TH-FRONTING IN HULL: INVESTIGATING THE INLAND REVENUE!

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Abstract

Our research investigates variation within the use of two dependent variables (dh) and (th) by employees of the Inland Revenue in Kingston-Upon-Hull, East Yorkshire. We report on the occurrence of the non-standard variant [v] for the variable (dh) and the non-standard variant [f] for the variable (th): variants referred to collectively as 'TH-fronting'. With observations of the geographical spread of TH-fronting over the last two decades, we make use of both real- and apparent-time methods in order to investigate the change in usage within Hull, comparing our results with those of Williams and Kerswill (1999). We focus specifically on the effects of age and gender, showing (i) the possible retention of TH-fronting beyond adolescence, and (ii) an apparent shift in usage across genders. We also observe speakers fronting (dh) and (th) to a similar degree unlike Williams and Kerswill (1999) where (dh) tended to be fronted more than (th); thus providing potential evidence towards a change in the overall distribution of fronted variants across (dh) and (th).

1. Introduction

This study examines the phenomenon of TH-fronting in a variety of English spoken in Kingston-Upon-Hull, East Yorkshire (Hull). TH-fronting is the collective term given to the process of labialisation of two variables, namely (dh), where /ð/ is fronted to [v] in lexical items such as *brother* and (th) where /θ/ is fronted to [f] in items such as *think*.

Originally a feature of the Cockney accent, as reported by Wells (1986: 328), TH-fronting is typically associated with London. Trudgill (1988: 43) describes TH-fronting as "spreading very rapidly indeed out from London"; an observation based upon there being no evidence of TH-fronting in his original study of Norwich (1974), yet finding the feature well established on his return visit (Trudgill 1988). Geographically, the feature has been gradually spreading further north in the UK, with reports of TH-fronting in Derby (Milroy 1996), Leeds (Wakelin 1977: 98) and Hull (Williams and Kerswill 1999). Some usage has been noted even further north in Newcastle (Watt and Milroy 1999: 30) and, more recently, TH-fronting has been reported in Livingston, Scotland (Robinson 2005). The spread of TH-fronting has been attributed to processes of both diffusion from the south, with locations of great geographical distance from the source adopting the feature before those with greater proximity, and levelling where marked variants of a variety are replaced usually for reasons of accommodation (Kerswill 2003). Thus, there is evidence that two mechanisms of change are contributing to the spread of TH-fronting.

The success of the spread of TH-fronting could lie partially with the standard variants themselves. Variation within TH and, in extreme cases, subsequent loss of the standard variants [ð] and [θ] could almost be said to be expected; Trudgill (1988: 43) expresses his lack of surprise at variation and mergers concerning /ð/ and /θ/ due to "these consonants being marked, acquired late by children, and relatively rare in the world's languages". Not dissimi-

larly, Milroy (1996: 219) describes TH-fronting as a "'natural' change" as the consonants /ð/ and /θ/ are "rare and often unstable".

With both the observation of geographical spread, and the purported inevitability of variation within TH, the likelihood of further spread occurring is great. Consequently, what we investigate here is whether there might even be further spread within a geographical area where the feature had already been observed, namely Hull, where Williams and Kerswill (1999) executed data collection from adolescents as part of a dialect levelling project approximately a decade earlier. It is with the findings related to the middle class adolescents of Williams and Kerswill (1999) that our current research is compared in real-time, allowing us to investigate whether TH-fronting in Hull is an age-graded phenomena, used by adolescents but lost during the transition into adulthood, or a change in progress where usage is maintained beyond adolescence.

2. Method

The current research is based upon real- and apparent-time investigation of TH-fronting in Hull. In 2005, apparent-time data were collected from two different age groups. We have also been fortunate to make use of the real-time data available, comparing our data with those of Williams and Kerswill (1999) which had been collected approximately a decade earlier. This study therefore utilises both apparent-time and real-time conventions in order to fully investigate and attempt to account for any synchronic changes that can be identified within our data set, in addition to diachronic differences evinced by comparing our findings with those of Williams and Kerswill (1999).

