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On Reduction in English: What the English Don't Say

Abstract. The aim of this article is to examine which sounds are most often omitted in official oral public performances by native speakers of British English. Such terms as *reduction*, *elision* (and its types), and *connected speech* are explained; the literature cited is concerned with elision of vowels (triphthong smoothing being treated separately), of consonants, and of whole syllables. The study presents the results of an analysis conducted on selected material available on the Internet – this comprises three British English oral performances of the total length of approximately 20 minutes. With regard to the nature of the data, they were divided into scripted, semi-scripted, and unscripted samples. The research has shown that earlier preparation significantly lowers the number of phonetic reduction phenomena. Furthermore, if the speech is given in front of an audience rather than being pre-recorded, the number of reduction phenomena is higher. Besides, the analysis has shown a few important tendencies in modern British pronunciation, such as omission of /t/, realisation of final /t/ as [ʔ], omission of final /t/ in contractions, which therefore are realised as [n] instead of [nt].

Keywords: reduction, elision, connected speech, British English, oral performance

1. Reduction, elision, and clipping

In order to specify the topic of the article,¹ let us consider two meanings of reduction:

reduce (v.) (1) A term used in the phonological classification of vowel sounds, referring to a vowel which can be analysed as a centralized variant of a vowel in a related form. For

¹ The article is based on the author's BA thesis in English Philology at the Pedagogical University of Cracow, written under the supervision of Anita Buczek-Zawiła, Ph.D.

example, the pronunciation of /ɒv/ reduces to /əv/ when unstressed; the stressed vowels in 'telegraph show reduction in the related word te'legraphy /'teləgrɑ:f/ ⇒ /tə'legrəfi/.

(2) A further phonological use of the term is found in the context of phonological rules, where it refers to a process of simplification which affects certain types of sound sequence. The most important category is consonant cluster reduction (e.g. clock becoming /gɒk/), which is common in early child language (Crystal 2008, 406).

In this paper, the focus is on the second meaning, whereby reduction is understood as elision. In phonology, elision, as defined by Crystal (2008, 166), is “the omission of sound or sounds in connected speech”.² It may affect vowels, consonants and even whole syllables. Elision may be further divided according to the position of the affected element (Skandera and Burleigh 2005, 96–97):

- aphaeresis: elision of an initial element or elements (*would have* [wəd 'æv]); if the initial omitted element is a vowel, the process can be named *aphesis*;
- syncope: elision of a medial element or elements (*answer is* ['ɑ:nsɪ ɪz]);
- apocope: elision of a final element or elements (*kept complaining* ['kep kəm'pleɪnɪŋ]).

However, if a part of a word or a whole syllable is omitted, we speak of clipping. Skandera and Burleigh (2005, 97), for instance, distinguish three types of clipping:

- fore-clipping: affects the initial part of a word, e.g. *telephone* – *phone*;
- back-clipping: affects the final part of a word, e.g. *laboratory* – *lab*;
- fore-and-aft clipping: fore- and back-clipping operate simultaneously, e.g. *influenza* – *flu* or *Elizabeth* – *Liz*.

In fore- and back-clipping, we understand the beginning and the end of a word in terms of its morphological borders.

Since vowel reduction (i.e. reduction in the first meaning) is not the subject of this paper, this change in grammatical words³ is not going to be considered.⁴ However, every non-standard pronunciation of these words will be noted and counted if affected by elision. What will not be counted are contracted forms, which are also treated as reduction, but counting them would be pointless because they are normative.

² Connected speech is understood here as a continuous sequence of words typical of natural utterances and conversations. Units (words or phrases) sound different when they are pronounced in connected speech or in isolation. Another important process operating in connected speech, apart from elision, is assimilation (cf. Crystal 2008, 101).

³ That is, strong and weak forms of auxiliary verbs, conjunctions, prepositions, pronouns, articles etc.

⁴ Cf. Reszkiewicz (1981, 139–152) or Cruttenden (2008, 266–268).

2. Elision in the literature

Elision, as understood in this article, has been the subject of numerous studies. It is usually divided into elision of vowels, consonants, and whole syllables. Within elision of vowels, triphthong smoothing can also be identified. All these will be described below.

2.1 Elision of vowels

The vowel schwa, transcribed /ə/, is commonly elided after voiceless plosives, namely /p/, /t/ and /k/, in the direct vicinity of a stressed syllable. The loss of the vowel is therefore compensated by aspiration, e.g. *potato* /pə'teɪtəʊ/ → ['pʰteɪtəʊ], *tomato* /tə'mɑ:təʊ/ → ['tʰmɑ:təʊ] or *canal* /kə'næl/ → [kʰnæl]. In such position, schwa is also often dropped when it precedes /n/, /l/ or /r/, which in this case become syllabic, as in *police* /pə'li:s/ → [pɫ'i:s], *tonight* /tə'naɪt/ → [tɪ'naɪt] or *correct* /kə'rekt/ → [kɪ'rekt]. Notice that in such cases, the boundaries of syllables also change (Skandera and Burleigh 2005, 95–96, Roach 1998, 127).

