Phonological Effects in Intrasentential Codeswitching
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MacSwan (2000) proposes that certain grammatical phenomena in codeswitching, traditionally analyzed as syntactic in nature, relate instead to interface conditions at PF (phonetic form). In the present paper, we note that the apparent prohibition on codeswitching of MacSwan (2000), derived from characteristics of the phonological rule system and formalized as the PD Disjunction Theorem, relates to the lexical phonology and may not pertain to the postlexical component of the phonological system. We therefore set out to determine empirically whether there exists a base-language effect in the postlexical phonological component of mixed-language contexts or whether, on the contrary, there is a sudden switch in phonological systems. Recent studies of phonological aspects of codeswitching have focused on phonetic effects. For instance, on the basis of Voice Onset Time (VOT) measurements in French/English codeswitches, Grosjean and Miller (1994) found that the “base language” had no impact on the production of codeswitches for VOT, and that the shift from one language to the next was total and immediate. In contrast with these results, Botero and colleagues (2004) found a trend towards convergence in the VOT values of voiceless stops in Spanish/English codeswitches, and concluded that there are perseverative phonetic effects in codeswitching contexts. Although Grosjean and Miller (1994) and Botero and colleagues (2004) differ as to the type of data under investigation (lexical versus sentential switches), both studies coincide in treating phonetic, gradient phenomena (i.e., VOT). Bullock et al. (2004) focuses on phonetics (phonetic convergence) as well, despite the introduction of allophonic distribution.

In contrast, the present study examines categorical, phonological phenomena that could provide more conclusive results than those of gradient, phonetic processes with regard to the question of cross-linguistic phonological effects, and therefore help to inform the question of whether a sudden switch of phonological systems is possible. Within an optimality-theoretic framework in which the phonology of a particular language consists of the language-specific ranking of universal constraints, we hypothesized that a sudden switch in phonological system is more likely to occur when categorical, phonological processes are involved, in particular when such processes reflect opposite rankings in the phonologies of the base and receptor languages. A common feature of all Spanish dialects is that voiced stops [b, d, g] are realized as approximants (sometimes considered fricatives) in postvocalic contexts, and as stops when preceded by a nasal or a pause (or by [l] in the case of [dl]). On the other hand, English bilabial, dental or velar stops are never realized as approximants. Assuming that opposite rankings--AGREE (stricture)>>FAITHFULNESS [Spanish] and FAITHFULNESS>> AGREE (stricture) [English]-- are responsible for intervocalic approximants and intervocalic stops, the prediction is that there will be a sudden switch of ranking/phonology at the point of switch and that therefore, the English stops will be realized as stops regardless of the preceding context. To test the hypothesis a protocol involving 27 sentences was developed. The sentences contained intrasentential switches from Spanish into English with a voiced stop-initial English noun at the onset of the switch preceded by a vowel-final determiner in Spanish (1). Presentation, a stimulus-delivery software package, was used to present study participants with these items, asking them to pronounce each sentence three times in non-sequential order and judge their grammaticality. The sentences were recorded, transcribed and subjected to spectrographic analysis using Praat software to determine the continuancy (stop versus approximant) of the relevant segments. Preliminary results bear out the hypothesis, showing almost complete absence of non-stop realizations of
voice stops at the onset of the switch. Results were compared to monolingual samples to rule out convergence towards English in the Spanish of the participants.

(1) Hablamos de mi ghost yesterday ‘We talked about my ghost yesterday’
    Hablamos de mi disk yesterday ‘We talked about my disk yesterday’
    Hablamos de mi book yesterday ‘We talked about my book yesterday’

References


