

# Speech, writing and boxsets: a messy linguistic change in English<sup>1</sup>

KEN LODGE

*University of East Anglia*

This article is an attempt to explain an observable change in present-day English in terms of quite disparate influences. Since the change is not yet complete, it is a messy conspiracy of these influences. By studying life-time changes of this sort we may gain insights into how well-understood historical changes work. The change under discussion is most noticeable in the written form, but its trigger has been the phonetic realizations of the forms to be considered. The forms are exemplified by alternations in noun phrases such as *box(ed) sets*, *skim(med) milk*, *arch(ed) corbel table*. The relationship between the very different

structures used in speech on the one hand and writing on the other is also relevant in this case. The NPs with *-ed* have a structure Adj<sub>pp</sub> N, whereas the forms without it are compound nouns. Some of the Adj<sub>pp</sub> forms found in such noun phrases are actually pseudo-past participles; that is, they are not formed from a verb, but take the *-ed* ending, e.g. *four-wheeled*, *gate-legged*. Whether native speakers learn such forms from the spoken or written language to some extent determines how they are perceived. This is relevant because the phonetic realization of members of both sets may be the same, so the phonetic form [boks set] may be perceived as *boxed set* or *box set*. I also consider the stress patterns of the new compounds, the orthography as a reflection of the structural change, and the 'Germanic' tendency towards compounding. The resultant picture is a messy one and the change has certainly not yet been completed, but we can see a conspiracy of disparate areas of the linguistic system putting pressure on certain lexical combinations. It should also be noted that 'English' is not a consistent linguistic system:

we have to be clear about which variety is being discussed. English 'belongs' to many different groups of people, including non-native speakers as a lingua franca, so it is subject to many more influences today than the parochial versions of even just a hundred years ago.

Keywords: language change, phonetic realizations, noun phrases, compound nouns, English, orthography

## 1 Introduction

This article is focused on a particular set of changes in English, which have had a considerable effect on the structure of the language over several centuries and which continue to affect present-day English. They involve phonetic realizations, syntactic

<sup>1</sup> This article is a revised version of a poster presented to the Fourth Symposium on Historical Phonology at the University of Edinburgh, 9–10 December 2019. I am grateful to Andy Spencer, Heinz Giegerich, Peter Trudgill, Jean Boase-Beier and several of those who attended the Symposium for discussion of my ideas and for providing a number of suitable examples. I am further indebted to two anonymous *ELL* reviewers, whose comments and criticisms have helped me produce what I hope is an improved version for publication. I am, of course, fully responsible for this version.

reinterpretation, nominal compounding and the relationship between speech and writing. It is also the case that the change ends up being ‘messy’, or at least presents this way at the moment, since the change has not finished yet: there are still speakers/writers who use the pre-change forms, so we have a period of variation at present. The changes involved are driven by essentially separate trends in English, which conspire to produce the recent examples to be discussed here.

## 2 The data

The forms and the changes have been manifested in English over several centuries, but the examples I shall focus on seem to have appeared in the written form relatively recently. For reference I will label the unaltered forms as A and the later, more recent ones as B. The forms are exemplified in (1).

(1)	A	B
	boxed sets	box sets
	fine-toothed comb	fine tooth comb
	skimmed milk	skim milk
	arched corbel table	arch corbel table

The examples in List A are of the form:  $NP[Adj_{pp}N]$ ; those in List B are of the form:  $NP[NN]$ . ( $Adj_{pp}$  = a past participle used as an adjective.)

Although this change may have accelerated during the post-World War II period, it should be noted that there is evidence that it has a much longer time-span than this. Trudgill (personal communication) has pointed out that the earliest recorded instance of *skim milk* in the *Oxford English Dictionary (OED)* is 1598 from Shakespeare’s *Henry IV, Pt 1* II. iv. 32: ‘I could deuide my selfe, and go to buffets, for mouing such a dish of skim milke [1623 edition *skim’d Milk*] with so honorable an action.’ However, the form with *skim* is not necessarily a reduced form of *skimmed milk*, as it is analysable as N + N. (I shall return to the issue of standardized writing below.) Be that as it may, *skim milk* appears on the menu on the wall behind the counter of today’s coffee shops.<sup>2</sup> Other examples, such as *ice cream*, have stabilized during the twentieth century, as can be seen from the spelling, whereas other items still show variable spelling: *iced tea/ice tea* (see the *OED*).