Cruttenden (2008, 303) points out that /ə/ is often not pronounced at word boundaries when it is initial but preceded by a consonant and followed by a continuant. The continuant in this case becomes syllabic, e.g. *get another* /get ə'nʌðə/ → [get 'nʌðə], *run along* /rʌn ə'lɒŋ/ → [rʌn 'lɒŋ]. Furthermore, it may be dropped before a linking /r/, for example *after a while* /ɑ:ftə ə'waɪl/ → [ɑ:ftə 'waɪl] or *father and son* /fɑ:ðə ənd'sʌn/ → [fɑ:ðə'n'sʌn] (ibid).

2.2 Triphthong smoothing

Although triphthong smoothing is also an instance of vowel elision, it has been treated separately, because it affects a discrete category of sounds in English phonetics and phonology, namely triphthongs. These also undergo elision, or to be precise – syncope, which is an omission of the medial element of a triphthong (/ɪ/ or /ʊ/), especially when the following /ə/ is not a separate morpheme. Thus, triphthongs undergo following changes, which are known as smoothing (Cruttenden 2008, 145–146):

- /aɪə/ ⇔ [a:ə] – in words such as *tyre*, *wire*, *fire*, but also in those where /ə/ is a suffix, such as *buyer*, *higher* or *liar*;
- /aʊə/ ⇔ [a:ə] – in *shower* or *tower*. Note that *tyre* and *tower*, *shire* and *shower* or *buyer* and *bower* become homophones when the smoothing occurs;
- /eɪə/ ⇔ [e:ə] – as in *player*, *prayer* or *layer*. As we see, the smoothing may take place at morpheme boundaries as well, thus producing homophones, e.g. *prayer* (the words or the act of praying) and *pray-er* (a person who prays) or *layer* and *lair*;
- /əʊə/ ⇔ [ɜ:ə] – as in *mower* or *slower*, which results in homophones with *myrrh* or *slur*, respectively;
- /ɔɪə/ ⇔ [ɔ:ə] – as in *employer*, *joyous* or *enjoyable*. Note, however, that the first element of the reduced diphthong, namely [ɔ:], is lower than phonemic /ɔ:/.

Moreover, triphthong smoothing occurs not only within one morpheme, but also at a morpheme boundary when word-initial /ə/ comes after a closing diphthong at the end of a word, for instance in *they are* [ðe:ə], *go away* [gɜ:ə'weɪ], *buy a house* [ba:ə'haʊs], *now and then* [na:ən'ðen] or *boy and girl* [bɔ:ən'gɜ:l] (Cruttenden 2008, 147).

2.3 Elision of consonants and syllables

The main factor triggering consonant elision is complex consonant clusters. The sounds that are most frequently omitted are plosives and fricatives. Skandera and Burleigh (2005, 95) provide such examples as *clothes* /kləʊðz/ → [kləʊz], *months* /mʌnθs/ → [mʌns] or *twelfth* /twelfθ/ → [twelfθ].

As we read in Roach (1998, 127), the middle plosive is usually dropped in a cluster of two plosives and a fricative or of three plosives, which can be illustrated with such examples as *acts* /æktz/ → [æks], *looked back* /lʊkt 'bæk/ → [lʊk 'bæk].

Cruttenden (2008, 303) lists also even more complex clusters: “Thus elision is common in the sequence voiceless continuant + /t/ or voiced continuant + /d/ (...) followed by a word with an initial consonant,” which is exemplified by such phrases as *next day* [neks 'deɪ], *raced back* [reɪs 'bæk], *last chance* [lɑ:s 'tʃɑ:ns], *left turn* [lef 'tɜ:n], *send round* [sen 'ɪaʊnd] or *caused losses* [kɔ:z 'lɒsɪz]. Further on, we read: “Similarly, word-final clusters of voiceless plosive or affricate + /t/ or voiced plosive or affricate + /d/ (...) may lose the final alveolar stop when the following word has an initial consonant,” which is again illustrated with such examples as *kept quiet* [kep 'kwaɪət], *helped me* ['help mi], *stopped speaking* ['stɒp 'spi:kɪŋ], *changed colour* ['tʃeɪndʒ 'kʌlə], *urged them* ['ɜ:dʒ ðəm] or *judged fairly* ['dʒʌdʒ 'feəli] (Cruttenden 2008, 304).

