'I'm not Geordie! I'm not actually anything!'

Convergent and divergent trends: Dialect levelling and the struggle for identity in a South Durham New-Town.

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Declaration:

I have read and understood The University of Edinburgh guidelines on Plagiarism and declare that this written dissertation is all my own work except where I indicate otherwise by proper use of quotes and references.

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Abstract

This paper identifies the linguistic and extra-linguistic factors of variation which exist in the unique dialect of Newton Aycliffe, a South Durham New-Town "with no identity". A panel study, similar to that of Watt and Milroy's (1999) study of Newcastle English, looks at the vowel variation in the variety and the social factors which appear to influence that variation. In addition to variation as a result of differences in social class, age and gender, the linguistic situation in Newton Aycliffe is further complicated as a result of the region's complex historical and social make-up and subsequent issues with local identity. Primarily, the town's issue with identity lies with the complicated nature of New-Towns, as discussed for example by Kerswill (2000), where a mixture of linguistic features have come together in one area to form a unique dialect with no obvious linguistic affiliation. The cocktail of identities and dialects involved in the creation of the New-Town have left the second generation inhabitants struggling for an identity, as they are born into a linguistic and social "no man's land", with the town situated between two distinct dialect areas: "Geordie" and "Yorkshire" (cf. Llamas's (1999) study of Middlesbrough). The contact and mixture of identities and the collision of dialects give rise to new variants and the 'levelling' of competing variants as well as the possible creation of new forms (cf. Kerswill (2000)). This paper examines the significance of a range of linguistic features in this unique variety of English and aims to identify whether it has its own linguistic and social identity.

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1 Introduction

The identification of phonetic variation in the speech of any speech variety raises questions as to the theoretical and social implications of the resultant forms that are produced. In other words, what forces are in operation to select the sounds that make-up a dialect.[1] The importance of identifying all possible influences on variant selection is emphasised by Watt (2000: 69) who states:

> 'The pressures of speaker and system should be seen as complementary: any attempt to explain sound change must take both speaker-centred external factors and system-centred internal factors into account.'

In accordance with this belief, this study aims to identify both the systemic and speaker related factors that are influencing the development and realisation of certain vowels in a South Durham New-Town in the North-East of England. To achieve this, a socially stratified panel of speakers will assess apparent-time variation trends; whilst a historical study of the vowels found in the surrounding local area, in reference to the Survey of English Dialects (SED), will assess the variation found 50 years ago in comparison to the variant realisation of the contemporary study. The variables in question in this study are those denoted by Wells's (1982:xviii) lexical sets as the vowel sounds to be found in FACE, GOAT, PRICE and the variation of /a/ found in TRAP/ BATH and PALM. The reasons for choosing these variables are discussed below.

The hypotheses of this study surround the notions of dialect contact in which marked[2] or local variants are reduced, whilst unmarked, regionally spread variants begin to gradually

[1] Dialect here refers to a sub-category of a single language and can refer to more than just pronunciation (cf. Meyerhoff (2006)). I avoid using the Labovian term 'speech community' as this paper highlights in its discussions this term is highly problematic, particularly in the context of New-Towns whereby speakers very often do not agree on notions of stigma and prestige.

[2] The term marked here is used to define 'unusual' or 'minority' forms (cf. Kerswill (2003).

populate the speech due to the high levels of social contact experienced with a New-Town structure (cf. Kerswill (2003)). This dialect levelling and gradual adoption of forms[3], however, is proved to demonstrate considerable variation depending on the external factors of differing notions and perceptions of speakers. Llamas's (1999) study of Middlesbrough discovered varying trends dependent of the varying attitudes of different age groups; the older speakers whose identity adhered strongly to Yorkshire, despite the shift in the political boundary, resulted in their speech rejecting innovative forms of glottalisation found in the North-East. The young speakers, on the other hand, adopted a much more local identity with Middlesbrough, rejecting any notion of their dialect sounding 'Geordie'[4] or 'old-fashioned', Yorkshire. Hence, in order to assess the potential differentiation of attitudes between groups of speakers, the external influence of speaker perception will also be taken into account in this study (see section 3; methodologies).

The potential internal motivations of the variation are also scrutinised in relation to the evidence provided by this paper. As mentioned above, the variants of FACE and GOAT are interesting in the North-East of England as the spread of the unmarked variant has triggered the scrutiny of the various theories of chain-shift. Traditionally in Durham, the SED demonstrates these variables were realised with localised variants, (see section 2.4). The notion of chain shift in these contexts shows how these vowel sounds developed differently in South Durham and the North-East compared to the speech variety of RP (cf. Wells (1982); see section 2.4). In contemporary Durham speech and in the North-East region in general however, these localised variants are gradually disappearing due to increased social contact (cf. Watt (2002); Williams and Kerswill (1999)).

[3] Levelling is referred to here as the reduction of marked forms only (cf. Kerswill (2003)) and is discussed in detail below.

[4] The term Geordie refers to the inhabitants and speech found in the city of Newcastle.

The parallel patterning of these sets (cf. Watt (2000)) has proven to contribute to the theoretical and internal analysis of vowel shift and synchronic and diachronic notions of language change. Therefore, this paper hopes to contribute to this discussion in assessing the theories and various models surrounding internalised mechanisms of sound change. The importance of the contribution of apparent time data to theories of internalised factors of change is recognised by Kerswill (2004: 26) who states:

> 'We can argue that the chain shift idea is a metaphor for a process by which vowels move, pushing other vowels away, or creating gaps which are then filled. The shifts are not observed directly; they are deduced from the apparent-time data and are consequently theoretical constructs.'

Complementary to the internal parameters of this study, the external forces of contact and levelling will be examined in order to assess which of these forces is the most influential in driving language change. As this study will identify, the 'external and extra-linguistic factors, especially contact and attitudinal factors, can override a natural shift' (Torgersen and Kerswill (2004: 26)). Unlike the various studies on older settlements, however, which display convergent trends towards the unmarked forms (cf. Watt and Milroy (1999)), the complicated social make-up of New-Towns means this study aims to find the potential presence of divergent trends (cf. Kerswill and Williams (2005)).

The PRICE vowel is similarly interesting within the North-East as the variant [ɛɪ] and alternations with the Scottish Vowel Length Rule (SVLR) in certain environments is reported to be a feature of the speech (cf. Watt and Milroy (1999)). Furthermore, according to several studies, the PRICE vowel is realised with both [ai] and [i:], an alternation which is described as being dependent both on the linguistic environment of the vowel and the social make-up of the speaker (cf. Watt and Milroy (1999)). As this paper demonstrates, however, due to the influx of variants into the New-Town in its early stages, the internalised

mechanisms of SVLR have been restructured to the simpler rules of the Voicing Effect[5]. Thus, the forces of internalised rule simplification are collaborative with high levels of speaker contact, whereby the numerous variants and rules that govern them are reduced and simplified. Though the PRICE vowel is often coupled in analysis with MOUTH due to the potential parallels to be found between the variables, for the purposes of this study the MOUTH vowel is not addressed here because it is not believed to be doing anything interesting in this area as it does not alternate between voiced and voiceless environments (cf. Britain (1997)).

Finally, this paper will turn its attention to the variation of /a/ before embarking on an in-depth discussion of the external and internal factors at work in influencing the variation and change of the variables mentioned above. The assessment of TRAP/ BATH and PALM is again of interest to this study as, similar to PRICE, the distribution of lengthened variants appears to be affected by the Voicing Effect. Moreover, the social affiliation of the speaker, and the extent of speaker network works in corroboration with the internalised mechanisms, strengthening this rule's presence within the New-Town. The interest of this study, then, is to identify the length of the vowel only rather than to assess the quality or backness of the variant. This then avoids any confusion with localised variants of [ɑ:] often realised as [ɔ:] and the more regionally spread variant associated with prestige varieties, such as RP (cf. Wells (1982)), as discussed in section 2.4.

In light of the variation to be found in these variables, this paper will then deliberate over the systemic and social influences in order to identify which systems are driving variation and change. Moreover, in the discovery of any convergent and divergent trends this paper will assess the nature of the spread; if the source of incoming variants are widespread

[5] The Voicing Effect adds length to preceding vowels before voiced consonants, whilst short vowels are maintained before voiceless segments. This is often seen as a simplification of the effects of voicing in SVLR, whereby vowels are lengthened before voiced fricatives, -r and word finally (cf. Milroy and Milroy (1978)).

through geographical diffusion (cf. Kerswill (2003)) then an account of the differing rates and types of diffusion will identify the origins of these forms and how they are being introduced into the speech variety found in Newton Aycliffe.

2 Social and Linguistic Backgrounds

This section identifies the social and linguistic history of Newton Aycliffe, the surrounding region of South Durham and the North-East of England. Starting with the birth of the New-Town and its subsequent social make-up, this section then turns to look at the predominant dialects that entered Newton Aycliffe in its early development. Hence, the identification of the numerous variants found in FACE, EIGHT, GOAT, PRICE and TRAP/ BATH/ PALM, respectively, in the local area 50 years ago recorded by the (SED) are delineated in section 2.4. These data will then be compared to the data of contemporary studies in the North-East region and Durham. Finally, this section will delineate some of the studies completed on New-Towns in order to assess the possible trends each of these variants may follow in a New-Town situation.

2.1 Social History of Aycliffe

Aycliffe or 'Acle' has existed as a village for centuries and is mentioned in Saxon records as far back as 782 (cf. Aycliffe Town Guide (1993)). The population of this village never exceeded 700. In the 1940's, however, this was all to change. The village was no longer hidden in the depths of an oak forest, following Oliver Cromwell's advance to Scotland, when the forest was cut down to pathe the way to Durham city. The new open expanse was never replenished, yet this was not taken advantage of until World War II when this largely forgotten land would become the ideal place for a 'shell filling ordnance factory' (cf. Aycliffe Town Guide (1993)); away from major cities and out of reach of bombers; positioned parallel to the first working railway from 'Stockton to Darlington' which gave birth to the East Coast Line, for easy transportation to London.

The influx of workers into the area from the surrounding region and from across the nation, coupled with the need for post-war housing due to 'subsequent inadequate housing urban

overspill' (cf. Britain (2009: 122)) gave need for the New-Town, set parallel to the old village, as detailed in the Town Programme (1993/4: 42):

> 'After considerable discussion and thought, Newton Aycliffe became one of the fifteen New-Towns being built under the New-Towns Act of 1946. In its original concept Newton Aycliffe was to be composed of small related villages, each having its own shops and school, but still belonging to the community'.

With this, the town continued to grow, attracting people and businesses from far and wide as the industry sparked by the ammunitions factory blossomed into a multi-industrial centre. The town itself would become the flagship for the NHS and its notoriety of its success in rising industry and jobs and its beautiful village green scheme mentioned above would eventually attract a population of up to 36 000 inhabitants by the 1990's (cf. Aycliffe Town Guide (1993)). Moreover, the existence of this growing industrial site and shopping centres within the town would provide employment for the majority of the inhabitants.

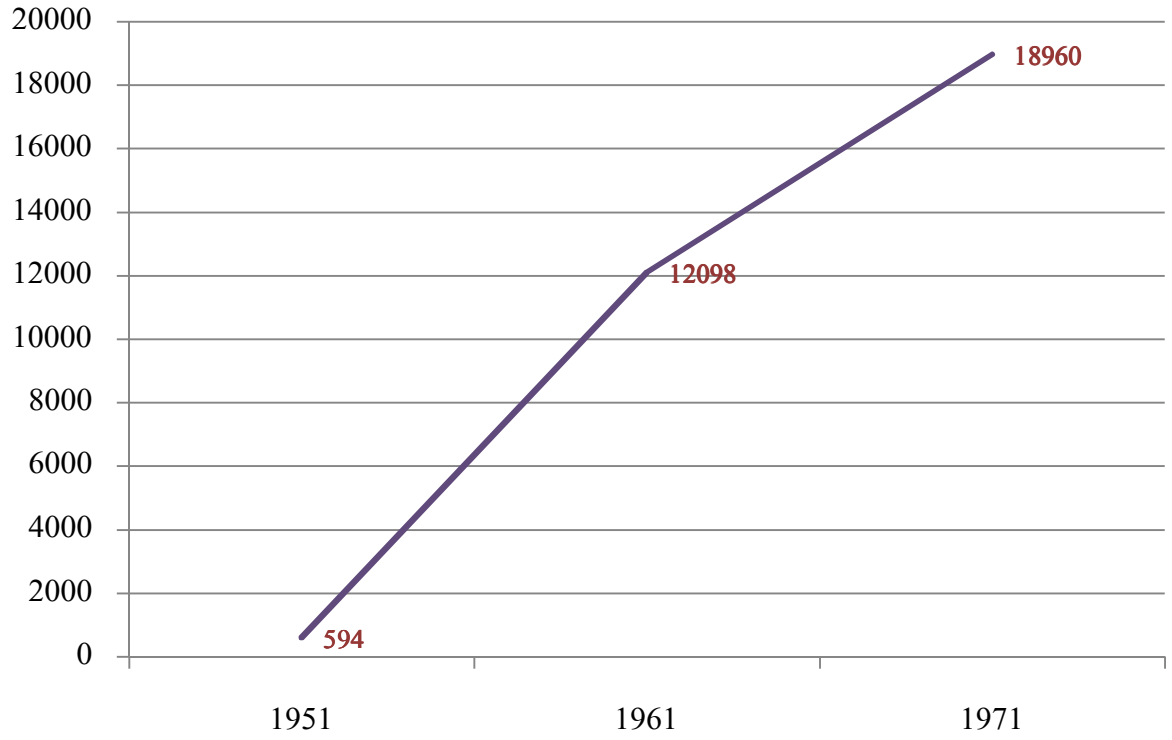
2.2 Demographic

As Britain (2005; 2009) and Williams and Kerswill (1999) identify, the social make-up of New-Towns has acted as a 'linguistic catalyst for the propulsion of core linguistic features into the area' (Britain (2005: 1003) due to the increased levels of contact these urban centres experience. The reason behind the existence of New-Towns is out-lined by Schafer (1972) (as cited in Williams and Kerswill (1999: 149)):

> 'Post-Second World War efforts to rehouse those displaced by the war or living in sub-standard accommodation in inner cities led to the creation of 35 'new towns' across the country.'

In its first 30 years, the growth of Newton Aycliffe was quite considerable as demonstrated by Figure 2.1 below.

Figure 2.1: *Census reports of total population.*



The demographic information for Newton Aycliffe is available only in the census summaries from 1951 to 1971, as full census records are not available for another 50 years[6]. The summaries of 1961 and 1971, however, are strongly indicative of the complex in-migration of peoples and dialects into the New-Town in its early years, as Figure 2.2 identifies.

[6] Full census reports are not available until approx. 100 years after the data collection period. As Newton Aycliffe is a New-Town under the 1960's New-Town development act, this data will not be available for another 50 years. There are, however, 10% data samples which provide us with indicative data of the demographic of the town, as well as parish records and census district reports which provide the same limited but suggestive information.

Figure 2.2: *Area of Origin of Migrants: Census 10% Sample.*

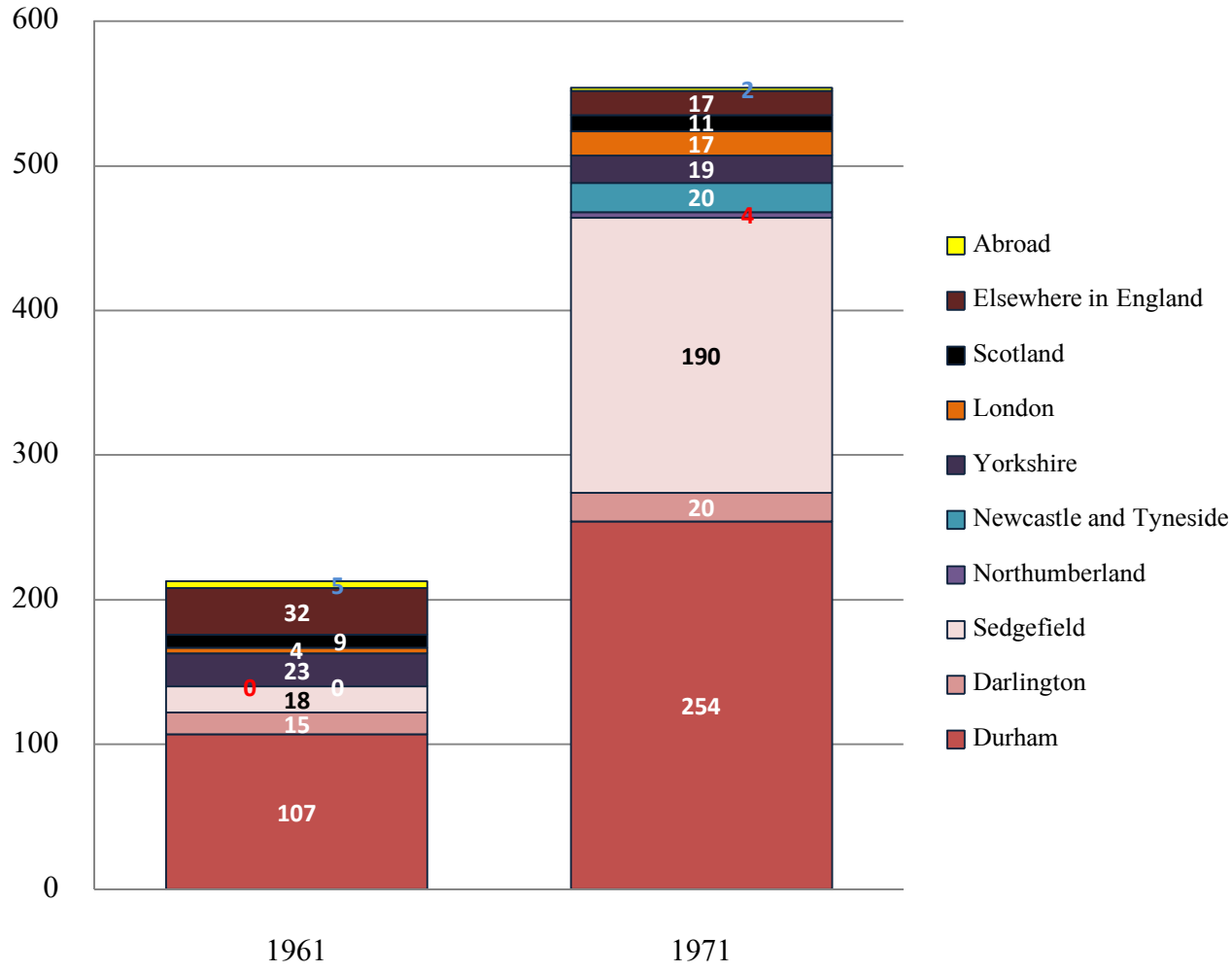


Figure 2.2 clearly shows that the majority of the population are from the local surrounding area, in particular Durham County and Sedgefield District, as the graph displays over 50% of the population coming from these areas in 1961 and over 75% in 1971. The exact localities from elsewhere in England are not identified in the 1961 census; however, the 1971 summary pin-points the origins of these migrants as predominantly from the East Midlands and London making up less than 10% of the overall in-migration. Due to the low number of migrants from outside the local area, however, their impact on Newton Aycliffe speech can be expected to be minimal. In light of this, section 2.4 identifies the variants of FACE, EIGHT, GOAT, PRICE and TRAP/ BATH/ PALM from the local areas surrounding Newton

Aycliffe using the data provided by the SED in order to discover the mixture of forms that were predominantly being introduced in the 1960's.

The census information for the district of Sedgefield and the National Statistics Parish records also provide significant information to give a general idea of the socio-economic status of the population; full tables are provided below (see appendix 17a and 17b).

The census information for 2001 states that 98.69% of the population are White British; for this reason the present study does not consider ethnicity as a factor of possible variability in Aycliffe. The socio-economic data state that 30% of Sedgefield's inhabitants are employed in unskilled-manual labour; whilst the Parish statistics for Great Aycliffe (2004), in Table 1 below, demonstrate a dramatic increase in this percentage:

Table 1: *Parish statistics of socio-economic activity*

	In Active Employment	Employed in Manufacturing[7]	Rounded to nearest %
Total No.	**10987**	**6278**	**57**

Here, the percentage is almost double in comparison with the Sedgefield District area. It is for this reason that the present study divides the informants into *upper* and *lower-working class*. Similarly, as the inhabitants consider themselves to be working class due to their employment within industry, whether as a supervisor or as a manual labourer, the term *upper-working class* is used to describe those employed higher up in industry, rather than using the term *middle class*. This stratification is discussed in more detail below in section 3.1.

[7] This includes factory floor supervisor and technical staff (factory mechanics).

2.3 Processes of levelling and New-Towns

This section sets out to identify the internal and external processes involved when speakers of different dialects come into contact with one another. Drawing on the work of other studies centred on the sociolinguistic principles of speech varieties, this section aims to delineate the terminologies and models which will prove most relevant to analysing the motivations behind the results presented in this paper. Hence, for purposes of consistency, this paper will presently define the terms that are to be used in the discussion of the results. Torgersen and Kerswill (2004: 25-6)[8] highlight that the spread of variants can be identified on varying geographical levels, which they define as follows:

(i) ***Geographical diffusion,*** a process which involves features spreading out from a populous, economically and culturally dominant centre to the surrounding areas (Britain 2002a; Trudgill 1983).

(ii) ***Levelling,*** the reduction of the number of variants following speaker accommodation through face-to-face interaction. This is distinct to supra localisation as it is restricted to smaller geographical areas, such as new towns.