Written evidence of this kind of phenomenon and the uncertainty surrounding it can be seen in examples such as the following: *triple cook(ed) chips* (Tesco website: the website has *-ed*, but the packaging does not); *six-wheel(ed) van* (railway vehicle, e.g. Hatton’s website, or road vehicle, Google search); *different size boards* (Google search: Images for different size boards). The example of the title, *box set*, is ubiquitous on television on-demand sites and TV adverts, e.g. BBC i-Player.

<sup>2</sup> Many of the examples I refer to specifically and similar examples can be found on the Internet. In many cases both the ‘full’ and the truncated forms can be found, sometimes on the same site.

## 3 Phonology: the phonetic realizations

Most dialects of English have realizations involving the simplification of consonantal sequences. The circumstances under which these occur are very restrictive and the process (if we wish to call it that in a synchronic grammar) is optional but very common. I distinguish here between clusters, which belong to one syllable, and sequences, which belong to more than one. These realizations do not affect initial clusters but may affect syllable-final ones, if there is an intervening morpheme boundary, e.g. [lɪf(t)s]; a word boundary will produce the same effect, as in the examples below. (See Lodge 1984/2015 for many examples of this phenomenon from different locations in the UK.) Examples of such realizations are in (2).

- (2) last time [lAs tɪm]  
 send me [sem mi] (with place assimilation)  
 ask me [As mi]  
 postman [p«Usm«n]  
 corned beef [kɔm bɪf] (with place assimilation)  
 boxed set [bɒks set]

(The vowel qualities are irrelevant; I have simply chosen Southern British tokens.) The environment in which these realizations occur is as follows: the second stop consonant of a sequence can be suppressed, iff it has the same phonation as the preceding one and there is a morpheme boundary between the second and third consonants.<sup>3</sup> This final requirement is necessary to exclude word-initial consonant clusters such as [spl-], [str-] and [skw-].<sup>4</sup> All the examples in (2) fulfill this condition, whereas the ones in (3) do not and hence are not subject to such realizations.

- (3) sent me  
 help me  
 thank me  
 milkman  
 string  
 spleen  
 squeak

Although the common examples affect single words and two-word sequences, there may be occasions where more than two words are involved. Ladefoged (2006: 199) gives the example of *I should have thought* in which the auxiliary verbs have no vocoid articulation

<sup>3</sup> The common descriptive term 't/d-deletion' does not do justice to the subtle environmental constraints on the operation of the rule in many varieties of English.

<sup>4</sup> Although I give a realization of *clasp me* as [klas me] in Lodge (1981: 35), the loss of labial (bilabial and labio-dental) consonants is unusual, although it has clearly happened in the past, e.g. in *raspberry*. Nasals are not subject to loss either, as in *kiln-dried*, for example. In fact, there are few consonant sequences in morpheme-final position in English that involve C + nasal or labial with matching phonation: *bulb, alb, wasp, gasp, film, elm, kiln, shelve*.

130 and no voicing, so the two words plus the initial consonant of the main verb are realized as  
 131 the sequence [StfT], which could also be realized as [SfT] under the same conditions as *last*  
 132 *time* etc.

133 It is important to point out that the length of the contoid articulations can vary. Even if  
 134 the oral stop phase is not articulated, compensatory lengthening can occur extending the  
 135 preceding articulation into the final coda place, as in (4), where the third consonant is  
 136 homorganic.

137 (4) [semm mi]  
 138 [bɒkss set]  
 139

140 Without detailed spectrographic analysis across a number of tokens it is only possible to  
 141 postulate that such extended realizations occur in those cases where the following  
 142 consonant matches the preceding one. Simple structures across the first two consonants  
 143 of the sequence with a word boundary and no following homorganicity, as in *last time*,  
 144 *ask me* and *postman*, are unlikely to be subject to what I referred to above as  
 145 compensatory lengthening, though *last seen* and *ask Sue* might well be because of the  
 146 homorganicity of the third consonant. Such examples could equally well be treated as  
 147 instances of assimilation. However, the main point is that the sequences under  
 148 consideration can be simplified in all cases. It may even be the case that the consonant  
 149 sequence simplification might be extended to *box set* with the realization [bɒk set], but  
 150 this is not the same process, as it is not the stop that is affected: rather it is an instance of  
 151 a simplification of homorganic sequences, as in *Prime Minister*, for example, with one [m].

