

Lenition and T-to-R are differently salient: the representation of competing realisations of /t/ in Liverpool English dialect literature

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1. Introduction

The orthographic variation found in contemporary dialect literature is sometimes dismissed as *ad hoc* and unenlightening. Grant (2007: 157), for example, sees little value in “‘comical’ pronunciations or eye-dialect renditions of pronunciations of otherwise perfectly ordinary Standard English words, such as *dem* for ‘them’”. In this chapter we develop the argument (first set out in Honeybone & Watson 2013) that precisely the opposite can be true: in the corpus of dialect literature that we consider (which represents the same variety that Grant discusses), there are subtle patterns in the ways that dialect features are represented, which accurately reflect the different degrees of *saliency* that we would expect of them.

The notion of ‘saliency’ will thus be important in what follows. Saliency has long been discussed in linguistics (see Kerswill & Williams 2002 and Racz 2013 for overviews); at heart, it simply means how ‘noticeable’ a particular linguistic feature is to speakers. In sociolinguistics, saliency is often operationalised in terms of Labov’s (1972) continuum of *indicators* (least salient) > *markers* > *stereotypes* (most salient), with the steps on the cline typically differentiated by speakers’ social evaluation of and commentary on particular linguistic features, and this ties in with a strand of argumentation in phonological theory which connects different degrees of saliency with different derivational levels (as in, for example, Kiparsky 1982, 2015). Many characteristics have been said to contribute to the saliency of a particular feature. Trudgill (1986: 11) for example, argues that a feature is salient if it is overtly stigmatised, in line with Labov’s (1972) definition of features which act as sociolinguistic ‘stereotypes’, and that saliency can be affected by the contrastive status of the feature in question, in line with a phonological approach. In Honeybone & Watson (2013), we expand on this by arguing that saliency is not only conditioned by lexical contrast, but that other phonological properties can also contribute to the saliency of a linguistic feature. We elaborate on this idea throughout this piece, referring to it as the *phonological saliency* of a linguistic feature.

On the empirical level, we focus here on the ways in which two phonological features of Liverpool English are represented orthographically in contemporary dialect literature: the lenition of /t/ and what Wells (1982) calls ‘T-to-R’. These seem structurally similar at first glance but, as we will see, are spelled with very different frequencies, indicating that they have very different degrees of saliency. This, we will argue, is predictable once we understand their phonological status. Section 2 of this piece describes the genre of dialect literature that we consider; section 3 describes the variety of English that provides our data and the corpus of dialect literature that we investigate; section 4 sets out our general framework for investigating dialect literature; section 5 describes the two phonological features that we focus on; section 6 sets out our new results and our explanation for them; and section 7 concludes.

2. Contemporary Humorous Localised Dialect Literature

Although it can sometimes seem hidden from view, there is a substantial amount of published writing involving non-standard forms of English. There are a number of different genres of such material, and some have long traditions. For example, ‘traditional’ dialect literature, often poetry, in which authors have sought to represent a non-standard dialect against a context of codified Standard English, stretches back to the 18th century. Such material has been assessed in a number of places for its potential as linguistic evidence for the dialects that it represents and their history (see, for example, Shorrocks 1996, Wales 2006, and the chapters gathered in Taavitsainen, Melchers & Pahta 1999 and in Hickey 2010).

In this chapter, we consider a genre that we identified in Honeybone & Watson (2013) as ‘Contemporary Humorous Localised Dialect Literature’ (CHLDL). CHLDL is *contemporary* in that it is current, being published continuously since the 1960s; it is *humorous* in that it is intended to amuse; it is *localised* in that it is published by regional publishers and is often only available in the area where the dialect is spoken; and it is true ‘dialect literature’ (rather than ‘literary dialect’, cf. Shorrocks 1996) in that it is written by, and is meant in large part for, an audience who speaks the dialect that it represents. CHLDL texts are normally well-received, and are kept in print. They typically have the form of small or thin booklets, and often masquerade as ‘phrase books’ or ‘dictionaries’, which means that they involve a direct comparison of (extreme and constructed) dialect sentences with absurdly formal Standard English ‘translations’. Some of this can be seen in the title of the series of texts that we consider: *Lern Yerself Scouse* (which could be translated as ‘Teach Yourself Liverpool English’ – the full details of our corpus are given in section 3). CHLDL exists for many varieties of English, and texts of this type have been considered elsewhere in linguistic work (e.g. Schneider 1986, Beal 2000, 2009, Johnstone 2009, Bennett 2012, Jensen 2013), but were never investigated in a fully quantitative way before Honeybone & Watson (2013).

While CHLDL can also give evidence about non-standard lexis and morphosyntax, our interest is in the extent to which CHLDL authors use respellings of General English words to represent the phonology of a non-standard variety and the ways in which it differs from the phonology of a standard/reference variety. We call the relevant standard/reference variety ‘General British’ (GB), following Cruttenden (2014). Such respellings rely on the fact that readers know the Standard English spellings of words, so that any divergence from this will be recognised and will mark out a form as ‘dialect’. It need not matter precisely how a word is respelled¹ – if a feature has a non-standard spelling it will draw attention to the fact that the form is pronounced differently in the dialect concerned. A reader who speaks the dialect represented will know this already, of course, and is just hoping to have the CHLDL text point this out. Nonetheless, such respellings are not random. Rather, they rely on speakers’ knowledge of the phon-to-graph correspondences that exist for GB, as these can be re-employed to represent the phonological features of a dialect which differ from those of GB (this thus also relies on readers having a fair knowledge of the phonology of GB). For example:

¹ The fact that respellings do not need to be phonologically transparent in order to mark out a particular phonological feature is not unusual in spelling – as Lass (2015: 107) points out: “[p]retty much any kind of ‘defective’ spelling will do, as long as the reader can be assumed to have some idea in advance of what a word is likely to be”.

- <u...e> typically spells [u:] in GB, as in *tune, rude, fluke*, so this grapheme can be used in dialect literature to represent [u:] (or the equivalent/corresponding vowel in the relevant dialect) in words in which it does not occur in GB, as in the retention of the long vowel in many northern English dialects in words like *cuke* 'cook'
- <'> typically indicates that something is absent in English orthography (as in contractions like *don't, I'm, she'd*), so this grapheme can be used to represent the absence of /h/, when a non-standard dialect is compared to GB, as in *'at* 'hat'
- <t> and <tt> typically spell an alveolar fortis stop in GB (as in [t^h] or [t] in *top, bat, matter*), so these graphemes can be used to represent [t] in TH-stopping, as in *nuttin'* 'nothing' – this works even though the TH-stopped form is dental (not alveolar, as in *top*, etc) because graphemes can be used to represent more than one sound – as, for example, in the GB cases of <th> representing both /θ/ and /ð/, <a> representing both the tense/long/free vowel (henceforth simply 'long') in *cart* and the lax/short/checked vowel (henceforth simply 'short') in *cat*, and <g> representing both /g/ and /dʒ/

In sections 4 and 6, below, we investigate such respellings on the basis of a corpus of CHLDL for one dialect of English. The next section explains what that corpus and dialect are. As we will see, the above holds fundamentally true, but needs to be modified in the light of the differential phonological salience of particular dialect features.