For the most part, variationist studies adopt apparent-time methods whereby different age groups are selected at the same period in time in an attempt to represent the dialect of a region over a period of years. The differences across the speakers are used to represent historical changes in the dialect. This method is widely used, as the collection of real-time data–where a researcher must conduct data collections over a period of several decades–is often impractical. Bailey (2004) presents detailed arguments for the advantages and disadvantages of apparent-time data, arguing that the method only permits projections to be made and the accuracy of those projections remains unknown. Although real-time methods are not without criticism (see Chambers 2004), the use of real-time data alongside apparent-time data is likely to give a more accurate account of the variation occurring, with Bailey (2004: 314, original emphasis) stating "the apparent-time data are only a *surrogate* for real-time evidence, and apparent-time data cannot uncritically be assumed to represent diachronic linguistic developments". Therefore, this study utilises real-time data from a reasonably similar cohort to that used a decade earlier in 1995, in addition to apparent-time data collected in 2005 from two different age groups. Consequently, with Chambers (2004: 360) arguing that real-time data can confirm the predictions of apparent-time projections, it is thought that the real- and apparent-time methods can be used to produce a more detailed account of the effect of an informant's age on their usage of TH-fronting. In the following sections, our methodologies and those employed by Williams and Kerswill (1999) are presented and discussed in terms of comparability.

2.1. Sampling and informants

The results and discussion in the following sections are based upon data collected during three visits to the Inland Revenue in Hull between October and November 2005. As we sought a relatively homogeneous speech community, we looked to places of work. The Inland Revenue was chosen because we had access through an acquaintance who was an employee at the Hull office. Use of a contact ensured we gained permission from management for the data collection to take place during office hours, and was an attempt at gaining more ready acceptance into the speech community (cf. Milroy and Milroy 1978: 21). The acquaintance–both an employee of the Inland Revenue and colleague to informants–contacted management to seek authorisation for the data collection to take place. Access was agreed, but with the proviso that a maximum of twenty employees be involved in an attempt to minimise disruption to the working day. This condition was not considered problematic however, with Labov (2001: 38) stressing that accurate representation of a speech community lies not with corpus size *per se*, but rather with the method of sampling, and Faegin (2004: 29) suggesting that five speakers per cell is an adequate representation.

At the time of the data collection, the Inland Revenue in Hull employed approximately 150 office staff, all of whom were contacted by our acquaintance, their colleague, via internal e-mail requesting they reply if they had been born in Hull and were willing to participate in a recorded language study. Of the 150 requests, twenty six positive responses were received. The twenty six responses were separated into subgroups of male and female and the first ten respondents for each were selected as informants (to comply with the management-imposed maximum of twenty).

The corpus of 20 informants, 10 male and 10 female, is split into an older age group born pre-1970 consisting of 10 informants, and a younger age group born post-1970, also consisting of 10 informants. The groups were segregated pre and post 1970 as it was at this time that TH-fronting was reported as diffused into Hull (Kerswill 2003: 236), therefore we may expect to see some difference in usage either side of this date. The youngest of our informants are the focus of the real-time results reported here, to allow comparison with Williams and Kerswill (1999). Williams and Kerswill collected data from their sixteen adolescents between 1995 and 1998. In 2005, approximately a decade on, those adolescents would, therefore, be around the age of our younger informants. Thus, an analysis of our younger informants represents, more or less a decade later, what might have happened to Williams and Kerswill's adolescents. Throughout the following sections, for ease of reference, the year the data collections commenced will be used to refer to the results of each study, therefore the results of Williams and Kerswill (1999) will be presented under the heading '1995' and our results under '2005'.

2.2. Attributing social class

As we wanted to compare our findings with those of Williams and Kerswill (1999), we required a similar cohort of speakers. Williams and Kerswill assigned social class according to the school attended by the informant (see Cheshire et al. 1999 for full details) however, by 2005, many of the schools attended by our informants no longer existed, causing complicating issues with assigning social class on hearsay. Due to the institutional similarities of school and work, namely the amount of time spent there throughout the week and the sorts of social networks in place, employment is, therefore, considered as the nearest appropriate equivalent.