152 The evidence for the change in the structure of the Adj<sub>pp</sub> + N noun phrases (as in (5))  
 153 comes from recent spelling conventions, which are now very widespread and which we  
 154 will consider in the next section. We now see *box sets* advertised on television, or even  
 155 *boxsets* (cf. also *mixtape* from an advertisement on Spotify), and even technical  
 156 terminology, such as the art-historical terms *arch(ed) corbel table*, *interlace(d) rib* and  
 157 *arch(ed) buttress*, has been affected (for examples of a technical nature similar to these,  
 158 see Huber & Rieth (1988) and parallel volumes). So, what were Adj + N structures  
 159 have become N + N structures.

160 (5) NP[Adj<sub>pp</sub> N] > NP[N N]  
 161

162 It is only the participial adjectives or pseudo-participles that have changed their syntactic  
 163 category; the simple adjectival forms, such as *last*, or verb forms, such as *send* or *ask*, have  
 164 not. So, it seems that the change is not spreading through the language in a consistent way,  
 165 but only in restricted circumstances, based on realizational norms.

166 Another realizational change that can be perceived is that the stress patterns do not  
 167 always conform to the head stress rule. We know that *bláckbirds* can have various  
 168 colourings, *black bírds* cannot. This is a consistent pattern throughout much, but not  
 169 all, of the English lexicon.<sup>5</sup> Commonly occurring examples, such as *box set*, as  
 170

171 <sup>5</sup> Giegerich (2009) draws a distinction between associative and ascriptive relationships in noun phrases, whereby he  
 172 shows that the stress pattern distinction is not as clear-cut as is usually claimed.

173 advertised on television, often have their main stress on *box*. The Adj + N structures, on  
 174 the other hand, have the stress on the N, unless the adjective is being contrasted with  
 175 another one, as in (6).

176 (6) They're bláck birds, not red ones.  
 177

178 We seem to have more evidence of the change from Adj + N to N + N, i.e. the move to  
 179 compound nouns. In English compound nouns are usually spelled separately, but the  
 180 fluctuation in cases such as *boxset* probably reflects uncertainty as to what the structure  
 181 and even the semantic relationship is.

182 Some of the stress variation relates to the place of the expression in the sentence. So, we  
 183 find:

184 (7) The mortgage rate is fix(ed) térm.  
 185 a fíx(ed) term mórtgage (rate)  
 186

187 This is in line with sets of similar disyllabic words, such as *thirteen* and *unknown*, as in (8).

188 (8) Thírteen people came to the party.

189 We only catered for thirtéén.

190 the únknown soldier

191 He was completely unknówn.  
 192

193 This does not seem to apply to *box set*.  
 194

#### 195 4 Writing

196  
 197 Having looked at the specifics of the change under discussion, I want to consider the  
 198 relationship between speech and writing a little more insofar as it has a bearing on the  
 199 change under discussion. Writing is conventional and so subject to cultural influences.  
 200 Complexity in writing reflects the fact that writing is a learned skill – one which  
 201 demonstrates variation in level of attainment throughout a society. It also reflects the  
 202 fact that writing can be reread as many times as the reader wishes, unlike speech,  
 203 which is fleeting. Early on in the learning process there is an attempt to teach the  
 204 relationship between the sounds of the spoken language and the letters on the page.  
 205 Alphabetic writing is often presented as a one-to-one relationship between letters and  
 206 sounds. Evidence that people who haven't necessarily attained a high level of writing  
 207 skills will sometimes use the spoken word as the basis of their written forms, witness  
 208 the commonplace confusion of *your/you're*, *there/their* and even examples driven by  
 209 assimilated forms, e.g. *Belgium waffle*, to be seen on many café menus.

210 We should also note that, as written forms developed, the language often used as a  
 211 model for writing European languages was Latin. This means that the structures  
 212 required in the written form fitted in with Latin norms. This would explain why so  
 213 many of the participles and pseudo-participles have been used in attributive position  
 214 because they are adjective-like. Note, however, that some current commentaries on  
 215 grammar refer to nouns in this position as attributive, too:

216 Nouns that modify other nouns are called adjectival nouns or noun modifiers.  
 217 For our purposes, they are called attributive nouns. ([www.google.com/search?](http://www.google.com/search?client=safari&rls=en&q=adjectives+before+nouns&ie=UTF-8&oe=UTF-8)  
 218 [client=safari&rls=en&q=adjectives+before+nouns&ie=UTF-8&oe=UTF-8](http://www.google.com/search?client=safari&rls=en&q=adjectives+before+nouns&ie=UTF-8&oe=UTF-8))

