Testing sensitivity to code-switching asymmetries in L2 sentence processing

Jorge Valdés Kroff1, Jessica Hall2, Rosa Guzzardo3 & Paola Dussias4
1University of Florida, 2University of Iowa, 3University of Puerto Rico, 4The Pennsylvania State University

Spanish (L1) - English (L2) bilinguals demonstrate an asymmetry in their production of code-switched verb phrases. Prior corpus work has shown that bilinguals are just as likely to code-switch before or after the progressive auxiliary verb estar as in Los niños [están/are] walking to the library “The kids are…”. In contrast, code-switches that involve the perfective auxiliary haber are heavily favored to occur after the auxiliary: Los niños [*han/have] walked to the library “The kids have…”. In turn, bilingual code-switchers are sensitive to these production asymmetries as reflected in reading times with eye-tracking, i.e. when analyzing the participle, no reading time differences for estar code-switches, but significantly different reading times for haber code-switches (Guzzardo Tamargo et al., 2016).

In the current study, we extend this paradigm to ask whether L1 English – L2 Spanish bilinguals are also sensitive to the same distributional asymmetries. This comparative approach will help uncover whether the distributional asymmetry is due to community-imposed (i.e., experienced-based) constraints or to structural properties of Spanish/English (Blokzijl et al., 2017), such as the grammaticalization or collocational strength of haber, which never appears independently.

Participants read 32 experimental sentences (64 filler sentences) in which the factors auxiliary verb (estar, haber) and switch position (at the auxiliary, at the main verb) were crossed. Preliminary data (N = 16) on early (first fixation, gaze duration) and late reading measures (regression path, total duration) indicate no sensitivity to distributional asymmetries. Instead, L2 speakers show a general switch cost, with switches occurring at the main verb (Los niños están walking/han walked) incurring greater reading times than switches occurring at the auxiliary (Los niños are walking/have walked). However, total duration shows a tendency towards reduced reading times for estar code-switches at the auxiliary (Figure 1). Data collection is ongoing with a target sample size of 32 participants.
Figure 1. Preliminary reading times on the main verb (walking, walked) split by auxiliary type (E = estar, H = haber)

References