Our informants held different positions within the Inland Revenue, therefore, the Office for National Statistics: Standard Occupation Scale (2000) was used to assign each informant a score along the 9-point scale used for upper middle to lower working class occupations. Information provided by informants regarding their employment titles and duties was entered into the system to provide an occupational rating. Every informant achieved a rating of 3–4, each holding a similar white collar, administrative role within the Inland Revenue.

Based upon this rating, informants were considered as members of the middle class due to their positioning in the upper third of the 9-point scale. Thus, we had access to a similar middle class cohort to Williams and Kerswill (1999).

2.3. Data collection

The management at the Inland Revenue also placed a time constraint on the data collection, with the maximum time permitted to be spent with each informant set at just ten minutes. We therefore expected not to elicit any useable casual speech (previous variationist studies having spent significantly longer with informants, allowing time to employ numerous strategies to elicit informal and casual speech styles (Labov 1972: 85–94; Milroy 1996: 214; Trudgill 1974: 50–52)). Styles elicited during the interviews were: interview style (IS); reading passage style (RPS); word list style (WLS) and minimal pair style (MPS).

The reading passages were constructed around environments of (th) and (dh) provided by Cruttenden (2001: 183). Based upon the environments and examples listed, the word list was firstly produced and then used as a basis for both the reading passage and minimal pair list, in order to ensure that the same environments were included across the speech styles RPS, WLS and MPS. Previous studies on TH-fronting found word initial /ð/ in function words such as *that* and *their* consistently pronounced as the standard [ð] by speakers who used the non-standard variant [v] elsewhere (Milroy 1996: 215; Wells 1986: 328; Williams and Kerswill 1999: 147; Docherty and Foulkes 1999: 51). Preliminary analysis showed this also to be the case in the Inland Revenue data set, consequently, word initial (dh) is excluded from the analysis and results. Thus, only examples of both (dh) and (th) word-medially and word-finally and word-initial (th) are included in the data set.

The data collection took place in a conference room within the Inland Revenue offices in Hull. The location and conditions were consistent for all interviews, as well as familiar to all informants, with each having attended meetings in the room previously. The setting could be described as semi-formal with informants interviewed at a large office desk (unlike some previous studies where informants have been interviewed in the comfort of their own homes (e.g. Trudgill 1974: 53)). It was, however, quite likely not dissimilar to the formality of the environments of the recordings of Williams and Kerswill (1999) that took place in the school attended by each adolescent informant.

2.4. Data analysis

Although TH-fronting has been examined as a single variable in the past (Milroy 1996), and the use of a collective term for two variables may suggest similarities in patterns of variation, the majority of studies have shown differences between (th) and (dh). In Livingston, all speakers have marginally higher occurrences of fronted variants for (th) in comparison to (dh) (Robinson 2005: 189–190). Kerswill (2003: 237) reports boys in both Newcastle and Durham to front (dh) more than (th), but there is no reported difference amongst the girls. In Milton Keynes, boys also front (dh) more than (th), unlike in Reading where (th) is fronted more by middle class boys (Williams and Kerswill 1999: 160). Conversely, middle class girls consistently fronted (dh) more than (th) in Milton Keynes, Reading and Hull (ibid.). In the following sections, in addition to overall comparison of TH-fronting results in Hull in 1995 and 2005, data are presented for (dh) and (th) separately to determine whether internal change has occurred.

The data set consists of 3822 tokens of (th) and (dh) in word initial, medial and final contexts. (Unfortunately, the number of tokens analysed by Williams and Kerswill (1999) is unknown as figures were unavailable upon request.) In addition to fronted variants, stopped and omitted variants are also present in the data set, however, with the combined number of stopped and omitted tokens being 14, these are too few for separate analysis. Therefore, the variables are circumscribed as binary, with results showing fronted variants as a proportion of all tokens extracted.