In informal speech, the elision of only two-consonant clusters can be encountered, too, as in *I want to* [aɪ 'wɒnə], *He went away* [hi 'wen ə'weɪ], *Give me* [gɪmɪ] or *Let me* [lemɪ]. Interesting forms are also the informal *gonna*, *gotta*, and *wanna*, which stand for *going to*, *have to* (or *'ve got to*), and *want to* (or *want a*), respectively. The elision also affects the /v/ in *of* in informal speech when it precedes a consonant, e.g. in *lots of them* ['lɒts ə 'ðəm] or *waste of money* ['weɪst ə 'mʌni] (Roach 1998, 127).

In regional informal speech, /h/ can be elided at the beginning of a word and the word then behaves as if it started with a vowel, namely it takes the *an* indefinite article or [ði] definite article, for instance *an hill* [ən'hɪl] or *the house* [ði'aʊs]. Even among some RP speakers, one can find such words as *historical*, *hotel*, or *hysterical* realised without the initial /h/ and the grammatical result is the same, as in *an historical novel* [ənɪ'stɔ:ɪkəl 'nɒvəl]. Such realisation, however, is not common (Cruttenden 2008, 205).

Furthermore, whole unaccented syllables can also be omitted. If the same consonant appears again in the subsequent syllable, the first syllable of the pair is likely to be dropped. This can be observed in numerous words, such as *library* ['laɪbrɪ] or *particularly* [pə'tɪkjəli] (Skandera and Burleigh 2005, 96).

3. Research

In this section, we are going to examine some fragments of genuine official English speech in terms of the reduction phenomena discussed above. The aim of the research is to look into the frequency of the reduction phenomena.

3.1 Selection of the material and procedure

I have decided to analyse approximately 20 minutes of data, consisting of three samples. The first sample, *A short introduction to the Studio School* (henceforth *Studio School*), is a speech by Geoff Mulgan on TED.com from 2011 about new, more practical, and less boring schooling. The second sample is a fragment of a BBC 4 podcast series *In Touch* about the cancellation of the DLA mobility component for disabled people living in residential houses. The last piece of the material, *A History of the World in 100 Objects. Episode 8. Egyptian Painted Pottery Cattle* from BBC Radio 4 (henceforth *Pottery Cattle*), is a fragment of a podcast series about clay statues of cattle in ancient Egypt.

Table 1. The data analysed

Sample	Duration	Number of speakers
<i>Studio School</i>	5' 54"	1
<i>In Touch</i>	10' 13"	5
<i>Pottery Cattle</i>	4' 8"	1
Total:	20' 15"	7

Although *In Touch* is of longer duration and features more speakers than the other two samples, it conforms with the remaining ones, since each speaker talks individually and undisturbed by the others, and only rare interaction between the speakers is observed.

The audio material was downloaded together with transcripts from the source websites. Then the recordings were slowed down and listened to, with the instances of relevant phonetic phenomena being marked on the transcripts.

3.2 Hypotheses

The occurrence of the reduction phenomena is dependent not only on phonetic and phonological features, but also on individual preferences of a speaker, as well as his or her speech tempo or regional origin. Nonetheless, we managed to find samples produced by speakers who use the standard variety of British English. Thus, two hypotheses may be forged.

Firstly, if the samples are not scripted, the number of the reduction phenomena is noticeably higher. Thus, *Studio School* is expected to show a significant number of the phenomena, while *Pottery Cattle* barely any. *In Touch* was labelled as semi-scripted,

since three of the speakers are journalists but the remaining two are not. Therefore, the number of reduction phenomena in *In Touch* should be somewhere between *Studio School* and *Pottery Cattle*.

Secondly, the sounds that are most frequently reduced are stops. Here, apart from /p/, /b/, /t/, /d/, /k/, /g/, affricates /tʃ/ and /dʒ/ are considered as well, since they also contain a stop element. In order to check this, we kept thorough records of the numbers of reduction phenomena and calculated the percentages.

The results obtained are collated in tables, each dedicated to one sample.

3.3 Studio School

Studio School is a monologue, similar to a very short lecture, delivered in front of an audience. Because of that, it was labelled as unscripted. The reduction phenomena which occurred in the text are listed in Table 2 below.

