Phonological resistance and innovation in the North-West of England

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Liverpool: An accent that is holding its own

OVER THE past few decades, studies of dialect levelling have concluded that phonological convergence amongst varieties of British English is rife. This review attempts to demonstrate the opposite, in the variety of English spoken in Liverpool. Despite various media reports predicting the death of Liverpool English, evidence is provided here that the variety appears to be *resisting* the innovation of 'T-glottalling', a feature which is frequent elsewhere, and instead shows signs of *divergence* from any kind of supra-local regional norm.

Introduction: dialect levelling in the UK

One of the most frequently occurring themes in British variationist sociolinguistics in recent years has concerned *regional dialect levelling*, the process by which the particularly regional and potentially stigmatised phonological or grammatical features of a dialect gradually disappear. These features are often replaced with widespread supra-local norms, which reduces the variability typically found between the dialects of neighbouring geographical areas. Britain (2002:63) argues that 'supra-local regiolects' are being created, which are fewer in number and larger in geographical size than regional dialects, and which are a result of 'increased intra-regional mobility' over the latter half of the 20th century. This article reports a study of phonological variation and change in Liverpool, one of the larger urban centres in the north-west of England. It is argued that certain aspects of Liverpool English ('Scouse') pronunciation are resisting levelling, and that

another is showing signs of moving not *towards* a putative regional standard, but is in fact diverging from phonological norms.

The notion of dialect levelling has been around for almost a hundred years (cf. Watt & Milroy 1999 for a succinct summary of the development of the term), but it is only quite recently that the mechanisms of levelling are being thoroughly investigated. Williams & Kerswill (1999:149) provide the often cited definition of the phenomenon, as 'a process whereby differences between regional varieties are reduced, features which make varieties distinctive disappear, and new features emerge and are adopted over a wide geographical area.' Strictly speaking, the above characterization encompasses two closely related but distinct processes which Kerswill (2003:223), following Trudgill (1986) and Britain (2002), refers to as *geographical diffusion* and *levelling* respectively. *Geographical diffusion* is the process whereby features spread out from a populous and economically and culturally dominant centre. *Levelling*, on the other hand, involves the reduction of marked variants.

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Evidence for each of these mechanisms in varieties of British English is plentiful, and has been noted in Newcastle (Watt & Milroy 1999, Watt 2002), Hull, Reading, Milton Keynes (Williams and Kerswill 1999), Middlesbrough (Llamas 2000), Northamptonshire (Dyer 2002), Norwich (Trudgill 1999), and elsewhere – see also Britain (2002) and Kerswill (2003) for detailed summaries of these and similar studies. Before we move on to consider processes of levelling in Liverpool English, we briefly consider a number of examples of the two different types of levelling mechanisms.

One well-known example of *levelling* via the reduction of marked variants is the loss of rhotic /r/ in most varieties of English in England over the last century. According to Britain (2002) *r*-loss in words like *car* was evident even in the early 19th century and intensified and spread throughout the 20th. This spread of the loss of /r/, even in rural areas which were traditionally its stronghold, is attributed to dialect contact induced by the 'gentrification of the countryside' (Britain 2002:56). Such rural locations have become desirable places to live, and have been subjected to influxes of people who are non-rhotic. Connected to this, of course, is the low prestige and stigma frequently associated in England with rhoticity.

Another example of levelling can be found in certain phonological changes affecting the FACE vowel in Tyneside English (cf. Watt & Milroy 1999, Watt 2002). The traditional Tyneside form of this vowel is /ɪə/, which is different from the RP-like closing diphthong /eɪ/, and from the monophthongal /eː/, which Watt (2002:47) terms the 'mainstream northern variant'. In modern Tyneside English, however, the traditional FACE vowel is used only by older speakers, with the young preferring the mainstream northern variant. Younger Tynesiders, then, have adopted a supra-local northern variant over the standard variant and as a result are losing one of the features which marks them identifiably as hailing from the North East. Their desire, Watt (2002) points out, is to sound like northerners, but *modern* northerners, who are aware of – and are inclined to avoid – 'old fashioned' phonological features.

The other mechanism of levelling, *geographical diffusion*, is most clearly evidenced by consonantal, rather than vocalic, variables. Kerswill (2003) cites three such variables as the classic examples of geographical diffusion: the

spread of labiodental [ʋ] for /r/, the fronting of dental fricatives /θ, ð/ to [f, v], and the use of the glottal stop [ʔ] for /t/. Space constraints restrict detailed discussion of each of these variables here, so we concentrate in the remainder of this section on the geographical diffusion just one of them – the glottal stop. As we will see, this will be significant for the following analysis of Liverpool English which begins in the next section.

