

On the syllabic status of final consonants: Evidence from an L2 system

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This study uses evidence from Brazilian Portuguese (BP) ESL learners to investigate the syllabic status of word-final consonants. BP speakers have difficulty with English /p/ and /k/ (among other consonants) in medial coda and final position, since BP allows only /s r l N/ in these positions. The tendency is to employ a process of [i]-epenthesis that permits such stops to be realized as onsets: hence *ca[pi]tain*, *do[ki]tor*, *bisho[pi]*, *magi[ki]*. Eventually, learners generally overcome vowel insertion and acquire targetlike pronunciation. Uncontroversially, this implies that they learn to syllabify medial /p/ and /k/ in *captain* and *doctor* as codas. But what happens when they acquire *word-final* /p/ and /k/ is less clear. Final consonants may be analyzed as **codas** (Selkirk, 1982), as **onsets of empty nuclei** (Kaye, 1990), or even at times as codas and at others as onsets, depending on the language (Piggott, 1999).

Following Piggott (1999), we assume that BP, with its canonical coda inventory /s r l N/ in final position, has final codas; whereas English, with its extensive final inventory /p b t d k g f v θ ð s z ʃ ʒ č ĵ m n ŋ l r/, has final onsets. Under this analysis, when BP ESL learners acquire medial coda and final /p k/ in English, they are acquiring two things: i) an expanded set of coda consonants, and ii) a prosodic representation of final consonants as onsets of empty nuclei. Importantly, the analysis predicts differential acquisition of medial coda and final /p k/, since these involve separate prosodic representations. More strongly, medial coda /p k/ should be acquired before final /p k/, since only the latter require a novel prosodic structure, namely empty nuclei.

To test whether medial coda and final /p k/ are acquired at different rates or in tandem, we adopted a variationist approach for data collection and analysis (Labov, 2001). Data were collected from 13 BP ESL learners via three oral tasks: i) real-word elicitation; ii) non-word repetition; and iii) non-word reading aloud. For the elicitation task, participants saw an image (e.g., *doctor*) and used it to complete a carrier sentence (e.g., *This is a ____*). For the repetition task, participants heard a non-word twice (e.g., *gazoop*) and repeated it in a carrier sentence (e.g., *I can't find my ____*). The final task involved reading aloud these same non-words in isolation.

Among other factors, the data were coded for [i]-epenthesis and for whether /p k/ were in medial or final position. A Goldvarb X (Sankoff et al., 2006) analysis revealed that production of /p k/ was more problematic by far in word-final position. Our findings strongly indicate that English final consonants require a different prosodic representation from medial codas. Hence, the findings are consistent with our hypothesis that these consonants are onsets of empty nuclei. They also support the analysis of BP final consonants as codas. In sum, our results provide compelling confirmation of Piggott's view of final consonants as being codas in some languages and onsets in others.

References

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