

## Reconsidering (t, d)-deletion as a single variable in English

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There have been a number of studies investigating the phenomenon of t/d deletion in English, the process through which /t/ or /d/ can be deleted in word final Ct or Cd coda clusters. This body of research ranges from sociolinguistic studies examining the role of internal linguistic and external social factors in deletion variation (e.g. Guy & Boyd 1990) through to more formal phonological based analyses. The latter approaches include frequency analyses (e.g. Bybee 2002) and statistically driven Optimality Theoretic accounts (such as the Multiple Grammars approach proposed by Kiparsky 1993), as well as more articulatory-based explanations (e.g. Guy & Boberg 1997, who regard t/d deletion as a result of obligatory contour principle violations). Hierarchies have been constructed of the preceding and following consonants most likely to promote deletion, but each of the studies has concentrated on an individual interpretation of the phenomenon.

However, despite the attention paid to this connected speech feature, very little, if any, attention has been paid to the complementary distribution of /t/ and /d/ in monomorphemic final clusters, the distributional interaction between /t/ deletion and glottalisation in certain environments, and, in particular, the role of intonational boundaries in variable t/d deletion. For example, the suggestion (Guy 1980 *et seq*) that the most likely type of preceding sound to promote deletion is a sibilant cannot adequately explain the patterns supplied by English data analysis, as it does not take distribution into account. Thus, this blanket claim fails to observe that, whilst /s/ is overall a promoter, this will only occur before /t/, and that /ʃ/ would only ever occur before /t/ in bimorphemic words. In addition, intonational contours have been explored as a means to test the applicable domains of certain phonological processes, such as /t/-insertion and coronal palatalisation (see Roca & Johnson 1999 for an overview of these processes), and it has been observed that t/d deletion tends to be blocked at intonational phrase and phonological utterance boundaries, too. Therefore, important predictors go unexplored in the behaviour of this well-trodden variable.

This paper proposes a sociophonological analysis using data from a linguistic variety of South-East British English. The data were extracted from semi-structured sociolinguistic interviews among a sample of eight Mersea Island English speakers, controlling for two external factors: age and gender. The research design considers (t) and (d) as discrete linguistic variables ( $n = 491$  and  $n = 406$ , respectively) in order to assess the extent to which a battery of factor groups vary across the two datasets: internal constraints included preceding and following phonological context, morpheme type, word class, and intonational boundaries. As mentioned above, the complementary distribution of these coronal stops prompts distinct distributional patterns within English grammar, and, thus, warrants two separate analyses, rather than subsuming them under the same linguistic variable. Two separate models of

mixed effects statistical modelling show that different statistically significant factor groups operate on t/d deletion in the datasets. The results show that while (t)-deletion is more likely to be constrained by the following segment and the morpheme's intonational boundary, (d)-deletion shows the following and preceding segments to be more important predictors of deletion. No social factors were selected as significant.

Thus, while differences in social variation appear minimal in the body of data analysed, the resulting analysis of linguistic constraints demonstrates the importance of considering (t) and (d) as separate variables. The evidence provided highlights differing patterns of distribution across linguistic contexts, which suggests the presence of two separate deletion hierarchies that calls for new analytical approaches.

### **References:**

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