3. Results

A full analysis of style and environment was completed; the effect of style revealed a gradual decrease in TH-fronted variants as the formality increased. This finding is expected of non-standard variants that are not undergoing stylistic change (see Trudgill 1974: 91; Labov 1972: 124; Milroy and Milroy 1978: 28). Analysis of environment revealed no significant difference between word-initial, medial and final realisations. As there was nothing particularly unusual to report, and with Williams and Kerswill (1999) presenting solely overall figures, all results presented here are an aggregate of all speech styles and environments. Before group figures are presented, the contribution of individuals is discussed in the following section.

3.1. TH-fronting and individual informants

TH-fronting according to individual informants is illustrated in Figures 1 and 2. There is a clear division in female usage shown in Figure 1 with some fronting amongst all informants born post-1970 but only a single informant born pre-1970. As the single informant (OF5) was born in 1969, and language change is a gradual process, this finding is not surprising.

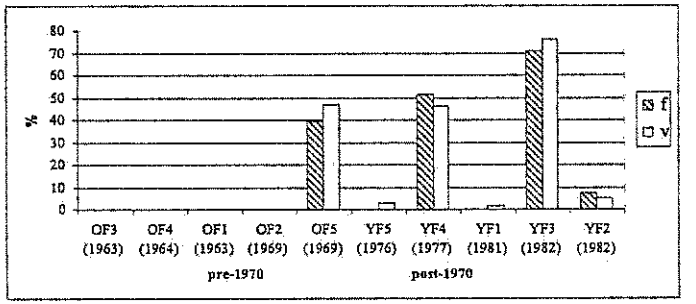

Figure 1: Fronted variants [f] and [v] amongst female speakers by birth year (shown in parentheses). OF=older female, born pre-1970; YF=younger female, born post-1970.

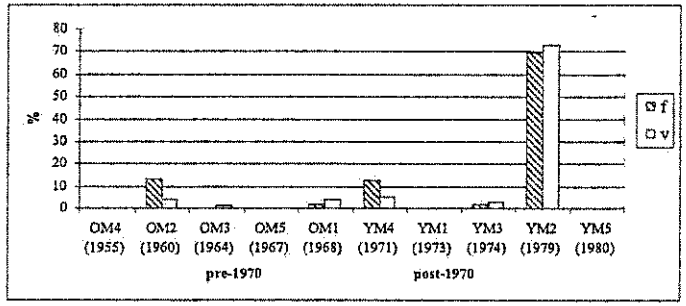

Figure 2: Fronted variants [f] and [v] amongst male speakers by birth year (shown in parentheses). OM=older male, born pre-1970; YM=younger male, born post-1970.

Conversely, Figure 2 reveals no such pattern amongst the male cohort, with more pre-1970 informants TH-fronting, but to a lesser degree than the single female informant. Here a single post-1970 male (YM2) can be held accountable for the majority of the overall male usage.

In order to compare our findings with those of Williams and Kerswill (1999) real-time, group figures are presented in the following sections.

3.2. TH-fronting and age

The life stage at the centre of much research has been adolescence with Cheshire (1982), Eckert (2000), Macaulay (1978) and Eisikovits (1998) amongst those making adolescents the focus of their studies. Williams and Kerswill (1999) also studied adolescents, focussing on their role in language change. Real-time analysis allows us to see whether the adolescents of 1995 have maintained their use of TH-fronting into adulthood where speakers are typically "more conservative in their use of variables" (Eckert 1997: 164).

	1995 post-1970	2005 post-1970	2005 pre-1970
% fronting	19.2%[1]	26.6%	5.8%

Table 1: Overall occurrences of TH-fronted variants in 1995 informants born pre-1970 and 2005 informants born pre-1970 and post-1970.