(iii) ***Non-contact, extra-linguistic factors,*** including identity, attitudes and ideology, leading to adoption of features speakers deem attractive, and the avoidance of features which are unattractive.

The first two points, (i) and (ii) will now be dealt with respectively in regard to the internal and external motivations that drive them; point (iii) is discussed in detail below, in regard to language ideologies and identity.

[8] The definitions from this paper will be adhered to despite the varying notions surrounding these terms. In Williams and Kerswill's (1999) paper they refer to levelling as including the emergence of inter-dialectal variants. For the purposes of this paper, the narrower definition presented in Torgersen and Kerswill's (2004) paper is adopted (also cf. Llamas (2001b)).

2.3.1 Internal Motivations

The vowels identified within the FACE and GOAT lexical sets are reported in several studies in the North of England to be undergoing a sound change (cf. Watt (2000; 2002); Watt and Milroy (1999)). The most remarkable aspect of this sound change is that these sets are progressing parallel to one another; adopting more regionally spread variants, specifically [e:] and [o:] (cf. Watt (2000)) at the cost of their traditional diphthongs[9]; as these studies find the frequency of the monophthongs vastly outweighing the number of traditional forms. A structuralist analysis would argue this progression to be an internally motivated shift, as recognised by Watt (2000: 91), whereby 'vowels locate themselves in the vowel space in an orderly and quasi-predictable way…The idea that /e/ and /o/ are symmetrical partner vowels are implicit in such a model'. In light of this, Labov (1994) posits the following progression of [e:] (Type I) > [ɪə] (Type II) > [eɪ] (Type III)[10], under the principle referred to by Labov (1972) (cited in Watt (2000: 92)) that:

> 'When the [raising and breaking of ē and ō] is completed, and the nucleus reaches high position, the next step is usually either monophongization or a shift to a rising diphthong.'

As Watt (2000: 92) highlights, however, this structural account of the sound change is flawed 'as if this shift is unidirectional…it is difficult to account for the relatively high frequency of Type I monophthongs over the other two types'. Similarly, the adoption of the Type III diphthong would depend on the adoption of the Type II forms, which is clearly not the case due to the low occurrence of Type II compared to Type III. Hence, whilst it is indicative that a unidirectional chain shift driven by 'natural' forces (cf. Lass (1976);

[9] The traditional diphthongs of the North East are identified in these sets by Watt (2000) as [ɪə] and [ʊə] respectively and are described in detail within this paper in section 2.4.1 and 2.4.3.

[10] Labov et al. (1972) asserts that the development of the diphthong [ɪə] is from the monophthong [e:] (cf. Watt (2000: 91).

Trudgill (1986)) is occurring due to the parallel progression of these lexical sets, Watt (2000) concedes that the external factors implicit in processes of levelling (below) are over-riding this development. Instead, the mixture of external and extra-linguistic factors dominate the direction of the change as the notions of prestige held by young females surrounding the Type III[11] diphthongs, [eɪ] and [oʊ], are leading to the adoption of these forms in the dialect, (see section 2.3.3, below); whilst the Type II, centring diphthongs, are considerably stigmatised by most speaker groups. The variants above the level of consciousness that are introduced into the speech through notions of prestige, subsequently disrupt and change the direction of sound change (cf. Dyer (2002); Llamas (1999); Stuart-Smith (2006)), as discussed in more detail below.

Moving now to an analysis of the PRICE vowels within these parameters, several studies have identified interesting patterns when analysing variant distribution in relation to phonological environment. As the SED data highlights (below), this variable can be realised in South Durham with the variants [ɛɪ] and [a:] as well as the standard RP form [aɪ] (cf. Wells (1982). The former variants are recognised by Lass (1976) to alternate depending on the following segment, as he states:

> 'Many Scots dialects show [ɛɪ] ~ [ɑe] or something similar with the latter before /r v z ð #/ only. These may also show [a] ~ [ɑ:], with the lengthened and back vowel in the same environments … most of the contexts crucially involve the specification [+voice].'

Thus, the Scottish Vowel Length Rule (SVLR) appears to be implicit in the PRICE vowel in the SED data below, whereby the quality of the vowel is affected in certain environments giving the variant [ɛɪ], as well as altering the length, as described by Milroy and Milroy (1978: 34) 'the diphthong /ai/ is short, except before voiced fricatives, −r and finally'. As

[11] In Watt's (2000; 2002) study of Tyneside, Type III refers to the up-gliding diphthongs [eɪ] and [oʊ]; Type II refers to the centring diphthongs [ɪə] and [ʊə] and Type I to the high-mid diphthongs [e:] and [o:].

the contemporary data unfolds, however, a simplification process is taking place in this alternation, whereby the specific contexts of lengthening have been extended to a simple Voicing Effect. The phenomenon of Canadian Raising is an example of this effect, whereby the vowel is lengthened before voiced consonants and word boundaries, whilst the short vowels preceding voiceless consonants are raised, similar to SVLR (cf. Britain (1997)). Canadian Raising is therefore often seen as a simplification of SVLR as the vowel is lengthened in all pre-voiced environments, not just before voiced fricatives (cf. Trudgill (1986); Canadian English). As discussed in more detail below, the simplified distribution of the lengthened variants in Canadian Raising are attributed to both internal and external factors. Moreton and Thomas's (2004: 3), study of Canadian Raising attribute the pattern of this alternation to be a consequence of natural factors, whereby voiceless codas 'protect' the off-glide as these environments 'cause peripheralization of off-glides in formant space' making them more resistible to deletion through phonetic assimilation. In extension of this, Moreton and Thomas (2004: 4) highlight the discovery made by Thomas (2000) that '/aɪ/ in particular tends to have short nuclei and long off-glides before voiceless codas but the reverse before voiced ones.' Trudgill (1986) and Britain (1997), however, convincingly argue in their studies of Canadian Raising in Canadian English and the Fens, respectively, that this phenomenon does not rely on internal processes alone but on contact induced situations; pointing to more external motivations as part of the causation of this phenomenon, thus this discussion is continued within these parameters below[12]. In relation to the contemporary data of this study (below) the Voicing Effect is similarly discovered.

[12] As the following section will identify, Trudgill (1986) and Britain (1997) posit an analysis of simplification and reallocation due to high levels of speaker contact. In this analysis, these linguists argue that as numerous speakers from different systems and with different variants come into contact with one another, a levelling process takes place, whereby the rules governing the distribution of lengthened PRICE vowels are simplified. Thus SVLR is in a sense extended so that all following voiced segments lengthen the vowel, not just voiced fricatives.

Thus, section 5 discusses these analyses at length in relation to the data found within this study, in order to assess whether length alternation is being internally and externally conditioned, as described above. As Torgersen and Kerswill (2004) identify, however, whilst the internal and external motivations can operate in unison with each other, it is often the case that a clash may occur which can instead over-ride the other factors and change the expected course of change. Hence, the natures of these of the external and extra-linguistic motivations are given due consideration in the following section.

2.3.2 External Motivations

Similar to the internal motivations discussed above, Labov (2001) places the some of the external motivations of language change into Principles. These are as follows (as cited in Milroy and Gordon (2003: 93)):

> **Principle I:** For stable sociolinguistic variables [i.e. those not involved in change] men show a higher frequency of non-standard forms than women.
>
> **Principle Ia:** In change from above [i.e. change which takes place above the level of consciousness] women favour the incoming prestige form more than men.
>
> **Principle II:** In change from below women are most often the innovators.

These groups demonstrate the interplay of external and extra-linguistic factors which govern their behaviour. The intrinsic psychological assumptions, however, surrounding the behaviour of socially stratified groups can often be violated due to varying notions of language ideology. Hence, the Variationist Model of a unified speech community on which these Principles are based is often violated; a phenomenon which this paper will discuss in more detail below in analysing extra-linguistic motivations of language change. For now, the discussion will ignore the divergent trends that can be caused by conflicting extra-linguistic interjection and examine these Principles within external parameters only.

Many linguists have argued that for these social groups to adopt (or reject) incoming variants two external factors are necessary, CONTACT/ MOBILTY and ACCOMMODATION (cf. Trudgill (1986); Milroy (1987); Kerswill (2003); Britain (2005; 2009)). These papers stipulate that when dialects come into contact with each other, the loss of localised variants (cf. Watt and Milroy (1999); Watt (2002)) and the adoption of more regionally spread forms can lead to geographical diffusion, as out-lined above.

Williams and Kerswill's (1999) study of Milton Keynes, Reading and Hull, compares the effect of varying levels of contact, exemplified by the different nature of these urban centres. Milton Keynes, being a New-Town, experiences high levels of contact from in-migration, as well as high levels of mobility. Hull, on the other hand, is entirely the opposite, experiencing 'strong local ties and the kind of network that reinforce local norms' (1999: 150); whilst Reading is the intermediary of the two, an old town with high mobility. Conclusively, they find that the adoption of variants from London was widespread and rapid in Milton Keynes, which is not surprising as Londoners make up 35% of the population.

The spread of these forms, however, was predominantly recognised to be caused by the expanse of the individuals' social network outside of Milton Keynes, a point which will be discussed in more detail below. Reading similarly displayed widespread adoption of variants from London, though this was due to ease of access and close proximity with city itself. Hull, on the other hand, retained more conservative forms, for instance (h) dropping[13] in young adolescents due to the nature of the town's social network (see below). Surprisingly, however, despite the lack of mobility and the density of the network to be found in Hull, Williams and Kerswill (1999) found the adoption of (th) fronting to be quite high; a fact they attribute to the extra-linguistic factors relating to social affiliations, which will be out-lined in more detail below.

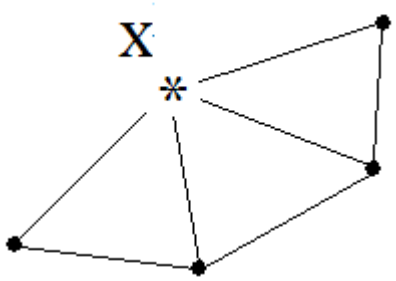
[13] '… (h) dropping in central England is a feature of traditional dialects' (Williams and Kerswill (1999: 157)).

The importance of mobility is, similarly, highlighted by Llamas (2001b) in her study of Middlesbrough English; as she discovers that, contrary to Labov's (2001) Principle II, young men were adopting (th) fronting more extensively than any other social group. In explanation of this converse finding, Llamas (2001b: 135-6) states:

> 'The fact that young adult males are more geographically mobile than the other young speakers is clearly a contributory factor… three of the four young adult males of the sample have lived and worked outside the area in recent years.'

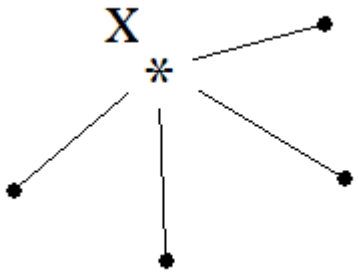
The studies of Williams and Kerswill (1999) and Llamas (2001b) call into play the relevance of social network on the extent of speaker contact and mobility in the process of dialect levelling. The concept of social network and its relevance within sociolinguistic studies of this nature are identified by Milroy (1987: 20) whereby, 'low-status speakers interact mostly within a defined territory; a given person's contacts will nearly all know each other.' The middle class speakers, on the other hand, are described as having the converse social network 'moving outside territorial boundaries, and a given person's contacts each has his own contacts, none of whom necessarily know each other' (1987: 20). Hence, the conservation of localised forms in comparison to the adoption of regional variants are identified correlatively with these two network types, the former often described as dense or *multiplex* and the latter low density or *uniplex*. Milroy (1987: 20) diagrammatically displays the varying connection densities as follows; Figures 2.3 and 2.4 below:

Figure 2.3: *Multiplex Network*



High-density personal network: X = focal point of network

Figure 2.4: *Uniplex Network*



Low-density personal network

Therefore, in accordance with Williams and Kerswill's (1999) study, mentioned above, Milroy's (1987) Figure 2.3 corresponds to Hull in that the local ties of the community are such that 'individuals may be linked to each other in more than one capacity' (Milroy (1987: 20-1). Figure 2.4 then, corresponds to Milton Keynes, whereby individuals have their own contacts, many of them outside the community or town in which they live. Moreover, within Milton Keynes, the inhabitants have a considerably less contact with one another than in older established communities (cf. Kerswill and Williams (2005: 1039)). In reflection of these types of network, in densely networked societies, due to the inverse communication and the subsequent reduced mobility (due to the inhabitants work, family

etc. all being localised), innovative forms have fewer opportunities to infiltrate the speech of the inhabitants. Conversely, in the *uniplex* social networks that are said to be widely typical of New-Towns (cf. Williams and Kerswill (1999); Kerswill and Williams (2005)) the spread of variants is much more extensive, as these forms are introduced through substantial in-migration, and accelerated through increased mobility due to contact with family and friends who typically reside outside of these urban centres (cf. Williams and Kerswill (1999)).

The effect of the social network type, high mobility and increased in-migration of New-Towns, however, serve not only to accelerate the process of levelling, as mentioned above, but can bring about another branch of levelling; KOINÉISATION and the presence of INTER-DIALECTAL FORMS which are defined as follows by Trudgill (1986: 107-8):

> 'In dialect contact and dialect mixture situations there may be an enormous amount of linguistic variability in the early stages. However, as time passes, focusing takes place by means of a *reduction* of the forms available. This reduction takes place through the process of koinéization, which consists of the levelling out of minority forms and otherwise marked speech forms, and of *simplification,* which involves, crucially, a reduction in irregularities. The result of the focusing associated with koinéization is a historically mixed but synchronically stable dialect which contains elements from the different dialects that went into the mixture, as well as interdialectal forms that were present in none.'

Though Trudgill (1986) defines dialect levelling as including the adoption of unmarked, regional forms, his description of the process of koinéisation in the adoption of inter-dialectal forms will be adhered to for the purposes of this paper. In the process of in-migration and the contact of numerous competing variants, however, the subsequent role of the individual and practices of discourse in relation to ACCOMMODATION need to be examined to identify the complete process. In analysing the spread of (th) fronting in Norwich English, Trudgill (1986) attributes the spread of this feature as a product of 'face-

to-face' interaction of speakers, together with attitudinal factors, which are discussed below. However, Trudgill (1986) concedes that many of the speakers who demonstrate the merger of /f/ and /θ/ have the least contact with London, from which this form originates (cf. Trudgill (1986). Yet, rather than ascribe the spread of this phenomenon as a product of exposure through the media, Trudgill (1986: 40) asserts:

> 'We can assume that face-to-face interaction is necessary before diffusion takes place, precisely because it is only during face-to-face interaction that accommodation occurs. In other words, the electronic media are not very instrumental in the diffusion of linguistic innovations. The point about the TV set is that people do not talk to it.'

Instead, Trudgill (1986) argues that accommodation is more likely to take place within Norwich, rather than in London, through tourists and football fans interacting with the inhabitants. Thus, whether we agree with Trudgill's (1986) view surrounding the spread of forms through the media or not, face-to-face interaction is strongly argued by many linguists to be central to variant accommodation, levelling and diffusion.

Referring now back to the alternation of the PRICE vowel in light of this discussion of contact, Trudgill (1986) and Britain (1997) attributes the development of [əɪ] before voiced consonants in Canadian English and the Fens, respectively, as a product of *simplification*, whereby both 'phonological naturalness' as well as an influx of numerous /aɪ/ variants[14], induced the form [əɪ] through high levels of contact. As out-lined above, the Voicing Effect implicit in Canadian Raising is described by Britain (1997) to be a simplification of the more restricted alternation of length encompassed in the SVLR. As the data in this present paper (below) will go onto delineate, a similar process is implemented, determining the distribution variants in relation to the Voicing Effect of following phonological

[14] Britain (1997: 19-20) reports the influx of migration into the Fenland commencing from the 17th Century from when this area was drained producing fertile land. He cites that 'Of the 1,210 in-migrants, almost 75% had come from non-fenland locations'.

environments in which vowel lengthening can occur. Moreover, a levelling process has taken place whereby the SVLR form [ɛɪ] has been considerably reduced; a point which is discussed in more detail in section 2.4.4, in relation to the SED data for the PRICE lexical set. Hence, in light of the data presented below, section 5 goes on to discuss the interaction of these internal and external factors which produce the alternation of vowel length with the Voicing Effects delineated above, within the New-Town context.

Moving now from the spread of variants on the micro-level of ACCOMMODATION, to the macro-level of diffusion, this paper now turns to identify the different ways in which variants disseminate across speech varieties geographically. Britain (2005: 996-7) out-lines the models of geographical diffusion as follows:

a) **"wave" or "contagion" diffusion**, whereby innovations, over time, radiate out from a central focal area, reaching physically nearby locations before those of greater distances.
b) **"urban hierarchical" diffusion**, whereby innovations descend down a hierarchy of large city to city, to large town, to town, village and country.
c) **"cultural hearth" diffusion**, whereby the innovation gains a foothold in both town and country in one particular region before diffusing to other parts of the country.
d) **"contra- hierarchical" diffusion**, whereby innovations diffuse *against* the urban hierarchy, arising in rural areas and spreading to urban ones. [15]

For the purposes of this paper, an attempt will be made to identify the variant nature of diffusion so as to pin-point the source of predominant incoming variants and the nature of their dissemination through the varying scopes of contact the innovators experience; see section 5.2.

[15] Examples of each of these types of diffusion are given by Britain (2005: 996-7) whereby an example of (a) can be found in Bailey's (1993) study of Oklahoma in US. which identifies the spread of lax nuclei; (b) was demonstrated in Britain's (2005) study of l-vocalization in the Fens (East Anglia); (c) was the identified pattern of spread of L-vocalization in coastal Australia and Adelaide (cf. Horvath and Horvath (1997)) and an example of (d) is found in Trudgill's (1986) study of Norfolk demonstrating the reduction of 'triphthongs to diphthongs from the rural to urban areas' (cf. Britain (2005)).

2.3.3 Extra-Linguistic Motivations

As the studies discussed above have indicated, the internal and external motivations that drive language change can often appear to work in tandem with one another (cf. Watt (2000)). As many studies demonstrate, however, the frequently conflicting nature of these factors causes one to over-ride the other, often disrupting an expected pattern of a sound change. As mentioned above, this interference is often caused by the innovators of a speech variety selecting a variant contrary to other internalised mechanisms. Hence, an explanation is then needed to understand the behaviour of why stratified groups of people select or conversely reject certain forms.

As stated above, the external factors set out by Labov (2001) to explain certain aspects of language change carry with them intrinsic psychological predictions, such as Principle Ia which states that as a general rule, middle class women select 'prestige' variants and are less conservative with language. The selection of prestige variants is discussed in detail in section 3, which presents the arguments surrounding gender roles and models of behaviour. For now, this paper will concentrate on studies that have demonstrated the psychologies behind these principles; as well as identify those studies that have found contradictory data, due to varying opinions of stigma and prestige surrounding language. Before this section addresses these papers, however, it is fitting here to outline the definitions of, *standardised, standard* and *prestige* that this paper will adhere to. Milroy (2001) recognises the inconsistencies between linguists as to how these terms as used. For the purposes of this paper then, the definitions that Milroy (2001: 531-2) out-lines will be adopted throughout, as follows:

> *Standardization:* In respect for internal language, the process of standardization works by promoting **invariance** or **uniformity** in language structure i.e. non-ideological.

In following this definition then, both *standardization* and *standard* are internalised and therefore non-ideological. In other words, the term *standard* does not mean *prestige* but describes a speech variety with no intra-variation, thus *standardization* is the process striving towards this result. *Prestige*, then, is the only term, according to these definitions, that applies to the ideologies of speakers, as Milroy (2001: 534) states 'it becomes contradictory to speak of variation in a standard variety of language as a standardized variety must be invariant'. As mentioned above, however, the notion of *prestige* is itself complicated as the social, political and cultural connotations of variants can cause differences in opinion between and within speech varieties, a point which will be exemplified presently.

Dyer's (2002) study of Corby English springs to mind, as the attitudinal data presented by this paper demonstrates the power of opinion in the selection process over 'natural' internalised mechanisms and the general assumptions placed on speaker gender, age and class, as mentioned above. In her study, Dyer (2002) analyses the presence of Scottish-English variants in comparison to Anglo-English variants over three generations, with the hypothesis that the Scottish form would be far less frequent in the younger groups due to levelling with the surrounding area[16]. The hypothesis holds for all of the groups[17] except the third generation men, who were adhering to the marked 'Scottish' variants; despite this group's lack of affiliation with the term Scottish. Interestingly, though it seemed plausible to simply attribute this to Labov's (2001) Principle of men being less susceptible to change, Dyer (2002) identifies that the negative attitudes towards surrounding villages was actually

[16] Corby is located in the Midlands of England. Due to the dominant industry of the town being a Scottish company, the town experienced mass in-migration of Scottish people, with this group of people making up 30% of the population, as indicated by the 1971 census (cf. Dyer (2002: 101)).

[17] The informants were stratified by age, gender and ethnicity.

the strongest factor; men were adopting the otherwise considered stigmatised forms to assert their local identity[18] due to the negative opinions this group held with neighbouring urban centres.

As Watt (2002) and Watt and Milroy's (1999) study of Tyneside FACE and GOAT vowels demonstrate, however, the ideological behaviour of speaker groups can often complement the external factors delineated by Labov's (2001) Principles. Here, both papers identify that, due to the stigma surrounding the diphthong forms [ɪə] and [ʊə], now seen as 'old fashioned', they are subsequently rejected by younger speakers; whilst the [eɪ] and [əʊ] variants considered prestigious due to their usage in the prestigious speech variety of RP (cf. Wells (1982)), are assumed by middle class females as evident by these forms' introduction into the dialect within this group.

