

Effects of language dominance on lexical access in Galician-Spanish bilinguals

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Words containing phonological contrasts which do not exist in the native phonetic repertoire create increased lexical competition for L2 learners (Weber & Cutler, 2004). However, less is known about the time course of word recognition in dominant bilinguals who are exposed to both languages on a regular basis. In the bilingual community of Galicia, Spanish-dominant (SD) listeners have been shown to differ from Galician-dominant (GD) listeners in their perception of Galician contrasts which do not exist in Spanish; they perform more poorly when identifying the mid-vowel contrasts /ɛ/-/e/ and /ɔ/-/o/ and have a different category boundary for the sibilant fricative contrast /ʃ/-/s/ (Tomé Lourido & Evans, 2015). The present study used the visual world paradigm to investigate whether Galician-specific contrasts would create increased lexical competition for SD listeners. Visual displays of the stimuli consisted of four printed words per trial: a target word (e.g., *peza* ['pɛθ̞a]), two competitors (e.g., *peso* ['peso], *pazo* ['paθ̞o]) and an unrelated distractor (e.g., *torre* ['torɛ]). The audio stimuli consisted of naturally-produced words recorded by two female GD speakers. Eye-movements from 22 GD and 21 SD were analysed.

The results showed that, overall, word recognition was slower for words that contained Galician-specific phonological contrasts and furthermore, that word recognition was slower for SD. However, competitors containing Galician-specific contrasts did not only create increased lexical activation for SD, but also for GD. In fact, lexical activation was similar for both listener groups for competitors that contained the mid-vowel contrast, and activation was even greater for GD for competitors that contained the sibilant fricative. These findings are in line with neurophysiological evidence from work on Catalan-Spanish bilinguals (Sebastián-Gallés et al., 2006), which suggests that Catalan-dominant bilinguals might have two different acoustic representations for such words in their lexicons. Another possibility though, is that, given the exposure to varieties with and without the Galician contrasts, GD listeners do not rely on these phonetic features for word recognition and this is why these contrasts create greater lexical competition not only for SD, but also for GD listeners.

References

Sebastián-Gallés, N. et al. (2006). First-and Second-language Phonological Representations in the Mental Lexicon. *Journal of Cognitive Neuroscience*, 18(8), 1277–1291.

Tomé Lourido, Gisela; Evans, Bronwen G. (2015). Switching language dominance for ideological reasons: A study of Galician new speakers' speech production and perception. *Proceedings of the 18th International Congress of Phonetic Sciences (ICPhS)*. Glasgow: University of Glasgow.

Weber, A., & Cutler, A. (2004). Lexical competition in non-native spoken- word recognition. *Journal of Memory and Language*, 50, 1–25.