219 Such comments do not solve the issue of the structure involved and avoid any discussion  
 220 of compounding.

221 It is interesting that spelling pronunciations have long been recognized as a (fairly  
 222 limited) mechanism of change, but ‘phonetic spellings’, which would describe  
 223 examples like *box set*, have usually been classed as errors and, therefore, disregarded  
 224 as a mechanism of change. In the light of what we are discussing here, this seems  
 225 misguided. There are historic examples of the reinterpretation of phonetic output,  
 226 suggesting that many people acquired these constructions through speech, such as  
 227 *spitting image* < *spit and image*, where the syllabic [n] has been reinterpreted as *-ing*.  
 228 Similarly, there is equivocation about the words of the late nineteenth-century singing  
 229 game: *Nuts in May*. This was written down in the 1880s in that form, but it makes little  
 230 sense to be gathering nuts in late spring. Other versions of what must have been the  
 231 sung version are *knots of may* (= the groups of hawthorn flowers) and *nuts and may*  
 232 (nuts and haws in autumn). A much older example of reinterpretation of realizations is  
 233 furnished by Middle English *at the last*, which underwent fricative to stop assimilation  
 234 and was written as *atte last*, which is then subject to unstressed vowel loss and ends up  
 235 as modern English *at last*.

236 Writing is inevitably based on an interpretation of speech. The kind of representation  
 237 that employs segmental alphabetic writing may be based on morphological units, on  
 238 phonological units or, occasionally, on phonetic output. A morphologically based  
 239 system is found in much of the Graeco-Latinate vocabulary of English: *sane/sanity*;  
 240 *photograph/photography/photographical*; *electric/electricity*, where the base form is  
 241 maintained in the same form irrespective of the pronunciation. Simple English words,  
 242 typically of Germanic origin, are spelled with simple segmental letters: *cat*, *dog*, *nut*.  
 243 The final type of representation, based on phonetic output, is less common because  
 244 native speakers are unaware of the realizational patterns they use in speech and, it is  
 245 claimed, perceive speech phonologically. However, examples such as *box set* indicate  
 246 an awareness of realizational detail, as in the case of *Belgium waffle*, too, given in  
 247 section 4 above. As this kind of written form gathers currency, it has as a consequence  
 248 a reinterpretation of the structure, as we have seen above. It does not involve a  
 249 phonological change, but a reinterpretation of the spoken sequence at a lexical or  
 250 syntactic level.

## 252 5 Compounding

254 We have already noted fluctuation in the spelling of *box set*. This may not be significant in  
 255 that English does not always spell compound nouns as one word (unlike German and  
 256 Modern Greek, for instance). In speech it is the stress pattern that indicates  
 257 compounding in many cases. But we have another orthographic change, which has an  
 258 effect on the structure of NPs, namely the lack of apostrophes in ‘possessive’

259 constructions. At one time these would have been perceived as errors in learning the rules,  
 260 but the lack of apostrophes, especially in plural possessive nouns, is now so widespread  
 261 that even in official titles and documents they fail to appear.<sup>6</sup>

- 262 (9) Citizens Advice Bureau  
 263       councillors surgeries  
 264       governors briefing  
 265

266 These are comparable to compound nouns with a plural first element, as in (10).

- 267 (10) High Plains drifter  
 268       antiques fair  
 269       sales manager  
 270       arms race  
 271

272 Here we are witnessing another change: in this case from  $N_{\text{poss}} + N$  to  $N + N$ , which  
 273 suggests the latter is the preferred structure for native speakers. Harris & Campbell  
 274 (1995: esp. 200–15) discuss the origins of compounds in a variety of languages. One  
 275 source is Genitive + Noun. This seems to account for even the more recent examples  
 276 with plural nouns in (9) and (10). However, in line with avoiding describing current  
 277 structures in terms of an earlier stage or even a different language, we should avoid  
 278 referring to the modern English examples as involving any kind of ‘genitive’. Whereas  
 279 this may well be the origin of the compounds under consideration, modern English has  
 280 no genitive.<sup>7</sup>

281       There seems to have been a tendency towards more compounding during the twentieth  
 282 century; a careful investigation of a selection of both nineteenth- and twentieth-century  
 283 texts would be needed to establish whether this is merely an impression. Nevertheless,  
 284 it is the case that the less overt syntax there is, the more the hearer/reader has to supply  
 285 an appropriate (or otherwise) interpretation of the string. Is (11) concerned with the  
 286 mental health of the Vice-Chancellor or has the taskforce been set up by him?