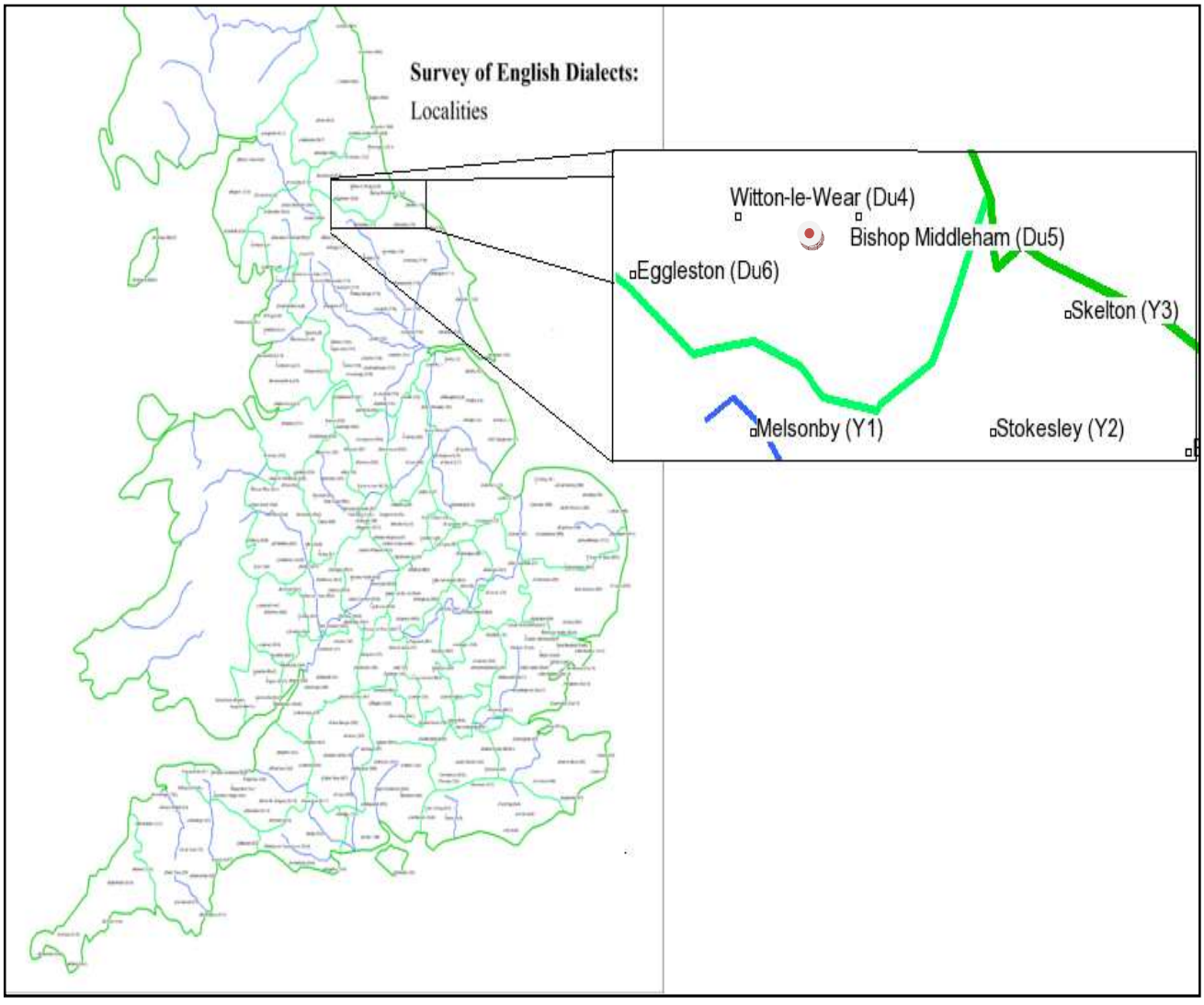
In light of these findings, the importance of this factor is recognised within the parameters of this present study and is therefore investigated in-depth. As section 3 below delineates, part of the methodology is specifically designed to elicit the speaker's opinions of language and identity in order to map patterns of co-variation between linguistic and attitudinal data.

[18] This group considered these forms as uniquely local rather than Scottish.

2.4 Newton Aycliffe: Historical and Contemporary Influences on the Dialect

In order to survey the local dialects which have fed into Newton Aycliffe (represented as the red spot in Figure 2.5), in the early stages of dialect formation, data from six of the surrounding towns studied in the Survey of English Dialects (SED) have been collected.

Figure 2.5: *Localities of Survey of English Dialects in closest proximity to Newton Aycliffe*



Miles from site of Newton Aycliffe by nearest route: BISHOP MIDDLEHAM (Du5) - 5 miles, WITTON LE WEAR (Du4) - 8 miles, EGGLESTON (Du6) - 18 miles (mainly B roads), MELSONBY (separated by a river) (Y1) - 9 miles, STOKESLEY (Y2) - 23 miles, SKELTON (Y3) - 26 miles.

Identifying words from the lexical sets, FACE, GOAT, PRICE and TRAP/ BATH/ PALM, the following graphs demonstrate the distribution of variants in the areas, above, from 50 years

ago. The FACE lexical set has been split into two groups creating the lexical set EIGHT, which will be analysed separately. This is due to the variables' separate derivational history, which in some dialects formed a merger into the single group FACE. In Durham, however, the variants included in the EIGHT set behave quite differently in the SED and are predicted in this study to still do so. Details of these separate derivations are given below in section 2.4.1 and 2.4.2.

2.4.1 Distribution of FACE variants

Wells (1982: 141) defines the FACE lexical set as, '[c]omprising of those words whose citation form in RP and Gen Am has the stressed vowel /eɪ/.' He continues the description of this group by noting their historical origin, stating (1982: 141):

> 'The FACE vowel has the traditional name 'long A'. It derives in most cases via the great vowel shift from Middle English /a:/ or, in consequence of the FACE merger, from /ɛɪ~æi/.'

Some of the words belonging to this set are as follows:

(a) *Tape, babe, name, change, taper, bass, crêpe*

(b) *Wait, day, rein, they, weigh, reign*

(c) *Great, steak, break, yea*

In South Durham, however, these groups of words have several different variants as indicated in Figures 2.6 and 2.7 below (for a complete list of the words assessed see appendix 1). The following graphs have been divided according to spelling, <ai>/ <ay> (typically from Middle English /ai/) and <aCe> (typically from Middle English /a:/) respectively, in order to account for varying developments due to varying historical patterns (cf. Wells (1982: 194)). In the case of some of the words in Wells's list (b), however, such as *weigh,* these words originate from Middle English /ē/ +<x> which, as the contemporary results of this paper will show, have not necessarily merged in the North;

therefore, belonging to the separate lexical set, EIGHT, mentioned above. Within this specific context, V + <gh>, the variant [ɛɪ] is frequently identified; however, this is not to be confused with the 'prestige' form identified by Wells (1982) above. This variant is often treated separately (cf. Williams and Kerswill (1999); Stoddart et al. (1999)) and is identified here separately in the EIGHT lexical set below (see section 2.4.2).

The data for this section then, identifies the spellings within the FACE set, excluding those spelt V + <gh> found in word-list (b), with the following results:

Figure 2.6: *SED: Distribution of FACE variants: <ai>/ <ay>*

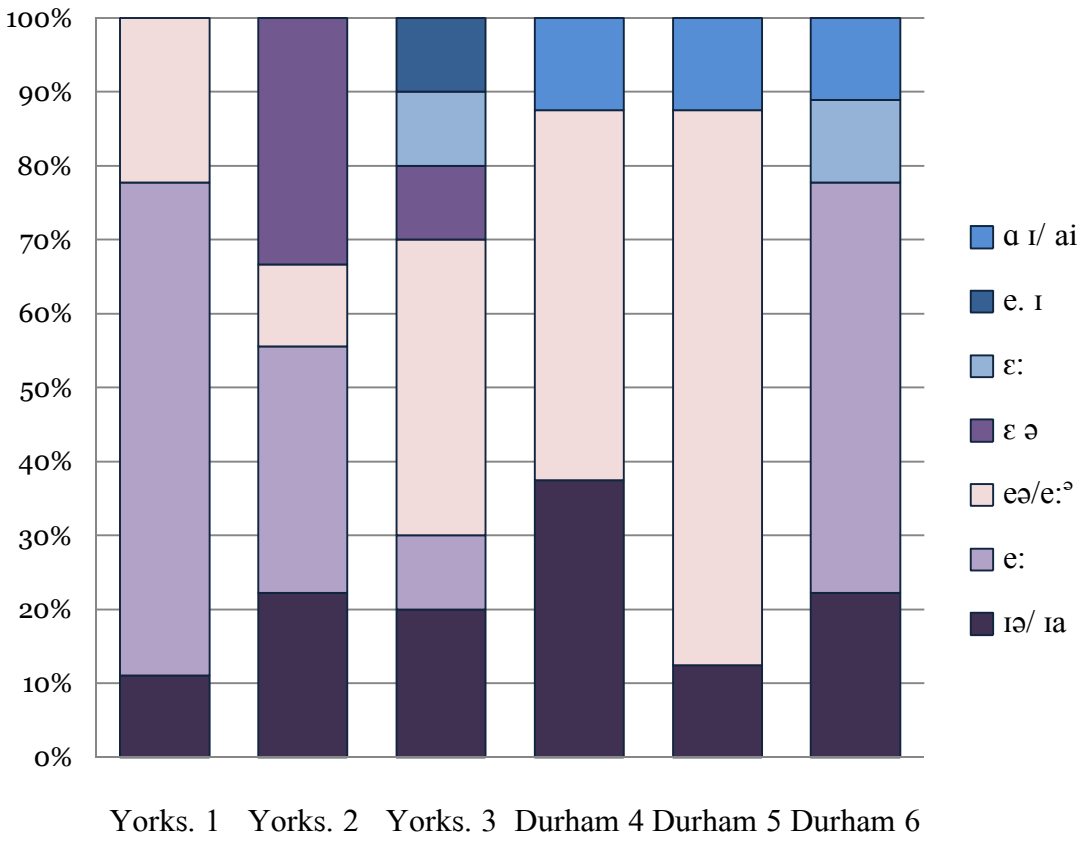
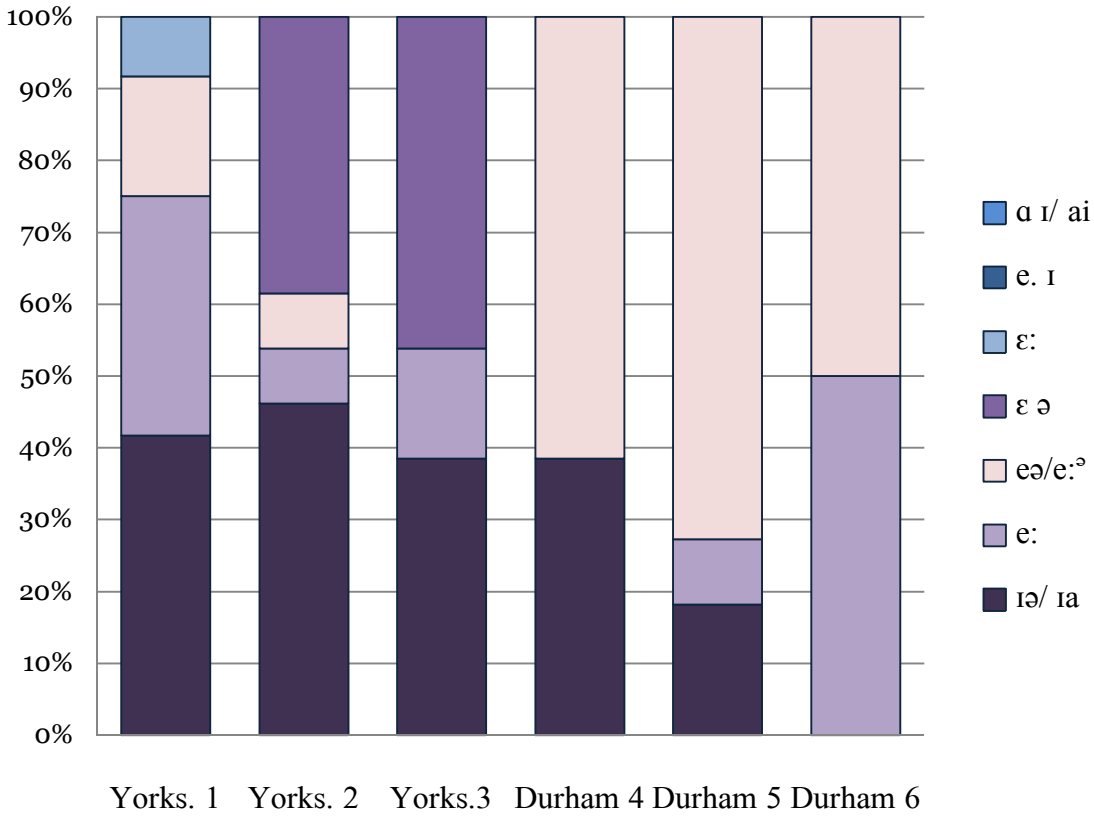


Figure 2.7: *SED: Distribution of FACE variants: <aCe>*



The data from both Figures displays a considerable amount of variation with a high number of localised forms. As the majority of these data were taken from Non Mobile Rural Males[19] (cf. Meyerhoff (2006)), however, it is not possible to state fully that these variants were indeed the dominant forms of the areas they were taken from. Nonetheless, the data does provide us with some understanding of the forms that existed in the area surrounding South Durham at the time Newton Aycliffe was being built. Hence, we can expect that these forms would have come into Aycliffe as people from the surrounding area moved in; see the census data above, section 2.2.

[19] Orton et al. (1962) were concerned with collecting localised forms which were rapidly disappearing due to increased contact between different dialects. As Orton et al. (1962: 15) recognised, 'In [England] men speak vernacular more frequently, more consistently and more genuinely than women', hence their reason for selecting this group as informants to this end.

Both graphs indicate that the dominant form is the diphthong [eə], particularly in Durham 5 which displays over 70% realisation regardless of spelling. The <aCe> spellings, however, display a 30% frequency of the [ɪə]/[ɪa] forms; 10% more than the <ai>/ <ay> words. The monophthong variants [e:] and [ɛ], on the other hand, are found more frequently in words spelt <ai>/ <ay>, particularly in Yorkshire 1 and Durham 6, which display approximately 70% realisation in these areas. Hence, whilst the <aCe> words, typically derived from ME /a:/, prefer the centring diphthong variants [eə] or [ɪə]/[ɪa] and the words derived from ME /ai/ typically prefer the monophthongal forms, the inter-variation between both word groups is minimal, displaying less than 10% difference in selecting the variant forms. This, therefore, demonstrates that spelling is not the best indicator of variant historical patterns, as Well's (1982: 194) identifies:

> 'Today's spelling does not always reflect the historical situation accurately. Although the spelling *a-C-e* usually indicates Middle English /a:/ and *ai* or *ay* Middle English /ɛɪ/, this is not true in, for instance, the words *mail* (post), *gait,* and *waist*, all of which go back to Middle English /a:/ and have hence presumably been homophones of *male, gate, waste* since long before the Long Mid Mergers.'

Turning now to contemporary studies centred on the North-East region, Watt and Milroy (1999) and Watt (2002) analyse the variation of FACE in Newcastle, revealing a number of important patterns relevant to this study in regard to dialect contact. The diphthong variant [ɪə], which appears quite frequently in the historical data presented here, is a feature which is rapidly becoming reduced as the monophthong variant [e:], found in the SED rather less prominently, is becoming more widespread across the North-East. Kerswill's (2003) study of Durham delineates the spread of the monophthong in which variants of FACE collected in Durham in 1983 were compared to similar data collected in Newcastle 10 years later. The speech of both males and females were analysed. Interestingly, Kerswill (2003) found that

even though the Durham data was collected a decade beforehand, women aged 26-59 in Durham demonstrated 92% of the monophthong variant, compared to women of similar age in Newcastle who similarly displayed 92% usage of [e:]. As Kerswill (2003: 4) identifies, due to the time difference in the data collection, 'one might conclude that monophthongisation is more advanced in Durham'.

Furthering this, as the historical data demonstrates, the monophthong variant [e:], which appears strongly in Yorkshire 1 and Durham 6, is evidence of Kerswill's (2003: 4) claim that this variant is spreading from Yorkshire as well as from the Tyneside as a result of urban hierarchical diffusion (above), as he states:

> 'In particular, it may be relevant that Yorkshire, the county to the immediate south of County Durham, traditionally has [e:]. Diffusion from there may be reinforcing diffusion from Newcastle…Whatever the motivation; we are dealing here with an example of regional dialect levelling.'

As the studies above identify, the diphthong variants are now generally restricted to the speech of older, working class males (cf. Watt (2002)) as the monophthong variant [e:] is spreading rapidly. No surprise then, as the data of this present paper will demonstrate, this variant is a feature of speech in Newton Aycliffe. Yet, as the pilot study for this paper[20] highlighted, another interesting variant [ɛ:], which appears in the SED data, minimally, in Yorkshire 1 and 2 and Durham 6, is becoming more apparent in Aycliffe speech. This variant is reported in more contemporary studies as a feature of the speech variety found in Hull (cf. Williams and Kerswill (1999)), Sheffield (cf. Stoddart et al. (1999)) and less prominently in Newcastle (cf. Watt and Milroy (1999: 28)). Hence, as this variant principally appears to be a feature of speech varieties in Yorkshire, and is beginning to

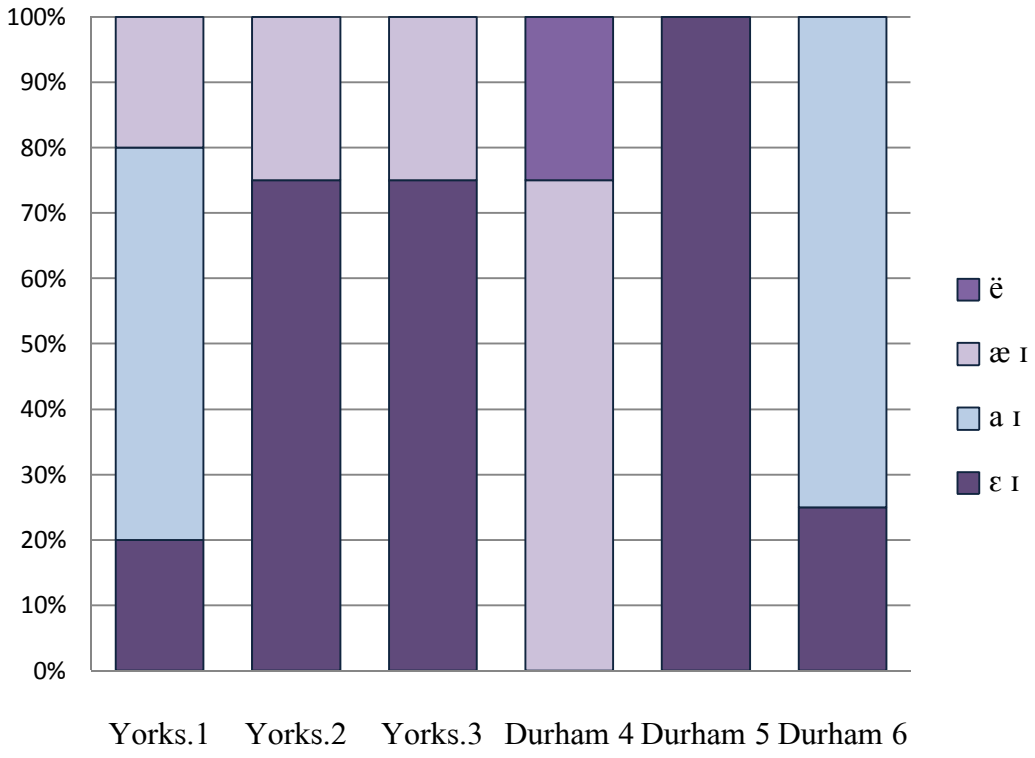
[20] West H., (2008). 'Language Variation and Change: A sociolinguistic study identifying the variation within the FACE and GOAT lexical set with the interrelation of social groups and subsequent attitudes to language in Newton Aycliffe'. Unpublished undergraduate dissertation, University of Edinburgh: MA.

appear in Newcastle, the prediction is that this variant is subject to reinforced geographical diffusion, similar to [e:]. A detailed discussion identifying patterns of convergence and processes of levelling and diffusion can be found below in section 5.

2.4.2 Distribution of EIGHT variants

The EIGHT set has many of the same variants as the FACE set above; however, the specific development of /e/ + <gh> is different from that of the FACE set in the North of England (cf. Wells (1982)), as Figure 2.8 demonstrates the EIGHT sets' divergent rate of development.

Figure 2.8: *SED: Distribution of EIGHT variants*



Here we see the two prominent variants are [ɛɪ] and [aɪ]. Notably, these variants with the up-gliding diphthongs are seldom found in the other FACE words (above) but appear in high numbers here. In particular, the [ɛɪ] variant is used categorically in Durham 5 and displays over 70% realisation in Yorkshire 2 and 3. Similarly, [æɪ] and [aɪ], respectively,

demonstrate 70% usage in Durham 4 and over 60% realisation in Yorkshire 1 and Durham 6.

As mentioned above, however, [ɛɪ] is not to be confused with the more widely spread variant associated with RP (cf. Wells (1982)) as Glauser (1988: 622) states:

> 'To the South[21] ei is a rare sound, occurring only in words like eight, neighbour, straight, weigh,...Between Northern Middle English e and /x/ a palatal glide seems to have developed before the fricative was deleted, which led to forms like [wɛɪ] "weigh" and [nɛɪ] "neigh"'.

