Individual variation in phonological repair strategies by Brazilian Portuguese-Japanese bilinguals

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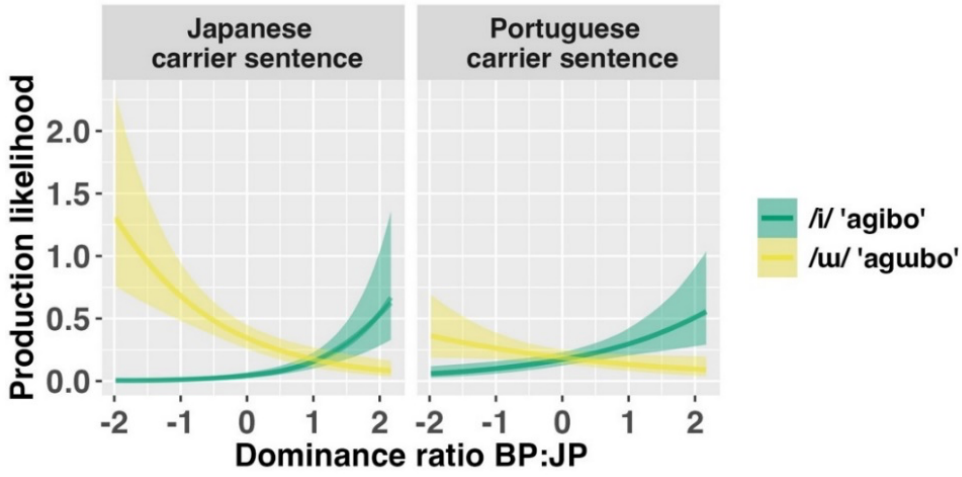
Japan is home to a Brazilian diaspora of approximately 200,000 individuals who are bilingual in Brazilian Portuguese (BP) and Japanese. I examine individual variation in phonological repair strategies in this bilingual community. Both Japanese and BP have a phonological repair strategy that involves vowel epenthesis in illegal consonant clusters and codas (Guevara Rukoz, 2021). Whereas Japanese typically inserts /ɯ/, BP inserts /i/. The English word 'laptop', for example, is produced as /ɾapːɯtopːɯ/ in Japanese and as /lɛpitɔpi/ in BP. The questions here are i) whether bilinguals apply these repair strategies separately in each language, or whether one language's strategy is applied cross-linguistically; and ii) whether language dominance influences repair strategies.

Speech data was analysed from 22 adult BP-Japanese simultaneous bilinguals in Japan. Language dominance (reflecting language proficiency and daily exposure) was calculated using the *LHQ3* (Li et al., 2020). Participants completed a multisyllable concatenation task to elicit vowel epenthesis in illegal consonant clusters. They heard a stimulus, e.g. /ag/, followed by a 500 ms pause and a second stimulus, e.g. /bo/, and were asked to produce the resulting nonce word in a Japanese or Portuguese carrier sentence. Acoustic analyses determined the presence and type of epenthetic vowel. **Figure 1** shows that speakers were likely to apply each language's strategy separately, producing /agɯbo/ in the Japanese sentence and /agibo/ in the BP sentence. However, individuals who were more dominant in BP were likely to apply the BP strategy, even in the Japanese sentence. This suggests that factors like language dominance have cross-linguistic effects on quite implicit aspects of speech production in highly proficient simultaneous bilinguals.

Figure 1. *Estimated count likelihood of /i/ or /ɯ/ insertion against dominance ratio.*



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