The presence of the glottal stop as a realisation of /t/ is arguably one of the most common phonological process in that it occurs in many varieties of British English. Trudgill (1974) describes how it was not until the middle of the 20th century that glottalling gained a foothold in most of eastern England (though it was attested in London, as well as Glasgow in Scotland, earlier than this), but by then it had not yet found its way to the north of England. Now, though, the glottal stop is well attested in almost all British English varieties, from Received Pronunciation (cf. Wells 1982, Cruttenden 1994, Fabricius 2000) to too many regional varieties to do justice to here.

To gain an indication of the pervasiveness of the glottal stop, it is interesting to note that /t/ → [ʔ] is evident to some degree in *all* of the accents discussed in Foulkes & Docherty (1999), which include Newcastle, Sheffield, West Wirral, Norwich, Reading, Milton Keynes, Hull, Cardiff, Glasgow, Edinburgh, and Dublin. This is despite the well-known observation that the glottal stop is (or, at the very least, once was) 'one of the… most stigmatised features of British English' (Milroy, Milroy, & Hartley 1994:4). The spread of the glottal stop is among the reasons for the recent newspaper reports claiming that all accents are becoming like Estuary English (e.g., 'Much ado about nuffin,' Louisa Young, *The Guardian*, 2 June 1999). Interestingly, as far as our current focus is concerned, other reports have claimed there are similar changes going on in Liverpool English ('Scouse is threatened by rising tide of Estuary English', Kathy Marks, *The Independent*, 1 June 1999). As always with such journalistic reports, the claims made must be considered with caution. We will reserve further comment for now until we have reviewed the linguistic evidence.

We have now seen the two mechanisms of levelling at work: (1) that which reduces the variants which are socially stereotyped and replaces them with some feature which is

spread over a wider geographical region (for example, *r*-loss, and loss of the traditional Tyneside FACE vowel); (2) that which increases the similarity of neighbouring accents by spreading features from one to another via geographical diffusion (for example, glottalling). In the next section, we begin to examine the evidence for the operation of either of these mechanisms in Liverpool English.

Liverpool English

Decades of 'Liverpudlian' exports (including, in the 1960s, the Beatles and Cilla Black; in the 1980s and 90s, popular UK television shows such as *Brookside*; and in the new millennium high-profile footballers) have helped Liverpool English to become one of the more well-recognised accents of the British Isles. Despite this high profile, however, the accent has traditionally done badly in polls of 'popular accents' (cf. Giles & Trudgill 1978). Commentary about Liverpool English in the local and national press is undecided with regard to its prestige.

In September 2000, a report in the *Guardian* suggested that the perception of the Liverpool accent as friendly and welcoming was the reason for the surge in telephone call centres in the city ('Scousers put the accent on success' David Ward, *The Guardian*, 22 Sept 2000), but in December 2005, a report in the *Independent* suggested the opposite, arguing that having a Liverpool accent was detrimental to the speakers' employment prospects ('How to make it in business: don't have a regional accent', Ian Herbert Smith, *The Independent*, 29 Dec 05). Of course, this sort of popular commentary is regularly made of many British accents (Watt 2002 provides similar examples for Tyneside English), but as long as it is considered cautiously it can shed interesting light on issues concerning the popular perception of the varieties under scrutiny.

In terms of linguistic research that has considered it, Liverpool English has certainly not been ignored. We are still some way from knowing the full phonetic and phonological facts, but much more consideration has been paid to Liverpool English than, say, to Manchester English, or any variety of English spoken in Lancashire. The earliest study of Liverpool English, Knowles (1973), remains the seminal work and is the investigation which has examined the widest range of linguistic details. These include both segmental and suprasegmental aspects of Liverpool English phonology and features of the variety's grammatical system, although Knowles points out that it is aspects of phonology, not syntax, which are most region-specific. Knowles comments that 'the peculiarities of [Liverpool English] are almost entirely phonological. When someone speaks, he produces a constant stream of prosodic patterns and segmental features which mark him unmistakably as a Liverpudlian' (1973:50).

These 'unmistakable' features have been studied more recently from a number of different perspectives. Sangster (2001) provides a detailed phonetic account of Liverpool English alveolar plosives, and Honeybone (2001) examines the voiceless alveolar and velar stops phonologically. A phonetic and phonological analysis is combined in Watson (forthcoming), which investigates each of the six plosives in utterance-final position. However, whilst Knowles has provided a detailed investigation of 1960s Liverpool English, and other studies have considered the contemporary linguistic system, no work has been carried out which attempts to compare the two in order to examine issues of phonological change in the variety.