3. Liverpool English and Liverpool CHLDL

The variety of English that is represented in the texts that we consider is Liverpool English (LE). The dialect is known popularly as 'Scouse', and its sound system has been the subject of a number of studies, starting with Knowles (1973), and including Newbrook (1986), Watson (2007a) and Watson & Clark (to appear). Most of the features that distinguish the variety are phonological, and many of these have their roots in a process of new-dialect formation that occurred in Liverpool in the 19th century, due to vast in-migration which was driven by Liverpool's status during that time as the site of Britain's most important docks. The migrants came from nearby areas of northern England, further afield in England, Scotland and Wales, and in large numbers from Ireland, which is just across the Irish Sea from Liverpool and was then tightly connected to the city by sea links (see Honeybone 2007 and Cardoso 2015 for details of the formation of LE, and also the slightly different take in Crowley 2012). LE is tightly connected to the city of Liverpool and the nearby area, and, while it has many features which contextualise it as a 'northern English', it is quite distinct from neighbouring varieties (e.g. Lancashire English and Cheshire English). We discuss some of the phonological features that set it apart from all or most other varieties of English in the following sections.

LE is a well-recognised dialect in Britain, always featuring near the top of lists of 'accents in Britain', but it is typically rated low in subjective 'aesthetic' rankings of British varieties, no doubt due to its urban status and stereotypes connected with the city of Liverpool (see such work as Montgomery 2007 and Coupland & Bishop 2007). The flipside of this is that speakers closely identify with the dialect,

and see it as a central part of Liverpool identity (see, for example, Liverpool Echo 2008). LE was in at the start of the contemporary wave of CHLDL texts for British dialects, which began in the 1960s, and there is a set of CHLDL volumes which are well-known in the city: the *Lern Yerself Scouse* books. This is a series of books which together form our corpus. They follow the common CHLDL ploy of pretending to be a phrase book for humorous purposes – for example, the phrase *I'm werkin fer de Queen* is 'translated' as 'I am drawing unemployment benefit' (it could be glossed as 'I'm working for the Queen'). We do not consider the lexis, humour or attitudes portrayed in the volumes. Our focus is on the phonological knowledge about distinctly LE-related forms that is shown through the respellings used in the texts. For example, in the sentence just cited, the words *werkin* and *de* accurately represents aspect of LE vocalic and consonantal phonology respectively (as we discuss below); at the same time, the elision of <g> in *werkin* and the spelling of *for* as <fer> represent common English forms which are perfectly accurate but which are not distinctively tied to Liverpool English (in British varieties of English it is unexceptional for unstressed *-ing* to be realised as [-ɪn] and for *for* to be reduced to [fə], and given that <er> often spells a schwa in non-rhotic varieties, as in *matter*, *winner*, *ladder*, it is sensible to use that sequence to spell the reduced form of *for*). The full details of the volumes that form our corpus are as follows:

- Shaw, Frank, Stan Kelly & Fritz Spiegl. 1965. *Lern Yerself Scouse: How to talk proper in Liverpool*. (Vol 1). Liverpool: Scouse Press.
- Lane, Linacre. 1966. *The ABZ of Scouse*. (Lern Yerself Scouse: How to talk proper in Liverpool. Vol 2). Liverpool: Scouse Press. (ed. Spiegl, Fritz)
- Minard, Brian. 1972. *Wersia Sensa Yuma?* (Lern Yerself Scouse: How to talk proper in Liverpool. Vol 3). Liverpool: Scouse Press.
- Spiegl, Fritz (ed.). 1989. *The Language of Laura Norder*. (Lern Yerself Scouse: How to talk proper in Liverpool. Vol 4). Liverpool: Scouse Press.
- Spiegl, Fritz (ed.). 2000. *Scouse International: The Liverpool Dialect in Five Languages*. Liverpool: Scouse Press.

In sections 4 and 6, we present results of a quantitative analysis of the dialectal respellings of a number of LE dialect phonological features that are found in our CHLDL corpus. We compare this with descriptions of the same features on the basis of corpora of LE *speech*, making reference to two sets of data: the material elicited from 16 adolescent speakers via elicitation tasks for Watson (2007b) and the material collected for OLIVE – the *Origins of Liverpool English* corpus² (see Watson & Clark to appear) – which holds spontaneous conversation and reading data representing over 100 years in apparent time. OLIVE consists of subcorpora with three age cohorts: *younger* speakers, born between 1992 and 1994, *older* speakers, born between 1918 and 1942, and *archive* speakers, born between 1890 and 1943; we report below on some data from the archive speakers. In order to produce the numbers for the quantitative analysis of Liverpool English

² OLIVE was created thanks to the financial support of the Economic and Social Research Council, as part of a project entitled 'Phonological levelling, diffusion and divergence in Liverpool and its hinterland' (RES-061-25-0458). We also gratefully acknowledge support from the University of Canterbury's summer scholarship scheme. Thanks are also due to the North West Sound Archive for donating the recordings for OLIVE's Archive subcorpus.

CHLDL, the books were digitised, the Standard English ‘translations’ removed, and both standard and non-standard spellings in the LE text were manually annotated with two sets of tags. The first set provided an identifying label for words which are relevant to the particular dialect features in question and the second categorised the word as being spelled standardly or non-standardly – every *potential* occurrence of a non-standard orthographic form was thus counted (in compliance with Labov’s 1972 ‘principle of accountability’), to give a percentage figure for how frequently a particular dialect feature is respelled in the CHLDL corpus.

4. Representing dialect features in CHLDL and their phonological salience

In Honeybone & Watson (2013), we report on the extent to which eleven LE phonological dialect features are represented in the CHLDL corpus mentioned above, showing that these features are accurately represented in this DL corpus in fundamental ways. One central finding is that groups of the eleven features are represented to different extents, and that this differential representation makes linguistic sense. In this section, we summarise some of the findings of Honeybone & Watson (2013), to provide the context for our introduction of new results and analysis in section 6. We consider here only three of the features discussed in Honeybone & Watson (2013), in order to keep our discussion focused. We refer to them as (d), (th), and NURSE/SQUARE, adopting the round bracket convention which is often used to represent sociolinguistic variables and the key words (in small capitals) proposed in Wells (1982) to describe English vowel distributions.

The feature (d) refers to the fact that underlying stops in LE are subject to what is often called ‘Liverpool Lenition’. That is, there is a synchronic (variable) process through which the stops can be realised as affricates or fricatives in certain phonological environments – this involves the stops heading down a lenition trajectory (of the type discussed in many places including Lass 1984 – see Honeybone 2008 for a summary) for either one or two steps. Liverpool Lenition has been investigated in quite some work (such as Honeybone 2001, Sangster 2001, Watson 2007b). The full environmental patterning is complex, but some broad generalisations are clear: fricatives are common in final and (foot-/word-) medial positions (and affricates are also possible in these positions), while affricates but not fricatives are common in initial positions. Lenition is possible in stops at all places of articulation, but Watson (2007b) shows that it is most common for /t/, /d/ and /k/ (such that *light* can be realised as [laɪθ], *lad* as [lað], and *lock* as [lɒx]). The fricative results of the lenition of /t/ and /d/ involve a wide range of realisational possibilities (Watson 2007a, 2007b) – the phenomenon is phonetically gradient – what we transcribe here are common realisations: alveolar fricatives with a flat cross-sectional tongue shape (Pandeli et al. 1997).