A comparison of the 1995 figures with those of the post-1970 group in 2005 suggests real-time changes. From Table 1, it can be seen that approximately a decade on, the overall occurrence of TH-fronted variants is higher at 26.6% in 2005 than at 19.2% in 1995. However, the increase is, in effect, actually more noteworthy. As mentioned above, Williams and Kerswill (1999) elicited informal speech in their interviews through discussions in groups and pairs. The 1995 data thus included casual speech–unlike the 2005 data set. As two of the three styles within the 1995 data are more informal, there may, therefore, have been some inherent bias towards non-standard variants. The majority of the 2005 data, however, consists of speech produced during reading tasks which are biased towards standard variants due to informants utilising more formal/careful speech. Thus, this methodological difference between speech style elicitations between the two data sets in all probability results in the overall increase actually being more substantial.

That argument notwithstanding, the importance of this observed increase is not so much the *amount* of increase, but rather the fact that there has been *no overall decrease* in TH-fronting, suggesting that the feature that was evident during adolescence in 1995 has in fact been retained by speakers into early adulthood. The reason for the assumption of *retention* lies in the results displayed by the 2005 older cohort (pre-1970). TH-fronting *could* have been more prevalent in 2005 due to some widespread explosion in the adoption of this feature. However, as our older cohort shows significantly low levels of TH-fronting (5.8%, $p \leq 0.001$), this cannot be the case. The high levels in the younger group (post-1970) must therefore be a result of post-adolescent retention.

Williams and Kerswill (1999) posit that the adolescents in Hull adopted TH-fronting to make their speech distinct from that of their parents. As the feature is in use by the 2005 young adults, their distinction from the 2005 older informants is maintained. Interestingly, the older informants who are TH-fronting, were born just before 1970, with a single female (born 1969) predominantly responsible for the frequency of TH-fronting amongst the older informants (see Figure 1), emphasising that distinction still exists between the younger and older informants.

What the examination of the 2005 data does reveal in terms of age however, is that TH-fronting does not appear to be an age-graded phenomenon, as the feature is in use to some extent by more mature age groups. A comparison with the 1995 data suggests that this usage appears to be due to retention beyond adolescence, as in 2005, a decade on, informants are continuing to use TH-fronted variants, yet the older generation still largely does not.

3.3. TH-fronting and gender

Traditionally, as discussed by Trudgill (1998) for example, males have tended to adopt non-standard features more than females due to social associations of working class speech and masculinity. This is supported by the findings of numerous variationist studies where males are observed as using a greater frequency of non-standard variants but females generally favouring the standard variants (Trudgill 1974; Cheshire 1982; Eisikovits 1998; Williams and Kerswill 1999). However, other studies have shown females to prefer non-local features (Milroy et al. 1994; Docherty et al. 1997), a finding consistent with our 2005 informants.

	Males	Females	Males and Females
1995 post-1970	20.1%	18.4%	19.2%[1]
2005 post-1970	19.0% (173/912)	35.3% (284/804)	26.6% (457/1716)
2005 pre-1970	2.8% (31/1112)	9.3% (92/994)	5.8% (123/2106)

Table 2: TH-fronting in 1995 and 2005 informants according to gender. Where available, actual number of tokens are shown in parentheses.

As shown in Table 2, in 1995 the males (20.1%) can be seen as TH-fronting more than the females (18.4%), which is perhaps not unusual. However in the 2005 post-1970 cohort, the females (35.3%) are not only TH-fronting more than the males (19.0%), they are now also using the non-standard variants *significantly* more than the males ($p \leq 0.001$).

Within-gender comparisons across both corpora reveal the 2005 post-1970 male cohort (19.0%) TH-fronting to a similar degree to the males of 1995 (20.1%). Conversely, fe-

male informants in 2005 post-1970 (35.3%) have a higher occurrence of TH-fronted variants than the 1995 female cohort (18.4%). Therefore the overall increase (7.4%) in TH-fronting from 1995 post-1970 to 2005 post-1970 shown in Table 1 is apparently accounted for largely by the change in female usage. Thus there is evidence for female innovation as females are seen to be leading the change.

There is also a significant difference according to gender for the 2005 informants born pre-1970 ($p \leq 0.001$), with females TH-fronting more than males (though as shown in section 3.1, fronting in this age group is accounted for by a single female informant (OF5) and this should be noted in any interpretation of the results).