Therefore, despite the variants of FACE being present here, the varying frequency of these forms, as well as the presence of the additional variant [ɛɪ] are due to this context's separate origin, described above, as opposed to the origins of the FACE vowels of [a:] and [ɛɪ]. Hence, whilst this set demonstrates a convergence towards the FACE set, its treatment in this paper will remain separate in order to assess the potential presence of the traditional Durham variant [ɛɪ].

2.4.3 Distribution of GOAT variants

Wells (1982: 146) describes this lexical set as 'comprising of those words whose citation form has the stressed vowel /əʊ/ in RP and /o/ in GenAm.' He continues the description of this word group as having originated from Middle English /ɔ:/ and /ɔu/ and that in many varieties these groups have now merged. He lists the words according to origin, respectively, as follows:

a) *Soap, boat, hole, home, no, brooch*

b) *Bowl, soul, colt, roll, sew*

As with the FACE set, I examine the behaviour of GOAT in the SED data for the area under investigation to show the different input vowels; hence, the SED data has been divided into

[21] The 'South' here refers to South Durham as Glausers' (1988) study is based mainly around Northumbrian English.

two groups according to spelling. As Figure 2.9 and Figure 2.10 indicate below, though the above groups have now converged in many other dialects, in South Durham and North Yorkshire at the time of the SED, intra- and inter-variation still occurs between spelling types.

Figure 2.9: *SED: Distribution of GOAT variants: <oa> and /o/ + C*

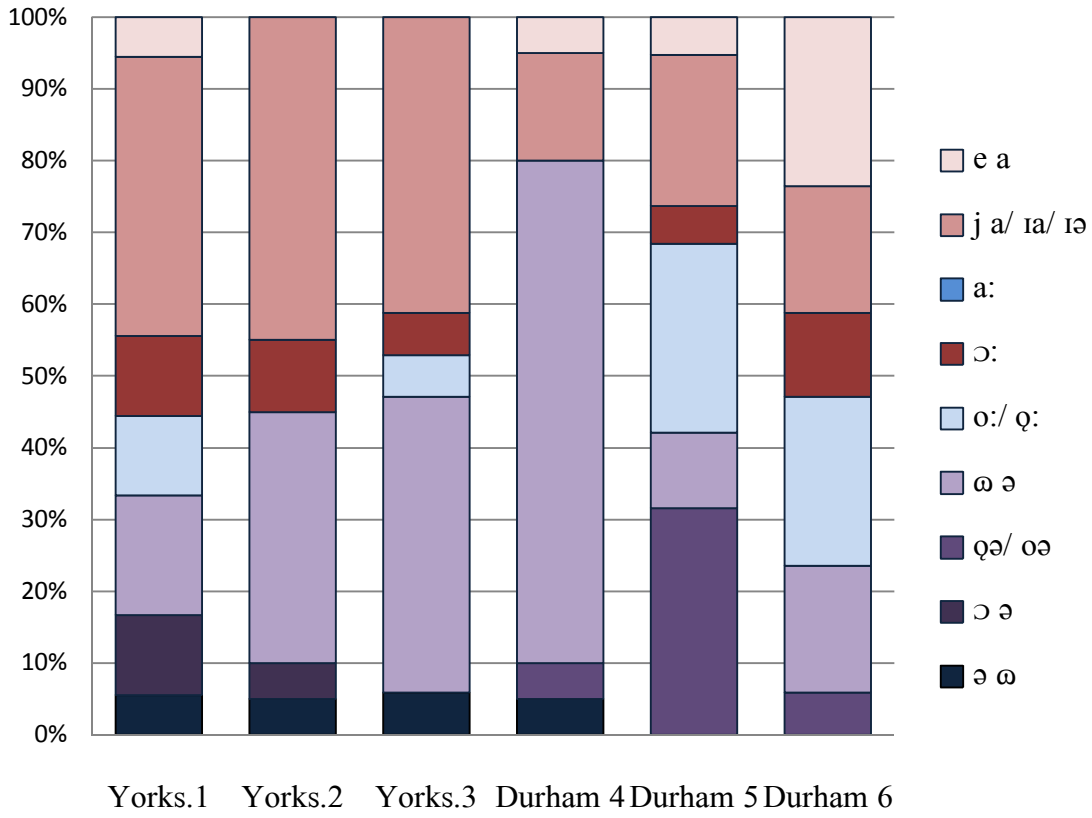
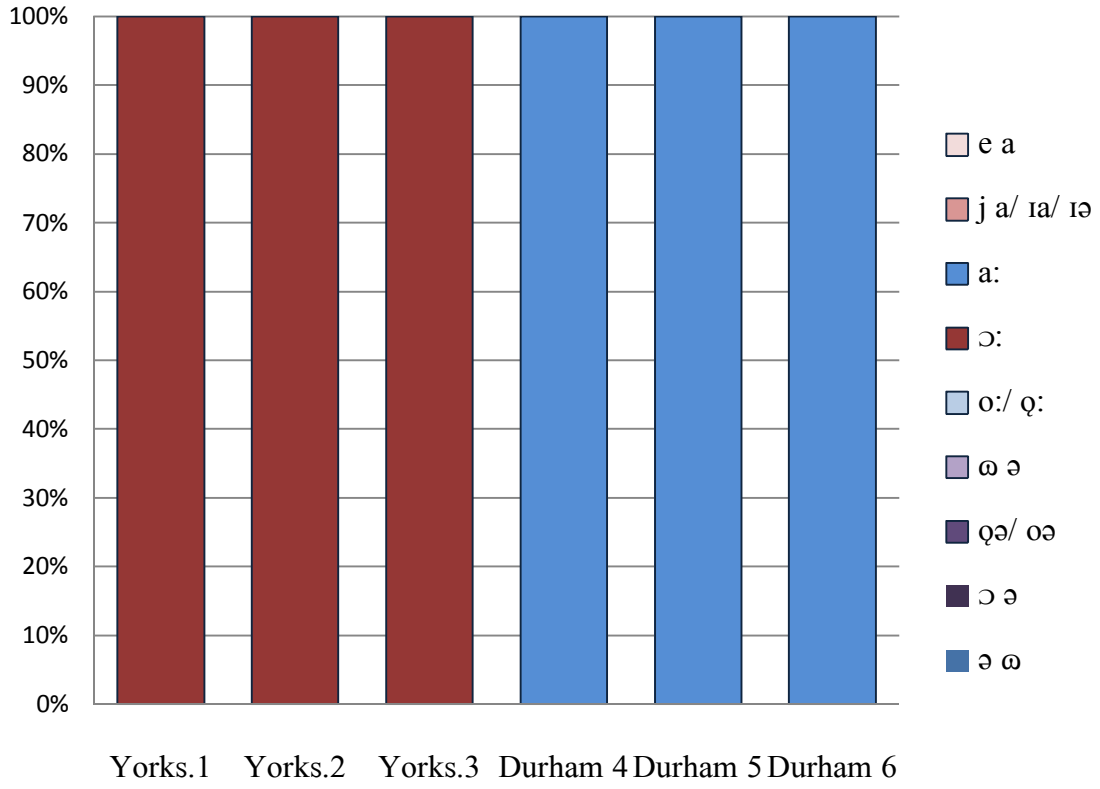
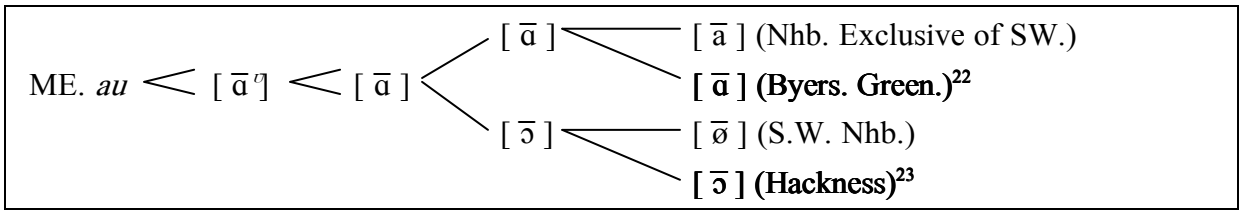


Figure 2.10: *SED: Distribution of GOAT variants: <ow>*



Looking primarily at Figure 2.10, the only variants that appear in words specifically spelt <ow> are [ɔ:] and [a:]. Interestingly, these variants seldom occur in GOAT words with other spellings, as Figure 2.9 indicates [ɔ:] accounting for less than 10% in the two environments and [a:] does not occur at all. Here, on the other hand, [ɔ:] appears categorically in Yorkshire in this context and [a:] appears categorically in Durham creating a distinct isogloss between the counties. Orton (1933: 238) represents the separate historical derivations of the variants from Middle English [au] (Diagram 1 below), showing the difference between the counties.

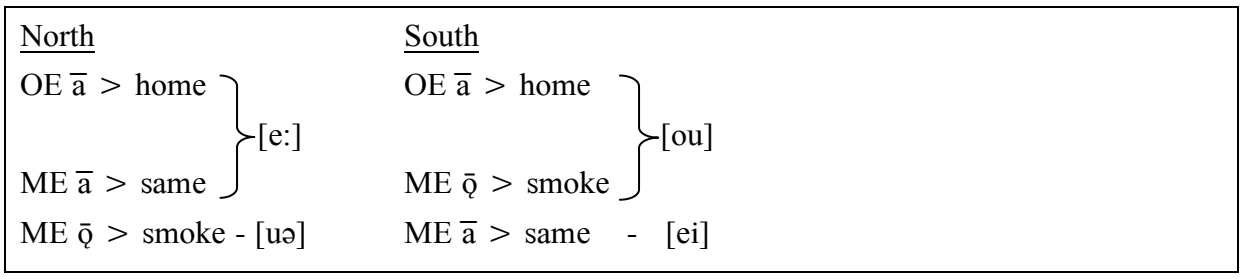
Diagram 1: *Progression of Middle English [au] in South Durham*



In Figure 2.9 the intra-variation between the variants is quite considerable, unlike Figure 2.10 which clearly indicates two realisations within this context. Thus, the most notable variation found in Figure 2.9 is the distribution of [ɷə], which is preferred overall, particularly in Durham 4, which displays 70% realisation of this variant. Similarly, the [ja]/ [ɪa]/ [ɪə] appear most frequently in Yorkshire demonstrating a frequency of approximately 50% in this county. Thus, the complex distribution displayed in Figure 2.9, indicates the difficulties with using spelling as an indicator of historical word patterns, as Wells (1982: 194) identifies; 'The spelling of *roe* (fish eggs) similarly suggests Middle English /ɔ:/, though in fact it had /ɔu/, just like *row* (with oars).' Similarly, the [ja]/ [ɪa]/ [ɪə] that appeared so frequently in the Yorkshire areas in Figure 2.9 are derived from Old English /ā/ as opposed to Middle English /ɔ:/ (cf. Orton (1933: 204)).

The difficulty with spelling as a historical indicator is further demonstrated by Lass (1976: 134) as he exemplifies the divergent trends of *home* and *smoke,* (Diagram 2, below):

Diagram 2: *Varying progressions of [ā] and [ǭ] between the Northern and Southern regions of England*



[22] A town in Durham.

[23] A town in Yorkshire.

Despite both *home* and *smoke* having the spelt <oCe> their similar spellings do not highlight their different origins which have led to the varying progressions producing different variants between the North and the South. As the contemporary data will demonstrate, however, despite the faltering of this system, the etymology of words can still be used to identify the distribution and historical patterns of lexical items with the <oa> spelling.

Moving now to look at the contemporary data of the GOAT lexical set, as with FACE (above), many cotemporary studies report the loss of localised forms due to increased social contact (cf. Kerswill (2003)). The parallel patterns of variation between FACE and GOAT are discussed in Watt's (2000: 69) study of Tyneside English, in which he identifies that,

> 'Patterns in the data are suggestive of dialect levelling, whereby localised variants become recessive and pronunciations typical of a wider geographical area are adopted.'

Watt (2000; 2002) analyse the variation of GOAT in proximity to 4 variants [o:] (Type I), [ʊə] (Type II) and [oʊ] ~ [ɵ:] (Type III). Conclusively in both papers, it is identified that the Type I variant is gaining ground in Tyneside English, whilst the Type II form which is considered more localised is gradually being reduced, as Watt (2002: 74-75) identifies:

> 'Type II diphthongs are found to be in other northern counties of England, such as Yorkshire and Derbyshire, but it is probably true that they are now somewhat rarer in these regions than on Tyneside…The consistent association of Type II variants among listeners from various regions of England suggests that these forms have become stereotyped, a factor which chimes with Wells's (1982: 375) remark that [ɪə] and [ʊə] are "nowadays rather old-fashioned".'

Similarly, in the data presented in this paper a reduction of Type II variants will be expected despite their substantial presence in the region in the SED data above. In light of this, this present paper further hypothesises the spread of the Type I variants in Newton Aycliffe speech.

As the pilot study for this paper identified, however, a further variant [ɔ:] is appearing in the speech of the younger speakers, parallel to the [ɛ:] variant in FACE, above. This variant has similarly been identified as being a feature of the speech variety found in Sheffield amongst all age groups, though particular in the speech of men (cf. Stoddart (1999)). Again, as with the FACE variant, this paper will go on to identify the convergent trends of Newton Aycliffe speech in section 5 below.

2.4.4 Distribution of PRICE variants

Wells (1982: 149) identifies this lexical set 'as comprising those words whose citation form in RP and GenAm has the stressed vowel /aɪ/.' He lists these words as follows:

a) *Ripe, tribe, time, Friday, isle, hi-fi, type*

b) *Fight, high, sign*

As with FACE and GOAT above, the data from the SED has been divided into three groups according to spelling, which can prove indicative of the words etymology. As Wells (1982: 149) identifies, the words in (a) are 'derived from Middle English /i:/', but other PRICE words have a different source: as Wells (1982: 209) states:

> 'Price words can be etymologically divided into two groups, those which did not contain /x/ after the vowel in Middle English and those which did.'

In Northern varieties, words with the spelling <iCe>/ <i#>, are typically derived from /i:/ and pronounced with the stressed vowel /aɪ/, whilst those with the spelling, <i+gh> are typically derived from /ix/, and behave differently, as shown below in Figure 2.11 and 2.12 (cf. Wells (1982)). A further distinction can be made, however, when analysing the spellings <i+nd> or <i+mb> as these spellings tend to retain the short vowel [ɪ] more strongly than the <i+gh> due to their separate origin from ME /i/ (cf. Orton (1933: 31)), as demonstrated in Figure 2.13.

Figure 2.11: *SED: Distribution of PRICE variants: <iCe> and <i #>*

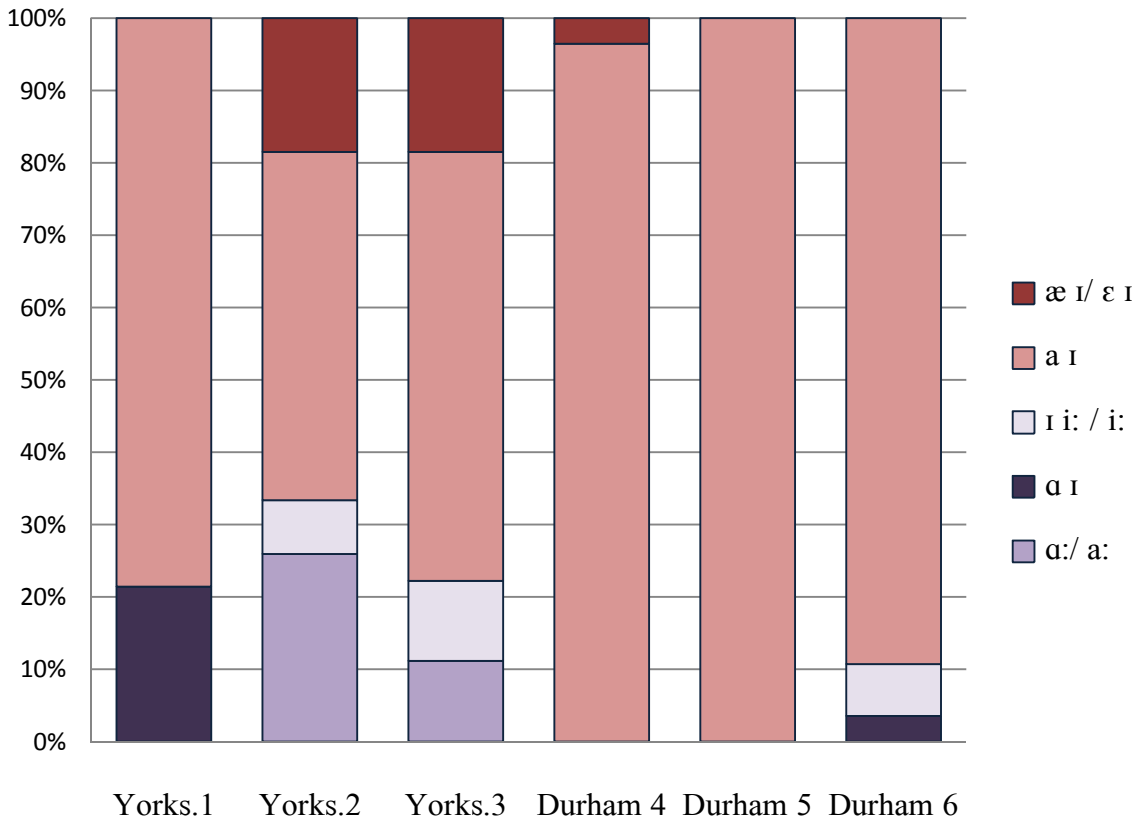
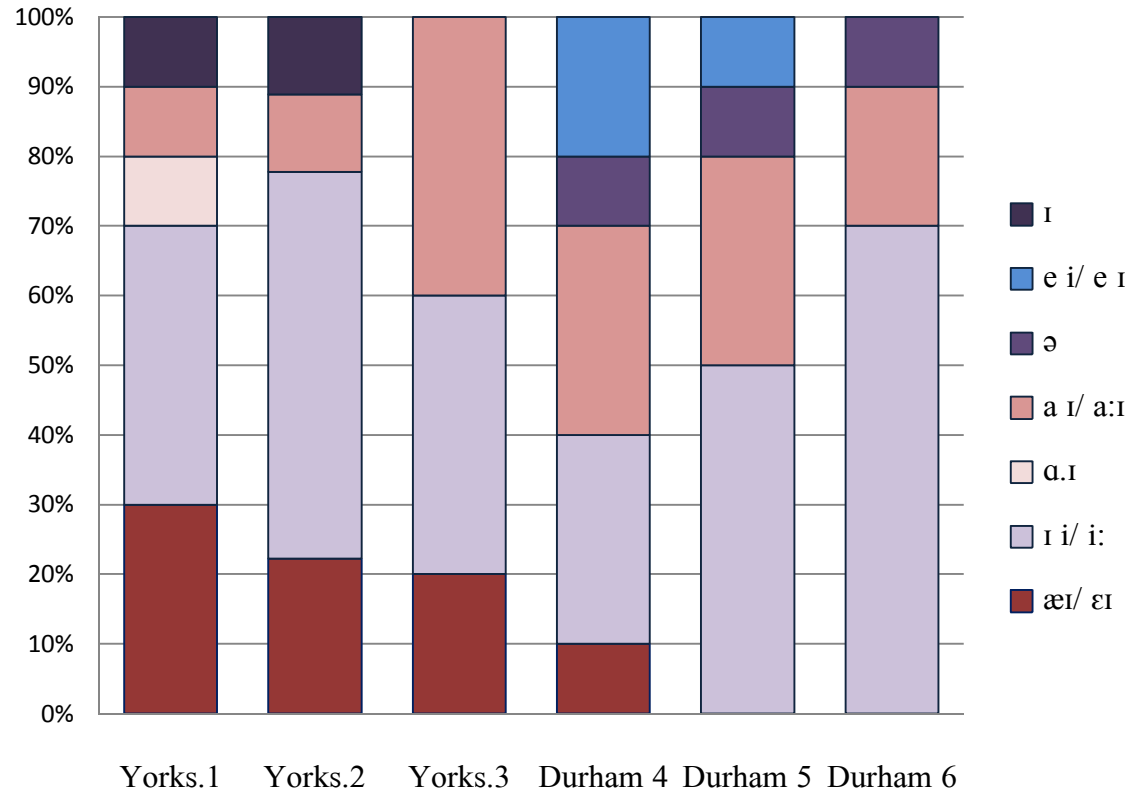


Figure 2.12: *SED: Distribution of PRICE variants: <-gh>*

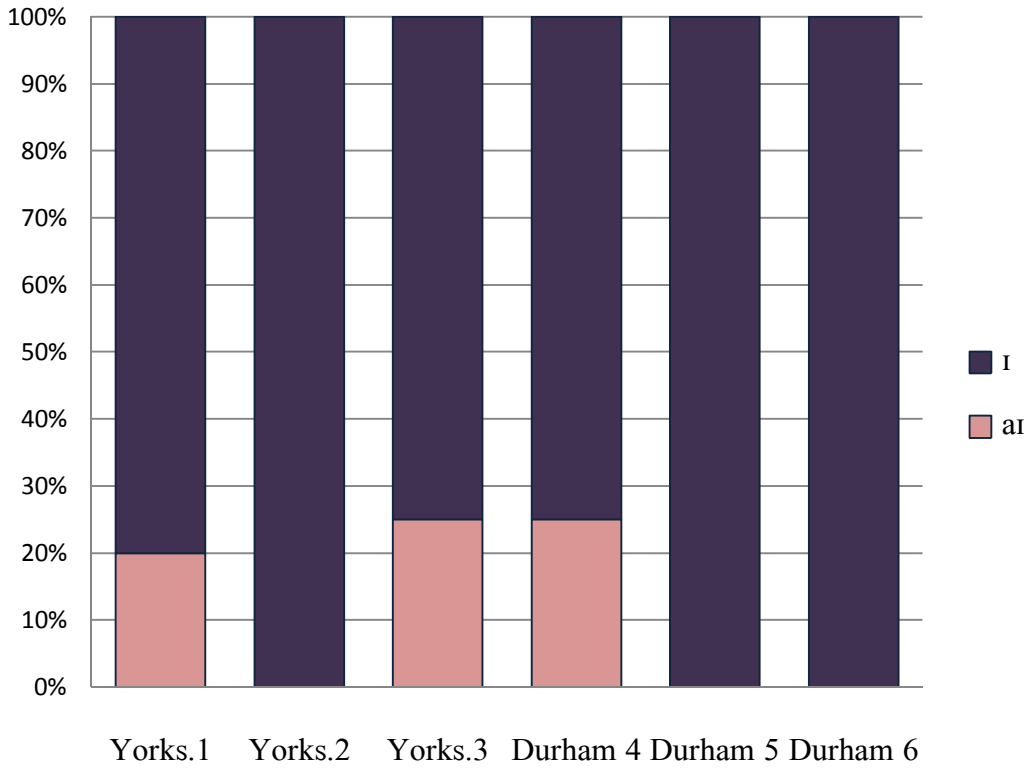


The pattern of the variants in Figure 2.12, appear to mimic the notion that spelling indicates historical pattern as /aɪ/ is the dominant form in all of the areas, particularly in Durham. As with FACE and GOAT, however, there is a considerable amount of intra-variation with the [i:] variant appearing reasonably frequently, as Wells (1982: 209) concedes:

> 'In traditional-dialect of the north of England and in Scotland, forms with [i(:)] may be encountered from both groups, e.g. [di:] *die*, [rit] *right*.'