Figure 1 shows that this lenition, while variable, is common. It shows the realisations of utterance-final /d/ in the speech of 16 adolescents from Vauxhall (a working-class area of Liverpool), who were recorded for Watson (2007b). Only 14% of underlying stops in final position are realised as stops in the female group – the others are all lenited in some way, with over 50% realised as fricatives; only 29% of such stops are realised as stops in the male group, with 45% realised as fricatives.

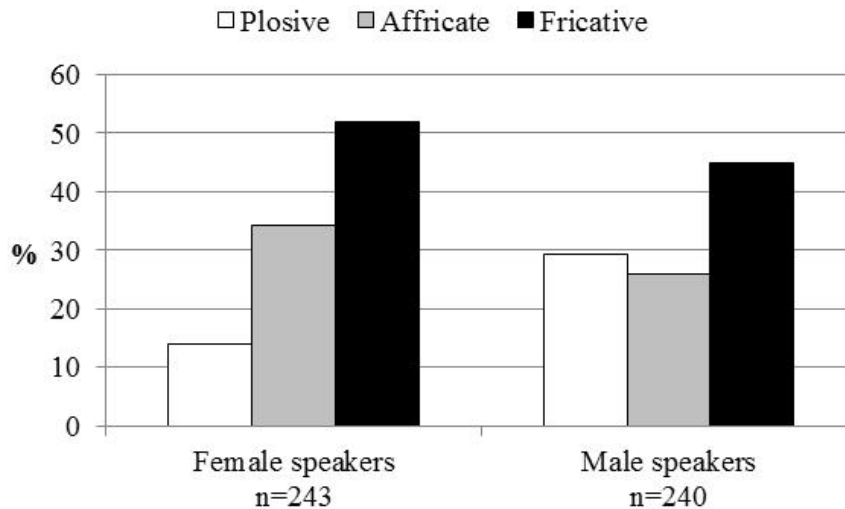


Figure 1. Realisation of utterance-final /d/ (in environment: V_##) in 16 adolescent speakers, adapted from Watson (2007b). N values are token counts.

Is this variability in (d) – that is, the lenition of /d/ – represented in the spelling of LE words in CHLDL? It can be. Examples include: *Folly me leedzer* (= ‘follow my leader’) where the medial /d/ in *leader* is written as an affricate, and *laz* ‘lad’, where the final /d/ is written as a fricative. The letter used in these spellings is <z>, which could imply that the lenition involves neutralisation with /z/. This is not the case, however, as the product of the lenition of /d/ is not normally a canonical grooved fricative (Sangster 2001 is explicit about the lack of neutralisation). Nonetheless, <z> is available in English spelling to represent a lenis alveolar fricative, and it is not unusual or problematic to use one grapheme to represent more than one phonological segment, as discussed above (in any case, <dz> is also unambiguously available to represent the outcome of lenition). We consider the *extent* to which the lenition of /d/ is represented in CHLDL once we have introduced the other two LE features that we compare here in this regard.

The feature (th) refers to the fact that LE traditionally has ‘TH-stopping’. That is, words which have /θ/ in most varieties of English can be realised with [t̪] in LE (the same is true of the lenis congener, but we focus on the fortis segment here). This is not a phonological *process* as it can affect all forms which have [θ] in other varieties – in all phonological environments – it is a context-free difference in terms of the realisation of a segment between LE and the reference variety. TH-stopping does not involve the neutralisation of a contrast which is available in other varieties: the stop is dental, so *thin* [t̪ɪn] still contrasts with *tin* [tɪn], for example. TH-stopping is relatively robust in LE, but stop realisations are minority forms in all quantitative reports. Figure 2 shows the number of occurrences of stops in fortis ‘TH-words’ in the speech of eight speakers from OLIVE’s Archive subcorpus. Stops occur around 30% of the time.

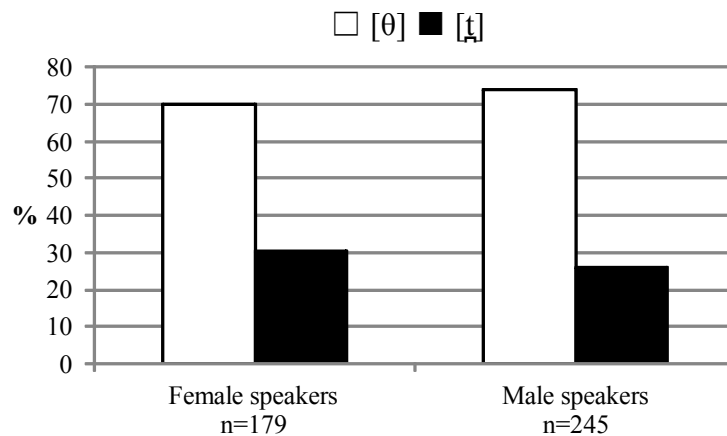


Figure 2. Realisation of (th) in four male and four female speakers from OLIVE's Archive subcorpus. N values are token counts.

The occurrences of stops for (th) is straightforwardly respellable, through the use of the Standard English conventions for the representation of /t/ (despite the fact that this collapses a contrast, as discussed above, because one grapheme can readily represent more than one phoneme). One example of the spelling of TH-stopping from our corpus is: *T'ingy* 'Anything or anyone whose name escapes the speaker' (= 'Thingy'), which in fact combines <t> and <'>, the latter implying that the <h> of Standard English spelling is omitted but also creates a grapheme <t'> which manages to preserve the contrast in spelling. The use of *de* in the above-mentioned example *I'm werkin fer de Queen* (and indeed the use of *dem* for 'them' mentioned at the very start of this piece) are also spellings intended to indicate dental fricative stopping, but of the lenis equivalent (that is, of (dh), not the (th) which is in focus here – (dh) and (th) pattern in the same way).

The NURSE/SQUARE feature refers to the fact that LE lacks a vowel contrast that virtually all other English varieties of English have: LE speakers typically use the same vowel in both the NURSE and SQUARE lexical sets, so that, for example, *fur* and *fair* are homophones. Because LE, like virtually all English varieties of English, is non-rhotic, (which means that there are no rhotics in codas at the surface), it is only the vowels which are relevant to discussion here (we set aside analyses which assume an underlying coda /r/ in non-rhotic dialects in order to keep our discussion focused). In GB and related varieties, the NURSE vowel is central [ɜ:], and the SQUARE vowel is fundamentally front, either as a long monophthong [ɛ:] or a front-starting centring diphthong [ɛə]. In LE, the same phonetic range (from front to central vowels) can be encountered, but the distribution of these vowel types is not determined lexically, so there is no contrast between them. Some speakers tend to use front vowels in the relevant words and some speakers tend to use central vowels (it is also clear that some use both, and also likely that there has been change over recent time in terms of the commonness of central vs front vowels). Figure 3 shows vowel plots of all monophthongs for eight speakers from OLIVE's Archive subcorpus. In this group, the four females have front vowels in NURSE and SQUARE and the four males have central vowels, but both groups show an absence of contrast, with the two vowels clustering together.

