

Individual Differences in Structural Priming across a continuum of bilingualism

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Background

Generative approaches are placing greater emphasis on the influence of individual differences beyond language-specific mechanisms in shaping language development and variation (Chomsky, 2005; van Gelderen, 2022). However, the extent to which these constraints interact with linguistic performance, particularly in contexts of bilingualism including heritage language acquisition, remains understudied (e.g., Van Osch et al., 2025). Heritage languages (HL), which are characterized by input environments subjected to strong variability (Montrul, 2012 and references thereafter), offer valuable insight into how individual differences in linguistic exposure and language experience influence performance.

The present study

The present study investigates how different linguistic profiles in a continuum from monolingual to bilingual speakers influence the production of transitive and passive constructions in Spanish through a structural priming task. To explore the sources of variability, the study examined how individual factors such as language proficiency and age of first exposure (AFE) modulate the production of such constructions.

A continuum of three groups of speakers participated in this study: Spanish monolingual speakers (Mean Age = 24.9 - SD = 4.53; Mean Proficiency = 48.63 - SD = 1.07), Italian (L1) - Spanish (L2) sequential speakers (Mean Age = 29.2 - SD = 9.81; Mean Proficiency = 44.95 - SD = 6.01; Mean AFE = 20.71 - SD = 6.07), and Spanish (L1) - Italian (L1) heritage speakers living in Spain (Mean Age = 29.77 - SD = 12.2; Mean Proficiency = 49.23 - SD = 1.17; Mean AFE = 0.38 - SD = 0.87). The structural priming task included two different types of constructions: (1) passive 'se' sentences and (2) transitive sentences (see examples below). Previous studies (Dabrowska & Street, 2006; Street & Dabrowska, 2010, 2014) suggest that passive sentences, despite being relatively simple grammatical structures, present considerable variability even among monolingual speakers. More recent studies focused on heritage speakers (HS) attest to similar results when comparing transitive vs. passive constructions (Romano, 2021). Based on this evidence, the present study aims to expand previous research to observe how such variability can be modulated by third factors. Therefore, the following research questions are put to the test: (i) Does syntactic complexity affect the priming effect in the production of passive vs. transitive constructions in monolingual speakers of Spanish? (ii) Is there any difference in priming between monolingual vs. bilingual speakers (Heritage speakers vs. Sequential Bilinguals)? (iii) If so, is the difference in priming modulated by third factors such as AFE and Spanish Proficiency (SP)?

Based on preliminary statistical analysis of our results, significant differences are expected in the priming effect of passive vs. transitive constructions in monolingual speakers, with transitive sentences being easier to prime than passive sentences with 'se' that involve greater syntactic and semantic complexity, according to Street & Dabrowska (2010, 2014). We also expect to observe significant differences by group. Specifically, monolingual speakers are expected to present lower variability when priming all sentences when compared to Heritage and sequential bilingual speakers, with the latter presenting the highest variability. Lastly, the priming effect is expected to be significantly modulated by individual differences, with speakers with lower AFE/SP being subjected to weaker priming effects. Moreover, our data innovate by virtue of the

language pairings (e.g., Spanish – Italian) and the fact that individual differences are often underexamined when exploring bilingual processing and heritage language acquisition.

Examples:

El	zapato	se	pone	antes	de	salir
La	scarpa	si	mette	prima	di	uscire
DEF	shoe	REFL	put.PRS.3SG	before	of	leave.INF

'The shoe is put before going out'

Alicia	llama	a	su	amiga	el	domingo
Alice	chiama	la	sua	amica	la	domenica
Alicia	call.PRS.3S	ACC	POSS.3SG	friend	DEF	Sunday

G
'Alicia calls her friend on Sunday'

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