Table 2. Reduction in *Studio School*⁵⁶⁷⁸

Time	Fragment	Transcription	Phenomenon
19"	<i>I want to talk</i>	[aɪ 'wʌnə 'tɔ:k]	apocope of /t/, aphaeresis of /t/ ⁵
25"	<i>of our conventional</i>	[əv a: kən'venʃnəl]	syncope (triphthong smoothing)
29"	<i>And it might just be</i>	[ən ɪt 'maɪ dʒʌs bi]	apocope of /t/ twice
49"	<i>we asked what was</i>	[wi 'ɑ:s wɒt wəz]	apocope of /kt/
50"	<i>important need for</i>	[ɪm'pɔ:tən 'ni:d fəɪ]	apocope of /t/
55"	<i>we felt the most</i>	[wi 'fel 'ðə məʊst ɪm'pɔ:ʔn]	apocope of /t/ twice
56"	<i>important priority</i>	[pɪaɪ'ɒɪtɪ]	
1'1"	<i>who just didn't like school</i>	[hu dʒʌs dɪdn 'laɪk 'sku:l]	apocope of /t/, weakening ⁶ of /k/
1'7"	<i>who kept complaining</i>	[hu 'kep kəm'pleɪnɪŋ]	apocope of /t/
1'14"	<i>we try to ask what</i>	[wi 'tɹaɪ tu 'ɑ:s wɒt]	apocope of /k/
1'43"	<i>simple answer in a way</i>	[ˈsɪmplɪ 'ɑ:nsɪ ɪn ə 'weɪ]	syncope of /ə/
2'15"	<i>practical projects</i>	[ˈpræktɪklɪ 'prɒdʒekt's]	weakening of /t/
2'21"	<i>who would have</i>	[ʔu wəd 'hæv]	aphaeresis of /h/
2'33"	<i>no extra cost, no selection</i>	[nəʊ 'ekstɪə 'kɒs nəʊ sɪ'lekʃn]	apocope of /t/
2'47"	<i>learn best by doing</i>	[ˈlɜ:n 'bes baɪ 'du:ɪŋ]	apocope of /t/ ⁷
3'07"	<i>famous for its airport</i>	[ˈfeɪməs fəɪ its 'eəpɔ:t]	reduction of /r/ to /ʔ/ ⁸

⁵ This results in a substandard, informal form, which is sometimes spelt *wanna*. The same form appears in 5'43" in *they want to get*. On the other hand, a few words earlier, the full form [ˈwɒnt tə] is pronounced in *They want to do things*.

⁶ *Weakening* used in the table stands for no audible release of a stop. However, the records below the table, used for statistics, include both unreleased plosion and reduction to /ʔ/.

⁷ The same occurs in 2'52" in the repeated phrase. However, in 2'50", in the phrase *learn best in teams*, the speaker uses the full form: [ˈlɜ:n 'best ɪn 'ti:mz].

⁸ The reduction here appears although the glottal stop most often substitutes the intrusive, not the linking /r/, as in the example above. A bit later, in 3'11" in the phrase *famous for its beaches*, the speaker uses the linking /r/: [ˈfeɪməs fəɪ ɪts 'bi:tʃɪz].

3'13"	<i>quite a lot of things</i>	[kwaɪ ə 'lɒt ə 'θɪŋz]	reduction of /t/ to /ʔ/, apocope of /v/
3'23"	<i>And perhaps most</i>	[ən p ^h 'jæps məʊst]	syncope of /ə/ and /h/ ¹⁰
3'28"	<i>these field trials</i>	['ði:z 'fi:ɫ 'traɪəɫz]	apocope of /d/
3'31"	<i>lowest performing groups</i>	['ləʊs pə'fɔ:mɪŋ 'gru:ps]	apocope of /t/
3'33"	<i>jumped right to the top</i>	['dʒʌmp 'raɪ tðə 'tɒp]	apocope of /t/ twice, apocope of /ə/
3'44"	<i>influenced some people</i>	['ɪnfluəns sm 'pi:pɫ]	apocope of /t/
3'50"	<i>described himself as</i>	[dɪs'kraɪbd ɪm'self 'æz]	aphaeresis of /h/
4'5"	<i>helping it work, not just</i>	['helpɪŋ ɪʔ 'wɜ:ʔ nɒt dʒʌst]	reduction of /k/ to /ʔ/
5'9"	<i>in fact, my nephew</i>	[ɪn 'fæʔ maɪ 'nefju:]	reduction of /kt/ to /ʔ/
5'24"	<i>It's not perfect yet</i>	[ɪts nɒʔ 'pɜ:fəkt 'jeʔ]	apocope of /t/
6'1"	<i>which is present, not as</i>	[wɪtʃ ɪz 'preznt nɒt əz]	apocope of /t/
6'2"	<i>answer for every child</i>	['ɑ:ns fə 'ʔevrɪ 'tʃaɪld]	apocope of /ə/, reduction of /r/ to /ʔ/ ¹¹
6'4"	<i>at least for an answer</i>	[əʔ 'li:s fəɪ ən 'ɑ:nsə]	apocope of /t/ ¹²
6'10"	<i>make that happen</i>	['meɪʔ 'ðæʔ 'hæpn]	reduction of /k/ to /ʔ/