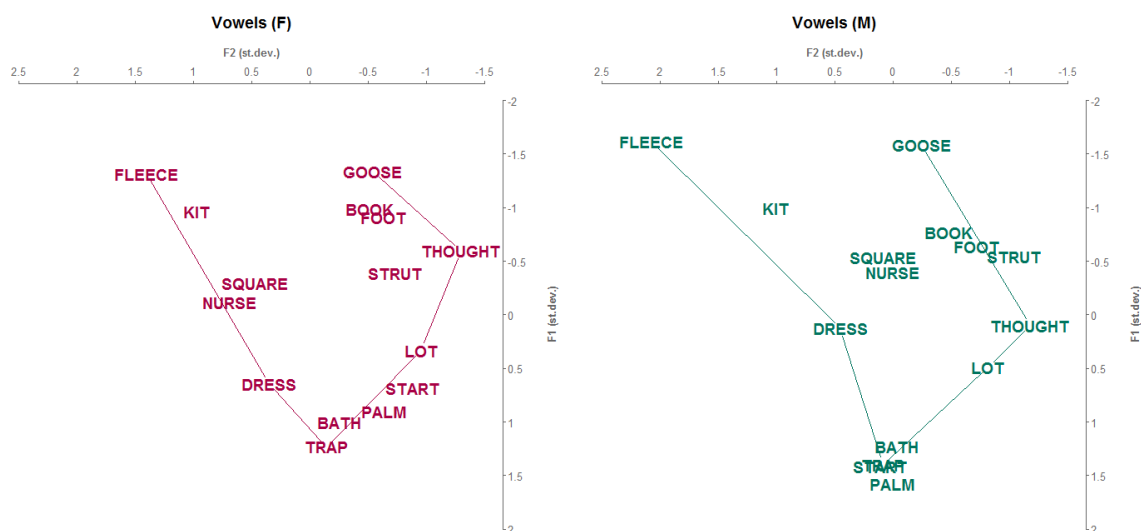


Figure 3. Vowel plots from 4 female speakers (F, left pane) and 4 male speakers (M, right pane) from OLIVE’s Archive subcorpus

The absence of contrast in the NURSE and SQUARE vowels can be straightforwardly represented in DL due to the fact that a number of graphemes are used to spell them in GB: for example, <er> in *person*, *where*, <ur> in *turn*, <ir> in *bird*, <air> in *hair*, <are> in *care*. If any of these graphemes are used to spell a word which uses a different grapheme in its Standard English form, attention is drawn to the vowel, which allows recognition of the fact that the absence of contrast between NURSE and SQUARE is a characteristic of LE which distinguishes it from GB (and almost all other dialects). This is shown in the use of *werk* in the above-mentioned example *I’m werkin fer de Queen*, and also in such spellings as *gerl* ‘girl’, *furs* ‘fares’, *tirn* ‘turn’ and *shairt* ‘shirt’, which are all found in our corpus.

4.1. To what extent are different features represented in CHLDL?

It is crucial for our argument here that the three LE dialect features just discussed are respelled to different degrees in CHLDL. Honeybone & Watson (2013 – henceforth H&W) present the results summarised in figure 4. This shows that (d) is respelled very infrequently (only 6% of the time), whereas (th) is respelled considerably more (just over 30% of the time), and NURSE/SQUARE is respelled quite commonly (60% of the time). The figures for (d) combine the occurrence of /d/ in all environments (initial, medial and final), and while lenition is least common word-initially, it is still possible there, and even if we only consider word-final /d/, the figures are essentially the same: 7% of words with word-final occurrences of /d/ are respelled.

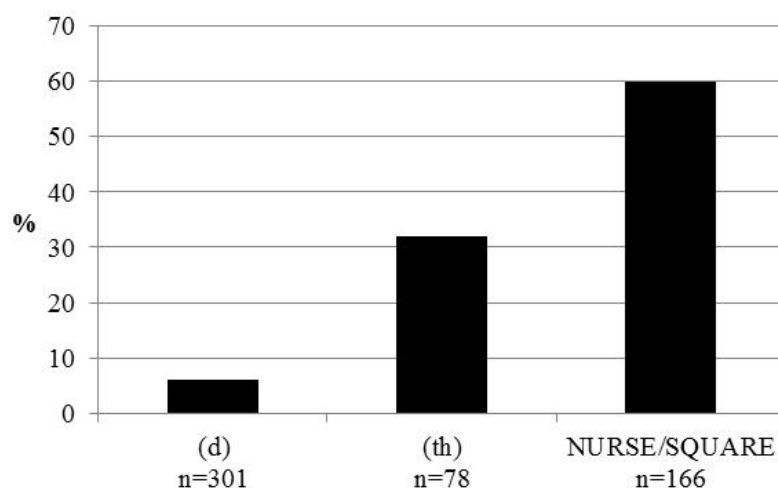


Figure 4. CHLDL respellings: (d), (th) and NURSE/SQUARE. Adapted from Honeybone & Watson (2013). N values are token counts.

Why are the three features represented to such different extents? It cannot be because authors are not able to represent them orthographically – our discussion above shows that all three are quite straightforwardly representable. It also does not seem to be related to the frequency of particular variants in speech – this may seem to be the case for (th), where approximately 30% of tokens of ‘TH-words’ in speech have stops (see figure 2) and approximately 30% of tokens of ‘TH-words’ in CHLDL are respelled (figure 4), but this is presumably a coincidence, because there does not seem to be a correlation for NURSE/SQUARE, as there is no evidence that the contrast is variably present, but relevant words are respelled only 60% of the time (figure 4), and, furthermore, lenition in final position in (d) is very common, at up to 50% fricatives and over 80% for any kind of lenition in utterance-final position (figure 1), but words with final /d/ are very rarely respelled (figure 4 and associated numbers).

H&W present two main explanations for the differing degrees to which dialect features are represented in CHLDL. One is that the *localisedness* of a feature can influence the extent to which it is represented in DL. For example, the absence of contrast in LE in NURSE/SQUARE when compared to GB is phonologically the same as the absence of contrast in FOOT/STRUT when compared to GB; however, FOOT/STRUT is much less commonly represented in our corpus of CHLDL (H&W show that FOOT/STRUT words are respelled just 11% of the time, compared to the 60% representation rate for NURSE/SQUARE). We interpret this difference as due to the fact that the NURSE/SQUARE feature is much more localised to Liverpool than is FOOT/STRUT (so it is more important to represent it in these Liverpool-focused texts). The FOOT/STRUT difference between LE and GB is one which is shared with all northern dialects – it is not a characteristic feature of LE, so is not that salient; on the other hand, the NURSE/SQUARE difference between LE and GB is shared with only one other variety that LE speakers are likely to be aware of³ – Lancashire English – all other relevant dialects have a contrast, like GB; this means that the

³ It may also be found in Middlesbrough English, where NURSE can have [ɛ:] (Beal, Burbano-Elizondo & Llamas 2012) and in Hull English, but these varieties are not well known outside the areas where they are spoken and it is likely that LE speakers are not aware of these facts.

