Prosodic cues facilitate morphological anticipation in monolinguals and bilinguals

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Anticipation is integral to L1 sentence processing [1], but its role in L2 sentence processing is undefined. Intermediate learners make reduced/no use of morphological cues to pre-activate referents [2, 3, 4, 5]. However, it is unclear whether advanced L2 learners use morphological [6] and prosodic [7] cues to predict morphological information or not (morphological cues: [5, 8]; prosodic cues: [9]). We investigate whether monolinguals and late learners use prosody to anticipate morphology, and whether first-syllable structure (CV, CVC) and L2 proficiency mediate their anticipatory abilities. Prosody is essential to process sentences [10] and words [11], and syllable structure is crucial to evaluate the effects of CVC’s extra acoustic information (nasal coda) on anticipation.

Thirty-eight Spanish monolinguals and 12 beginning and 26 advanced adult English learners of Spanish completed a background questionnaire, an L2 proficiency test, and a visual-world eye-tracking test (66 sentences: 18, practice, 32 fillers, 16 experimental). In the latter, they saw two words on a screen (paroxytone: first syllable stressed, CANta “s/he sings”; oxytone: first syllable unstressed, canTÓ “s/he sang”), heard a sentence containing one of the two words, and chose the word they had heard. Stress is different in English (stressed-timed [12], weak functional load [13]) and Spanish (syllable-timed [12], strong functional load [14]). Spanish listeners have to attend to stress to reduce competition, but English listeners do not (unstressed vowel reduction is sufficient for lexical differentiation) [15, 16].

GLMMs revealed that the monolinguals, but not the beginners, used prosodic information to guess words before hearing suffixes. The advanced learners mirrored the monolinguals, except in words with first-syllable CV structure, but a growth curve analysis showed that they were slower than the monolinguals. These findings show that prosody facilitates morphological anticipation, and that adult learners can gain anticipatory processing patterns qualitatively, but not quantitatively, similar to monolinguals.
References