Some of the examples in Table 2 require a comment. First of all, we have observed the speaker's general tendency to substitute a /t/ preceding a consonant with a /ʔ/. We have found a number of instances in such words as:⁹¹⁰¹¹¹²

- *important – important priority* [ɪm'pɔ:ʔŋ pɪaɪ'ɒɪtɪ] (5'6") and *most important of all* (3'23");¹³
- *importance – the importance of* [ðɪ ɪm'pɔ:ʔŋs əv] (1'32");
- *animate – animate them* ['ænɪmeɪʔ ðəm] (5'35");
- *that* (both strong and weak forms) – *complaining that the kids* [kəm'pleɪnɪŋ ðəʔ ðə 'kɪdz] (1'7"), *ideas that large numbers* [aɪ'dɪəz ðəʔ 'la:dʒ 'nʌmbəz] (2'45"), *that was a nice idea* ['ðæʔ wəz ə 'naɪs aɪ'dɪə] (2'59"), *that influenced some people* ['ðæʔ 'ɪnfluəns sm 'pi:pɫ] (3'44") and *make that happen* ['meɪʔ 'ðæʔ 'hæpn] (6'10");
- *not – done not through* ['dʌ 'nɔ:ʔ θru:] (2'11"), *not surprisingly* [nɒʔ sə'praɪzɪŋli] (3'42"), *not perfect* [nɒʔ 'pɜ:fəkt] (5'24") and *They're not like all* [ðeə 'nɒʔ laɪk 'ɔ:ɫ] (5'35");
- *at – at no extra* [əʔ nəʊ 'ekstɪə] (2'33")¹⁴ and twice in *at least* [əʔ 'li:s] (6'4" and 6'9");

⁹ What follows, however, is a vowel.

¹⁰ In this case, aspiration of /p/ in an unstressed syllable and appearance of /r/ occur as compensatory phenomena for the elision.

¹¹ Notice that two seconds later (6'4"), in the phrase *for an answer for some children*, the speaker uses both linking /r/ in *for an* and /ə/ in *answer*, in contrast to the preceding phrase with a similar wording. The form [ɑ:ns] also appears earlier, in 1'43", with linking /r/ following.

¹² *At least* is again reduced to [əʔ 'li:s] in 6'9" in the phrase *at least can help us*.

¹³ In 1'38", however, the speaker uses the full form [ɪm'pɔ:tnt].

¹⁴ Interestingly, in 4'58", in the phrase *right at the heart*, we observe no elision: ['raɪt ət ðə 'hɑ:t].

- *but* – *but through real-life* [bət θru: ,riəl'laɪf] (2'13");¹⁵
- *it* – *helping it work* ['helpiŋ ɪ? 'wɜ:ʔ] (4'5");
- *yet* – *not perfect yet*;
- *but* [mɒ? 'pɜ:fɛk 'jeʔ bət] (5'24"), and *out* – *you out there* [ju 'au? 'ðeə] (5'50").

Furthermore, the speaker tended to drop the final /t/ in negated contractions, as in *didn't* – *didn't like* [dɪdŋ 'laɪk'] (1'1"), *didn't have* [dɪdŋ 'hæv] (1'11") or in *doesn't* – *It doesn't animate* [ɪt dʌzŋ 'ænɪmeɪʔ] (5'35"). Therefore, these instances will not be counted in the percentage result of reduced words in this sample and have not been included in the table.

With regard to this, the percentage result of reduction is 3.81% (1,050 words in total, 40 reduced¹⁶). The recording gave us 4 examples of syncope, 27 of apocope, 4 of aphaeresis, 9 of weakening. The total number of reduction processes is 44. Stops were reduced in 33 cases (75%) and 26 of them were /t/, vowels in 5 cases and other consonants in 6. The results are presented in Table 3.

Table 3. Reduction in *Studio School* (unscripted)

Words in total		Words reduced		Reduction percentage	
1,050		40		3.81%	
REDUCTION PROCESSES					
In total	Syncope	Apocope	Aphaeresis	Weakening	
44	4	27	4	9	
SOUNDS AFFECTED					
Stops in general		/t/	Other consonants		Vowels
33		26	6		5

3.4 In Touch

In *In Touch*, there are five speakers altogether: two men, who are professional radio journalists, and three women, one of whom is also a professional radio broadcaster; the two remaining speakers are not trained for professional recording – they are people to whom the topic of the programme (the cancellation of the DLA mobility component) applies. They are not guests in the studio so the sample cannot be considered a discussion. Each answer to the journalist's questions is given in an elaborate way (at least a few sentences), which is why this fragment has been chosen for the study. The recording has been classified as semi-scripted. Table 4 presents the reduction phenomena found in the recording.