3.4. TH-fronting and minimal pairs

Labov (1972) included the reading of a list of minimal pairs as an elicitation technique for data collection. It is arguably during the reading of minimal pairs that an informant will produce their most careful speech due to the amount of attention paid to making each word in the pair distinct. It therefore follows that an informant is likely to produce many more standard variants, than non-standard variants for minimal pair style (MPS). The occurrence of TH-fronting in MPS reflects the robustness of the feature amongst the informants that are TH-fronting. In minimal pairs, where the most attention is paid to speech, informants are still producing the non-standard variants. An examination of the three most consistent TH-fronters provides a useful insight.

When the more consistent TH-fronters (informants YM2, YF3 and YF4) were presented with a minimal pair where a fronted second part of the pair would sound like the first, distinction appeared to be maintained by making the second part standard (see Table 3). For example, with *fin* and *thin*, a TH-fronted realisation of *thin* would be ['fɪn] therefore to maintain the distinction, *thin* appears to be realised as the standard ['θɪn]. However, when the order is reversed, for example *three* and *free*, and the opportunity for TH-fronting appears first, the first part of the pair appears to be TH-fronted, resulting in *three* and *free* being homophonous.

Informant	*thin* of *fin/thin*	*throw* of *fro/throw*	*three* of *three/free*
YM2	[θ]	[θ]	[f]
YF3	[θ]	[θ]	[f]
YF4	[f]	N/A	[f]

Table 3: Minimal pair realisations for three younger informants.

It is clear that additional research is required before concrete claims can be made, and the ordering of minimal pairs becoming a methodological consideration in the production of minimal pair lists. However, with regard to the 2005 data, these results emphasise that TH-fronting appears to be well established amongst these informants as (th) is fronted when presented as the first part of the pair. It is only when a TH-fronted sounding variant has already been used that the standard variant is chosen, and even then this was not always the case, as with YF4.

4. TH-fronting and unfamiliar lexical items

Language change has been shown to affect lexical items at a different rate (see Bybee 2002; Labov 1994 for detailed discussion). During the data collection it became clear that some lexical items in the reading texts were unfamiliar to informants. A combination of hesitancy, several attempts at reading an item and vocalised uncertainty was used by informants to express unfamiliarity with particular items as shown in (1) and (2).

(1) YM2 (0.5) earth- earthed

(2) YF3 atheist is that?

It might be argued that these items are infrequent in the speakers' repertoire and are more likely to be realised as the standard as, firstly, less frequent items are affected by language change only in the later stages and, secondly, psycholinguists have discovered that less frequent words take longer to process (see Aitchison 2002: 230), and therefore more attention is likely to be taken over their production. In our data set this does not appear to be the case however, with fourteen tokens of unfamiliar items resulting in the production of thirteen non-standard variants (92.6%). Again, these results emphasise that TH-fronting seems to be well established both amongst the informants and within the lexicon.

5. Observed change across (dh) and (th)

Within TH-fronting there are two separate variables, therefore an examination of each variable would reveal more about the nature of TH-fronting. Table 4 shows that the 1995 males TH-fronted (dh) (23.7%) substantially more than (th) (16.5%). This was also the case with the 1995 female informants but to a larger extent, with the frequency score for (dh) 27.1% and (th) 9.6%. From the 1995 data it can be said that (dh) was TH-fronted substantially more than (th). This difference is not, however, observed with the two variables in 2005 as the post-1970 males are showing no significant difference across the two variables, TH-fronting (dh) 18.0% and (th) at 19.5%. Not dissimilarly, the 2005 post-1970 females also show no significant difference, with their frequency scores for (dh) 33.8% and (th) 36.0%. In comparison to 1995, in the 2005 post-1970 data there is very little difference in the frequency of TH-fronting of the two variables, (which is statistically not significant) *irrespective of gender*.