In the context of <i+gh> the [i:] pronunciation is retained considerably, accounting for approximately 50% of the realisation overall in Figure 2.12 below. Even more striking, however, is the distribution of the short vowel, [ɪ], in Figure 2.13 in comparison to Figure 2.12, which displays approximately 90% realisation overall in the context <i+nd>/ <i+mb> with the remaining 10% being dominated by the [aɪ] variant.

Figure 2.13: *SED: Distribution of PRICE variants: <-nd> and <-mb>*



Notably, Figures 2.11 and 2.12 both display usage of the SVLR variant [ɛɪ], which predominantly features in the EIGHT lexical set, shown above. The presence of this variant in Northern dialects is recognised by Watt and Ingham's (2000) study of Berwick English whereby the usage of SVLR[24] was found to be an indicator for identity in this border region. This study highlights Glauser's (1988: 623) findings of SVLR in Durham in consideration of the effects on their data of the spread of this variation into North-East England English:

> 'On one hand Scots innovations seem to have reached as far South as Tyneside and North Durham, and on the other hand Aitken's context exerts its influence on only a marginal part of the northern English phonological systems.'

In a more recent study, Watt and Milroy (1999: 28-29) similarly identify the specific context in which SVLR occurs, stating:

> 'A similar alternation to the Scottish Vowel Length Rule obtains among words of the PRICE set: raised [ɛɪ] is found before voiceless stops and fricatives, [ai] elsewhere, thus [nɛif] *knife* but [naivz] *knives*.'

As Figures 2.11 and 2.12 displays, however, the presence of the [ɛɪ] and [eɪ] variants account for only 20% and 9%, respectively, of the realisation, demonstrating the gradual disappearance of this form. As Labov (1994: 281) states, there are two possible routes in which this diphthong [eɪ] can take; (a) by the nucleus rising (Principle IIA), or (b) become monophthongised, as he states:

> 'The nonperipheral nucleus of the original [E>ɪ] then typically becomes the most open vowel of the system as a whole, [a]. If the glide remains, the nucleus continues the shift under Principle I,

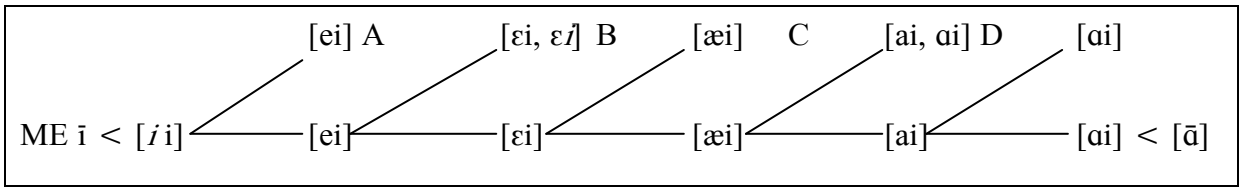
[24] As out-lined in section 2.3 above, SVLR, otherwise known as 'Aitken's Law', states that 'In Scots, most vowels (and certainly the high vowels and the diphthong /ai/), are short, except that before the voiced fricatives, −r, and finally, a markedly longer vowel occurs. Furthermore, in the case of /ai/, there is a marked qualitative difference: thus, *drive* in Scots has [a·e], but *ride* has [ʌɪ] or something similar' (Milroy and Milroy (1978: 34) In this case it's the variant [ɛɪ], which attributes to this rule.

> moving up and back to peripheral [ɔ>ɪ]. In other cases, the vowel leaves the subsystem of up-gliding diphthongs and becomes a long monophthong, [a:].'

In light of these findings and for the purposes of this present study, this paper aims to identify whether the Voicing Effect[25], whereby the vowel is lengthened pre-voiced consonants, is a feature on Newton Aycliffe speech. As the results identify below, however, the effect on length is the only consequence on the vowel, as unlike the Voicing Effect in Canadian Raising, /aɪ/ does not raise in front of voiceless consonants. Similarly the [i:] variant is now largely restricted to the speech of older working class, males in the words *night* and *right* as Watt and Milroy (1999: 29) report in continuation of their description of Tyneside English. Hence, the SVLR variant [ɛɪ] and the [i:] forms were not expected to feature due to its already restricted appearance in Tyneside and Durham speech, as mentioned above.

Therefore, the alternation of [aɪ] and [a:] will be examined in relation to the Voicing Effect delineated above. As Figure 2.11, the data identifies the presence of [a:]/ [ɑ:] in two of the Yorkshire areas, in which the second segment of the diphthong has been dropped. This is recognised by Wells (1982: 209) as 'an independent development in the American South, parts of the north of England, and South Africa.' Orton (1933: 201) elaborates further on this development in South Durham in demonstrating its derivational history in Diagram 3:

Diagram 3: *Progression of Middle English [ī] in South Durham*



[25] As mentioned above, the Voicing Effect is implicit in Canadian Raising, whereby the vowel quality is altered in length in front of pre voiced segments and finally, whilst the short vowel precedes voiceless segments and is also raised. Canadian Raising is considered as a simplification from SVLR, whereby lengthening occurs before voiced fricatives, -r and before morpheme boundaries only, (cf. Milroy and Milroy (1978); Belfast; Britain (1997); the Fens; Trudgill (1986); Canadian English).

This development is reported in several contemporary studies conducted in the North (cf. Docherty and Foulkes (1999); Derby; Williams and Kerswill (1999); Hull). Interestingly, Williams and Kerswill (1999: 156-157) describe the distribution of the monophthong variant as conditioned by phonological environment, stating:

> 'Characteristic of the old dialect of Hull and the surrounding area of Holderness is an allophonic distinction between a diphthong [aɪ̯] and a monophthong [a:] in this vowel. The former precedes voiceless consonants in words such as *bright, like, pipe,* and the latter, voiced consonants as in *bride, five, mind.*'

Hence, for the purposes of this study, the assessment of the PRICE vowel in regard to phonological environment was carried out to identify the alternation of length between [+voice] and [-voice] environments found in Canadian Raising, as well as the presence of weakening or deletion of the second segment of the diphthong, preceding [+voice] environments.

2.4.5 Distribution of TRAP/ BATH/ PALM variants

Wells (1982: 133) describes the varying surface forms of /a/ in the BATH lexical set, which he describes 'as comprising those words whose citation form contains the stressed vowel /æ/ in GenAm, but /ɑ:/ in RP.' He lists the words belonging to this set as follows:

(a) *Staff, giraffe path, lath, brass, class, grass, pass, raft, craft, graft, daft, shaft;*

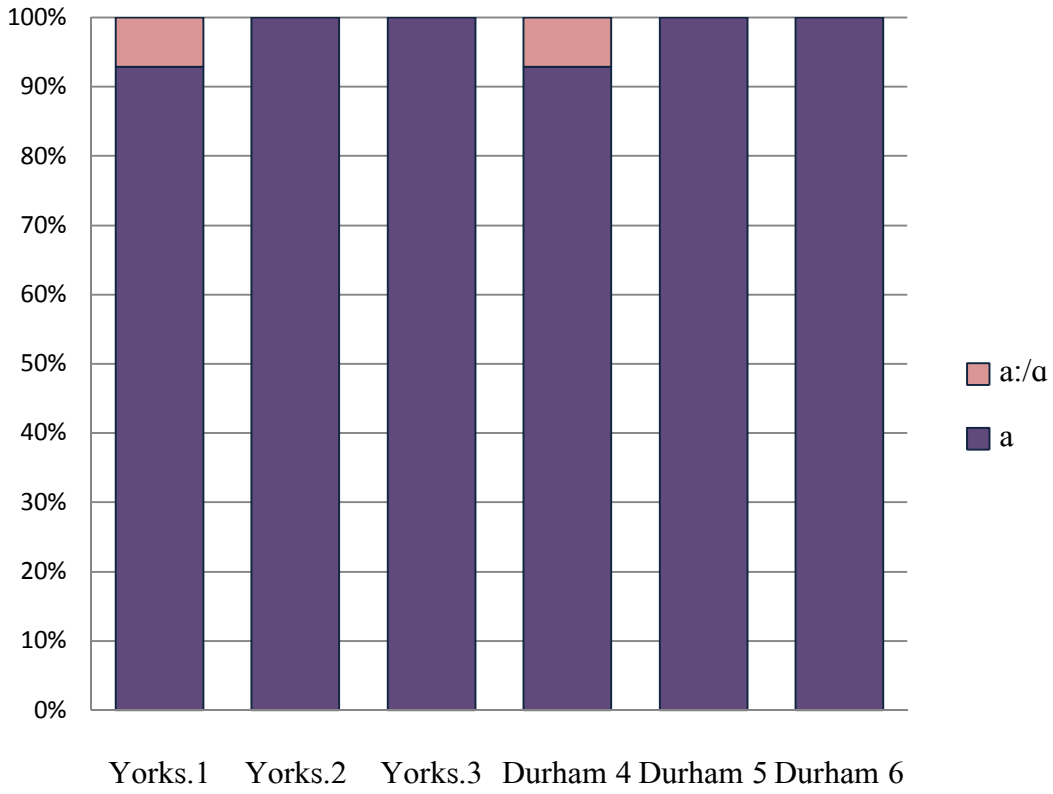
(b) *Dance, advance, chance, France…aunt, chant, plant;*

(c) *Calf, half, calve, halve, Slav, shan't, can't.*

Each of these lists behaves differently from each other, however, depending on speech variety. Looking in particularly at Wells's (1982) description of RP and Northern varieties, those listed in (a) and (b) typically have the BATH vowel /ɑ:/ in RP but /a/ in the North. Those in (c), however, are pronounced similar to BATH but comprises of words which have the /ɑ/ pronunciation even in GenAm as opposed to /æ/ (cf. Wells (1982: 142)). In the

North however, a similar distinction can be made with word-list (c) as in the North these words are susceptible to lengthening, /a:/ or the use of the back vowel /ɑ/ (cf. Wells (1982: 135)). This is demonstrated by the data from SED presented in Figure 2.14 and 2.15 below, whereby the former accounts for pronunciations of words listed in a) and b) above, whilst the latter comprises of words from word-list c).

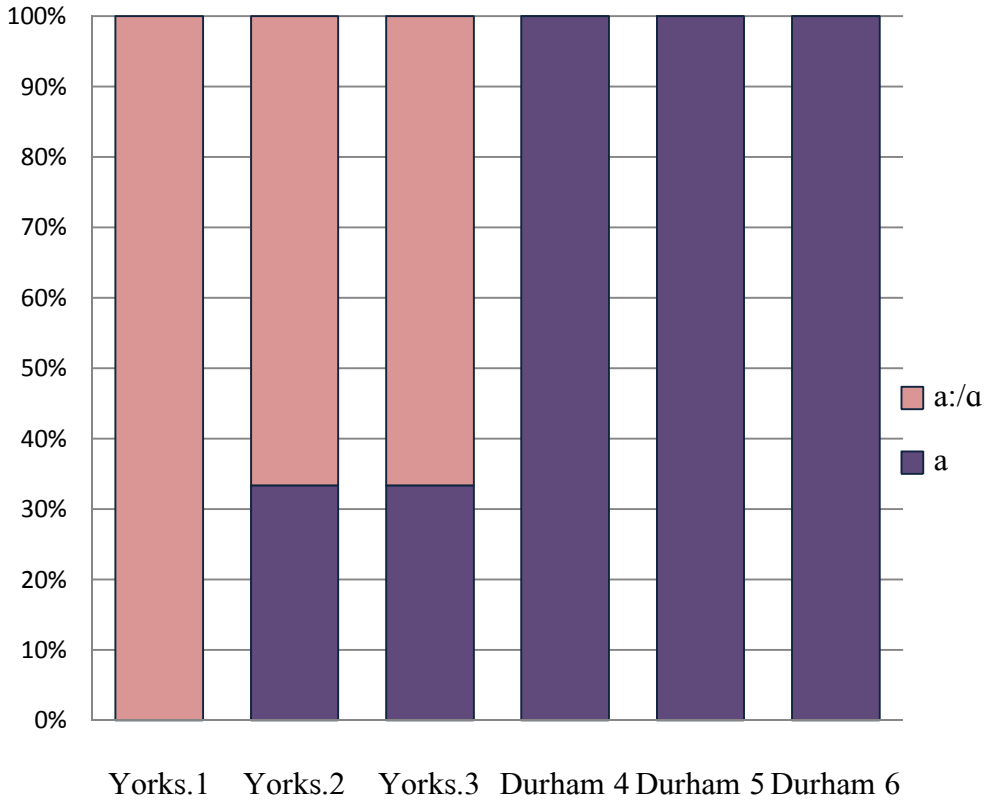
Figure 2.14: *SED: Distribution of TRAP/ BATH/ PALM variants: Word-lists A and B*



As Figure 2.14 demonstrates, the dominant form in the North of England is the TRAP pronunciation [a], despite a two anomalous examples in Yorkshire 1 and Durham 4 (see appendix 14 for details). In Figure 2.15 below, however, there is a massive distinction between Yorkshire and Durham with words such as *can't*, *shan't* and *aunt*, as Yorkshire favours the V/ [+ length] or V/ [+ back] whilst Durham adheres categorically to the TRAP pronunciation. The inter-variation between these graphs is of particular interest due to

the high number of [a:] and [ɑ] in the GenAm PALM words compared to the BATH sets presented in Figure 2.14.

Figure 2.15: *SED: Distribution of TRAP/ BATH/ PALM variants: Word-list C*



The lengthening and/or backing of /a/ in certain contexts are discussed by Beal (2004: 123) in her discussion of North of England dialects as she states:

> 'In some northern varieties, there are lexical exceptions to the rule that BATH words have a short vowel: in Tyneside and Northumberland, *master, plaster* and less frequently *disaster* are pronounced with [ɑ:] (phonetically more like [ɒ:]), but *faster*[26] with [a], whilst *master* alone is pronounced with [ɑ:] in other varieties (Lancashire, Sheffield).'

[26] *Father* belongs to Wells's (1982) lexical set PALM. In regard to length only, the vowel in this word in the North of England alternates in length between the TRAP pronunciation [a] and are lengthened vowel [a:]; the latter being a more typical pronunciation of PALM words in the North (cf. Beal (2004)). *Master* and *plaster*, on the other hand belong to BATH set in RP, however in the North a similar alternation occurs with length [a] and [a:] as cited by Beal (2004) above.

In light of these findings, the variation of the BATH words are considered here; however, as Beal mentions above, the quality of the back vowel can vary and it is not often clear whether this vowel is a localised pronunciation or that described by Wells (1982) in RP, above. Hence, this vowel is only looked at in consideration of length, which as the SED data above indicates, proves to be a good indicator of the variation within these sets.

This paper will now turn to the contemporary data, identifying the variation found in the lexical sets denoted above in the New-Town. The following section identifies the various methodologies used in order to collect the data for this study.

3 Methodologies

This section will identify the methods of data elicitation used for this study. Primarily this chapter will delineate the problems that arose as a result of varying social implications surrounding informant selection (cf. Eckert (1997); Cheshire (2002); Milroy and Milroy (1993)) before moving on to the considerations involved in the collection of viable and effective data in the assessment of elicitation techniques.

3.1 The Informants

In light of the potential causal factors of variation out-lined in section 2 - internal, external and extra-linguistic - the following social stratification and methods of data elicitation have been carefully selected. Following the example of Watt and Milroy's (1999) study of Newcastle English, a panel of 16 people divided by age, gender and class, shown in Table 2 below, was interviewed.

Table 2: *Stratification of informants by age, gender and social class*

	16-25		35-50	
	Upper Working Class	Lower Working Class	Upper Working Class	Lower Working Class
Male	*2*	*2*	*2*	*2*
Female	*2*	*2*	*2*	*2*

Informants who have lived in Newton Aycliffe all their lives were selected for this study. This then narrows the investigation to identify the influence of in-migration of speakers from other speech varieties on the informant's dialect as well as the consequences of their own social network (travel to work or to see family and friends) on variant selection, as discussed in more detail below. Due to the complex nature of New-Towns, however, with mass in-migration of inhabitants from several regions and surrounding urban centres (see

section 2.2 above) this was not always possible; hence one of the younger male informants had lived in Darlington for a couple of years.

Though the nativeness of the speakers was largely kept homogeneous, the decision to stratify my speakers in accordance to gender, age and class, as detailed in Table 2 above, is due to the well known perception that each of these factors has a crucial effect on speech variation, as Sankoff (1980) states:

> 'Assessing the relevant dimensions of variation within the community involves constructing the stratification sample. Thus, we must ask whether ethnicity, gender, or social class of speaker might affect the kind of language used. Most studies so far have shown that to a very great extent they do.' (Milroy and Gordon 2003: 26).

Ethnic variation, in this study, is not assessed as Durham County is predominantly 'White British' as mentioned above in section 2.2 referring to census and parish record data.

In assessing the significance of extra-linguistic variables on language change, many linguists have identified various problems in selecting and defining significant social groups due to the complicated nature of each group's social make-up; for example, which age groups should be selected and what are the social implications embedded in this group that drive language change (cf. Eckert (1997))? This section will now turn to each of these variables in turn and discuss the concerns and decisions for the selection of each of the social variants detailed in Table 2 above.

3.1.1 Gender/ Sex

For the purposes of this study, the social variable identifying the linguistic difference between males and females will be referred to as gender. The reasons for adhering to this label as opposed to sex will be discussed at length presently.

It is widely claimed by sociolinguists that there are considerable behavioural differences between males and females in their treatment of language. Labov's (2001) Principles

surrounding gender emphasise the importance of identifying the variation of this variable within the parameters of any sociolinguistic study due to the nature of language selection found within each gender, as out-lined above in section 2.3.2.

Within Labov's (2001) Principles, however, it is implicit that the conscious or subconscious decisions made by women depend on the cultural and social aspects that are implicit in gender roles and their effect on the linguistic output of the informant's speech. Hence, to view gender simply in terms of biological sex is inadequate.

The reasons as to why women adopt prestige variants are a cause for much debate amongst linguists. On one hand, some linguists argue that 'women acquire social status vicariously, whereas men can acquire it through their occupational status' (Trudgill (1972); cited in Cheshire (2002: 427)), hence, women use prestigious forms to overtly signal and assert their significance. On the other hand, some linguists argue that it is women who create the prestigious forms as Milroy and Milroy (1993: 65) strongly aver:

> 'The generalization suggested is not that females favour prestige forms, but that they create them; i.e., if females favour certain forms, they become prestige forms. In these developments, both class and gender are implicated, but gender is prior to class.'

These theories will not be addressed in relation to the data presented by this present study, though it is important to highlight that the treatment of gender, for the purposes of this study, is recognised as often implicitly interactive with class and age. Moreover, the social and political implications surrounding this term are helpful in understanding the differences in variant selection between males and females, due to their varying roles within society (cf. Milroy and Milroy (1993)). Therefore, the study of social factors must be assessed singularly as well interactively in order to determine the most likely cause of change within external parameters in correlative terms with the extra-linguistic/ideological notions held by the variant social groups.

3.1.2 Age

In accounting for language variation and change over time, the assessment of age is a necessary variable for study. There are generally two major considerations when analysing this variable; firstly, the reliability of apparent-time data as opposed to real-time; the former applies to assessing change over time by analysing the speech of different age groups, whilst real time studies analyse the same group of speakers during two or more intervals of their life to examine how the language has progressed. The assumption with apparent time studies, then, is that the 'speakers only minimally change the way they speak after the *critical period* or adulthood' (cf. Meyerhoff (2006: 127)).