¹⁵ In the phrase *but independently run*, the speaker does not use the glottal stop: [bət ndrɪ'pendɪntli 'rʌŋ].

¹⁶ By *reduced words* we understand words in which at least one sound was affected by reduction.

Table 4. Reduction in *In Touch*

Time	Fragment	Transcription	Phenomenon
5'25"	<i>I asked her</i>	[aɪ 'ɑ:sk hə]	apocope of /t/ ¹⁷
5'34"	<i>deafblind people</i>	['defblɑɪn 'pi:pəl]	apocope of /d/ ¹⁸
5'56"	<i>be hit by this</i>	[bɪ 'hɪʔ baɪ 'ðɪs]	reduction of /t/ to /ʔ/
6'	<i>the moment from the</i>	[ðə 'məʊmənt frəm ðə]	apocope of /t/
6'14"	<i>authority expects to take</i>	[ɔ: 'θɒɪti ɪk 'speks tə 'teɪk]	syncope of /t/
6'31"	<i>travel independently of</i>	['trævl ɪndɪ 'pendɪnli əv]	syncope of /t/ ¹⁹
6'54"	<i>the government says</i>	[ðə ɡʌ 'vɪmənt 'sez]	syncope of /n/, apocope of /t/ ²⁰
7'24"	<i>supposed to be</i>	[sə 'pəʊz tə bi]	apocope of /d/
7'24"	<i>earmarked for exactly the</i>	['iəmə:k fəɪ ɪɡ 'zækli ðə]	apocope and syncope of /t/
7'44"	<i>to prevent cuts to other</i>	[tə pɪ 'ven 'kʌts tu 'ʌðə]	apocope of /t/
8'1"	<i>And amongst the groups</i>	[ænd ə 'mɒŋz ðə 'ɡru:ps]	apocope of /t/ and voicing
8'22"	<i>Liz herself lives</i>	['lɪz ə 'self 'lɪvz]	aphaeresis of /h/
8'24"	<i>she explained what the</i>	[ʃi ɪk 'spleɪn wɒt ðə]	apocope of /d/
8'41"	<i>have a support worker</i>	['hæv ə sə 'pɔ: 'wɜ:kə]	apocope of /t/ ²¹
9'8"	<i>have to find myself</i>	['hæv tə 'faɪn maɪ 'self]	apocope of /d/ ²²
9'10"	<i>quite considerable</i>	[kwɑɪt kən 'sɪdɪəbəl]	syncope of /ə/
9'24"	<i>other disabled people</i>	['ʌðə drɪ 'seɪbəl 'pi:pəl]	apocope of /d/, weakening of /b/ ²³
10'10"	<i>at worst not going to</i>	[əʔ 'wɜ:s nɒʔ 'ɡəʊɪŋ tə]	apocope of /t/
10'45"	<i>It's difficult to believe</i>	[ɪts 'dɪfɪkəl tə brɪ 'li:v]	apocope of /t/
10'54"	<i>I suspect that they</i>	[aɪ sə 'spek ðəʔ ðeɪ]	apocope of /t/
11'12"	<i>we asked the Department</i>	[wi 'ɑ:sk ðə drɪ 'pɑ:tmənt]	apocope of /t/
11'24"	<i>to help tackle the</i>	[tə 'help 'tækəl ðə]	weakening of /p/
11'36"	<i>it designed to support</i>	[ɪt dɪ 'zaɪn tə sə 'pɔ:t]	apocope of /d/ ²⁴
11'47"	<i>authority contracts with</i>	[ɔ: 'θɒɪti 'kɒntræks wɪð]	syncope of /t/
11'52"	<i>residents assessed needs</i>	['rezɪdənts ə 'ses 'ni:dz]	apocope of /t/
12'4"	<i>Our commitment to</i>	[aʊə kə 'mɪtmənt tə]	apocope of /t/
12'24"	<i>to protect the people</i>	[tə prə 'tek ðə 'pi:pəl]	apocope of /t/
12'38"	<i>Eric Westbrook</i>	['eɪrɪk 'wesbrʊ:k]	syncope of /t/
13'39"	<i>website because essentially</i>	['websaɪt kəz ɪ 'senʃli]	fore-clipping

¹⁷ However, in 12'54" in the phrase *I asked him*, there is no apocope but aphaeresis in the weak form: [aɪ 'ɑ:skt ɪm].