- 287 (11) The Vice-Chancellor’s mental health and wellbeing taskforce  
 288 (UEA internal memo)  
 289

290 This extension of compounding may be an influence from American English, but be that  
 291 as it may, the disparate changes in phonetic realization and orthographic conventions that  
 292 we have discussed in sections 2 and 3 have accelerated the trend. The lack of  
 293 morphological markers in English to denote word-class enables changes of category to  
 294 take place easily.  
 295

296 <sup>6</sup> Andy Spencer (private communication) has pointed out that apostrophe loss has been occurring slowly since the  
 297 seventeenth century. We no longer use it to pluralize foreign words such as *concerto’s* or *tomato’s*, or even  
 298 capitalized abbreviations and numbers, as in *PhD’s*, *MP’s*, *1930’s*. He also points out that loss of the apostrophe  
 299 probably reflects the fact that in many cases it is unclear whether the ‘possessor’ is singular or plural – and it is  
 300 probably both or either.

301 <sup>7</sup> I am trying here to distinguish the terminology of different linguistic levels. ‘Genitive’ refers to morphological  
 markers in a case system; it is not intended to be used as an indication of a semantic relation.

Compounding is always presented as a major component of the lexicon (see, for example, Bybee 1985; Katamba 1993; Harris & Campbell 1995; Haspelmath 2002). It is a major feature of the Germanic languages in particular. It was a productive part of word-formation in Old English, a time when many new concepts were coined. Many of the compounds of this period have been replaced, as in the following examples in (12).

- (12) læcecræft 'leech-craft' medicine  
 tungolcræft 'star-craft' astronomy  
 lofsang 'praise song' hymn  
 banhus 'bone house' skeleton

(See, for example, Hughes 2000.)

Several words are no longer recognized as compounds, though they were originally: for example, *husbonda* 'house dweller' *husband*; *wifmann* 'female person' *woman*.

The assumption is that the elements making up compound words, in particular nouns, can be classified according to syntactic categories. Because English has few morphological markers of word-class, as noted above, it is often the case that a word gets its category from being placed in a particular syntactic slot. *Kick* cannot be assigned to either V or N until it is in a sentence. In *kick-start* is it a verb or a noun? What criteria do we use to answer the question? This makes compounding relatively free, as the category is irrelevant inside the compound. It is true that N + N is taken to be the norm (cf. Hughes 2000: 344, Haspelmath 2002: 86), but we can find V + N (*think tank*) or Adj + N + *ed* (*green-eyed*) as a compound adjective, and other languages have other possibilities.

In terms of the construction, what is crucial is the Head versus Dependent relation, irrespective of word category. Indeed, Di Sciullo & Williams' (1987) proposal of a Right-hand Head Rule (see also Williams 1981) works extremely well for English. According to this proposal the rightmost element of a construction is its head. (There are exceptions to this, even in English, but we need not bother with the details here.) This specification includes both inflections and derivational suffixes. Since English has few morphological markers, a suffix will provide a morphological identity in cases where nothing else will, e.g. *box*: *boxes* (plural noun or third person singular, general tense): *boxed* (past tense/participle). For this reason many nouns have become verbs in recent years simply by putting them in a different slot and adding the appropriate endings where necessary, e.g. *progress* (with stress change); *appeal* (rather than *appeal against*); *reference* (rather than *refer to*).

In present-day spoken English and even some forms of the written language, e.g. colloquial journalism, we can find whole verb phrases or even sentences in the dependent position, as in (13).

- (13) a couldn't-care-less attitude  
 an I've seen it all before feeling



(Whether these forms are hyphenated depends very much on the writer.) We also find multiple co-ordinated dependents, as in (14). These occur in particular on menus and in product advertising (cf. also the example in (11) above).

- (14) ham-hock, grated cheese and festive chutney wrap  
 cutting-edge home security range  
 a butternut squash and coconut oil and soya alternative to cream cheese, topped with  
 Applewood Vegan coconut oil alternative to cheese and smoke flavoured pea and wheat  
 protein pieces

Even technical writing may demonstrate such long nominal constructions, as in (15).