NURSE/SQUARE feature is more localised to Liverpool, and is more salient. This explanation (which accounts for other things in H&W, too) does not help with the three features discussed above as they all have approximately similar localisedness: lenition of /d/ is not really found in any other dialect, TH-stopping is only found in one other locally-relevant variety (Irish English), and, as noted, NURSE/SQUARE is also only found in one other locally-relevant variety (Lancashire English). This does not predict the features' different degrees of representation in CHLDL – on this basis, (d) should be most commonly respelled.

The other explanatory factor that we propose in H&W, as introduced above and further discussed below, is that different degrees of *phonological* salience between dialect features can account for differences in the extent to which these features are represented in DL. This builds on ideas in work such as Trudgill (1986), McMahon (1991, 1994), Kerswill & Williams (2002), and much else, that speakers are aware of phonological phenomena to different degrees. The fundamental difference that we hang this on is the distinction between 'early phonology' and 'late phonology', which builds on the feed-forward metaphor in derivational phonology. This model assumes that underlying representations are the earliest stage in a derivation, and that underlying representations in part encode *contrasts*, which are phonological differences that are easily noticeable; and that phonological *processes* can intervene in a derivation in some kind of order, concluding in 'late' processes, which derive things that are typically not noticed by speakers.

This makes sense of the different degrees to which the three LE features are represented in our corpus of CHLDL:

- NURSE/SQUARE involves a systemic difference of contrast between dialects, at the earliest stage of phonology, and so is salient to speakers and should be a good candidate for representation in DL
- (d) involves differences in the realisation of a segment in certain specific, context-dependent phonological environments – a low-level, exceptionless phonological process – and so is not salient to speakers and hence is not a good candidate for representation in DL
- (th) involves a context-free difference of realisation between dialects – this does not involve a difference of contrast, but will always involve a difference between varieties, so may be expected to be placed between systemic differences and process-related differences in terms of its salience

It is clear that the two criteria (localisedness and phonological salience) could in principle interact, but it is also clear that phonological salience trumps localisedness – only if a phonological dialect feature is phonologically salient can it be a candidate for orthographic representation, and only then can localisedness play a role in determining the extent to which features are represented. In the rest of this chapter, we consider a dialect feature which was not fully considered in H&W, and compare it with a further case that we did consider in H&W. The two features are 'T-to-R' and the lenition of /t/ (which is closely related to the just-discussed lenition of /d/).

5. Doing different things to a /t/ in LE: T-to-R and T-lenition

Like other dialects of English from the north of England, LE features what Wells (1982) calls 'T-to-R'. This is a process in which underlying /t/, in certain specific environments, is realised in the same way as a dialect's underlying rhotic (which we transcribe as /r/). In many varieties, this is [ɹ], and such approximant realisations do occur in LE, but LE also has [ɾ] (a tap) as a common realisation of /r/, so T-to-R can involve /t/ being realised as [ɹ] or [ɾ] in LE. Wells (1982) describes T-to-R as typically applying cross-lexically, with a word-final /t/ in an intervocalic environment (with a vowel-initial word providing the following vowel), in contexts like *get off* and *shut up*. Subsequent investigations have confirmed this: Clark & Watson (2011) find only 1.5% of occurrences of T-to-R in a corpus of LE were in word-medial context, and Buchstaller *et al* (2013) find word-medial T-to-R massively dispreferred in comparison to word-final application in an investigation into the intuitions of speakers (this considered T-to-R in a different dialect, but all T-to-R dialects seem to pattern alike in this regard). In what follows we therefore consider T-to-R only with reference to the word-final environment, where it is robust. In our present context an obvious question arises: to what extent, if at all, is T-to-R represented in the respellings found in CHLDL? We investigate this in section 6, after a more detailed consideration of the nature of T-to-R, and of a phenomenon which it competes with in LE in terms of the realisation of /t/.

LE also features another process which competes with T-to-R as a way of realising word-final /t/. This is related to the phenomenon discussed as (d), above – as mentioned there, Liverpool Lenition also affects /t/, meaning that, if T-to-R does not apply to derive a rhotic, /t/ can be realised as an affricate or fricative. As with /d/, lenition of /t/ (henceforth T-lenition) is very common in speech. Watson (2007b) finds that less than 10% of occurrences of utterance-final /t/ are realised as a stop, as shown in figure 5. Affricates and fricatives are both as common in the female group, and fricatives are preferred in the male group (T-to-R cannot occur in utterance-final position, of course, so figure 5 shows how common T-lenition can be expected to be in environments where T-to-R cannot occur).

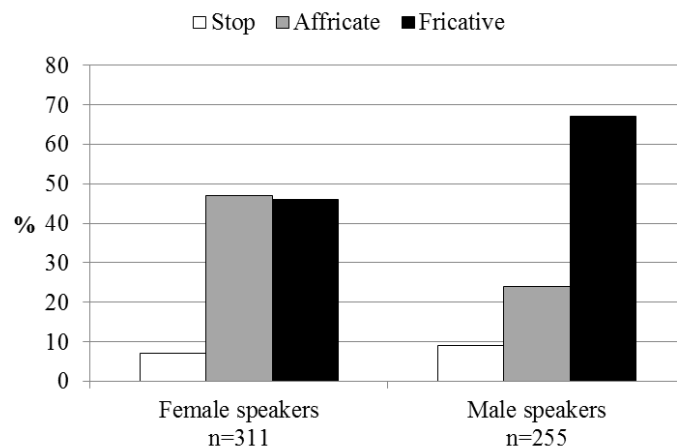


Figure 5. Realisation of utterance-final /t/ (in environment: V_##) in 16 adolescent speakers. Adapted from Watson (2007b). N values are token counts.

In the environment in which it *can* occur, T-to-R is also common. In order to see this we need to recognise a fundamental characteristic of T-to-R: it is lexically-specific. This means that there are only certain words in which it can occur – other words which have fundamentally the same phonological shape as those which allow T-to-R do not permit it. Caffrey (2011) employed the methodology developed for Buchstaller *et al* (2013) to consider some aspects of T-to-R in LE. This methodology probes the intuitions of speakers using a questionnaire, asking speakers indirectly whether it is possible to pronounce specific T-final words with a rhotic. All 24 informants agreed that it would be normal for them to pronounce the /t/ in the word *not* as a rhotic if it occurs in the phrase ‘oh no – not again’, and all informants also agreed that they would never pronounce the /t/ in the word *knot* as a rhotic if it occurs in the phrase ‘oh no – he’s tied it in a knot again’. This shows that it cannot be any aspect of the phonology of the word which determines whether it can undergo T-to-R, as *not* and *knot* are homophones – it must be marked in some way in the lexical entry of the word. The full details of the methodology employed to get such results are given in Buchstaller *et al* (2013), and more details of the results of Caffrey (2011), along with a phonological analysis, are given in Honeybone (in preparation), but the basic point is clear: we can distinguish between ‘T-to-R words’ and ‘non-T-to-R-words’.

