

Code-switching and the phonological word

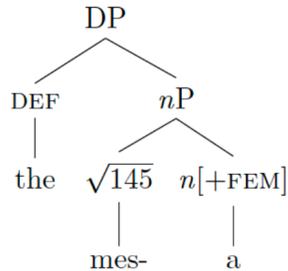
This talk will report on a Director-Matching experiment that we carried out on 23 Spanish/English bilinguals from the Chicago area with the overarching goal of studying phonetic influence in code-switching, focusing on the pronunciation of functional categories. The participants produced the following DPs: (i) English determiner + Spanish noun ('the *mesa*'); (ii) English determiner + Spanish noun ('the table'); and (iii) Spanish determiner and Spanish noun ('*la mesa*'); and (iv) English determiner + English adjective + Spanish noun ('the green *mesa*'). We then measured the quality of the vowel sound in the determiner (i.e., the orthographic |e| of the determiner in 'the *mesa*') and compared that to the same speaker's |e| in an all-English DP (e.g., 'the table'). We also compared it with the |a| of the determiner in a Spanish DP (e.g., '*la mesa*'). We used the sounds in the English and Spanish unilingual DPs as controls. There were 15 items per condition for a total of 1,380 tokens.

Our results show that the vowel of the determiner in the noun phrase 'the *mesa*' is distinct from the equivalent vowel in 'the table', being pronounced in an intermediate point between [schwa] and [a]. Thus, one could conclude that code-switching affects the phonetic shape of proximate or adjacent words. This hypothesis can be made more precise: we also found that the vowel of 'the' in 'the green *mesa*' is a plain [schwa] unaffected by code-switching, which shows there is a boundary to how far influence can go. This state of affairs is accounted for by means of an analysis that makes use of (i) an understanding of the phonological word as the domain in which phonetic segments can be affected by imminent code-switching and (ii) the novel hypothesis that the morpheme that takes care of categorizing a syntactic phrase (little *n*, little *a*, little *v*) also plays a role in defining the phonetic shape of the phonological phrase.

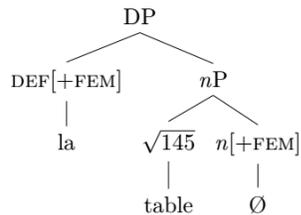
We start with the difference between *the mesa* and *the green mesa*. We take it as given that *the mesa* comprises one phonological word (ϕ *the mesa*), while an intervening adjective gives rise to two phonological words: (ϕ *the green*) (ϕ *mesa*) (Ito & Mester, 2009; Costa & Caramazza, 2002; Aronoff and Sridhar, 1983). We suggest that the phonological word boundary is also the boundary for phonetic influence in code-switching.

Future steps include the analysis of another code-switched DP: (v) Spanish determiner + English noun ('*la* table'). Consider now if we find an absence of contrast between '*la mesa*' and '*la* table'. The syntactic structures of these DPs are shown in (1) and (2). Adopting assumptions common in the Distributed Morphology framework (see Embick, 2015; Kramer, 2015; López, 2020) we take it that the presence of a feminine determiner reveals the presence of a "Spanish" little *n* with a [\pm FEM] feature (we write Spanish in scare quotes because we do not believe that grammatical categories bear a language label, they are bearers of morphophonological and morphosyntactic features for which the linguist may, *a posteriori*, provide a label). Our proposal is that *n*[\pm FEM] plays a role in the phonetic shape of the phonological phrase and therefore ensures that *la* is pronounced similarly in *la mesa* and *la table*; and also ensures the distinction in the pronunciation of 'the *mesa*' and 'the table' (examples (1) vs. (3)).

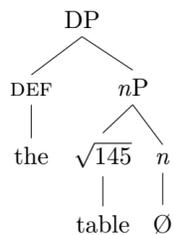
(1)



(2)



(3)



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