We are therefore as yet unable to consider the Liverpool English phonological system in terms of the discussion of dialect levelling above. This paper provides the necessary comparison by examining the parallels between the observations of Knowles (1973) and a new corpus of data from 16 adolescents (collected in 2001). Before we consider the phonological features under discussion here, we end this section with a general illustration of the important aspects of the Liverpool English phonological system.

As expected, given the geographical location of the city, Liverpool shares numerous phonological features with other north-western cities. Like other accents in the north, for example, the STRUT and FOOT vowels are typically the same (i.e. [ʊ]), and the BATH vowel is the short [a]. The START & PALM vowels are typically front for working-class speakers (i.e. [aː]) whereas the middle class make a modification to an RP-like [ɑː]. The middle class are also more likely to have an RP-like distinction between the NURSE and SQUARE lexical sets, using a central [ɜː] and something like the fronter [ɛː] respectively. Working-class speakers typically exhibit a lack of contrast in these sets, which have merged to the front variant [ɛː].

Words such as *book*, *cook* and *look* typically have the long vowel of the GOOSE set rather than that of the FOOT set, like elsewhere in the north. Perhaps the biggest difference between Liverpool English vowels and those of many other northern English varieties is that Liverpool English has diphthongs where other northern varieties would use monophthongs. The SQUARE lexical set mentioned above excepted, the other sets, including CHOICE, PRICE, FACE, GOAT and MOUTH have (rising) diphthongs.

With the consonantal system, too, there are similarities with other northern Englishes, but, as we shall see, it is here that there are the greatest number of features more or less unique to Liverpool. Like other varieties in the West and North West of England, the [ŋ] in words such as *thing* and *singer* is maintained, e.g. [θiŋg, sɪŋgɛ]. Knowles (1973:301) observes that, although reduplicated forms such as *singing* [sɪŋgɪŋ] are not common, they are attested. The velar nasal/alveolar-nasal alternation found in other varieties is also attested, e.g. *singing* [sɪŋgin]. Liverpool English /r/ is tapped in non-initial position, e.g. *mirror* [mɪrɛ], *American* [əmɛrɪkən], *breath* [brɛθ], but *red* [ɹɛd], *right* [ɹaɪt]. A phonological feature of Liverpool English which is more geographically restricted than the features examined so far is the 'stopping' of the dental fricatives /θ, ð/. Knowles (1973:331) shows that whilst the middle class typically favour the standard variants [θ] and [ð], the working class often use dentalised or laminal alveolar stops in both initial, final and intervocalic positions, e.g. *the* [d̪ə], *brother* [brʊd̪ɛ], *plinth* [plɪnt̪]. Knowles does not find TH-fronting in the variety.

The final set of consonantal variables to be discussed here are the most regionally restricted of all Liverpool English phonological features, and contribute most strongly to the stereotype. This feature is the lenition of phonological plosives. *Lenition* is a cover term for a set of phonological processes which are often glossed as the *softening* or *weakening* of plosives to affricates and fricatives (see Watson forthcoming). As Hughes and Trudgill (1996:93) put it: Liverpool English '/p, t, k/ are heavily aspirated or even affricated. Thus, *can't* [kxɑːnt], *straight* [stɹeɪts], *back* [bakx]. In final position, /p, t, k/ may be realised as fricatives [ɸ s x].'

The voiced plosives also *lenite* [that is, are realised as affricates or fricatives], as Knowles (1973) points out, although Watson (forthcoming) demonstrates that /b/ and /g/ lenite far less frequently than /d/ or any of the voiceless stops. It is, in fact, /t/ and /k/ which lenite most frequently of all the stops, and it is unsurprising therefore that these segments have attracted the attention of most modern research (Sangster 2001, Honeybone 2001, Honeybone & Watson 2001, Honeybone 2002).

I will also focus here on one of these segments, /t/, not only because it is a classic leniting variable of Liverpool English phonology (and one of the features of the variety which is most stereotypical and geographically restricted), but also because the glottalling of /t/ (as seen in the previous discussion) is one of the classic features of dialect levelling. Accordingly, it is with respect to /t/ that the mechanisms of levelling should be visible, if indeed such mechanisms are at work in contemporary Liverpool English. However, before considering whether this is indeed so, some more information on the nature of Liverpool English /t/ in the 1960s is in order.