Clark & Watson (2011) considered a considerable spoken corpus of LE and found rhotics in only twelve T-final words: *let, bit, not, put, at, that, what, lot, get, got, it, but*. These words crop up again and again in descriptions of T-to-R (such as Broadbent 2008 and Asprey 2008), so it is clear that all dialects with T-to-R share a core set of T-to-R words, although different dialects may have slightly different inventories of words which undergo the process: Buchstaller *et al* (2013) find that *fit* is also a T-to-R word in Newcastle upon Tyne, for example. All of these words comply with Wells’ (1982) other basic claim about the process: that the vowel before the /t/ needs to be short. The results of a search of the OLIVE archive materials for the purposes of this piece are given in figure 6, which shows that T-to-R occurs (in a V_#V environment) to different extents in different words (nearly 70% of the time in *got*, for example, and nearly 20% of the time in *it*), but except for a few of these words (discussed below), it is robust (even though it only occurs 18% of the time in *it*, for example, that still involves 18 occurrences).

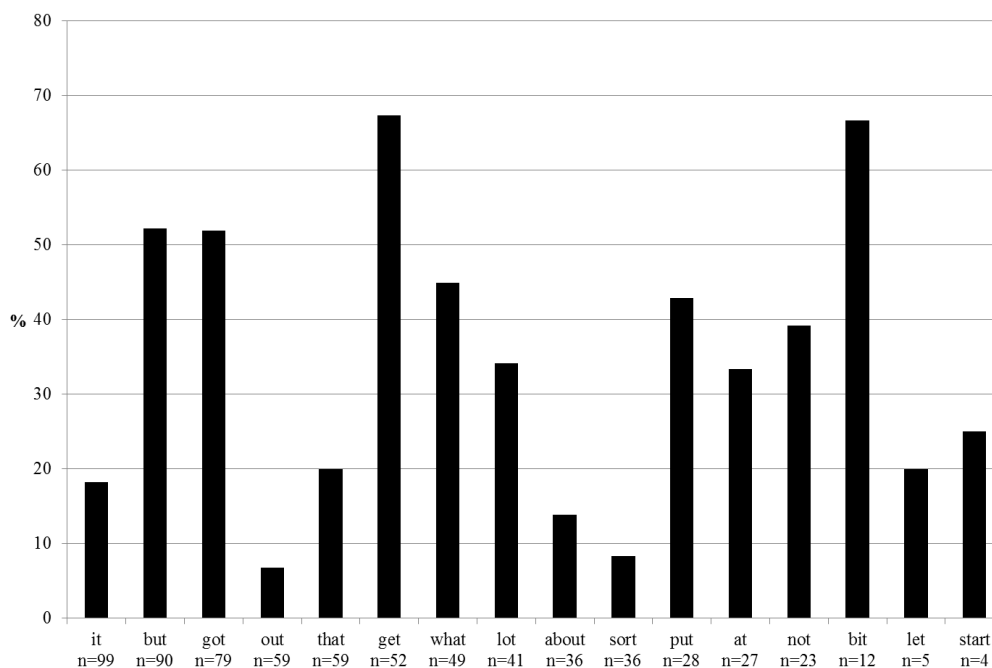


Figure 6. Frequency of occurrence of T-to-R (in environment: V_#V) in four male and four female speakers from OLIVE's Archive subcorpus. N values are token counts.

This shows the same twelve words just mentioned, but also a few occurrences in four other words: *out*, *about*, *sort*, *start*. These latter words may require further consideration as they all have long diphthongs or monophthongs lexically, which is surprising given most previous descriptions of T-to-R. The words *out* and *about* both occur with a rhotic four times in the corpus, so it is unlikely that this is a misinterpretation of the data; *about* is also reported to be a T-to-R word in Black Country English in Asprey (2008), and was tested by Caffrey (2011) for LE, who found that all informants agree that T-to-R is possible in the word. In *start*, a rhotic-like realisation is only attested once, in an utterance which is not completely clear, so it may be that a rhotic was not intended and thus, in fact, *start* is not a T-to-R word; *sort* is analysed as having a rhotic three times in the OLIVE materials, so it cannot be dismissed so easily. A full consideration of this is beyond the scope of this chapter, however. As it is at least possible that all these words have T-to-R in the OLIVE archive subcorpus, which contains recordings from speakers who were adults around the time of the first publication of the DL considered here, we take these 16 words as the set of 'T-to-R' words for LE.

Although it is lexically-specific, T-to-R is a productive process. Buchstaller *et al* (2013) show that speakers find it just as acceptable in an infrequent collocation (likely never encountered before), such as 'get Ethel' as they do in a normal collocation such as 'get about', indicating that it is productive with those words that allow it. Both T-to-R and T-lenition are thus phonological processes found in LE, and both count as dialect features, as neither occur in GB. If we focus on the word-final environment in which both can occur (in order to compare them), then T-to-R can be understood as a generalisation of the sort given in (1), which assumes that the derived rhotic is realised in the same way as the underlying rhotic (due to a separate generalisation), and note that the rule only applies to

certain words (see Honeybone, in preparation, for a non-arbitrary way of restricting the process to specific words); and the relevant part of T-lenition (its full environment is broader) can be understood as a generalisation of the sort given in (2), which uses [θ] as a cover-symbol for all lenited realisations. Their applicability is summarised in (3).

(1) $t \rightarrow r / V_ \#V$

(2) $t \rightarrow \theta / _ \#$

- (3) (a) if a T-to-R word is followed by a vowel ($_ \#V$), T-to-R can occur
 (b) if a T-to-R word is followed by a consonant ($_ \#C$) or is in utterance-final position ($_ \#\#$), T-lenition can occur
 (c) if a non-T-to-R word is followed by a vowel ($_ \#V$), or a consonant ($_ \#C$) or is utterance-final ($_ \#\#$), T-lenition can occur

Are these two LE dialect features represented in CHLDL? Both *are* representable in spelling, and respellings are found in the CHLDL corpus for both. The rhotic product of T-to-R can be straightforwardly spelled using the letter <r> (or <rr>, using a doubled consonant to indicate shortness in the preceding vowel), given that it is definitional for the phenomenon that it neutralises /t/ with /r/. One example found in our corpus is: *Ee azzin gorra potter piss in* ‘That gentleman’s economic status leaves a lot to be desired’ (= ‘He hasn’t got a pot to piss in’), where *got* – a canonical T-to-R word – is spelled in a way that clearly indicates T-to-R. The product of T-lenition can be spelled in an analogous way to that used for the lenited realisations of (d), discussed above – using the graphemes that are employed in Standard English spelling to represent the fortis alveolar fricative /s/, because the product of T-lenition is also a fortis alveolar fricative. This is indeed attested, in such cases as *oh rice* ‘very well then’ (= ‘oh right’), where <ce> is used.

