Numerous studies have investigated (td) deletion in US English dialects: the phonological process through which /t/ or /d/ may be deleted in final consonant clusters C(C)t, C(C)d. This stable sociolinguistic variable has been explored through linguistic and social constraints, with attention to obligatory contour principle violations (Guy & Boberg 1997) and Lexical Phonology (Guy, 1980). Morphological class and following phonetic environment typically strongly constrain reduction; preceding environment does so weakly. Morphological class significantly and consistently affects all American English dialects. This variable has received comparably little attention in the UK, though findings from York (Tagliamonte & Temple, 2005) and Manchester (Baranowski & Turton, 2016) show conflicting results for morphological class (which we report elsewhere).

Intersection of constraints has been explored in some English varieties, e.g. with past marking in Jamaican Creole (Patrick, 1991). In British English dialects (td) intersects with the well-known variable of (t) glottaling:

“kept” /kɛpt/ → [kɛp] = deletion or → [kɛʔ] = with glottal

yet no systematic investigation has been carried out on their intersection Amos et al. (2018). In analysing (td), both Tagliamonte & Temple (2005) and Baranowski & Turton (2016) coded glottal replacement as a variant of retained [t]. However, most research on morpheme-final /t/ glottaling focuses on the following phonetic segment, limiting the preceding context to vowels. When preceding phonetic context is analysed, consonants disfavour glottal replacement (Roberts 2006; Schleef 2013). Temple (2017) noted the difficulty of determining whether a surface glottal is a reflex of /t/, and suggested conducting exploratory analysis by comparing tokens with sequences of glottals.

This paper investigates the intersection between /t/ glottaling and /t/ deletion in final consonant clusters. 1,275 tokens were analysed, excluding final C(C)d clusters, following /t/ and /d/. 36 East Anglian speakers from Colchester, Ipswich and Norwich were stratified by class, sex and age. Data were gathered through sociolinguistic interviews, reading passages and word lists. The linguistic environments investigated are preceding and following phonetic segment, voicing agreement, style and stress (stress on the final cluster and stress on the following phonetic segment). Data were transcribed in Elan; acoustic analysis with Praat was conducted for critical cases. Results of a mixed-effects Rbrul regression analysis, with speaker as a random effect, show that the above linguistic predictors are significant, except for voicing agreement.

Preceding stops and fricatives favour deletion, whilst preceding nasals and /l/ favour /t/ glottaling. /t/ deletion is also favoured when the following phonetic segment is a nasal, fricative, stop or pause, whereas following vowels and approximants favour /t/ glottaling. Stress plays an important role with more deletion than glottaling in unstressed final clusters. Unstressed following syllables, instead, are more likely to favour /t/ glottaling. Glottal replacement occurred more in words in isolation than in the reading passage or informal speech, where /t/ deletion was preferred. Sex is the only independent variable that reached statistical significance: Ipswich males delete more than women.
References