¹⁸ The same happens in 5'43" and 5'51" (the same speaker), 9'23", 9'42", 9'43", 10'52", 11'17", in the phrase *blind people* in 12'56" and 13'44", *blind games* in 13'53" and *blind person* in 15'22" (different speakers).

¹⁹ The same form appears in 8'23" and 8'34" (each in a different speaker).

²⁰ The same speaker in the next phrase (7') says *but the government has been talking* with the syncope and the apocope but this time with the proper stress: ['ɡʌvəmənt]. In 7'52", however, she does not use the syncope. This also occurs in different speakers' speech, as in *The government keep talking* in 10'14" and in *the government would want* in 10'46".

²¹ The speaker uses the same form in 8'46" and 8'58".

²² The same occurs in the phrase *eventually find one* in 14'55".

²³ The same form appears in 11'12", 11'37", and 12'9", but without the weakening.

²⁴ The same form occurs in 11'49" and in 12'51" in the phrase *designed for people*.

13'46"	<i>Ian runs software</i>	[ˈaɪən ˈrʌnz ˈsɒfweə]	syncope of /t/ ²⁵
13'57"	<i>the last one was</i>	[ðə ˈlɑːs wʌn wəz]	apocope of /t/
14'23"	<i>with its spoken clues</i>	[wɪð ɪʔ ˈspəʊkɪ ˈkluːz]	apocope of /s/
14'41"	<i>which are called words</i>	[wɪtʃ ə ˈkɔːl ˈwɜːdz]	apocope of /d/
15'5"	<i>extensive help file that</i>	[ɪkˈstensɪv ˈhelp ˈfaɪl ðəʔ]	weakening of /p/
15'8"	<i>recommend to start</i>	[ˌrekəˈmen tə ˈstɑːt]	apocope of /d/
15'29"	<i>people who have never</i>	[ˈpiːpl hu əv ˈnevə]	aphaeresis of /h/
15'31"	<i>would like to try</i>	[wəd ˈlaɪʔ tə ˈtʁaɪ]	reduction of /k/ to /ʔ/

Moreover, all of the speakers showed a strong tendency to substitute the final /t/ with /ʔ/, not only in pronouns or prepositions, but also in lexical words. Furthermore, they also tended to drop the final /t/ from negative contracted forms. Hence, these instances have been considered as a general inclination and have not been counted as reduction.

Having said this, we may state that 65 words out of 1,775 were reduced, which amounts to 3.66%. There were 68 reduction processes, 47 (69.12%) of which were examples of apocope, 12 (17.64%) of syncope and 3 (4.41%) of aphaeresis, 5 (7.35%) of weakening and 1 (1.47%) of clipping. In total, stops were elided in 61 cases (89.7%), vowels in just 2 cases and other consonants in 6.²⁶ Among stops, /t/ was reduced 25 times. These results are presented in Table 5.

Table 5. Reduction in *In Touch* (semi-scripted)

Words in total		Words reduced		Reduction percentage	
1,775		65		3.66%	
REDUCTION PROCESSES					
In total	Syncope	Apocope	Aphaeresis	Weakening	Clipping
68	12	47	3	5	1
SOUNDS AFFECTED					
Stops in general		/t/	Other consonants		Vowels
61		25	6		2

3.5 Pottery Cattle

Pottery Cattle comes from one speaker, with the exception of two very short sentences, which are quotes from two professors who contributed to the story, one sentence each. This material was professionally recorded in a studio by a man who, as we assume, had familiarised himself with the text of the speech and prepared for the recording – therefore, it was labelled as scripted. The speaker’s pronunciation is much more accurate and clear than in the previous samples. Hence, very few reduction instances have been found. They are presented in Table 6.

²⁵ The word appears twice close to each other: “Ian runs *software* calles Spoonbill *software*”.

²⁶ The difference in numbers between reduction processes and sounds affected results from the fact that clipping was counted as one process, but it affected two sounds: /b/, which is a stop, and /ɪ/, which is a vowel.

