

Deletion of Final /t/ and /d/ in BBC English

Implications for Teachers in Singapore

by David Deterding, *National Institute of Education* (david.deterding@nie.edu.sg)

Investigation of recordings from the BBC World Service shows that BBC broadcasters quite regularly omit final /t/ and /d/ from consonant clusters at the end of a word, especially when the next word begins with a plosive, fricative or nasal. Furthermore, this deletion occurs regardless of whether the /t/ or /d/ is an *-ed* suffix or is part of the stem of the word. It is suggested that teachers should not be too concerned if students sometimes omit final /t/ and /d/, and greater emphasis should be directed to the *-s* suffix, as final /s/ and /z/ are hardly ever omitted in British or American English.

■ Introduction

It has often been observed that there is a tendency for final consonant clusters to be simplified in Singapore English (Tongue, 1979: 27; Bao, 1998; Deterding & Poedjosoedarmo, 1998: 158), and this particularly affects final /t/ and /d/ (Cruz-Ferreira, 2005; Gut, 2005).

Many pronunciation teachers in Singapore focus on this feature, emphasizing that retention of final /t/ and /d/ is important. However, we need to be aware that deletion of final /t/ and /d/ is also common both in American English (Guy, 1980) and in British English (Fabricius, 2002; Temple, 2005). In fact, careful enunciation of every single final /t/ and /d/ may represent an over-careful, unnatural style of pronunciation.

In this paper, the extent of /t/ and /d/ deletion is investigated in RP British English broadcast by the BBC World Service, and conclusions are drawn regarding priorities for pronunciation teaching in Singapore.

■ Data

In British or American English, the environment that is most conducive to deletion of /t/ and /d/ from the end of a word-final consonant cluster is when the next word begins with a consonant, so the /t/ in *last Sunday* and the /d/ in *world class* are both likely to be deleted. In addition, deletion of /t/ is more common when the preceding consonant is voiceless (Wells & Colson, 1971: 58; Deterding & Poedjoseodarmo, 1998: 134-5). This second stipulation arises because, when a /t/ follows a voiced sound, deletion of the /t/ may leave a residue in the shortening of the preceding consonant, so it is hard to determine if there really is deletion or not. (This can easily be demonstrated by noticing that even when the /t/ is deleted, *felt sad* does not become the same as *fell sad*, and *pint glass* does not become *pine glass*.)

It is also rather difficult to tell whether the final /t/ or /d/ is deleted or not when the next word begins with

a /t/ or /d/, so in the current investigation, such tokens were avoided. For the same reason, tokens where the following word begins with an affricate /tʃ, dʒ/ were avoided. Furthermore, it is common for /h/ to be omitted from unstressed pronouns such as *he, her* and *his* (Roach, 1991: 104), so instances where the following word begins with /h/ were not included.

195 tokens that matched all these criteria were extracted from the MARSEC corpus of BBC World Service broadcasts from the 1980's (Roach, Knowles, Varadi & Arnfield, 1993). In most cases, three or four words were included in the extract, to provide some context for the speech. In some instances, several tokens were extracted from the speech of one person, but care was taken to randomize the order of presentation so that tokens from the same speaker were not heard consecutively.

■ Listeners

Three British phoneticians listened to all 195 tokens over headphones. They did the exercise separately, and they could listen to each token as many times as they wanted before indicating whether they perceived retention or deletion of the /t/ or /d/. For 151 tokens, there was unanimous agreement, but for 44 tokens, one of the listeners disagreed with the other two. In cases where there is disagreement, the majority verdict is the one used here.

■ Results

Overall, 112 tokens (57%) were perceived to have a retained /t/ or /d/, while in 83 cases (43%) the plosive was heard to be deleted.

We can also consider some of the circumstances affecting the deletion or retention of /t/ and /d/. In 51 of the tokens, the final consonant is a *-ed* suffix, either a past tense form of the verb or the past participle.

(Instances of irregular verbs where the final /t/ or /d/ occurs together with a change in the vowel, such as *left* and *told*, are not regarded as instances of *-ed* suffixes, as the vowel already indicates it is not the base form of the verb.) Table 1 shows the proportion of tokens with and without the *-ed* suffix to undergo deletion.

	retained	deleted
<i>-ed</i> suffix	32 (63%)	19 (37%)
no <i>-ed</i> suffix	80 (55%)	64 (45%)
total	112 (57%)	83 (43%)

One might expect /t/ or /d/ to be deleted less often when it is a suffix, as in this case it carries meaning, and this is the pattern reported by Guy (1980), though Temple (2005) fails to find the same pattern for British English. Although the results for the BBC data from Table 1 suggest a slightly greater probability for retention of /t/ or /d/ when it is a suffix, the difference is not significant ($\chi^2 = 0.796$, $df = 1$, ns), so in fact there is no evidence from these results that the status of the final sound as a suffix has any influence on its deletion.