- (15) the choir ambulatory four-part rib vault  
 root accent contrast preservation  
 consonant sequence simplification paradox

In technical documents relating to local government and planning there are even more extreme examples of compounding, which require considerable effort to understand, even by native speakers, as in (16).<sup>8</sup>

- (16) Draft North Lowestoft Heritage Action Zone Design Guide Supplementary Planning  
 Document (East Suffolk Council website)

## 6 A brief comment on acquisition

One aspect of these orthographic representations to consider is how we, as native speakers, acquire these forms. Either we learn them from the spoken language addressed to and spoken around us, or from written texts. This may have an influence on how we perceive their structure. One example given above in section 4, *spitting image*, suggests that most people learned the expression from speech. To take two examples from my own experience, I learnt *fine tooth comb* from speech and perceived it as an Adj + [N + N] construction (with variable main stress on either *tooth* or *comb*). On the other hand, I learnt *arched corbel table* from written technical art-historical texts. This also has the structure Adj + [N + N], though in this case the Adj is a past participle. In the earlier (A) version of the former example the pseudo-participle is *fine-toothed*, so the structure has apparently changed from Adj + simple N to a structure containing a compound N in my own speech and no doubt that of others. There are a number of pseudo-participial words in English based on nouns: *blue-eyed*, *gate-legged*, *low-backed*, *six-wheeled*. There are no verbs from which these participial-looking forms are derived, with or without the first element in front of the hyphen: *\*to (fine-)*

<sup>8</sup> Three speakers of Romance languages at the Edinburgh Symposium pointed out that French, Spanish and Italian could not tolerate such constructions; the Spanish speaker added that he had considerable difficulty in processing such English constructions. French, for example, has some compound nouns (though Head-first), e.g. *pause-café*, *essuie-mains*, but compare *corbel vault* with *voûte en tas-de-charge*. For an extended discussion of the semantics of NN-compounds, see Boase-Beier (1987: esp. 66-8).

388 *tooth*, \**to (blue-)eye*, \**to (gate-)leg*, \**to (low-)back*, \**to (six-)wheel*. (There are  
 389 homophonous forms to some of these, but they have a different meaning: *to back*, *to*  
 390 *wheel*; neither of these means 'to put X on something'.) However, in some cases a  
 391 back formation does occur and we find, for instance, *to triple-cook chips* (Great British  
 392 Cooks website: cf. the example at the end of section 2). On the other hand, I have  
 393 always analysed [skɪm mɪlk] as *skimmed milk*, i.e. as subject to the realization  
 394 discussed in sections 2 and 3, having been unaware until recently of a noun *skim*.

## 397 7 Concluding remarks

398 It appears that three essentially separate changes are conspiring to consolidate the most  
 399 recent examples that are under discussion here. One is realizational and part of the  
 400 phonological implementation component, whereas the other two are orthographical  
 401 and lexical. They all combine to produce more and more compound NPs rather than  
 402 analytical ones.

403 The realizational changes have not altered all Adj<sub>pp</sub> + N structures because of the  
 404 restricted environments in which they can apply. So we still have *grated cheese*, *malted*  
 405 *milk*, *spilt milk*, *sent mail* (with possible assimilation of the /d/ or /t/), but *box set*,  
 406 *gate-leg table*, *skim milk*. The last of these examples has already been commented on  
 407 above: it could be seen as a reduced form of *skimmed milk* or as a N + N compound.  
 408 However, it is not exocentric either (as *pickpocket* and *killjoy* are): *skim milk* is a kind  
 409 of milk. Furthermore, there is something decidedly odd about (17).

410 (17) ?\* I'd like two coffees, please, one with ordinary milk and one with skim.

411 In this case *skimmed* would have to be used, but it would be an orthographic trick to claim  
 412 that *skim* and *skimmed* were environmentally conditioned alternants.

413 We may not be able to decide definitely whether we are dealing with a change in  
 414 progress or stable variation, partly because it only occurs in the restricted  
 415 circumstances we have been discussing, and partly because there are still people alive  
 416 who use the older forms with Adj<sub>pps</sub>.

417 It is also the case that there are no phonological consequences to the change in terms of  
 418 underlying phonological units, only realizational ones. This is a common enough  
 419 phenomenon in a number of well-known historical instances. For example, in Old  
 420 English, [θ] and [t] alternated in specific contexts. There was a general constraint on  
 421 fricative + fricative sequences, which has resulted in alternations in modern English,  
 422 which are no longer recognized, as it is no longer productive, e.g. *width*, *length* but  
 423 *height*, *weight*.<sup>9</sup> The results of this alternation can still be seen in some northern  
 424 varieties of English: the second-person singular pronoun (*thou* in old-fashioned  
 425 standard English) alternates depending on the preceding consonant, as described  
 426

427  
 428 <sup>9</sup> The *gh*, of course, represents an earlier voiceless velar fricative, so the nominal suffix appears as [t] not [θ]. The  
 429 constraint no longer applies, so sequences of two fricatives are quite common. Interestingly, *fifth* and *sixth* often  
 430 appear as late as Tudor times as *fiſt* and *sixt*.