	Variable	Males	Females
1995 post-1970	(th)	16.5%	9.6%
	(dh)	23.7%	27.1%
2005 post-1970	(th)	19.5% (116/596)	36.0% (196/544)
	(dh)	18.0% (57/316)	33.8% (88/260)
2005 pre-1970	(th)	3.5% (25/719)	8.5% (56/658)
	(dh)	1.5% (6/393)	10.7% (36/336)

Table 4: Frequency of TH-fronting of (th) and (dh) by age and gender. Where available, actual number of tokens are shown in parentheses.

It seems that previously, as shown in the 1995 data, the two variables within TH-fronting were being adopted to differing degrees, with (dh) fronted more than (th). The 2005 data shows that this is no longer the case: both variables are now being TH-fronted to similar degrees, suggesting that there has been change (convergence) within TH-fronting, an observation that future research into other TH-fronting communities could address.

6. Summary and conclusions

The use of apparent- and real-time methods has allowed us to identify TH-fronting in Hull as a change in progress rather than a case of age-grading. Real-time comparison of the 2005 post-1970 data with the 1995 data have revealed several findings, providing evidence that changes have indeed occurred during the last decade. TH-fronting was investigated by Williams and Kerswill (1999) as a feature of adolescent speech. The 2005 data has shown the feature in use by 23-34 year olds (post-1970) as well as a minority of 35-50 year olds (pre-1970), thus providing evidence that the feature is now in use by more mature speakers. The predominant use of TH-fronting by the 23-34 year olds suggests that, if the feature was indeed adopted during adolescence, it has been retained beyond adolescence despite "the pressure for use of standard language in the workplace" (Eckert 1997: 164), thereby indicating that TH-fronting is well established in those speakers. The robustness of TH-fronting is also supported by its use in both minimal pairs and unfamiliar lexical items. In both of these conditions, it would be expected that the standard variant would be used, yet several informants have relatively consistently made use of TH-fronted variants when producing their most careful speech.

Females are using significantly more fronted variants than males, suggesting that the non-standard variants are more appealing than the standard. This appeal could be due to the ambitious nature of the female informants to progress socially and economically, as found in the case of glottalisation in Cardiff (Mees and Collins 1999: 202). There is also the possibility that that usage can be accounted for by the desire for informants to be associated with other geographical areas, with several informants expressing their dislike of Hull. Watt and Milroy (1999) discuss the modern, cosmopolitan appeal of dialect levelling features to younger speakers and it is perhaps this appeal that is now attracting the 23-34 year olds, rather than solely their desire to sound distinct from their parents, which Williams and Kerswill (1999) reported to be the case at adolescence.

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Notes

[1]These figures are the arithmetic mean of percentages published by Williams and Kerswill (1999), as exact figures were unfortunately unavailable upon request. The figures are considered reasonably accurate as when our figures were calculated using both the actual numbers of occurrences and by arithmetic mean of percentages, the same overall percentage resulted each time.

References

Aitchison, J. (2002). *Words in the Mind: An introduction to the mental lexicon*. 3rd edn. Oxford: Blackwell.

Bailey, G. (2004). Real and apparent time. In J. K. Chambers, P. Trudgill and N. Schilling-Estes (Eds.), *The Handbook of Language Variation and Change*, pp. 312–332. Oxford: Blackwell.

Bybee, J. (2002). Word frequency and context of use in the lexical diffusion of phonetically conditioned sound change. *Language Variation and Change 14*, 261–290.

Chambers, J. K. (2004). Patterns of variation including change. In J. K. Chambers, P. Trudgill and N. Schilling-Estes (Eds.), *The Handbook of Language Variation and Change*, pp. 349–372. Oxford: Blackwell.

Cheshire, J. (1982). *Variation in an English Dialect: A sociolinguistic study*. Cambridge: Cambridge University Press.

Cheshire, J., A. Gillett, P. Kerswill and A. Williams (1999). The role of adolescents in dialect levelling. *Final report submitted to the Economic and Social Research Council*. (Unpublished).

Cruttenden, A. (2001). *Gimson's Pronunciation of English*. 6th edn. London: Arnold.