We can further investigate whether the nature of the sound at the beginning of the following word has any effect on the retention or deletion of a final /t/ and /d/. Table 2 shows the results for this, and in this case, the differences are highly significant ($\chi^2 = 20.07$, $df = 3$, $p < 0.01$). It is clear that deletion occurs very regularly before plosives, is quite common before fricatives and nasals, but is much less common before approximants.

next sound	retained	deleted
plosive /p, b, k, g/	19 (40%)	28 (60%)
fricative /f, v, θ, ð, s, z, ʃ/	37 (51%)	35 (49%)
nasal /m, n/	18 (58%)	13 (42%)
approximant /j, w, r, l/	38 (84%)	7 (16%)

■ Discussion

The proportion of deleted /t/ and /d/ reported here is rather lower than that found by both Gut (2005) and Cruz-Ferreira (2005) for Singapore English, but we should not be surprised if news broadcasters are a bit more careful in their speech. What is certainly true is that even BBC broadcasters exhibit quite regular deletion of /t/ and /d/, both when they carry no independent meaning (e.g. *last*, *world*) and when they represent a separate morpheme (e.g. *worked*, *described*), and this deletion occurs very commonly before a following plosive and also quite often before a fricative or nasal.

While it is true that speakers need to be aware of the existence of final plosives in the underlying representation of a word, for example to help them use standard spelling and also to enable them to pronounce a word carefully under some circumstances, we should not be too concerned if our students sometimes drop these sounds in ordinary speech. It is far more important for teachers to focus on the retention of the *-s* suffix, as /s/ and /z/ at the end of a word are very rarely dropped in most varieties of English. While /s/ may occasionally be silent (as in *précis* [preɪsɪ:]), and non-final /s/ may occasionally be deleted (for example in *sixth* which is sometimes produced as [sɪkθ]), an *-s* suffix is almost never dropped.

In summary, teachers should focus more on the pronunciation of the *-s* suffix than the *-ed* suffix.

ACKNOWLEDGEMENTS

Work on this paper was supported by the National Institute of Education Academic Research project NIE: RI 1/03 LEL: *Theoretical Speech Research and its Practical Implications*.

REFERENCES

- Bao, Z. (1998). The sounds of Singapore English. In J. Foley, T. Kandiah, Z. Bao, A.F. Gupta, L. Alsagoff, C.L. Ho, L. Wee, I.S. Talib & W. Bokhorst-Heng (Eds.), *English in new cultural contexts: Reflections from Singapore* (pp. 152-174). Singapore: Singapore Institute of Management & Oxford University.
- Cruz-Ferreira, M. (2005). Past tense suffixes and other final plosives in Singapore English. In D. Deterding, A. Brown & E.L. Low (Eds.), *English in Singapore: Phonetic research on a corpus* (pp. 26-36). Singapore: McGraw-Hill.
- Deterding, D., & Poedjosoedarmo, G. (1998). *The Sounds of English: Phonetics and phonology for English teachers in Southeast Asia*. Singapore: Prentice Hall.
- Fabricius, A. (2002). Ongoing change in modern RP: Evidence for the disappearing stigma of t-glottaling. *English World-Wide*, 23(1), 115-136.
- Gut, U. (2005). The realisation of final plosives in Singapore English: Phonological rules and ethnic differences. In D. Deterding, A. Brown & E.L. Low (Eds.), *English in Singapore: Phonetic research on acCorpus* (pp. 14-25). Singapore: McGraw-Hill.
- Guy, G. (1980). Variation in the group and the individual: The case of final stop deletion. In W. Labov (Ed.), *Locating language in time and space* (pp. 1-36). New York: Academic Press.
- Roach, P. (1991). *English phonetics and phonology: A practical course*. Cambridge: Cambridge University Press.
- Roach, P., Knowles, G., Varadi, T., & Arnfield, S. (1993). MARSEC: A machine-readable spoken English corpus. *Journal of the International Phonetic Association*, 23(2), 47-54.
- Temple, R. (2005, June). Los(t) in translation? A view of -t/d "deletion" from eas(t) of the Atlantic. Paper presented at the First International Conference on the Linguistics of Contemporary English, Edinburgh.
- Tongue, R.K. (1979). *The English of Singapore and Malaysia* (2nd ed.). Singapore: Eastern Universities Press.
- Wells, J.C., & Colson, G. (1971). *Practical phonetics*. London: Pitman.

