The intersection between bilingual language dominance and patterns of code-switching: Evidence from Spanish-English contact

Daniel J. Olson<br>Purdue University

Code-switching, roughly defined as the alternation between two languages in one interaction, is a salient outcome of language contact, particularly in the case of Spanish in contact with English in the U.S. Yet, there is considerable variability in both how and how much different communities and individuals engage in code-switching. At the community level, some communities stigmatize code-switching (Montes-Alcalá, 2000), resulting in different contexts where each language is used (e.g., home vs. work), but few contexts where both languages are used in the same interaction. Oher communities permit or encourage language switching across a wide variety of different contexts (Green \& Abutalebi, 2013). At the individual level, even within a given language pairing or community, bilinguals express a wide range in the degree to which they engage with and their attitudes towards code-switching (Olson, 2022a). Among other individual factors, language dominance (i.e., the relative strength of each of a bilingual's two languages) has long been proposed as a key factor that impacts patterns of code-switching.

Considering the impact of language dominance on the use of code-switching, several authors in early code-switching research have highlighted the need to consider language dominance in the study of code-switching (Valdés-Fallis, 1978; Cantone, 2007). Within this line of research, authors have proposed that language dominance may serve to impact both the frequency of code-switching and the directionality of code-switching. In examining the impact of language dominance on patterns of code-switching, there appear to be two competing factors at play. On one hand, given the complex syntactic restrictions, pragmatic functions, and social roles that shape code-switching behaviors, a relatively high degree of proficiency in both languages may be required to effectively engage in code-switching (Gumperz, 1982; Legenhausen, 1991, among many). On the other hand, given that codeswitching can be used as a "crutch" (Zentella, 1997), filling in when the speaker lacks the linguistic resources to produce the desired message in a single language, one might expect greater code-switching with less balanced bilinguals. As such, more balanced bilinguals, with more complete linguistic repertoires in both languages, may engage in less code-switching.

Given these competing factors, mixed prior results, and the general underexplored nature of the links between language dominance and patterns of code-switching, the current study examines the relationship between language dominance and both the frequency and directionality of code-switching. Employing a quantitative, self-reported approach, 454 Spanish-English bilinguals from a wide range of dominance profiles, ethnic backgrounds, and geographic communities completed questionnaires regarding language dominance (i.e., Bilingual Language Profile: Birdsong et al., 2012), code-switching engagement (Bilingual Code-Switching Profile: Olson, 2022a), and code-switching directionality.

Results demonstrated a nuanced relationship between language dominance and patterns of code-switching in Spanish-English bilinguals. With respect to overall frequency of engagement with code-switching (Figure 1), more balanced bilinguals reported greater engagement with code-switching, although there was significant individual variation. Yet, the overall proportion of the variation in the code-switching profile score explained by the
language dominance score was small (Adjusted $R^{2}=.241$ ), suggesting a weak relationship between the two variables.

With respect to directionality (Figure 2), the findings showed an overall small effect of dominance on directionality. Taken as a whole, the results suggest that while language dominance may play a small role in determining patterns of language switching (frequency and directionality), other individual and community-level factors are likely to contribute substantially.


Figure 1: Scatter plot of language dominance score vs. code-switching profile score. The grey line represents a LOESS smoothed curve with confidence intervals (+/- 1SE). The dashed black line represents the fit of the second order model.


Figure 2: Scatter plot of language dominance score vs. combined directionality score. The grey line represents a LOESS smoothed curve with confidence intervals ( $+/-1 \mathrm{SE}$ ). The dashed black line represents the fit of the simple linear model.

## References

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