Due to limited time, this present study was conducted using an apparent time structure. As this is a study of a relatively new speech variety, the assessment of diachronic change from data provided by the SED was necessary in order to account for the numerous variants that were introduced into the dialect in its early stages (section 2.4). From there, the decision to interview the group of people who were the first to have grown up in Newton Aycliffe from birth would then demonstrate how these input dialects came together to form the dialect in its early stages as this group in their childhood would be responsible for the selection and rejection of incoming variants (see Figure 3.1 below). This approach, however, is operating under the assumption that these speakers have only minimally changed their speech from that period.

The apparent time technique has been adopted by many sociolinguists to great effect in demonstrating differing variant selection depending on age. Docherty and Foulkes (1999: 61) study on Derby and Newcastle demonstrate the success of this method:

> 'Younger speakers from both social classes produce far fewer Type 2 tokens,[27] and there is little difference in scores for males and females'.

This demonstrates that in this instance, age is the only significant factor in determining the cause of linguistic variation between speakers. This also, however, highlights the necessity of studying social and linguistic factors comparatively in order to identify their possible interaction with one another in driving linguistic change, as Milroy and Gordon (2003:39) address:

> 'Age by itself has no explanatory value; it is only when examined in the context of its social significance as something reflecting differences in life experiences that it becomes a useful analytical construct'.

This brings us to the second consideration, which relates to the first in considering how age should subsequently be graded in the assessment of language change in a particular community. For the purposes of this present study, the decision was taken to grade age groups *emically* rather than *etically*, in consideration of the social implications surrounding certain ages (cf. Eckert (1997)). In other words, rather than dividing the informants 'by equal age spans' (Eckert (1997: 155)), consideration was taken to identify age groups that are going through a specific life experience, with the consequence of that experience in relation to varying linguistic markets[28]. Hence, the younger age group were selected due to the pivotal decisions surrounding this period of time; further education or entering the work-force; each of which carrying separate social and linguistic implications, as Eckert

[27] Docherty and Foulkes (1999) divide there phonetic realisations in to two distinct groups whereby Type 1 variants correspond to [ʔ] and Type 2 corresponds to glottalised variants [ʔp], [ʔt], [ʔk].

[28] Sankoff and Ladberge (1978) identify linguistic market as varying depending on several factors; in relevance to this study, markets vary depending on institution, for example, the use of prestige forms in higher education environments increases the speaker's awareness of such forms making them more likely to adopt them into their speech.

(1997: 157) emphasises:

> 'Entrance into young adulthood, for example, is earlier for working-class youth than middle-class youth; and the relation between adult status and relation to the linguistic marketplace is also different for these groups.'

Therefore, in regard to this, the choice to enter further education or not also interacts with social class in an immediate sense; but also holds implications with connection to the linguistic market (Sankoff and Ladberge (1978)), whereby the awareness of prestige forms is increased with 'participation in educational and commercial institutions' (Eckert (1997: 159)). The use of further education as an indicator of class in younger informants is discussed in more detail below.

Similar to the age-grading of the younger speakers, the stratification of this variable in regard to older speakers was emically considered, thus, the first inhabitants of the New-Town to have lived in the town their entire lives were selected. This is due to this group's exposure to the input forms from the incoming dialects, mentioned in section 2.2; hence, they would have undergone the initial processes of variant selection and dialect levelling. The sociolinguistic consequences of age within New-Towns and urban centres that have experienced similar mass in-migration are schematised by Britain (1997: 41) confirming the influence that this group has in the levelling process in high contact situations on the /aɪ/ vowel in the Fens:

Figure 3.1: *Britain's*[29] *sociolinguistic consequences of age in high dialect contact areas.*

Social Context	Sociolinguistic Consequences	(aɪ) in the Fens
	First Generation	
Disruption of daily everyday life routines. Ontological insecurity.	Very diffuse heterogeneous language variety. Few recognised community norms	Mixed variety containing variants with open and central onsets. No structure common to whole society.
	Second Generation[30]	
Re-routinisation of daily life at personal and institutional level. Development of stronger networks and norm enforcement.	Convergent linguistic accommodation among adults. Children begin to rationalise the mixed speech of their peers.	Start of gradual reallocation of onsets to different phonological environments.
	Third Generation	
High levels of routinisation, strong social networks and pressure to conform to local norms	Pressure within stronger networks to conform to new linguistic norms.	Emergence of Canadian Raising, Central onsets before voiceless consonants; open onsets before voiced consonants, # and ə.

Thus, in analysing the speech of these speakers in comparison with the data from the SED, the direction of language selection from input dialects will become apparent in the form of the variants which have survived in the informants' speech and are replicated in the speech of the young.

3.1.3 Social Class

As with gender and age, the social, economic and ideological attributes surrounding the varying notions of class make this variable increasingly difficult to define. As gender is

[29] Britain (1997: 41), "Canadian Raising" in the English Fens.

[30] In applying this schema to the informants of this paper, the *second generation* are the older informants, emphasising their relevant role in the selection process; thus necessitating the selection of this group for this study.

attributed not just by biological sex but by the role one assumes within society, i.e. dress, tone of voice and so on, class similarly adheres to varying patterns of social and economic activity, such as; occupation, education, leisure activities… in a seemingly never ending list. Ash (2002: 420) highlights some of the problems in identifying class in relation to the study of linguistic variation; in recognising that occupation has often inadequately been identified as the sole marker of class in sociolinguistic research she states:

> 'Occupation is not allowed to stand as the sole indicator of social class. When additional factors are included, they should be used in a motivated way, with an awareness of the distinction between objective factors of economic power and ownership as opposed to matters of status and prestige.'

In light of this, the decision was made to assess the older speakers' 'ownership' in regard to property values (cf. Labov (2001)), whilst their 'status' was in terms of their occupation, as detailed in Table 3 below. As mentioned above, the social category termed *upper-working class* is used as opposed to *middle class* due to the nature of managerial work of the informants being within the industrial centre of Newton Aycliffe (section 2.1 above). Therefore, due to their occupation still being based within industry, the informants consider themselves as working class. The 'Manual Blue Collar' specifically refers to factory work and excludes plumbers, electricians and so on whose income is fluid and complex due to the nature of their work and varying demand of custom.

For the younger speakers, however, the attribution of social class suffers its own complexities as the notion of ownership may or may not be applied. Instead their socio-economic situation was implemented in terms of the property value of their parents'/ guardians' homes, whilst their status was applied to their level of education (cf. Eckert (1997)). This division is discussed in more detail below.

Table 3: *Factors for the stratification of informants into social class*

	16-26	16-26	40-55	40-55
	Lower Working Class	**Upper Working Class**	**Lower Working Class**	**Upper Working Class**
Occupation	Left school at 16	Continued Further Education	Manual Blue Collar/ Unemployed	Managerial/ Professional
Average Housing Value and Council Tax	£50,000-£60,000	£130,000-£140,000	£50,000-£60,000	£130,000-£140,000

Housing averages are taken over three years based on property sales. Council tax averages have been included in the evaluation to complete district class value.

As mentioned above, this social factor is closely linked with age as the attribution of socio-economic status on a younger person is more complex due to their class being interlinked with their parents/ guardians lifestyle. Similar to the criticisms of Ash (2002) above, Watt's (1998: 130) study on Tyneside English also stresses that 'place of residence alone is no guaranteed predictor of the social identity of an individual speaker'. Therefore the decision to look at education for the younger group as a possible defining feature of their status was necessary. This approach has been used with some success as Stuart Smith's (1999: 215) study of Glaswegian found conclusive results due to her method of stratification; dividing her informants around the success of the schools they attended, i.e. exam success and percentage of school leavers going to college, as she concludes:

> 'A specifically WC Glaswegian voice quality can be identified (with more open jaw, raised and backed tongue body with possible retracted tongue root, whispery voice); MC voice quality is best described in terms of the *absence* of WC traits.'

Furthering this, all informants were selected from class distinct areas. As Newton Aycliffe is a New-Town, however, the specific census information was not available; therefore this

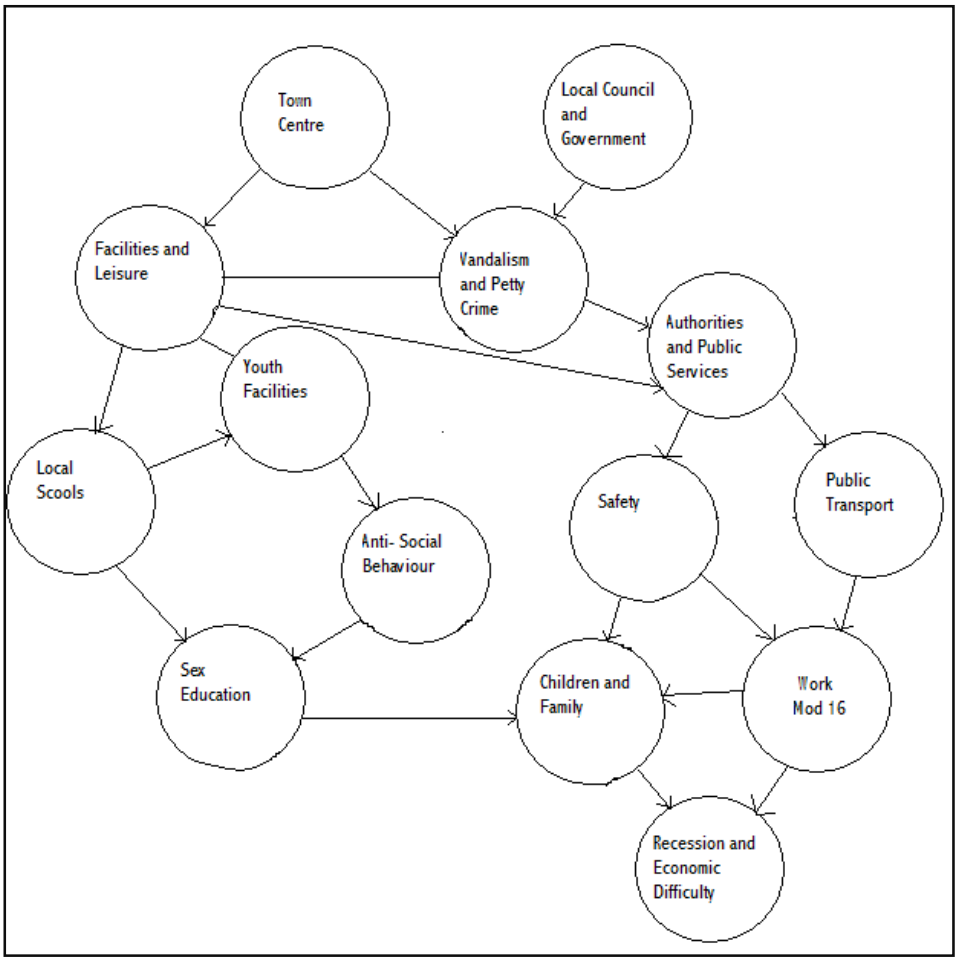
scale was devised using property value information from local estate agents, as indicated in Table 3 above (see appendix 18 for further details). A similar method was adopted successfully by Watt (1998: 131) who selected two areas of Newcastle using a native inhabitant's knowledge of area and class. Similarly in this case, as a native of Newton Aycliffe, a selection of friends from my own network, coupled with friends from their estates fulfils this study of class. This is then backed by property value and occupation as further indicators of potential class division.

3.2 The Fieldwork

3.2.1 Conversational Data

Taking inspiration from Labov's (1984) topics for free speech interviews, a similar model was devised, Figure 3.2 below, based on local topics of interest, in particular centring on the local community, the decline of the town centre and so on. The intention of this model is not only to create flowing conversation but also emotive speech, which is considered to produce the most naturalistic speech as the informant is more aware of content than pronunciation (cf. Labov (1984); Milroy and Gordon (2003)). This model is put into practice in order to counter the effects of the Observer's Paradox, whereby the sociolinguist's need to identify how speakers speak when they are unobserved in everyday interaction is contradicted as 'the only way to discover this behaviour is to observe them' (cf. Meyerhoff (2006: 38)). This paradox is unavoidable; however, Labov's (1984) method of eliciting emotive conversational speech between two or more speakers, as opposed to a one to one interview with the linguist, draws attention away from the observer and therefore reduces the formality of the situation and the need for the informants to adjust their speech.

Figure 3.2: *Adapted Labovian Topic Model for Newton Aycliffe*



The younger group were recorded using self-selecting dyads so that two friends could talk comfortably and flowingly to one another 'outnumbering the interviewer and decreasing the likelihood that speakers will simply wait for questions' (Milroy and Gordon (2003: 66-7)). Similarly, the older groups consisted of married or partnered couples. Age and class groups were kept distinct, as the mixture of such groups is considered to cause exchange difficulties between the speakers, as Fairclough (1989: 57) discusses:

> "'Unequal exchanges' between class and age lead to one perceiving authority over the other and therefore can lead to more controlled speech or the adoption of the standard'"[31].

[31] The term 'standard' here, refers to 'prestige' variants.

The decision to collect data from mixed gender couples was taken with the assumption that these 'unequal exchanges' would not occur to this extent, due to the relationship between the informants encouraging more comfortable speech. This is highlighted in Watt's (2002) study, whereby dyads were *usually* of the same sex, but class and age were *always* matched, emphasising the effect of mixing as considerable only on the latter groups. Moreover, couples were interviewed in their own homes to reduce the formality of the interview and the younger informants in higher education were interviewed in the comfort of the college common-room.

The use of dyadic interviews has proven a popular method for linguists for obtaining vernacular[32] since the method was postulated in Labov's (1984) 'Field methods of the project on linguistic change and variation' (cf. Watt and Milroy (1999); Docherty and Foulkes (1999); and so on). Hence to avoid collecting tokens solely from the formal context of reading of word-lists, this approach was adopted for the purpose of his study to elicit data which more closely replicated everyday speech interaction, as highlighted above.

3.2.2 Word-List Data

Though the conversational speech provides for naturalistic data, it does not easily elicit linguistic information concerning the effect of the following segment upon the vowel (cf. Milroy and Gordon (2003)). Therefore, the informants were asked to read a word-list of approximately 200 words. These words were divided into categories of 6 words to account for all types of following segment where applicable, such as plosive, fricative and so on, to ensure that any possible effect, whether internal or external to these groups would be accounted for. Therefore, an account of [+voice] and [- voice] following segments would analyse the potential occurrence of vowel length alternation between the two conditions in

[32] 'Spontaneous everyday speech' (cf. Milroy and Gordon (2003)) whereby the informant is thought to pay the least attention to their pronunciations of words (cf. Labov (1984)).

the PRICE set, as discussed above. Following <r> was not accounted for in the FACE, EIGHT and GOAT data as words with this environment have a different historical pattern, which this present paper is not concerned with (cf. Orton (1933)). Subsequently, the word-list was then randomised, so that one word would not prime the next.

Though word-list data is criticised as unnatural and heightens the awareness the informant has of their speech (cf. Labov (1984)), the use of word-lists has proven to produce very successful results in studies of this kind, for example, Stuart-Smith's (1999: 213) study of Glaswegian, which reports:

> 'The overall transcription would seem to be confirmed by a relatively high degree of consistency in setting, and setting values, in speakers across the two speech types'.

Though this out-come proves as a bonus to the attainment of linguistic data that accurately reflects natural speech (above), this method is essential in quantifying the effect the following segment has on variant distribution, and is subsequently adopted in this study for this purpose.

3.2.3 Identity Questionnaire Data

Finally, the informants were asked to complete an identity questionnaire. This method was successfully used by Stoddart et al. (1999), whereby the questionnaire was read out whilst the informants discussed the answers. This method was adopted for the data of this present paper as this not only allowed for background information to be collected but for additional variant tokens also, often with emotive responses as the informants argue the validity of their notions of identity, as mentioned above in reference to Labov's (1984) topic model.

The informants of this present study were asked questions concerning their social background, such as where their parents and close friends are from, the perception on their

town and region, as well as their perception of their dialects and opinions of surrounding speech varieties (for full details, see appendix 35).

This method of identifying perceptions of dialect was used in Llamas's (1999: 145) study of Middlesbrough[33], in which the informants' regional and local identity proved a significant factor on the speech forms used, as the study concludes:

> 'By examining attitudinal information, a tension is revealed between the hypothesised identification with Tyneside suggested by the increased use of glottalisation amongst young speakers and the overtly negative and hostile attitudes towards Newcastle and the Geordie accent.'

As Newton Aycliffe, similar to Llamas's (1999) study on Middlesbrough, is juxtaposed between at least two notable dialect areas of 'Geordie' and 'Yorkshire', a similar identity crisis affects the speech forms produced; as well as other factors such as the varying degrees of contact of informant groups with other speech varieties, discussed below in section 5.

3.2.4 Recording Equipment

As interviewees were recorded in the quiet of their own homes a standard recording device and single microphone were used. The microphone was placed in the centre of the speakers with the male informant to the left and the female to the right. The data could then be heard distinctly from each other as the males speech oriented to the left ear piece and vice versa (for a more detailed discussion of methodologies and equipment see West (2009))[34].

[33] Middlesbrough is located in the North-East of England in between Newcastle and Yorkshire. Moreover with the shifting of the political boundaries, it no longer belongs to Yorkshire, but it recognised as its own district. Its location and changing identity is found by Llamas (1999) to cause difficulties with identity and negative attitudes to the surrounding region, particularly Newcastle, as their dialect is often mistakenly identified as Geordie.

[34] West, H. (2009). *Sociolinguistic Methods*. University of Edinburgh: Unpublished paper.

3.3 Analytical Methodology

This section identifies the variants recognized in this study followed by a discussion of interpretative techniques for identifying the variants concerned.

As the data will be interpreted using auditory methods (see below), the variant realisations have been divided into four distinct groups for FACE and GOAT, as detailed in Table 4 below. EIGHT is divided into five representations; in order to account for the realisations found parallel to the FACE set as well as the traditional Durham variant [ɛɪ] that predominantly features in this environment, see section 2.4.2 above.

Table 4: *Phonetic variants of FACE, EIGHT and GOAT*

	FACE	EIGHT	GOAT
Low-mid variant	**[ɛː]**	**[ɛː]**	**[ɔː]**
High-mid variant	**[eː]**	**[eː]**	**[oː]**
Centring diphthongs	**[eə]**	**[eə]**	**[oə]**
Up-gliding diphthongs	**[eɪ]**	**[eɪ]**	**[əʊ]**
Traditional Durham variant	-	**[ɛɪ]**	-

As the variation found in PRICE and TRAP/BATH/PALM is a phonetic continuum, a scalar system from 1 to 4 has been devised, detailed in Table 5 below. Labov (1961) and Britain (1997) similarly use a quantitative index in their analysis of /ai/. In doing so, they were able to take an average score for speakers and regions in order to easily identify which feature a particular group of speakers was assimilating to. As mentioned above, the /aɪ/ vowel is affected by the Voicing Effect, only in terms on lengthening and monophthongisation as, unlike the Voicing Effect in Canadian Raising (above), the raising of the vowel before voiceless segments did not occur in any of the interviews.

Table 5: *Phonetic variants of PRICE and TRAP/ BATH/ PALM*

	PRICE	TRAP/BATH/PALM
Type 1	**[aɪ]**	**[a]**
Type 2	**[aːɪ]**	**[a'][35]**
Type 3	**[aːˈ]**	**[aː]**
Type 4	**[aː]**	**[aːˈ]**

In relying on auditory analysis of the data it is recognised that the judgements in placing the vowels in the auditory coding system above are much more subjective than using instrumental techniques to analyse the data. Furthermore, the consistency of the transcriber hearing and transcribing like vowels is also at risk (cf. Milroy and Gordon (2003)). Kerswill and Wright (1990) evaluate the validity of both instrumental and auditory techniques by conducting an experiment that compares the transcription of both methods. To achieve this they asked thirteen phoneticians to transcribe the variation of connected speech processes from a recording, the results of which were then compared to the results of the same recording on an *electropalatogram (EPG);* however, not all the phoneticians were instructed in precisely what detail they were looking for. The out-come was not surprising; whilst there was some agreement amongst the phoneticians' transcriptions surrounding vowel quality, there were several problems with vowel length as transcribers could not agree on this aspect of the transcription. The EPG, on the other hand, could not measure vowel length at all. The overall issue, however, was found in identifying the articulation of *connected speech processes*; the EPG was able to demonstrate 'the gradualness of

[35] The symbols used here to described length are adopted from Giergerich's (1992) system, whereby [a**'**] is a long vowel but not as long as [a**ː**] and [a**ː'**] is longest realisation.

articulation' from complete alveolar closure to zero alveolar. The phoneticians, on the other hand, could only correctly identify when complete closure occurred, yet where it partially occurred or didn't at all, the transcribers raised the score 'as they expected to "hear" alveolarity even when there is none' (Kerswill and Wright (1990: 266)). Hence, the most conclusive aspect of this paper was that the bias of the transcribers' knowledge led to inaccurate transcriptions due to the expectation to hear what is not actually there. Yet, Kerswill and Wright (1990) concede that the completion of a transcription without any theoretical basis is un-interpretable, as it was impossible to distinguish what specific aspects of the transcription the transcriber was analysing. Therefore, in consideration of the accuracy of the data presented in this present study, the methodology was extended to reduce this bias and increase the reliability of the transcription by adopting a technique suggested by Milroy and Gordon (2003: 151), as they state:

> 'An important remedy is to utilize multiple coders for the same data. If a second coder analyzes even a sample of the data, this can serve as an important check on the reliability of the coding.'