Are T-to-R and T-lenition represented to the same extent? T-to-R is not strongly localised as it is found throughout the English north, and down into the Midlands (see Buchstaller *et al* 2013), while T-lenition is quite highly localised, found only in Liverpool and a few other dialects (Irish English, Middlesbrough English – see Jones & Llamas 2008), so this would predict that T-lenition should be represented in orthographic forms more commonly than T-to-R. We suggested above, though, that phonological salience can trump localisedness. These two phenomena are both phonological processes, however, so might be expected to score equally in this regard. We show in the next section that there are good reasons why this is not the case.

6. Representations of word-final /t/ in CHLDL

We can consider the spelling of all occurrences of all words with final /t/ that occur in the corpus of CHLDL described above. The results are very clear. They are presented in figure 7.

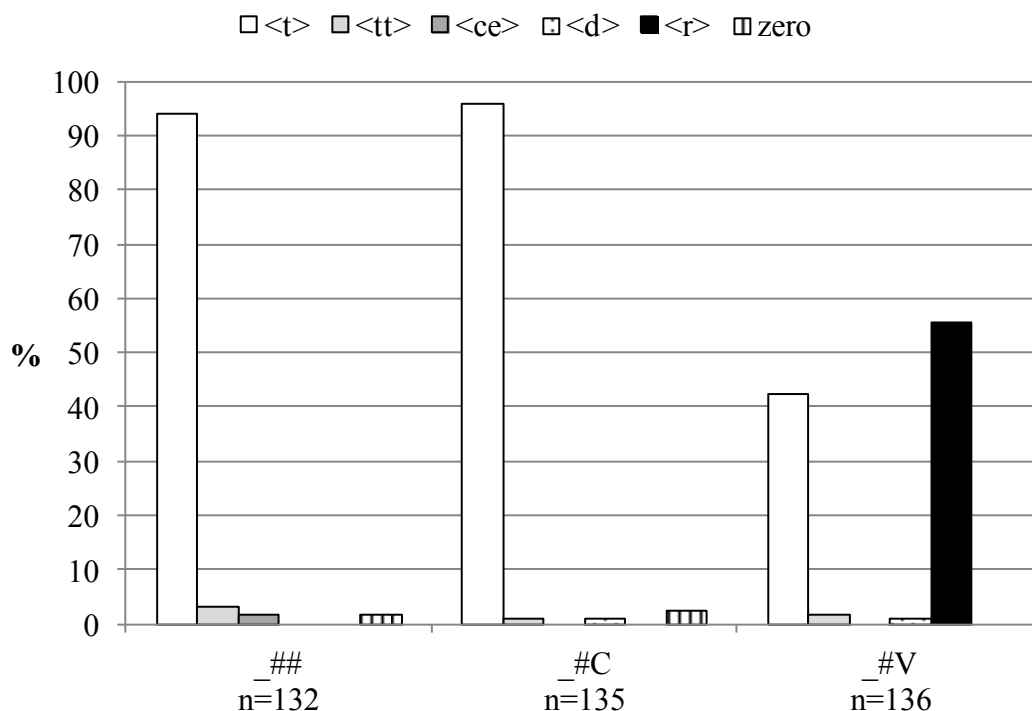


Figure 7. Spelling of /t/ in the LE corpus of CHLDL in three phonological environments: utterance final (_##), word-final preconsonantal (_#C) and word-final prevocalic (_#V). The spelling <r> combines <r> and <rr>. N values are token counts.

The immediate impression is that the results are not the same in all the situations set out for T-to-R and T-lenition in (3a), (3b) and (3c). In the environments shared by (3b) and (3c), where T-lenition is possible (and indeed common in speech, as shown in figure 5), the overwhelming spelling is with <t>, as in Standard English. In (_##), 93.9% of the spellings are with <t>, and in (_#C), 96.1% of the spellings are with <t>. T-lenition is not written in CHLDL, except for in 1.5% of the cases in (_##), where <ce> is used, as in the example above. In the environment which is relevant to (3a), spellings with <r> are common (this includes spellings with <rr>). In the overall (_#V) environment, 55.6% of words with final /t/ are written as a rhotic. This compares to 43.7% of the words which are written with either <t> or <tt>. There are also tiny numbers of cases where other graphemes are used (0.5% overall have <d> and 1.3% overall have no final consonant transcribed), which we do not consider further here.

Figure 7 includes all /t/-final words in the three environments, but (3a) refers to *T-to-R words* – as we have shown, not all words allow T-to-R. If we split /t/-final words into T-to-R words (as defined in section 5) and non-T-to-R words, the results are clearer still. Figure 8 shows the results for the three environments split between T-to-R words and non-T-to-R words.

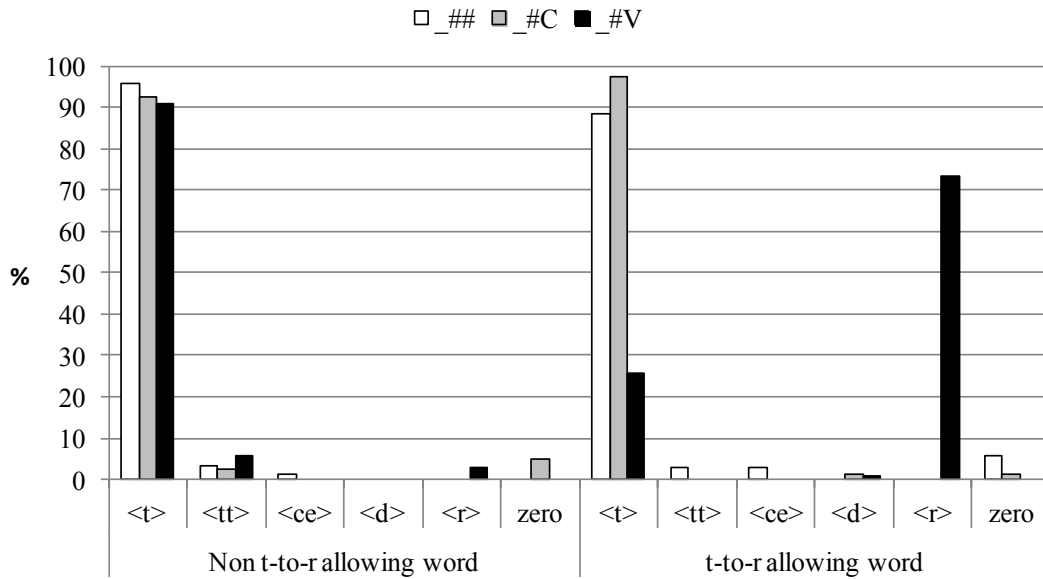


Figure 8. Spelling of /t/ in Liverpool CHLDL split by words which exhibit T-to-R in OLIVE's Archive subcorpus and words which do not, in three phonological environments: utterance final (_##), word-final preconsonantal (_#C) and word-final prevocalic (_#V)

Two things are clear from figure 8: T-to-R is frequently spelled in CHLDL where it is possible in speech – 73.3% of T-to-R words in (_#V) are spelled as a rhotic; and the CHLDL authors are highly accurate in using <r> to spell word-final /t/ only in words which allow it phonologically – the only exception is one occurrence with *might*. It may be that *might* is a T-to-R word for at least some LE speakers, or it may be a mistake on the part of the author – if so, this pales in comparison to the accurate spellings.