431 above. The forms of the definite article in such varieties underwent similar variation, but  
 432 in this case the pattern today has changed the environments in which each variant occurs  
 433 and the variants have been generalized according to a new pattern: [θ] before vowels and  
 434 [ʃ] elsewhere. (For details, see Lodge 2010.) What will happen in the case of forms like  
 435 *box set* that are under consideration here is unpredictable, though there is evidence that in  
 436 some lexical items the environmentally triggered realizations have been extended into  
 437 environments that do not fit the template that was presented in section 3, e.g. *good size*  
 438 *flat* in accordance with the template, but *good size apartment* where the following  
 439 noun starts with a vowel.

440 It is also possible that it is only those participial forms that end up homophonous with  
 441 an already existing noun that are undergoing the change as indicated by the orthography. If  
 442 we consider *baked beans*, for example, which can be realized as [beIk bIɪnz] in line with  
 443 our other examples, I have found no evidence that this is represented orthographically as  
 444 *\*bake beans*. *Bake* is a verb and V-first compounds are assumed to be unproductive in  
 445 English (see Haspelmath 2002: 86), so less likely to be new formations.<sup>10</sup> Similarly  
 446 with *refined sugar*, since *refine* is only a verb.

447 One may wish to ask what the drivers of this change might be. As a Germanic language,  
 448 English has a predisposition to produce compounds (and not just nouns), as we have seen  
 449 already. This gives the linguistic framework within which this change can take place. In  
 450 addition there is the element of non-native speaker influence on the perception of normal  
 451 native-speaker realizations. That English is a worldwide language is part of the picture.  
 452 ‘English’ is not a consistent linguistic system. We have to be clear about which variety  
 453 we are discussing, and English ‘belongs’ to many different groups of people, including  
 454 non-native speakers as a lingua franca, so it is subject to many more influences today  
 455 than parochial versions were a hundred years ago. Many non-native speakers use  
 456 English as a lingua franca in all kinds of situations, especially commerce. Speakers of  
 457 languages that do not themselves tolerate consonantal sequences, such as Chinese or  
 458 Japanese, will reanalyse sequences. This can be transferred into the written form and  
 459 will then be well on its way to being normalized, if native speakers also take up the  
 460 reinterpretation, as seems to be the case in *box sets* and similar NPs.

461 As with all historical change, another important factor is analogy. In the case of *box set*  
 462 there are similar N + N structures that it can be aligned with, e.g. *pot plant*. Note that this  
 463 is not a reduced form from a past participle, which would not fit the realization rule template,  
 464 i.e. *potted plant* with [-tId]. Just as a pot plant is a plant in a pot, so a box set is a set in a  
 465 box.<sup>11</sup>

466  
 467  
 468  
 469 <sup>10</sup> *Bake* on its own does not seem to be a noun, although related compound forms are: *tray-bake*, *bake-off*. In the case  
 470 of *baked beans* there may be commercial pressure to keep the orthographic form unchanged, as it is part of the  
 471 marketing of Heinz (and other) baked beans. On the suggestion of one of the anonymous referees I googled  
 472 *like bake beans*, to which the first response was: ‘Did you mean: like *baked* beans.’

473 <sup>11</sup> Note that in the case of *box set* we are not dealing with a box of anything. Although originally it was used in  
 reference to a set of DVDs or CDs in a box, it is now used to refer to a series of programmes all available at  
 once on catch-up TV. To me a *box set* should mean ‘a set of boxes’, not ‘a set of DVDs in a box’.



517 To fit the traditional Det Adj N template those items that are (pseudo-)past participles  
518 would have to end in *-ed* to match the predicative position. This is clearly no longer  
519 the perception of speakers/writers in the examples under discussion. Phonology is  
520 assumed to represent abstract speaker knowledge and it is assumed that native speakers  
521 are aware of only phonological units, not the details of phonetic implementation. This  
522 assumption may be questioned in some cases, such as those under discussion, since  
523 awareness of phonetic realization seems to be operating, as evidenced by some of the  
524 spellings. But the consequence of some of these changes is that speakers are unsure of  
525 what the resultant structure is.

526 The question here is whether such long NPs are, in fact, examples of a simple  
527 concatenation of elements. It is possible to propose that in much modern writing  
528 simpler elements of structure from speech are being reintroduced. The claims of  
529 Everett (2017) regarding different types of grammar may be of relevance in trying to  
530 find an answer to this intriguing problem. There seems to be evidence that both  
531 hierarchical and non-hierarchical structures can operate in one and the same language  
532 variety. This is not a question I can attempt to answer in this article.

