

## Research Summary

# Do bilinguals have one grammar for two languages?

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## Overview of the study

This study investigates whether the grammatical knowledge is shared (the shared-syntax account) or separate (the separate-syntax account) in bilingual language production and comprehension. Previous research has found that bilinguals have one integrated mental storage for words and concepts, rather than two separate monolingual storages. This led the researchers to test the shared representation at the level of grammar. This study used a phenomenon called syntactic priming, a tendency for a speaker to repeat a particular sentence form that she heard or spoke before instead of alternative structures (e.g., active vs passive sentence). The findings indicate that the grammatical knowledge in bilinguals is shared.

## Research method

24 Spanish-speaking L2 learners of English participated (L2 proficiency: moderate or high; the average age: 28). All the participants had lived in the UK for 22 months on average (range: 2 months - 7 years). A picture-description task was used. In the task, an experimenter (i.e., confederate) pretends to describe a picture on the card in Spanish by reading a scripted prime sentence. After listening to it, a naïve participant takes the topmost one from a stack of cards to decide if it matches with the description that she just heard. Then she picks up another card and describes it in English. The authors analyzed these English descriptions to examine whether the structure spoken by the confederate was repeated. The shared-syntax account predicts the participants are more likely to use the structure that she just heard from the confederate's Spanish description due to the structural similarity in two languages, whereas the separate-syntax account predicts no effect of the prime sentence. Example stimuli are as below:

1. Active: El taxi persigue el camión. ( "The taxi chases the truck." )
2. Passive: El camión es perseguido por el taxi. ( "The truck is chased by the taxi." )
3. Intransitive: El taxi acelera. ( "The taxi accelerates." )
4. OVS (the word order object-verb-subject): El camión lo persigue un taxi ( "The truck[chasee] it chases a taxi[chaser]." )

## Results

The authors analyzed the proportion of passives out of active and passive descriptions. The results indicate that participants used more passive structures in their English descriptions when they heard a Spanish passive sentence (e.g., 56% of the time) than when they heard either a Spanish active or intransitive sentence (e.g., 37% and 39%, respectively).

## Practical Implications/Significance

Although this study tested only one sentence form and one pair of languages, it provides evidence for cross-linguistically shared grammatical representation and suggests the feasibility of methodology for expanded research involving various sentence forms, languages, and bilingual types.

**Original Text:** Hartsuiker, R. J., Pickering, M. J., & Veltkamp, E. (2004). Is syntax separate or shared between languages? Cross-linguistic syntactic priming in Spanish-English bilinguals. *Psychological science*, 15(6), 409-414. <https://doi-org.eres.library.manoa.hawaii.edu/10.1111/j.0956-7976.2004.00693.x>