To summarise: T-lenition is represented vanishingly rarely in CHLDL, even though it is very common in speech and is in principle respellable: in just 1.5% of the cases in (_##) and never in (_#C) or (_#V); whereas T-to-R is represented very commonly where it would be expected phonologically: in 73.3% of cases of a T-to-R word occurring in (_#V).

6.1. Why is there a difference? Lenition and T-to-R are differently salient

It may seem surprising that T-lenition and T-to-R should be represented orthographically in CHLDL to such different extents. It was argued in section 4 that different types of phonological phenomena should be expected to show different degrees of salience (that is, noticeability by speakers), and hence CHLDL authors would be differently able to indicate them in spelling. In decreasing degrees of salience, we differentiated between:

- systemically-relevant phenomena which involve underlying contrasts
- context-free differences in the realisation of segments
- context-determined phenomena which involve phonological processes

Both T-to-R and T-lenition fit into the last of these categories – they are formalisable as phonological rules (or could be expressed through ranked constraints or in any other phonological formalism) which affect the same underlying segment and derive different segments in specific (overlapping) phonological environments. Why should there then be the vast difference in representability between T-lenition and T-to-R? We hint at a rationale in H&W and explore this in detail here. The explanation comes from the fact that T-to-R and T-lenition (the latter as part of Liverpool Lenition more generally) have different characteristics as phonological processes – they respectively display traits of ‘early’ phonological processes and ‘late’ phonological processes, to use Coetzee & Pater’s (2011) terminology. All processes come after the earliest aspect of phonology (the underlying forms themselves) and the idea that there are different types of phonological processes is not new – it is visible in the structuralist idea that there is a distinct morphophonology and then a phonology proper, and it is fundamental in the model of Lexical Phonology (also called Stratal Phonology – see Kiparsky 1982, 2015; Bermúdez-Otero, to appear) where it is instantiated as a difference between lexical and postlexical processes. Coetzee & Pater (2011) set out five “typical characteristics assigned to each” of the two types of processes, reproduced here as (4i-v), and McMahon (1991, 1994), summarising work such as Kiparsky (1982, 1988), lists all these – apart from (v) – and also adds two more, reproduced here (one in the wording from 1991 and one in the wording from 1994) as (4vi-vii).

(4) <i>Early Phonology</i>	<i>Late Phonology</i>
(i) Sensitive to morphology	Insensitive to morphology
(ii) May have exceptions	Exceptionless
(iii) Makes only categorical changes	Can introduce non-categorical changes
(iv) Word bounded	Sensitive to cross-word contexts
(v) Insensitive to factors like speech rate	Sensitive to factors like speech rate
(vi) Observable/categorisable	Speakers unaware
(vii) Operate on and introduce only contrastive units	May introduce novel segments and features

T-to-R and T-lenition differ on many of these criteria, with T-to-R showing hallmarks of early phonology and Liverpool Lenition hallmarks of late phonology. Thus, to consider the relevant criteria: (ii) T-to-R has a large number of exceptions given that it is word-specific, whereas T-lenition is exceptionless; (iii) T-to-R makes a categorical change involving either a [t] (if it does not apply) or an [r] (if it does), whereas T-lenition can introduce a gradient range of fricatives, meaning that it is non-categorical; (v) links to the products of T-lenition being somewhat sensitive to speech rate as they vary in line with many such factors, whereas T-to-R does not show clear evidence of being sensitive to speech rate; (vii) T-to-R is neutralising, and in some sense ‘structure preserving’ (Kiparsky 1982) in that it only involves units which are contrastive and which exist at the underlying level (/t/ and /r/), whereas T-lenition creates [ʈ] and other novel fricatives which do not exist at the underlying level. Criteria (i) and (iv) do not distinguish the two

processes, and criterion (vi) is, in fact, what our results show to be the case: speakers are aware of T-to-R and are able to spell it in DL, whereas speakers do not seem to be aware of T-lenition and therefore do not try to spell it in DL⁴ In general, there is a good correlation between T-to-R and the properties expected of an early phonological process and Liverpool Lenition and the properties expected of a late phonological process; it may also be relevant that the two processes would in any case be ordered this way through an ‘elsewhere relationship’ – this would see T-to-R, with a more specific environment, ordered before T-lenition, with a more general environment, due to the Elsewhere Condition.

At the start of this section, we set out the three degrees of phonological salience that we had previously recognised – it is now clear that we need to refine this: although both T-to-R and T-lenition are context-determined phonological processes, we have shown that we need to differentiate between *early* and *late* phonological processes in terms of their degree of salience. This has been tied to the basic characteristics recognised for the two types of phonological process, and it correlates with our findings. If early phonological processes are more ‘noticeable’ than later processes, and if differential phonological salience determines the extent to which a dialect feature can be spelled in DL, all falls into place: we should expect only early phonological processes to lead to frequent respellings in DL, and this is what we find in our corpus of CHLDL.⁵ This retains the general idea that ‘early phonology’ is more salient than ‘late phonology’ (with underlying contrasts being the ‘earliest’ aspect of phonology overall) but also extends our understanding by differentiating between different levels of phonological salience for different types/levels/strata of phonological processes. While localisedness can play a role, as shown in H&W, that role seems to be secondary, such that it may make a difference when two phonological phenomena tie in terms of phonological salience, but it can also be substantially overridden by different degrees of phonological salience.

7. Conclusions

This piece has reconsidered a number of issues that we discussed in Honeybone & Watson (2013) and has added to the results and rationale considered there. We have presented new detail in the representation of T-to-R in written LE, showing it to be well represented in orthographic forms in our corpus of CHLDL. We considered the relationship between T-to-R and another process which can also affect /t/, but which is more localised: Liverpool Lenition. We have shown T-to-R to be an early phonological process, and as such to be somewhat phonologically salient, like differences which involve underlying contrasts. This explains why it is so much better represented in CHLDL than T-lenition: T-lenition is not salient to speakers of LE because it is a low-level, late phonological

⁴ This is in part no surprise – it is clear on other grounds that T-to-R is above the level of consciousness: our own intuitions tell us so, and the success of the questionnaire method of investigation into T-to-R in Buchstaller *et al* (2013) and Caffrey (2011) also show it to be the case.

⁵ As Auer, Barden & Grosskopf (1998:184) put it: “postlexical processes should be less salient than lexical regularities” (we can to a fair extent map ‘postlexical’ to ‘late’, and ‘lexical’ to ‘early’). They go on to say that this is “a prediction which remains to be tested” – our results provide some evidence that the prediction is met.

process. As in H&W, CHLDL has been shown to represent dialect features accurately, and, the notion of phonological salience has provided a way to understand the difference in the extent to which native speakers notice dialect features, and hence can represent them in DL.

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