

L3 French vowel categorization of L1 English-L2 Spanish speakers at absolute first exposure

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The present study investigates bilinguals' categorization of L3 sounds at first exposure in order to inform debates in L3 phonological acquisition. Models of third language acquisition debate the role of previously known languages in the acquisition of a third. In particular, the starting point of third language acquisition has been debated, in which some models suggest that one language holistically influences the L3 (The Typological Primacy Model; Rothman, 2015, the L2 Status Factor, Bardel & Falk, 2007), while others suggest that property-by-property or gradient influence is possible (The Linguistic Proximity Model; Westergaard et al., 2017, the Scalpel Model, 2017).

In the present study, participants who speak L1 American English and L2 Spanish completed a French vowel categorization task (Best & Tyler, 2007, among others). Importantly, these participants did not speak French, as the principle aim of the study was to assess the cross-linguistic influence on perception at the initial state of L3 acquisition. During the task, they heard a total of 20 French vowel sounds in 4 conditions (L1 bias, L2 bias, new sound, both languages) and chose the closest matching L1 or L2 vowel sound given orthographically in language-specific carrier words. Following a vowel selection, each choice was rated for goodness of fit on a continuous scale.

The results revealed that novel L3 sounds are categorized using both L1 and L2 categories (Figure 1). Additionally, the same L3 sounds were not always categorized the identically within subjects, nor were all selections typically in one language (Figure 2). These results suggest that both languages of a bilingual are active during L3 perceptual routines and best support the Linguistic Proximity Model (Westergaard et al., 2017), while providing counter-evidence for full transfer models of L3 acquisition such as the L2 Status Factor and the Typological Primacy Model.

Figure 1

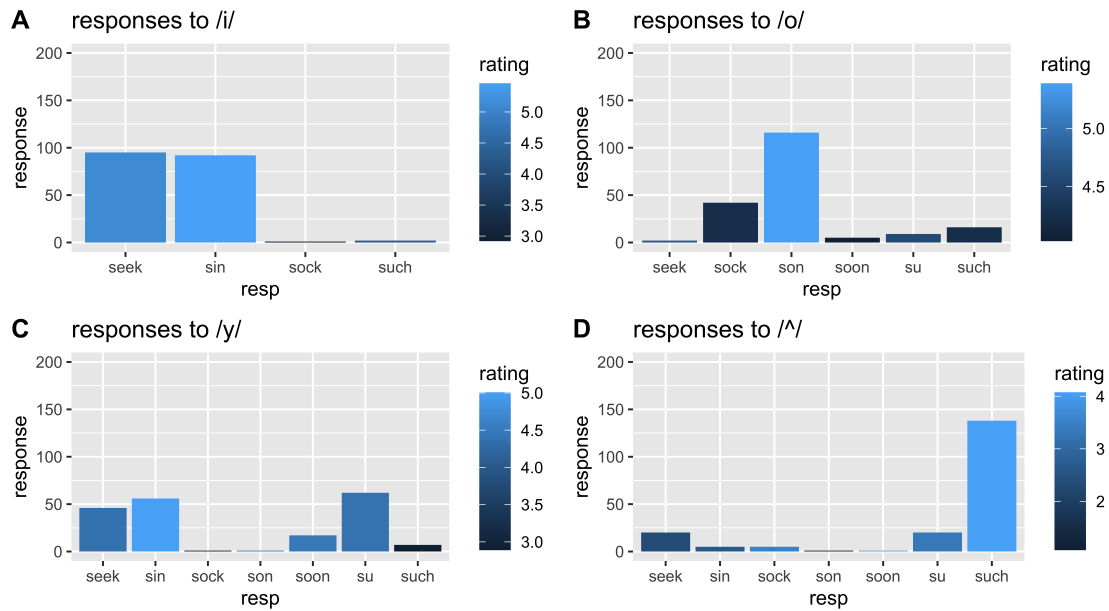
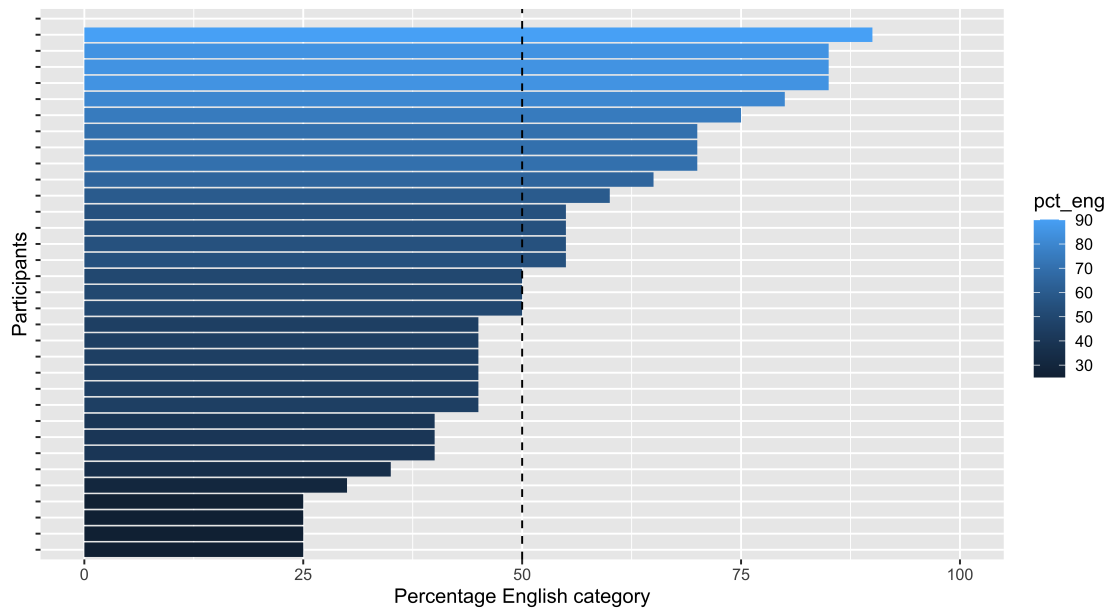


Figure 2



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