

Apocope and word-final consonants: a Brazilian Portuguese case study

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The purpose of this paper is to discuss the development of apocope, i.e., word-final vowel deletion, which leads to the emergence of word-final consonants in Brazilian Portuguese (BP) as in *passe* [ˈpasi] ~ [ˈpasØ] “entry ticket” or *chave* [ˈʃavi] ~ [ˈʃavØ] “key” (where Ø indicates a deleted vowel). Studies on BP report a restricted number of consonants in word-final position (AZEVEDO 2005). Only phonetic “r” and “s” tend to surface: *amor* “love” or *paz* “peace”. Whereas rhotics can be deleted and vary considerably their pronunciation (taps, to approximants or fricatives) the sibilants can be either apical or palatal: *paz* [ˈpas] ~ [ˈpaʃ] “peace”. So, BP tends to restrict word-final consonants.

In fact, Portuguese shows a historical tendency for words to end in a vowel or a glide. Nasal vowels emerged from the deletion of syllable final nasals: /laN/ > [lã] “wool” and laterals are vocalized in the end of a syllable: *sal* [saw] “salt”. However, recent work has shown that due to apocope there has been a tendency for BP to present word-final consonants (DIAS & SEARA 2013). Assis (2017) showed that various consonants may occur in word-final position as a consequence of postonic high vowel deletion. In her study apocope occurred in 42% of the data which she suggests provides evidence for a new pattern in BP: the emergence of word-final consonants. Voiceless consonants and fricative/affricates favour apocope whereas nasal consonants and voiced stops disfavour it, as shown in (1):

(1) Emerging word final consonants:

ʃ	f	dʒ	k	f	p	ʒ	s	z	v	g	b	m
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The deletion of word-final unstressed vowels may represent a developmental stage of BP where a language that formerly preferred word-final open syllables tends to prefer word-final consonants (closed syllables). Interestingly, the literature shows that vowels tend to be shorter in closed syllables as, for example, in Tamil or Italian (MADDIESON 1985). Thus, as apocope promotes closed syllables it would be interesting to consider how it develops: whether in a discrete or gradual fashion.

If vowels are shortened in closed syllables which emerged from apocope – for example [ˈpa:si] ~ [ˈpasØ] “entry ticket” – we could compare their durational values with vowels that originally occurred in closed syllables: *paz* [ˈpas] “peace”. This comparison would contribute towards the debate on the role of phonetic detail in phonological representations. If closed syllables from apocope – [ˈpa:si] ~ [ˈpasØ] “entry ticket” – present durational values different from vowels that originally occur in closed syllables: *paz* [ˈpas] “peace” we could suggest that apocope has been developing in a gradual manner. Otherwise, we can suggest that apocope is implemented in an abrupt fashion.

We analysed the durational values of the primarily stressed vowel in dissyllabic words (‘CVCV) when apocope occurred or not – [ˈpa:si] ~ [ˈpas] “entry ticket” – and also in cases where a sibilant occurred word-finally, as in *paz* [ˈpas] “peace”. The results to be presented comprised words where the primarily stressed vowel was [a]. Consider the results in Figure 1.

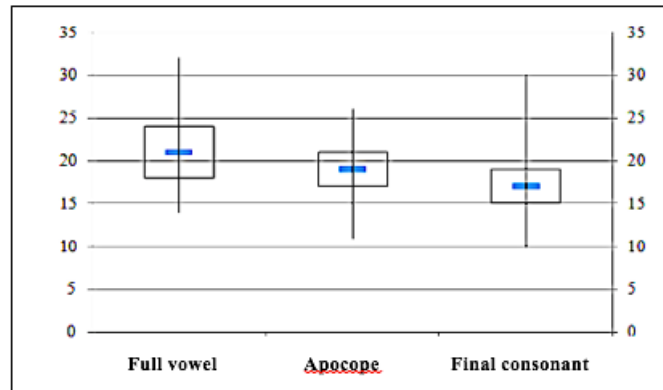


Figure 1: Duration of primary stressed [a]

Figure 1 present the durational values for the primarily stressed vowel when a word-final full vowel occurs (thus, we have an open syllable, cf. the leftmost bloxplot); when apocope occurs (middle bloxplot) and when a word that originally ends in a consonant occurs (rightmost bloxplot). We can observe that when a full vowel occurs word-finally, as in ['pasɨ] “entry ticket” the duration of a stressed vowels is longer than when apocope occurs ['pasØ] “entry ticket” (cf. the two leftmost boxplots). Cases with an original word-final consonant in a closed syllable, as in paz ['pas] “peace”, presented the shortest durational values. The difference between the three group was statistically significant ($p < 0.005$).

We suggest that the results presented in this paper corroborate previous findings in the literature with regards to vowel shortening in closed syllables. Considering that in cases which showed apocope – ['pasØ] “entry ticket” – the primarily stressed vowels were longer than in cases which originally had word-final consonants – ['pas] “peace” – we may suggest the gradual implementation of apocope in BP. Although, apocope promotes sub-phonemic shorter vowels it reflects a developmental stage of BP where a language that formerly preferred word-final vocalic segments tends to prefer word-final consonants. The results presented in this paper support the relevance of experimental work in phonology in order to address the role of phonetic detail in phonological representations (HARRIS 2007; BERMUDEZ-OTERO 2007; COLE & HUALDE 2011).

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