Hence, in light of these considerations, a decision was made to strengthen the validity of the data through secondary transcription[36] by a phonetician who had a reduced bias towards the speech variety found in Newton Aycliffe as, unlike myself, the second phonetician is not a native inhabitant of the town. However, the transcriber was fully aware of what variants were being evaluated and was presented with the scales delineated above in Tables 4 and 5. In the interpretation of the data 90% agreement was achieved in identifying the realisation of the vowels. The other 10% was either excluded from the study due to poor quality of sound or due to a variant bordering two possible representations. In the case of the latter a final decision was made as to the variants representation.

[36] I would like to thank Stuart Dunmore for his invaluable assistance in second transcribing the data for this project.

4 Results: Apparent Time Data

4.1 Distribution of the FACE variants: Social Data

The distribution of the FACE vowels across the social groups produces a number of interesting patterns, the most striking of which being the distribution of the [ɛ:] variant as indicated by Figures 4.1 and 4.2 below. Though the Figures show data from two different elicitation techniques (free speech and word-list respectively), the patterns are very similar. Differentiation between the older and younger speakers is clearly marked, as the [ɛ:] form is almost entirely constrained to the speech of the younger group.

Figure 4.1: *Distribution of the FACE variants: Free speech data*

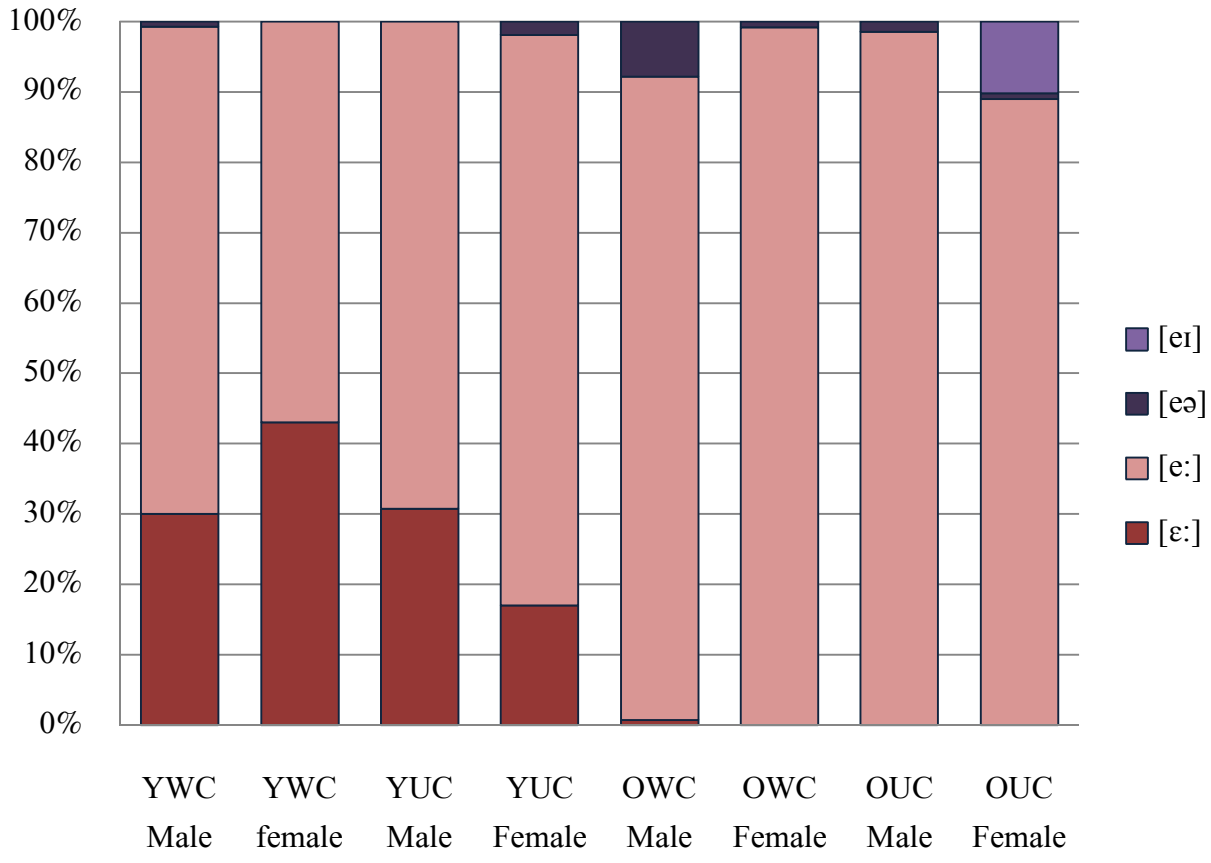
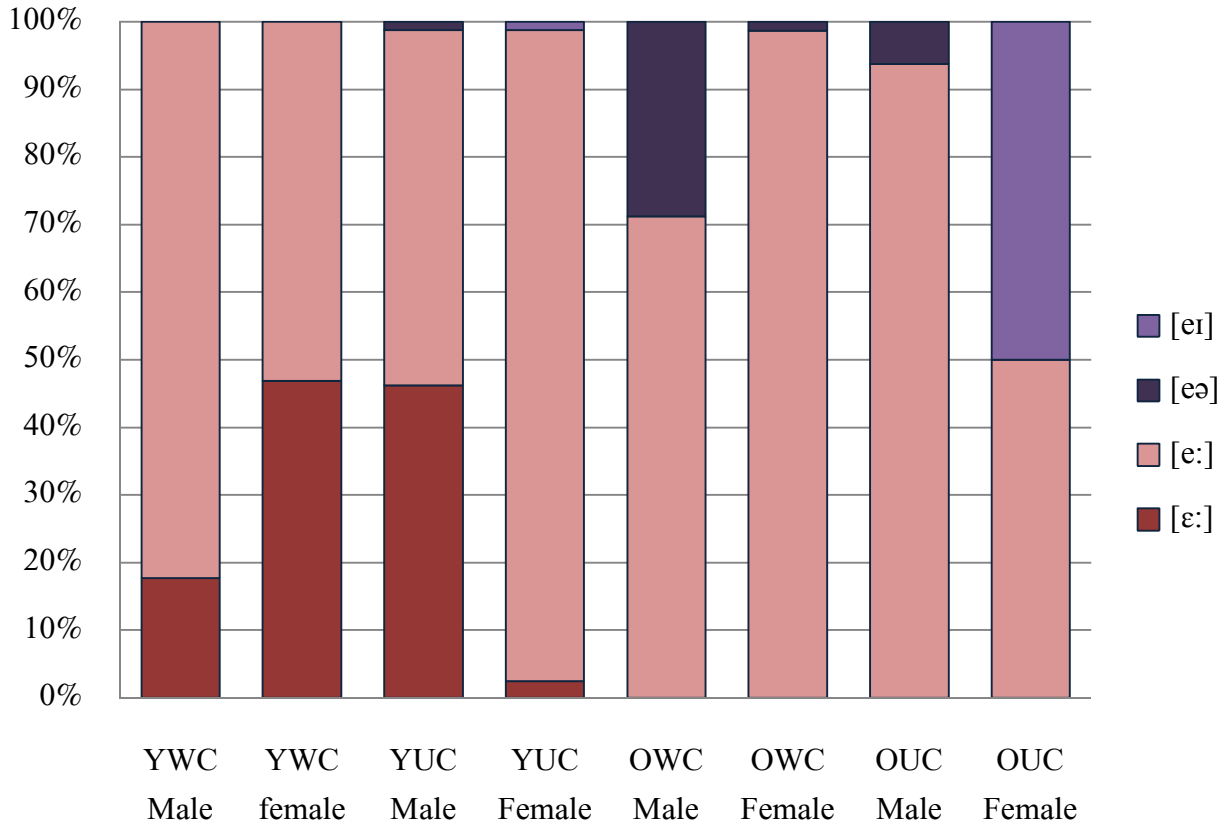


Figure 4.2: *Distribution of the FACE variants: Word-list data*



Interestingly, the intra-variation within the group of younger speakers points to the low-mid variant being predominantly used by younger lower-working class females; whilst upper-working class females demonstrate the lowest frequency of this form, displaying over 20% less usage than the lower-working class females in free-speech data and over 40% less in the word-list data, indicative of carefulness of speech in the latter speech style.

The difference between the two speech styles with the [ɛ:] variant is also notable between the younger lower-working class males and upper-working class females, as we see a reduction of this form in the word-list data from free-speech, but an increase with the lower-working class females and upper-working class males in the word-list data. Similarly, the up-gliding diphthong variant, [eɪ], demonstrates a higher frequency in the word-list than in the free speech data of the upper-working class females, clearly marking the greater attention to speech in the former style. Furthermore, this form is thus indicated as a prestige

variant as this group purposefully select it when they are more conscious of their language. Interestingly, however, the centring diphthong [eə] also shows a higher percentage in the word-list data in the speech of the older lower-working class men. This then, may indicate that the carefulness of speech with reading word-lists is counter intuitive as this diphthong has been found to be a stigmatised form in other speech varieties (cf. Watt (2002)). Yet, as mentioned above (section 2.3.3), attitudes vary intra- and inter-speech variety, which will prove to be the case here, see section 5 below. Moving on to the social context of the [eə] and [eɪ] variants, it is evident that their distribution is governed by more than one social factor; the former appearing most strongly in the speech of older males, though in particular working class speech. The [eɪ] variant, on the other hand is restricted to the speech of older upper-working class females.

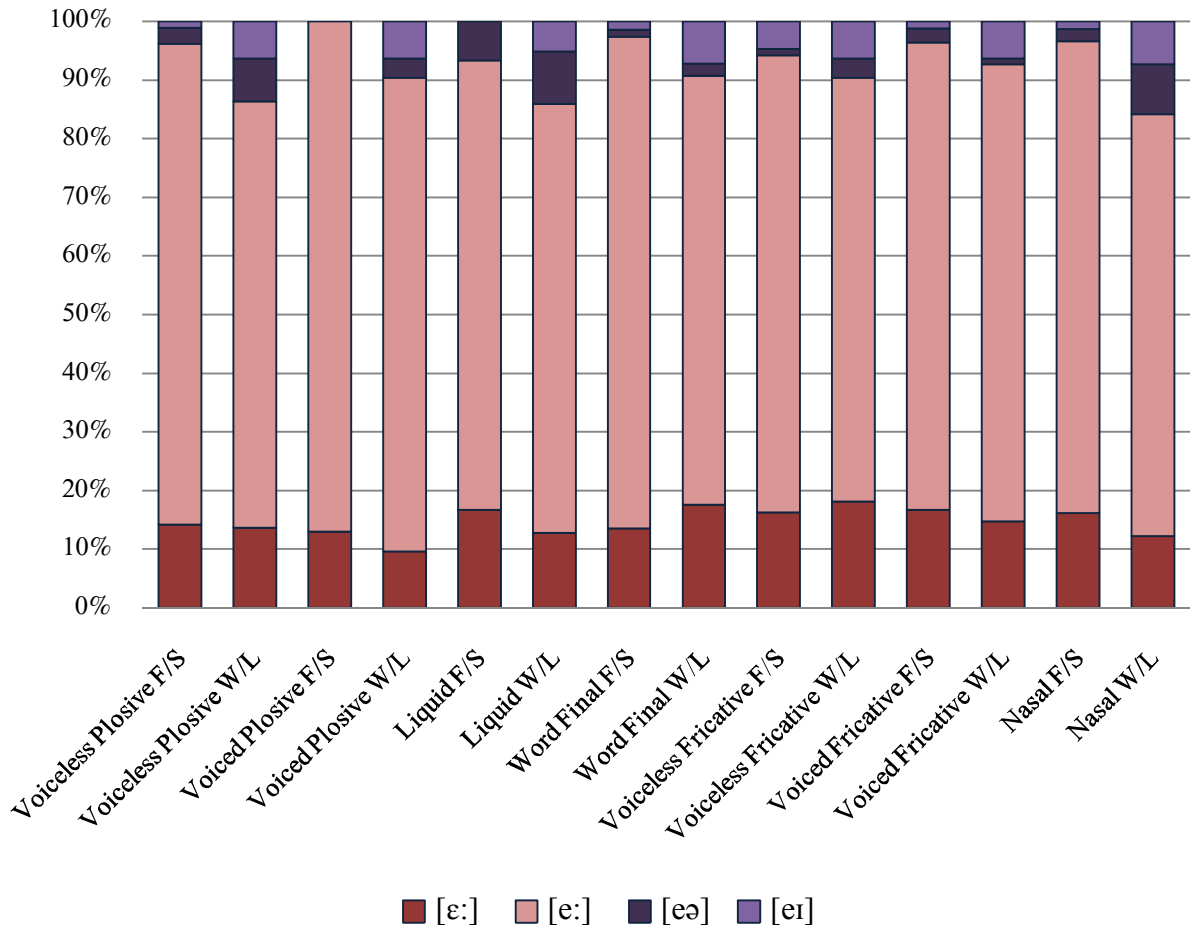
As predicted, the regional variant [e:] (cf. Watt and Milroy (1999); Watt (2002)) is the most dominant realisation in all the social groups; most strikingly, in the speech of older lower-working class females, where its presence is near categorical, regardless of speech style. The possible ideological and non-ideological mechanisms responsible for the distributions of these variants are discussed in detail in section 5 below.

4.1.1 Distribution of the FACE variants: Linguistic environment

In comparison to the social data above, the effect of the following segment on the distribution of the variants appears to have less of an effect. There are, however, some notable features, as Figure 4.3 demonstrates below. As noted above, the style of speech affected the percentages of variants, whereby the centring and up-gliding diphthongs appeared more frequently in the word-list data. Conversely, the low-mid variant displayed a more complicated variation between the two speech styles, as out-lined above. Looking primarily at the diphthong variants here, [eɪ] displays a relatively even distribution across all environments in the word-list data. In the free speech data, however, the distribution is more

sporadic as this form displays a rejection of following voiced plosive and liquid environments, whilst in conjunction with a voiceless fricative this variant displays increased frequency.

Figure 4.3: *Distribution of the FACE variants: Free speech and word-list data*



The diphthong variant [eə] demonstrates a sporadic distribution across both speech styles, though displaying a considerable preference for following liquids, and nasals in the word-list data, as each environment in this speech style accounts for approximately 10% of the realisation whilst the other environments account for less that 5%. As section 5.1 will go on to discuss in detail, this pattern may be due to etymological reasons, as highlighted above in section 2.4.

The low-mid variant displays a moderately even distribution across environments demonstrating that social factors are the key influence in governing this forms distribution; whilst [e:] appears as the default form, once again appearing as the dominant variant across all environments.

4.1.2 Distribution of the EIGHT variants

As the phonological environment is intrinsically monitored in this set, the data are divided by the style of speech of social data only, as presented in Figure 4.4 and 4.5. As a subset of FACE above, much of the same variants are under consideration, with the exception of the localised form [ɛɪ] which can appear in this context, as mentioned above in section 2.4.2.

As with FACE, the high-mid variant [e:] is the most dominant, appearing categorically in several of the social categories; whilst the Traditional Durham variant [ɛɪ] appears very rarely in the free speech of older lower-working class females only.

Figure 4.4: *Distribution of the EIGHT variants: Free speech data*

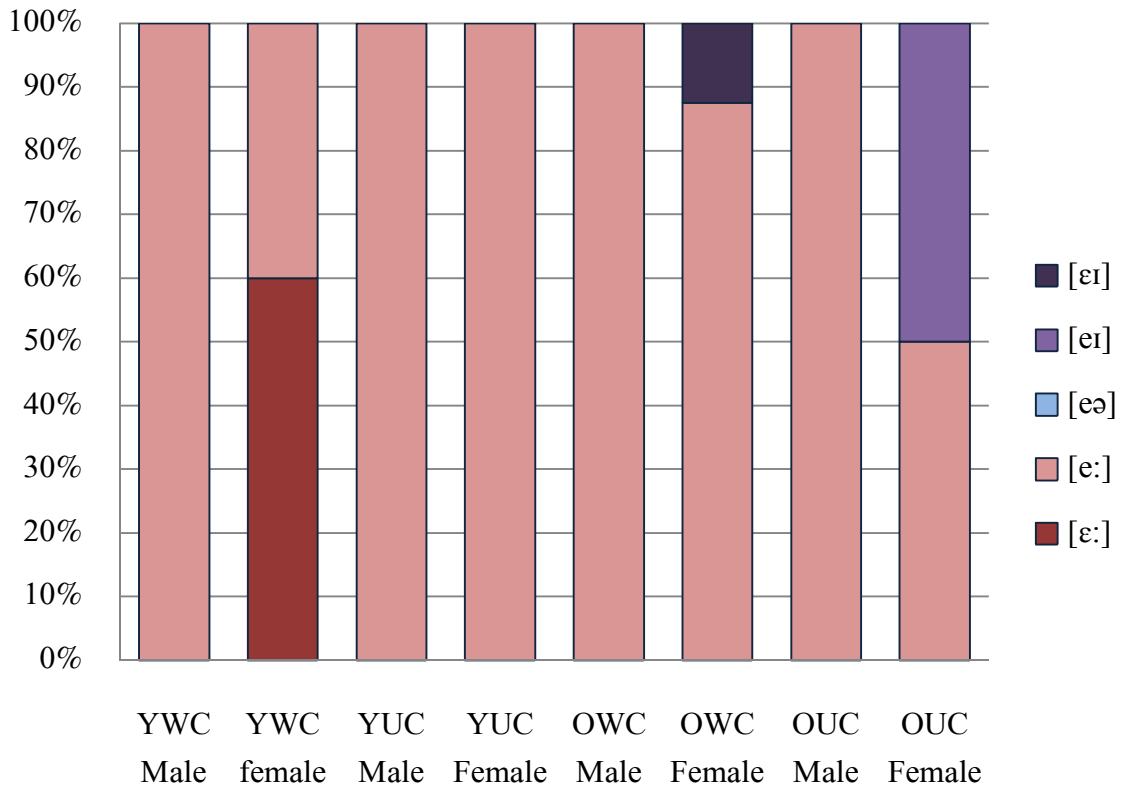
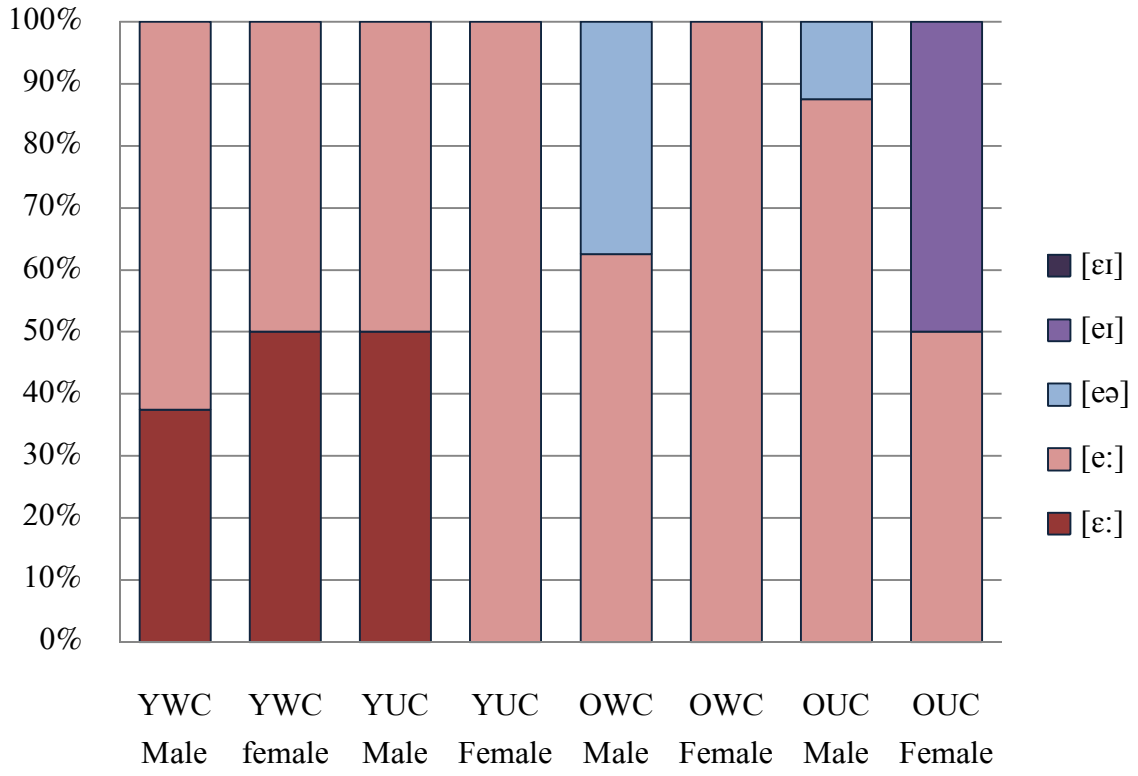


Figure 4.5: *Distribution of the EIGHT variants: Word-list data*



Once again, the differentiation between speech styles is notable. Looking primarily at the inter-distribution of [ɛ:], this variant is dominant in the free speech data of the younger lower-working class females. In the word-list data, however, this variant displays a considerable distribution in the speech of the younger upper-working class and lower-working class males. As section 5 below discusses in length, this distribution is attributed to theories of contact and accommodation.

Similarly, the centring diphthong form only appears in word-list data in the speech of the older males, in particular the lower-working class group. Once again, as with the FACE data, the distribution of this form becomes more explicable when correlated with extra-linguistic data (see section 5.3). Finally, the up-gliding diphthong displays 50% realisation regardless of style in the speech of the older upper-working class females; though like the [eə] diphthong, the distribution of this variant is attributed to ideological factors (section 5.3 below).

