

# Word-final intervocalic glottalization in American English: Evidence for word-specific phonetics

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T-Glottalization, i.e. the realization of the fortis alveolar plosive /t/ as the glottal stop [ʔ], as in *city* ['sɪʔi] is usually seen as a feature typical of British English accents, and contrasted categorically with flapping in American English, e.g. *city* ['sɪri] (e.g. Harris & Kaye 1990). Granted, word-internally between vowels, glottalization is rare in American English. It is present there, however, in other phonological contexts. For starters, it has been attested in American English word-internally before consonants, e.g. *Batman* ['bæʔmæn], *output* ['aʊʔpʊt] (Eddington & Taylor 2009). Furthermore, there is a growing body of evidence for glottalization across word-boundaries in American English, including before vowels, e.g. *right around* [,raɪʔə'raʊnd] (Levon 2006, Roberts 2007, Eddington & Taylor 2009, Eddington & Channer 2010).

In word-final intervocalic position, both flapping and glottalization can take place. The choice of one allophone over the other has been shown to be influenced by both linguistic and social variables. Eddington and Channer (2010) provide evidence that the likelihood of glottalization in prevocalic position is higher for words which (as evidenced in speech corpora) are typically followed by consonant-initial lexemes (words with high 'c-ratio' henceforth). This finding challenges any model of phonology which assumes that the phonetic shape of a word is solely the result of the interplay between its phonological composition and phonetic environment (plus unsystematic performance factors). If words typically followed by consonants show higher rates of glottalization, then their c-ratios (or some other information from which c-ratios can be derived) must be stored – it is impossible for information about typical following word to be computed online (cf. Pierrehumber 2002).

A serious limitation of Eddington and Channer (2010) is that the influence c-ratios on glottalization rates was analyzed post-hoc, and so their result might be an artefact of an interplay of confounding variables. The present study compensates for this shortcoming, by including c-ratio (calculated from SUBTLEX-US (Brysbaert & New 2009)) as a predictor variable in a model including a number of other variables shown in extant research to influence glottalization. A generalized linear mixed model is fitted to a large set (N = 5,803) of word-final intervocalic /t/'s retrieved from the Buckeye corpus (Pitt et al. 2007). C-ratios are shown to correlate with glottalization rates, which provides evidence for word-specific phonetics.

## References

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