533 Since much work in linguistics, especially syntactic investigations, takes standard  
534 written material as its data, one might legitimately ask to what extent that reflects the  
535 grammar of the language as spoken every day by native speakers (see also comments  
536 by Miller 2011). Standardized written forms of only a fraction of the world's languages  
537 have been around a relatively short period of time in comparison with the history of  
538 speech and they have had to be taught/learned (and invented). This means that traditions  
539 of linguistic analysis and norms have often been set with reference to some other norm.  
540 From the sixteenth to the nineteenth century Classical Latin was used as the model for  
541 such grammars. The effects of this have been ridiculed by twentieth-century analysts:  
542 the 'declension' of English nouns, the ban on split infinitives, possessive adjectives,  
543 though some of these are still to be found in pedagogical grammars. However, it might  
544 be said that describing colloquial speech, or even colloquial written forms of the kind  
545 under discussion here, in terms of a syntactic theory based on standard written forms  
546 makes the same erroneous assumptions as describing English in terms of Latin.

547 *Author's address:*

549 *School of Politics, Philosophy, Language and Communication Studies*  
550 *University of East Anglia*  
551 *Norwich Research Park*  
552 *Norwich NR4 7TJ*  
553 *UK*  
554 [k.lodge111@btinternet.com](mailto:k.lodge111@btinternet.com)

#### 556 References

- 557 Boase-Beier, Jean. 1987. *Poetic compounds*. Tübingen: Max Niemeyer.  
558 Bybee, Joan L. 1985. *Morphology*. Amsterdam: John Benjamins.  
559

- 
- 560 Di Sciullo, Anna-Maria & Edwin Williams. 1987. *On defining the word*. Cambridge, MA: MIT  
561 Press.
- 562 Everett, Daniel. 2017. *How language began*. London: Profile Books.
- 563 Giegerich, Heinz. 2009. The English compound stress myth. *Word Structure* 2(1), 1–17.
- 564 Harris, Alice C. & Lyle Campbell. 1995. *Historical syntax in cross-linguistic perspective*.  
565 Cambridge: Cambridge University Press.
- 566 Haspelmath, Martin. 2002. *Understanding morphology*. London: Arnold.
- 567 Huber, Rudolf & Renate Rieth. 1988. *Glossarium artis 6: Gewölbe: Voûtes: Vaults*. Munich: Saur.
- 568 Hughes, Geoffrey. 2000. *A history of English words*. Oxford: Blackwell.
- 569 Katamba, Francis. 1993. *Morphology*. Basingstoke: Macmillan.
- 570 Ladefoged, Peter. 2006. *A course in phonetics*, 5th edition. Boston, MA: Thomson Wadsworth.
- 571 Lodge, Ken. 1981. Dependency phonology and English consonants, *Lingua* 54, 19–39.
- 572 Lodge, Ken. 1984/2015. *Studies in the phonology of colloquial English*. London: Croom Helm.
- 573 Lodge, Ken. 2010. Th'interpretation of t' definite article in t'North of England. *English Language  
574 and Linguistics* 14(1), 111–27.
- 575 Miller, Jim. 2011. *A critical introduction to syntax*. London: Continuum.
- 576 Williams, Edwin. 1981. On the notions 'Lexically related' and 'Head of a word'. *Linguistic Inquiry*  
577 12, 234–74.

#### References to online texts

- 578 BBC i-Player: [www.bbc.co.uk/iplayer/categories/drama-and-soaps/featured](http://www.bbc.co.uk/iplayer/categories/drama-and-soaps/featured)
- 579 Hatton's website: [www.hattons.co.uk](http://www.hattons.co.uk)
- 580 Tesco website: [www.tesco.com/groceries](http://www.tesco.com/groceries)
- 581 Great British Chefs website: [www.greatbritishchefs.com/how-to-cook/how-to-make-triple-cooked-chips](http://www.greatbritishchefs.com/how-to-cook/how-to-make-triple-cooked-chips)
- 582 East Suffolk Council: [www.eastsuffolk.gov.uk/2019/north-lowestoft-heritage-action-zone-design-guide/](http://www.eastsuffolk.gov.uk/2019/north-lowestoft-heritage-action-zone-design-guide/)

583  
584  
585  
586  
587  
588  
589  
590  
591  
592  
593  
594  
595  
596  
597  
598  
599  
600  
601  
602