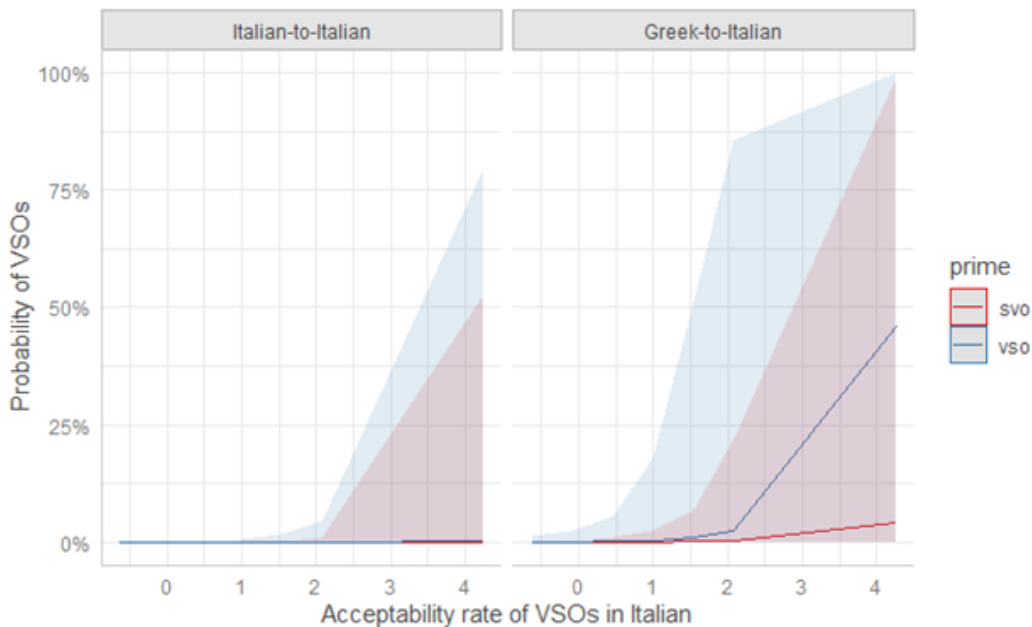


Figure 2: Predicted probability of producing a VSO target sentence as a function of the acceptability rate of VSOs in Italian in the Italian-to-Italian task (on the left) and the Greek-to-Italian task (on the right).

References:

[1] Montrul, S., and Bowles, M. 2009. Back to basics: Differential object marking under incomplete acquisition in Spanish heritage speakers. *Bilingualism: Language and Cognition* 12(3), 363-383.
 [2] Fernández, E., M., De Souza, R., A., and Carando, A. 2017. Bilingual innovations: Experimental evidence offers clues regarding the psycholinguistics of language change. *Bilingualism*, 20(2), 251–268.
 [3] Kootstra, G. J., and Şahin, H. 2018. Crosslinguistic structural priming as a mechanism of contact-induced language change: Evidence from Papiamentu-Dutch bilinguals in Aruba and the Netherlands. *Language*, 94(4), 902-930.