Table 6. Reduction in *Pottery Cattle*

Time	Fragment	Transcription	Phenomenon
13''	<i>see ourselves entering</i>	[ˈsi: əʊəˈselvz ˈentɪŋ]	syncope of /ə/
15''	<i>discovering the hidden</i>	[dɪˈskʌvɪŋ ðə ˈhɪdn]	syncope of /ə/
19''	<i>rewriting history</i>	[ɪˈraɪtɪŋ ˈhɪstɪ]	syncope of /ə/
22''	<i>should be warned that</i>	[ʃəd bɪ ˈwɔ:n ðæt]	apocope of /d/
36''	<i>almost clerical dryness</i>	[ˈɔ:lməʊs ˈkleɪnkɪ ˈdraɪməs]	apocope of /t/
2'49''	<i>they've been grazing</i>	[ðəv bi:n ˈgreɪzɪŋ]	reduction of /eɪ/ to /ə/

There are 451 words in this fragment, 6 of which were reduced, that is 1.33%. There were 6 reduction processes altogether, 4 of syncope and 2 of apocope. Stops were elided only in 2 cases (33.33%), whilst the remaining 4 cases concerned vowels (66.66%). Table 7 presents the exact results.

Table 7. Reduction in *Pottery Cattle* (scripted)

Words in total	Words reduced	Reduction percentage
451	6	1.33%
REDUCTION PROCESSES		
In total	Syncope	Apocope
6	4	2
SOUNDS AFFECTED		
Stops in general	/t/	Vowels
2	1	4

4. Results

Having demonstrated all the results from our research, we will now refer to the hypotheses we put forward in 2.1.

According to the first hypothesis, the number of reduction phenomena would be smaller in a scripted sample, larger in a semi-scripted one, and the largest in unscripted. That is why we kept thorough statistics of the reduction. The results support our hypothesis, as can be seen in Table 8.

Table 8. Percentage of reduction in the audio material

Sample	Percentage of reduction	Type of speech
<i>Studio School</i>	3.81%	unscripted
<i>In Touch</i>	3.66%	semi-scripted
<i>Pottery Cattle</i>	1.33%	scripted

The difference between *Studio School* and *In Touch* is, however, minute: 0.15%. Nonetheless, looking at this table, one must bear in mind the other differences between *Studio School* and *In Touch*: they differ in duration (5'54'' vs. 10'13''), in the number of words (1,050 vs. 1,775), and in the category of speech they represent (a monologue

in front of an audience and a prepared radio programme with journalists and guest speakers).

It seems that our findings favour the second hypothesis as well. In the material, there were 119 elements reduced altogether, 96 of which were stops, which gives the result of 80.67%. The remaining elements were: vowels – 11 (9.24%), fricatives – 8 (6.72%), and other consonants – 4 (3.36%).

The frequency of occurrence of reduction in the whole material is 3.39% (that is, 111 words reduced out of the total of 3,276). Table 9 presents the detailed data.

Table 9. The whole empirical material

Words in total		Words reduced		Percentage	
3,276		111		3.39%	
REDUCTION PROCESSES					
In total	Syncope	Apocope	Aphaeresis	Weakening	Clipping
119	20	77	7	14	1
SOUNDS AFFECTED					
In total	Stops in general	/t/	Vowels	Fricatives	Other consonants
119	96	52	11	8	4
	80.67%	43.7%	9.24%	6.72%	3.36%

5. Conclusion

The research shows that prior preparation and speaking with the aid of a script influence the occurrence of elision. The audio material has provided us with a straightforward answer, although one must bear in mind the differences between the samples analysed.

Furthermore, stops proved to be the most frequently elided elements in the audio material: they constituted more than 80% of the elements reduced. Amongst all the stops elided, the most significant number falls on /t/, which constituted 54% of them. This means that /t/ alone constituted more than 40% of all the elements affected by reduction. Furthermore, final /t/ was reduced in 43 cases, which is more than a third of all the sounds reduced. The second most frequently elided elements were vowels, but they amounted to less than a tenth of the total.

Another conclusion which may be drawn from the analysis of the audio material is that in present-day colloquial English, there is a strong tendency to use [ʔ] in the place of final /t/ before a vowel. Another easily observed tendency is an omission of the final /t/ of the negative contracted forms, so that -n t̩, normally pronounced as [nt̩], is realised as [n].

This study has shown that phonetic reduction is a topic worth studying, since it affects native speakers' pronunciation to a noticeable extent. The analysis has confirmed that earlier preparation for speaking influences the pronunciation, namely there

are fewer reduction phenomena. The present paper can be beneficial in teaching not only of pronunciation but also of listening skills. It may help teachers provide explanations and choose proper materials for classwork (semi- or unscripted samples, rather than recorded in a studio). This may also be an inspiration for new research, such as looking into students' listening comprehension of various speeches: official, informal, colloquial, or scripted, semi-scripted, unscripted. The type of communicative situation seems to be worth considering, too, e.g. a public and official speech (for instance, given by a politician), a presentation in front of an audience, a presentation recorded in order to be listened to and without an audience present, a recorded podcast, a video, TV or radio news, TV or radio programmes (interviews, reports, phone calls from listeners or viewers).

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