Liverpool English /t/ in the 1960s

As well as the phonological processes of affrication and spirantisation outlined above, Knowles has observed an additional process he calls '/t/ elision'. This is not simply a product of coarticulation, but is tightly constrained by the Liverpool English linguistic system. He argues (1973:234), for example, that 'there is a small class of words including *get got bit what that it not* in which the final /t/ is pronounced before another consonant but can be elided in absolute final position'. This is not the replacement of /t/ with a glottal stop, as Knowles notes that the glottal stop is rare in the variety. Instead, there is absence of both an oral gesture and a glottal closing gesture (elsewhere, I have called this process 't→h' rather than 't-elision' because there is an audible release of breath, and I will retain that label here: see Watson 2005 & Watson forthcoming for further discussion). What is crucial for the following analysis is that in 1960s Liverpool English, 't→h' (that is, Knowles' t-elision) was only attested in monosyllabic function words (and high frequency 'pseudo' function words like *get* and *got*) with short vowels, in pre-pausal position.

The presence of 't→h' is a classic potential

Table 1

Monosyllabic function words with short vowels	Monosyllabic functions words with long vowels and 'pseudo-' function words	Polysyllabic words with a final weak syllable	Polysyllabic words with primary or secondary stress on the final syllable
at, it, not, that, what, bit, get (v), got	bet, cat, eat, get(n), height, hot, knot, light, lot, net, out, pet, pit, pot, right, shot, shout, wait, watt, weight, wrote, yet	aggregate, biscuit, bucket, certificate, chocolate, delicate, delicate, maggot, merit, Robert, target, ticket	acrobat, boycott, cigarette, forgot, internet, jackpot, reset, teapot, tonight

candidate to be lost via either levelling or geographical diffusion. First, 't→h' occurs almost uniquely in Liverpool English (although see Hickey 1999 for a discussion of Dublin English), and is a salient marker of the stereotype. Liverpool is surrounded by accent varieties which do not exhibit this process. In addition to this, the environment for 't→h' is exactly the environment where we might expect glottal replacement to occur – the process that is spreading throughout almost all British English varieties.

Given the above, two questions arise. The first is: Does 't→h' still occur in contemporary Liverpool English, and if so, does it occur in the same tightly constrained environments? The second is: Has the glottal stop, which was rare in the 1960s, made any inroads to try to supplant this particularly Liverpudlian feature? Some light on these issues emerges from a consideration of new data.

The new data

The data on which the following remarks are based was collected in 2001 from 16 adolescent speakers of Liverpool English. All speakers, who were born and raised in the electoral ward of Vauxhall as in Knowles' previous work, were asked to complete two elicitation tasks. The first required them to rearrange the order of words in a series of sentences to make them grammatical. Each sentence for this task was written so that the only possible correct answer placed the target word in pre-pausal position. The second task involved role-playing dialogue between a pair of speakers. As with the first task, each target word here was also pre-pausal. The tasks generated 945 tokens of pre-

pausal /t/. The target words are presented in Table 1, sorted according to their segmental and prosodic patterning. Those words in column A represent the only words that would allow 't→h' in 1960s Liverpool English.

During the analysis, spectrograms were examined and phonological stops were categorised according to whether there was an oral gesture or not. That is, no distinction was made between 'aspirate', 'affricate' or 'fricative' tokens and all were classified as 'oral'. If no oral gesture was detected, the glottal gesture was further classified as either a glottal fricative or a glottal stop.

Contemporary Liverpool English /t/

Table 2 presents the percentage of tokens in which /t/ was articulated with an oral gesture. The greater the percentage, the more times /t/ was realised either as an aspirate, an affricate, or a fricative, but not [ʔ] or [h]. In fact, of all 945 tokens of pre-pausal /t/, there was not a single case of a glottal stop. Therefore, in Table 2, the lower the word in the table, the higher the frequency of 't→h'.

