Previous studies (Flege, 1995; 2002; 2007) posit that overlapping phonemic categories in the L1 and L2 can yield either native-like productions of the L2 target phoneme or non-native-like assimilation towards the L1 category. Several hallmark studies corroborating these claims have taken place in Catalonia with speakers that are bilingual in Spanish, which has a single front mid vowel (/ɛ/), and Catalan, which has two front mid vowels (/e/ and /ɛ/), where /e/ is higher and fronted and /ɛ/ is lower and less fronted than Spanish /e/ (Bosch & Ramon-Casas, 2011; Lleó, Benet & Cortés, 2009; Pallier, Bosch & Sebastián Gallés, 1995). The nearly exclusive focus on the variable acquisition of Catalan in Catalonia, however, has only furthered a long-standing asymmetry favoring the study of the minority language (Catalan) over the majority language (Spanish) (Galindo Solé, 2003: 18). Accordingly, in this study I investigate variability in the production of Spanish /e/ by Catalan-Spanish bilinguals, and by employing a framework of variationist sociolinguistics (Labov, 2001; Herzog, Labov & Weinreich, 1968) that treats variation as an inherent feature of language, I broaden the scope of prior phonological acquisition studies to include an assessment of community-level language variation and possible change.

A Spanish word-list reading task consisting of 60 words with /e/ stratified by cognate vowel in Catalan was administered to 17 Catalan-Spanish bilinguals stratified by gender, age, and Catalan-language dominance, as measured by the Bilingual Language Profile (Birdsong, Gertken & Amengual, 2012). These participants were also recorded reading from a Catalan word-list task consisting of the 40 cognates of the Spanish word-list. F1 and F2 measurements for Spanish and Catalan /e/ and /ɛ/ vowels were extracted in Praat (Boersma & Weenink, 2019) and submitted to individual mixed effects linear regression models in R (R Core Team, 2019).

Findings of gender and age effects are consistent with a change in progress toward more Catalan-like (higher F1 and lower F2) Spanish /e/, where young men are leading the change. Young males with higher Catalan dominance scores exhibit this pattern in both languages, perhaps indicating that this group is able to index a Catalan identity through the use of lower, less fronted vowels. The absence of a significant main effect of cognate in either Spanish or Catalan production support the notion (Lleó et al., 2007; 2008; 2009) that the Catalan contrast is weakening in Barcelona and is extremely variable within and across speakers. These results demonstrate that contact effects in this bilingual community are indeed bi-directional (contrary to Arnal, 2011) and that variability in phonological acquisition is a natural process, subject to regular constraints of language variation and change.
References


Birdsong, D., Gertken, L., and Amengual, M. (2012). Bilingual Language Profile: An Easy-to-Use Instrument to Assess Bilingualism. COERLL, University of Texas at Austin. sites la.utexas.edu/bilingual.


Flege, J. E. (2002). Interactions between the native and second-language phonetic systems (pp. 217-244).


