

## L2 priming before L1-L2 priming? A cross-linguistic structural priming experiment in late Dutch-Spanish Bilinguals

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Hartsuiker and Bernolet (2017) suggest that, during the acquisition of L2 syntax by late learners, abstract syntactic representations will emerge earlier for more frequent structures than for less frequent ones, first within languages and then across languages. However, if the more frequent structure in the L2 is not identical to its equivalent in the L1, a different pattern might be observed. That is, structural priming for the more frequent, but non-identical, structure might occur *later* than priming for the less frequent, but identical structure.

To test this, late Dutch-Spanish bilinguals (planned sample size N = 40, 32 have already participated) perform a within- and between-language priming experiment in which we investigate abstract structural priming of transitives in spoken language production. Active sentences in Spanish are morphosyntactically different from actives in Dutch when the subject and direct object concern animate objects (AA items)<sup>1</sup> but are identical when the subject and direct object concern inanimate objects (II items)<sup>2</sup>. Because of these differences in the morphosyntactic realization of the active structure in Spanish, it might take a while before late learners of Spanish with L1 Dutch produce the active structure correctly in Spanish and realize that both structures have the same syntactic structure. The passive structure (the less frequent structure), however, is identical between both languages<sup>3</sup>. Based on Hartsuiker & Bernolet's (2017) developmental theory for L2 syntax acquisition, we hypothesize that, due to the similarity of the passive structures in Spanish and Dutch, passive priming within Spanish and between Spanish and Dutch might be stronger and might occur earlier than active priming within Spanish.

**Design.** In our cross-linguistic experiment, within-language blocks are alternated with between-language blocks (twelve blocks) and each block consists of twelve trials. During the experiment, participants hear a prime sentence (active, passive or a noun phrase [baseline condition]), either in Spanish or Dutch, and are asked to always describe the target picture in Spanish, using an unrelated target verb. Importantly, in the middle of the experiment, we included an intervention block. The intervention block consists of four trials with verb overlap. The main reason for this is to boost priming (*lexical boost*, Pickering & Branigan, 1998) within Spanish (for active sentences) as well as between Spanish and Dutch (for passive sentences). Consequently, we expect priming effects to be stronger after the intervention block, due to cumulative priming (Kashak et al. 2014; Muylle, Bernolet, & Hartsuiker, 2021).

**Planned analyses.** The priming effects will be analyzed with generalized linear mixed effects models. Our models will consist of the three predictors *Prime Condition* (baseline, active and passive), *Prime Language* (within vs. between language priming) and *Intervention* (Pre-intervention vs Post-intervention), as well as the interaction between them. *Participant* and *Item* will be entered as random intercepts and the three fixed effects will be entered as random slopes within *Participant*, and *Prime Condition* and *Intervention* will be entered as random slopes within *Item*.

**Theoretical relevance.** Hartsuiker and Bernolet's theory (2017) predicts that abstract structural priming will first emerge for more frequent structures than for structures that are less frequent. However, it is not clear what happens if the less frequent alternant is identical to the L1 variant, while the more frequent alternant is non-identical. Moreover, some studies (Kantola & Van Gompel, 2011) have reported comparable structural priming within- and-between languages. However, Hartsuiker and Bernolet suggest that late learners of an L2 might first show stronger within-language structural priming (usually for similar structures) before between-language priming occurs between the L1 and the L2.

## References

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## Example stimuli

<sup>1</sup>AA-items: El obrero ayuda **a la** médica – De bouwvakker helpt de dokter [*The construction worker helps the doctor*]

<sup>2</sup>II-items: El camión persigue el coche – De vrachtwagen volgt de auto [*The truck chases the car*].

<sup>3</sup>The passive structure in Spanish and Dutch:

El autobús es perseguido **por la bicicleta** – De bus wordt gevolgd **door de fiets** [*The bus is being followed by the bike*].