It is clear that the presence of 't(h' is still robust in monosyllabic function words with short vowels. For example, all the words in which 't→h' *never* occurs are lexical items, except one, *out*, and [h] is prohibited here by virtue of the long vowel. The monosyllabic words in which 't→h' occurs most consistently are indeed function words with short vowels. For example, /t/ is realised as [h] over 70% of the time in *that*, *what*, *not*, and *at*. Other monosyllabic lexical words (e.g. *bet, cat, eat, get, pot, shot, net*) have an oral gesture for /t/ 100% of the time. The importance of the dis-

Table 2

%age containing oral gesture	Words
100	acrobat, bet, boycott, cat, cigarette, eat, get (n), height, hot, internet, knot, jackpot, light, net, out, pit, pot, pet, right, reset, shot, shout, teapot, tonight, watt, wrote, weight, wait
70–99	yet
50–69	lot
30–49	merit, get, bit, aggregate
1–29	delicate, at, got, it, not, certificate, forgot, maggot, ticket, target, Robert, that, what
0	biscuit, bucket, chocolate

Table 3 The presence of 't→h' in polysyllabic words

't→h'	No 't→h'
aggregate	acrobat
biscuit	cigarette
bucket	internet
certificate	jackpot
chocolate	reset
delicate	teapot
forgot	tonight
maggot	
ticket	
target	
Robert	

tinction between lexical words and function words can be seen clearly in the following comparisons:

Do you want one or <u>not</u>? ('t→h' = 73%)
Did you tie that string in a <u>knot</u>? ('t→h' = 0%)

He said <u>what</u>? ('t→h' = 89%)
The sixty <u>watt</u>? ('t→h' = 0%)

In each of the above pairs, the lexical items never exhibit 't→h', but the grammatical words have [h] very consistently.

However, to account for the presence of 't→h' with a generalisation such as *'t→h' can occur in monosyllabic function words with short vowels*, is no longer sufficient, and it is here that the current data differs most significantly from previous work on the phenomenon. It is clear that, as well as being frequent in monosyllabic function words with short vowels, 't→h' is now also common in polysyllabic words. Indeed, the three words in which 't→h' occurs most frequently (100% of the time) are polysyllabic: *biscuit*, *bucket* and *chocolate*. Other polysyllabic words in which 't→h' occurs frequently include *maggot, Robert, target*, and *ticket* (over 80% of the time) and *merit* (around 70% of the time). It is not restricted to bisyllabic words, as the frequent presence of 't→h' in *aggregate* (58%), *certificate* (85%) and *delicate* (73%) demonstrates.

The presence of 't→h' is not random here because as with monosyllabic words, there are

polysyllabic words which never exhibit it. These include *acrobat*, *internet*, *cigarette*, *reset*, *teapot*, and *tonight*. Table 3 lists the polysyllabic words in which 't→h' is and is not attested. The *No 't→h'* column in the table indicates that /t/ is *always* realised with an oral gesture. *The 't→h'* column includes words in which /t/ is sometimes realised as [h]. It should be noted that in the 't→h' column the word in which /t/ is realised as [h] least often is *aggregate*, and even here /t/ has no oral gesture 58% of the time.

This time, the conditioning environment for polysyllabic words is phonological. Almost all words in which 't→h' occurs have unstressed final syllables, and so, in each case, the final /t/ is preceded by a weak vowel. Every word in which 't→h' is prohibited has final syllable stress (*tonight*, *cigarette*) or secondary stress on the final syllable (*acrobat*, *internet*), and so ends in a full, non-weak vowel. The only word in the data set which does not follow this pattern, that is, which is stressed on the final syllable yet still allows 't→h' is *forgot*. One explanation for this may be that the speakers have generalised by analogy from *got*, which Table 2 showed also allowed 't→h'. In fact, we can consider the relationship between *pot* and *jackpot*, and *net* and *internet* in this regard. The polysyllabic word *forgot* allows 't→h' despite its final syllable stress arguably because the high frequency monosyllabic word *got* exhibits it. The words *pot* and *net*, on the other hand, do not exhibit 't→h' at all, and so the polysyllabic words *jackpot* and *internet*, do not allow 't→h' either. This explanation can only be tentative, but it seems at least plausible.

In summary, then, the lexical and phonolog-

ical environments in which 't→h' occurs have extended since Knowles' (1973) consideration of the phenomenon; 't→h' is not completely unrestricted, but its domain of application is much wider. The process has spread from occurring solely in monosyllabic words with short vowels to polysyllabic words which end in a syllable with a weak vowel.

Conclusion: divergence

Earlier in this article, we saw how Liverpool English 't→h' was a strong potential candidate to be lost via either geographical diffusion (because of the rapid spread of the glottal stop) or levelling (because it is one of the features of the variety which is socially marked). However, there is no evidence of this in the new data. First, the glottal stop is not spreading to utterance-final position, where 't→h' still occurs. As well as this, the phonological and lexical constraints on 't→h' have extended, so that 't→h' now occurs in a wider range of words than before.