Docherty, G. and P. Foulkes (1999). Derby and Newcastle: Instrumental phonetics and variationist studies. In P. Foulkes and G. Docherty (Eds.), *Urban Voices: Accent studies in the British Isles*, pp. 47–71. London: Arnold.

Docherty, G. J., P. Foulkes, J. Milroy, L. Milroy and D. Walshaw (1997). Descriptive adequacy in phonology: A variationist perspective. *Journal of Linguistics 33*, 275–310.

Eckert, P. (1997). Age as a sociolinguistic variable. In F. Coulmas [Ed.], *The Handbook of Sociolinguistics*, pp. 151–167. Oxford: Blackwell.

Eckert, P. (2000). *Linguistic Variation as Social Practice*. Oxford: Blackwell.

Eisikovits, E. (1998). Girl-talk/boy-talk: Sex differences in adolescent speech. In J. Coates (Ed.), *Language and Gender: A reader*, pp. 42–54. Oxford: Blackwell.

Feagin, C. (2004). Entering the community: Fieldwork. In J. K. Chambers, P. Trudgill and N. Schilling-Estes [Eds.], *The Handbook of Language Variation and Change*, pp. 20–39. Oxford: Blackwell.

Kerswill, P. (2003). Dialect levelling and geographical diffusion in British English. In D. Britain and J. Cheshire [Eds.], *Social Dialectology: In honour of Peter Trudgill*, pp. 223–243. Amsterdam: John Benjamins.

Labov, W. (1972). *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press.

Labov, W. (1994). *Principles of Linguistic Change: Internal factors*. Oxford: Blackwell.

Labov, W. (2001). *Principles of Linguistic Change: Social factors*. Oxford: Blackwell.

Macaulay, R. K. S. (1978). Variation and consistency in Glaswegian English. In P. Trudgill (Ed.), *Sociolinguistic Patterns in British English*, pp. 132–143. London: Edward Arnold.

Mees, I. M. and B. Collins (1999). Cardiff: A real-time study of glottalisation. In P. Foulkes and G. Docherty (Eds.), *Urban Voices: Accent studies in the British Isles*, pp. 185–202. London: Arnold.

Milroy, J. (1996). A current change in British English: Variation in (th) in Derby. *Newcastle and Durham Working Papers in Linguistics 4*, 213–222.

Milroy, J. and L. Milroy (1978). Belfast: Change and variation in an urban vernacular. In P. Trudgill (Ed.), *Sociolinguistic Patterns in British English*, pp. 19–36. London: Edward Arnold.

Milroy, J., L. Milroy and S. Hartley (1994). Local and supra-local change in British English: The case of glottalisation. *English World-Wide* 15, 1–33.

Office for National Statistics: Standard occupation scale 2000. (2000). London: The Stationery Office.

Robinson, C. (2005). Changes in the dialect of Livingston. *Language and Literature 14*, 181–193.

Trudgill, P. (1974). *The Social Differentiation of English in Norwich*. Cambridge: Cambridge University Press.

Trudgill, P. (1988). Norwich revisited: Recent linguistic changes in an English urban dialect. *English World-Wide 9*, 33–49.

Trudgill, P. (1998). Sex and covert prestige. In J. Coates (Ed.), *Language and Gender: A reader*, pp. 21–28. Oxford: Blackwell.

Wakelin, M. F. (1977). *English Dialects: An introduction*. Revised edn. London: The Athlone Press University of London.

Watt, D. and L. Milroy (1999). Patterns of variation and change in three Newcastle vowels: Is this dialect levelling? In P. Foulkes and G. Docherty (Eds.), *Urban Voices: Accent studies in the British Isles*, pp. 25–46. London: Arnold.

Wells, J. C. (1986). *Accents of English 2: The British Isles*. Cambridge: Cambridge University Press.

Williams, A. and P. Kerswill (1999). Dialect levelling: Change and continuity in Milton Keynes, Reading and Hull. In P. Foulkes and G. Docherty (Eds.), *Urban Voices: Accent studies in the British Isles*, pp. 141–162. London: Arnold.

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