It has been observed that phonological divergence among accents of British English has not been frequently documented (Kerswill 2003). However, it seems that in resisting the spread of the glottal stop, Liverpool English is resisting one of the processes of supralocalisation which is widely attested elsewhere in Britain. In addition, the extension of 't→h' provides evidence that Liverpool English is not, as the popular press would have us believe, losing its regionality but is instead moving in the opposite direction and *diverging* from supra-local norms. ∎

References

Britain, David. 2002. 'Phoenix from the ashes?: the death, contact and birth of dialects in England.' In *Essex Research Reports in Linguistics* 41:42–73.

Cruttenden, Alan. 1994. *Gimson's pronunciation of English*. London: Arnold.

Dyer, Judy. 2002. 'We all speak the same round here: Dialect levelling in a Scottish-English community.' In the *Journal of Sociolinguistics* 6/1 99–116.

Fabricius, Anne. 2000. 'T-glottalling: between stigma and prestige: a sociolinguistic study of modern RP.' Unpublished PhD dissertation. Copenhagen Business School.

Foulkes, Paul, & Gerard Docherty, eds. 1999. *Urban Voices: Accent studies in the British Isles*. London: Arnold.

Giles, Howard, & Peter Trudgill. 1978. 'Sociolinguistics and linguistic value judgements: correctness, adequacy and aesthetics.' Reprinted in Trudgill, Peter. 1983. *On dialect: social and geographical perspectives*. Oxford: Blackwell, pp. 201–25.

Hickey, Raymond. 1999. 'Dublin English: current changes and their motivation.' In Foulkes & Docherty, eds.

Honeybone, Patrick. 2001. 'Lenition inhibition in Liverpool English.' In *English Language and Linguistics* 5, pp. 213–249.

—. 2002. 'Germanic obstruent lenition: some mutual implications of theoretical and historical phonology.' In B. Blake & K. Burridge, *Historical Linguistics 2001*, pp. 181–203. Amsterdam: John Benjamins.

— & Kevin Watson. 2005. 'Liverpool English: linguistics meets history, society and culture.' Talk at the conference for the Centre of Liverpool and Merseyside Studies.

Hughes, Arthur, & Peter Trudgill. 1996. *English Accents and Dialects*. 3rd edition. London: Arnold.

Kerswill, Paul. 2003. 'Dialect levelling and geographical diffusion in British English.' In David Britain, & Jenny Cheshire, eds, *Social Dialectology: In honour of Peter Trudgill*, pp. 223–243. Amsterdam: Benjamins.

Knowles, Gerry. 1973. 'Scouse: The urban dialect of Liverpool.' Unpublished PhD Thesis, University of Leeds.

Llamas, Carmen. 2000. 'Middlesbrough English: convergent and divergent trends in a part of England with no identity.' In *Newcastle and Durham Working Papers in Linguistics* 8.

Milroy, James, Lesley Milroy, & Sue Hartley. 1994. 'Local and supra-local change in British English: the case of glottalization.' In *English World Wide* 15, pp. 1–33.

Sangster, Catherine. 2001. 'Lenition of alveolar stops in Liverpool English.' In the *Journal of Sociolinguistics* 5/3, pp. 401–412.

Trudgill, Peter. 1974. *The sociolinguistic differentiation of English in Norwich*. Cambridge: University Press.

Trudgill, Peter. 1986. *Dialects in Contact*. Oxford: Blackwell.

—. 1999. 'Norwich: endogenous and exogenous linguistic change.' In Foulkes & Docherty, eds.

Watt, Dominic. 2002. 'I don't speak with a Geordie accent, I speak, like, the Northern accent: contact induced levelling in the Tyneside vowel system.' In the *Journal of Sociolinguistics* 6/1, pp. 44–63.

— & Lesley Milroy. 1999. 'Patterns of variation and change in three Newcastle vowels: is this dialect levelling?' In Foulkes & Docherty, eds.

Watson, Kevin. Forthcoming. 'The Phonetics and Phonology of Plosive Lenition in Liverpool English.' Unpublished PhD thesis, Lancaster University, Edge Hill College.

—. 2005. 'Phonological convergence and divergence in Liverpool English.' A paper presented at the 5th UK Language Variation and Change conference, University of Aberdeen.

Wells, John. 1982. *Accents of English* (3 volumes). Cambridge: University Press.

Williams, Anne & Kerswill, Paul. 1999. 'Dialect levelling: change and continuity in Milton Keynes, Reading & Hull.' In Foulkes & Docherty, eds.