4.2 Distribution of the GOAT variants: Social Data

The distribution of the variants in this set, despite a slight variation in numbers, displays patterns that are parallel to those found in FACE (cf. Watt and Milroy (1999); Watt (2002)). Regarding the free speech data, primarily, it is noted here that the distribution of the high-mid form is considerably greater than in FACE. Hence, the distribution of the other variants, though appearing in the same groups as they did in the FACE set, are subsequently reduced; in particular [oə] which appears only marginally in lower-working class speech. Interestingly, here the [ɔ:] variant is found frequently, however, unlike its occurrence in the SED data above, this variant is not constrained to words with the spelling <ow>, appearing frequently in other environments as Figure 4.8 demonstrates below.

Figure 4.6: *Distribution of the GOAT variants: Free speech data*

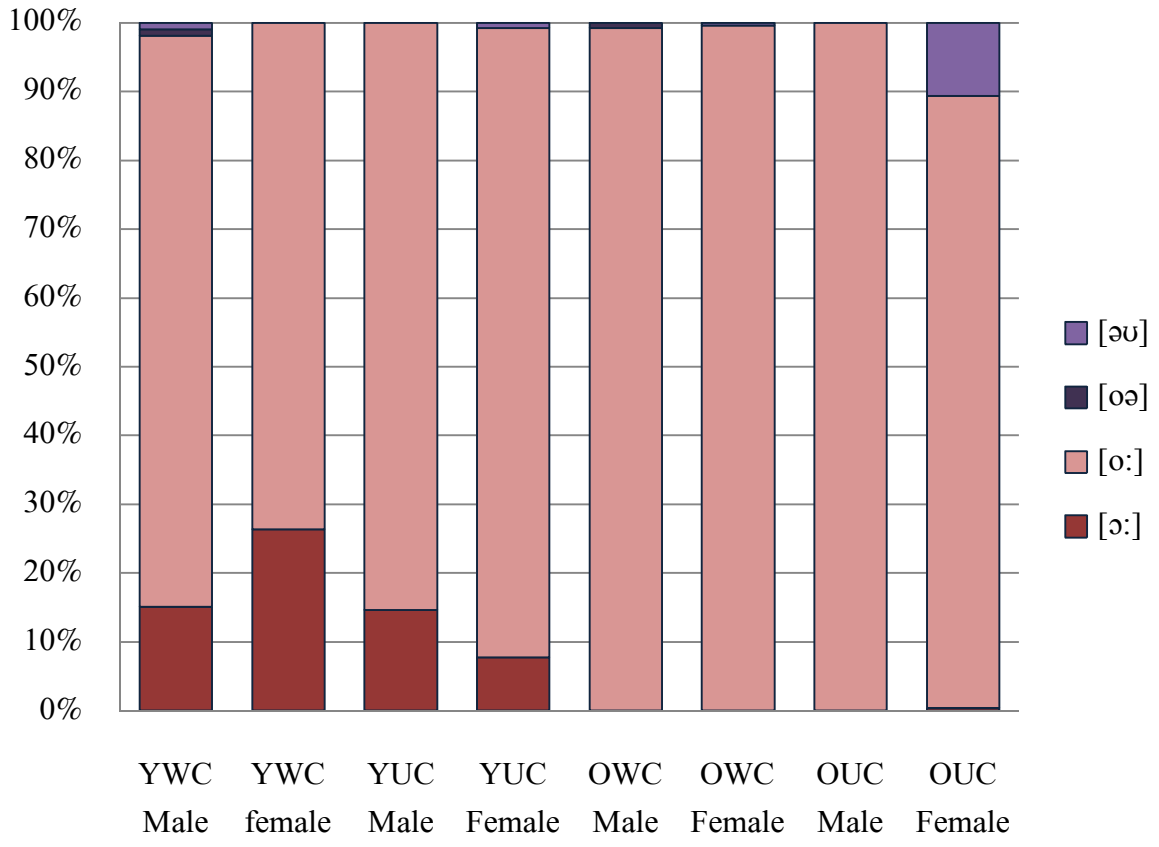
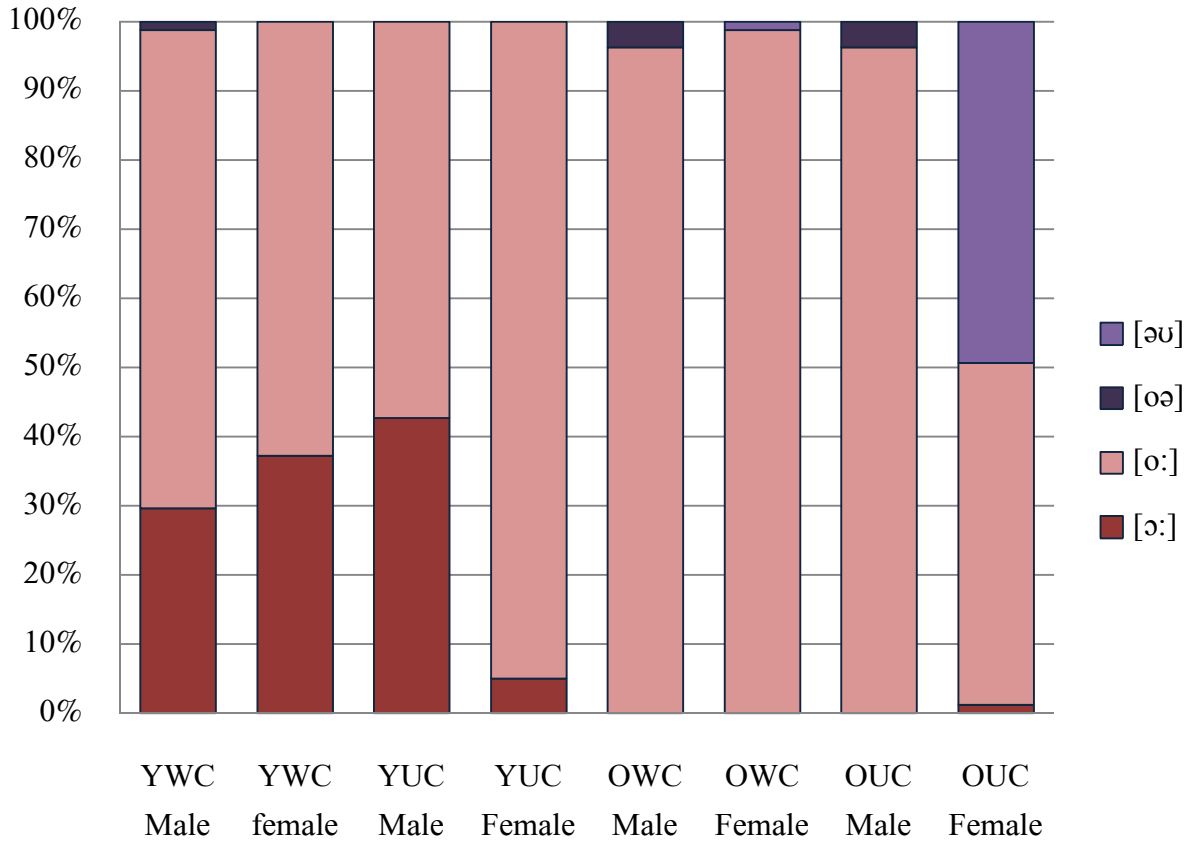


Figure 4.7: *Distribution of the GOAT variants: Word-list data*



Once again, the difference between speech styles is remarkable, in particular, the distribution of [ɔ:]. As with FACE, this variant appears as more of a feature of younger lower-working class speech and is similarly the least common in younger upper-working class females; however, this time we see inter-variation between the speech styles in lower-working class females and upper-working class males in this group. In the younger free speech data, the lower-working class females display a greater distribution of the low-mid variant than the upper-working class males, whilst in the word-list data the converse is apparent. As section 5 discusses, however, as with the FACE data, this unusual distribution can be accounted for in regard to a number of external factors.

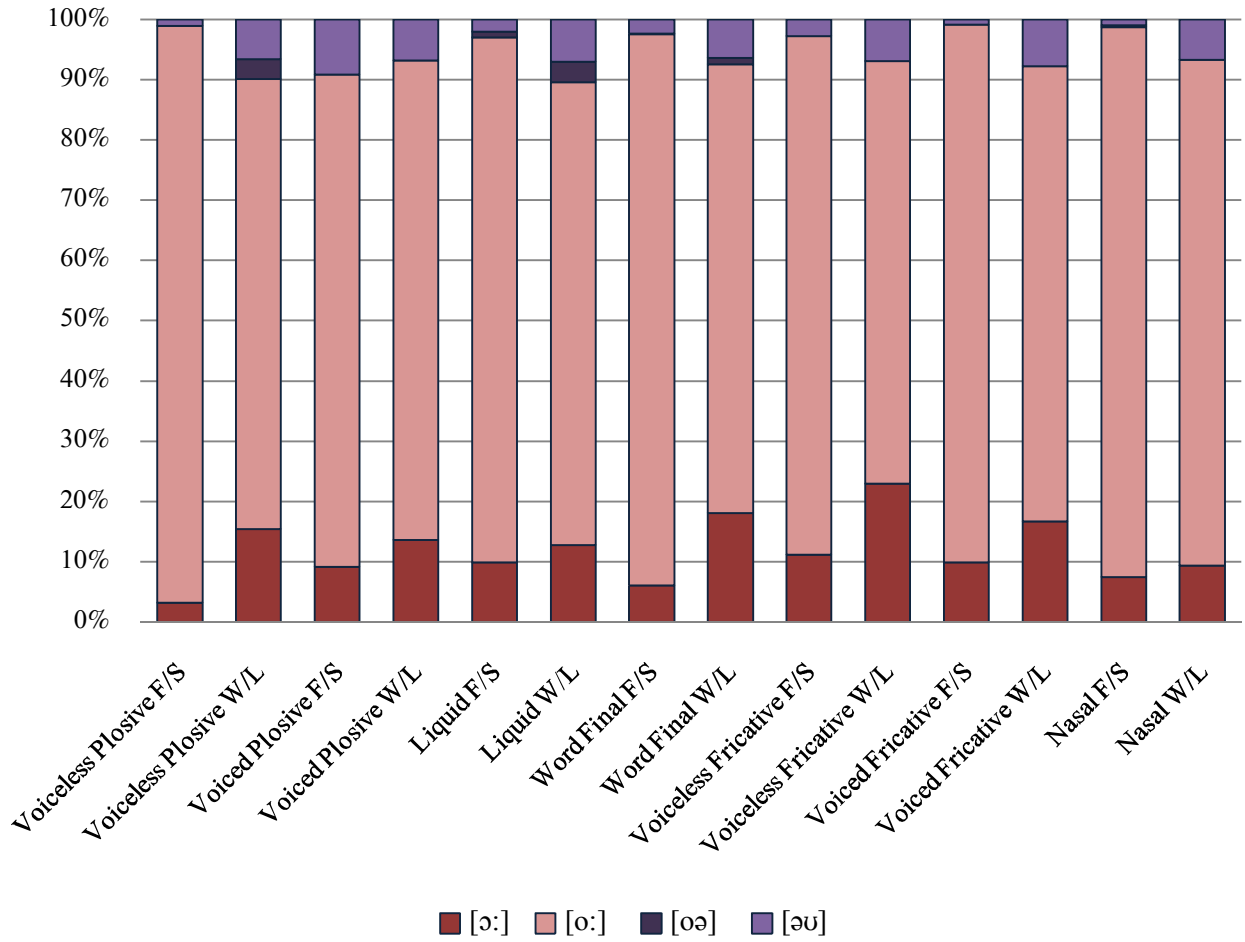
Moving on to the distribution of the diphthong variants, both variants display a higher frequency in the word-list data, parallel to FACE above, despite the stigma surrounding the centring diphthong variant in other speech varieties (cf. Watt (2002)). As with the FACE

variants, however, the same ideological notions apply here in governing the distribution of this variant (see section 5).

4.2.1 Distribution of the GOAT variants: Linguistic environment

The distribution of these variants in relation to their linguistic environments mirrors that of the FACE vowels, above, in that the social data appears as a more prominent factor in governing the distribution of the variants.

Figure 4.8: *Distribution of the GOAT variants: Free speech and word-list data*



As with FACE, the centring diphthong displays a preference for following voiceless plosive and liquid segments in the word-list data. As with the distribution of the centring diphthongs in the FACE set, the distribution here can attributed to the etymological patterns highlighted by the SED data, as discussed at length in section 5.1 below.

The up-gliding diphthong, once again, rejects following nasal and voiced fricative environments, though here, this variant is considerably more frequent in front of a voiced plosive segment, than its counterpart in the FACE set.

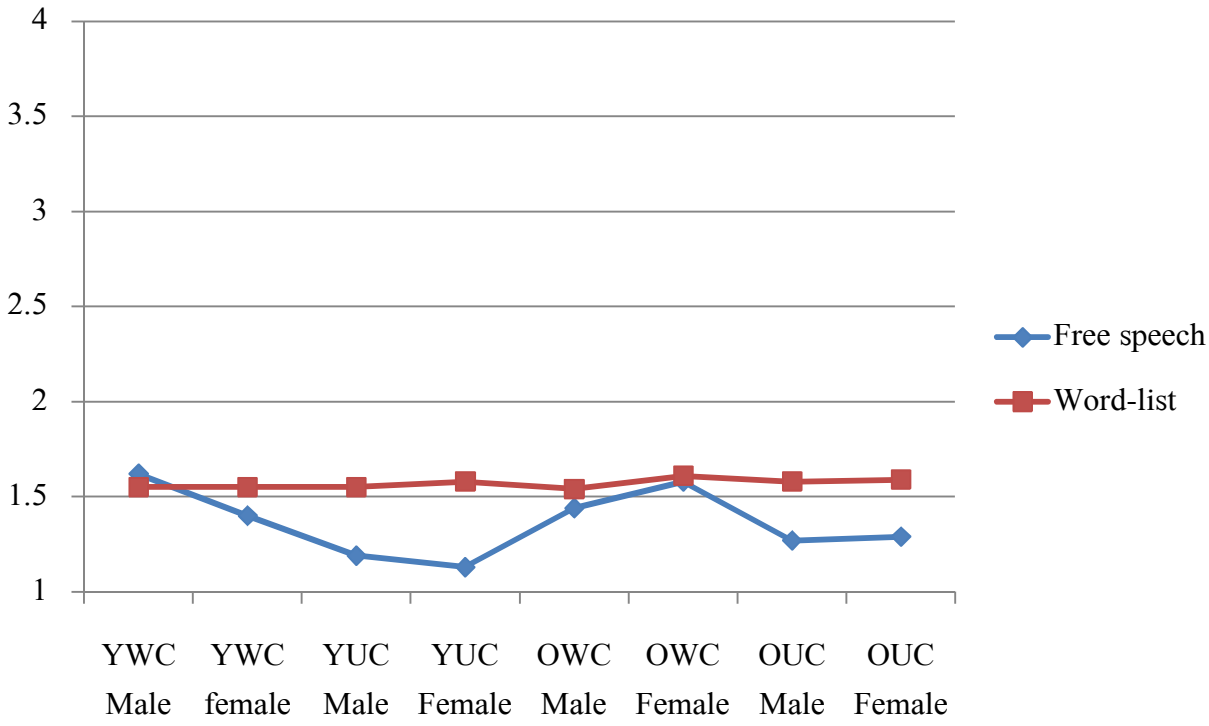
As mentioned above, the low-mid variant appears sporadically across all environments, rather than being constrained to appearing solely in words such as *snow* and *crow,* as in the SED data. Though their appears to be no apparent preference for selecting either voiced or voiceless environments, this variant displays a clear preference for following voiceless fricatives and in word final position.

Though the social factors appear to be the most dominant influence in variant distribution, a detailed discussion, weighing up the internal and external factors is presented in section 5.

4.3 Distribution of the PRICE variants: Social Data

The data here, and in TRAP/ BATH/ PALM variants below, have been given index scores, due to the variation in these sets being assessed along a continuum, as mentioned above in Table 4. Interestingly, the word-list speech shows very little variation across the social groups, indicative of the carefulness of speech with reading aloud tasks (see above 3.2.2).

Figure 4.9: *Distribution of the PRICE variants: Free speech and word-list data*



Interestingly all of the data averaged below an index of 2, indicating that lengthened and or monophthongised variants, such as Type 2 [a:ɪ], Type 3 [a:ˈ] and Type 4 [a:] were relatively minimal compared to the short vowel [aɪ] (Type 1).

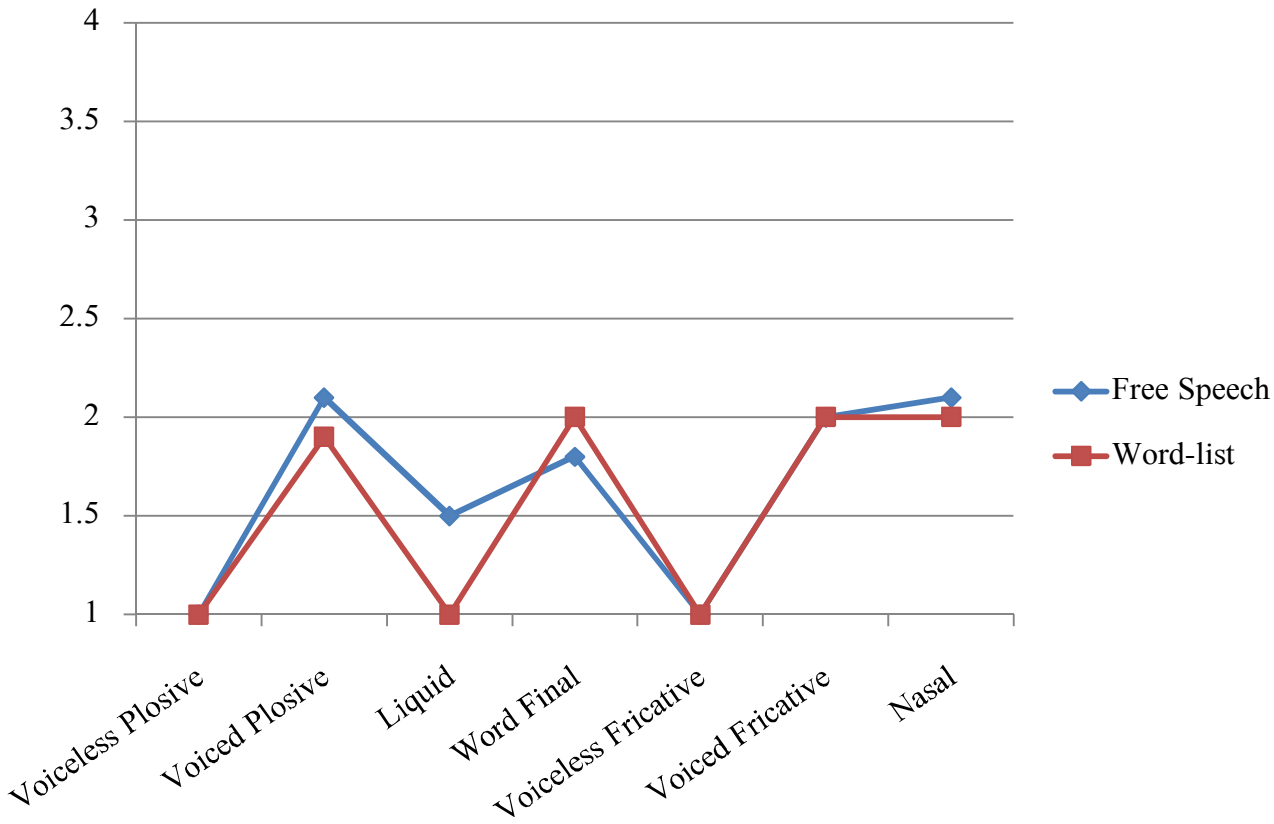
The free speech data, however, does display considerable variation across the social groups. In particular, the difference between the classes demonstrates that the upper-working class informants are using a higher frequency of the Type 1 variants, whilst the lower-working class speakers are orienting towards the more lengthened and monophthongised variants (cf. Williams and Kerswill (1999)); whereby words such as *library* are pronounced [l**a:ɪ**bri:] or

even [l**a:**bri:]. Notably, however, the younger lower-working class males are using more lengthened and monophthongised variants than the females of this group. The older lower-working class group, on the other hand, are acting more predictably as the females are using less of the Type I variants than the males.

4.3.1 Distribution of the PRICE variants: Linguistic environment

Conversely, compared to the FACE and GOAT sets, the variants here appear to be predominantly conditioned by the following segment. As Figure 4.10 demonstrates below, the distribution is most notably effected by the following being [+ voice] or [− voice] on the variant. Remarkably, the Type 1 variant greatly prefers a following voiceless segment; whilst the Type 2, 3 and 4 favour environments of V / [+ voice].

Figure 4.10: *Distribution of the PRICE variants: Free speech and word-list data*



The distribution of the variants before liquids is also interesting as the Type 1 variant appears to be dominant in this environment also, rather than follow the pattern of V→ [+ length] / __ C [+voice]. This is speculated to be due to this vowel being governed by Voicing Effect rules (cf. Britain (1997)) in conjunction with dialect levelling and contact; which is discussed in more detail in section 5.

Looking now at the variation between speech styles, once again, there are considerable differences. In particular the distribution of the Type 3 and 4 variants are almost entirely confined to free speech, again demonstrating the attention to speech in reading tasks (section 3.2.2.). As mentioned above, the Type 3 and Type 4 variants particularly favour voiced following segments, in particular plosives and nasals with words such as *library*[37] and *time* frequently being pronounced [l**a:**bri:] and [t**a:**m] (cf. Trudgill (1986); East Yorkshire).

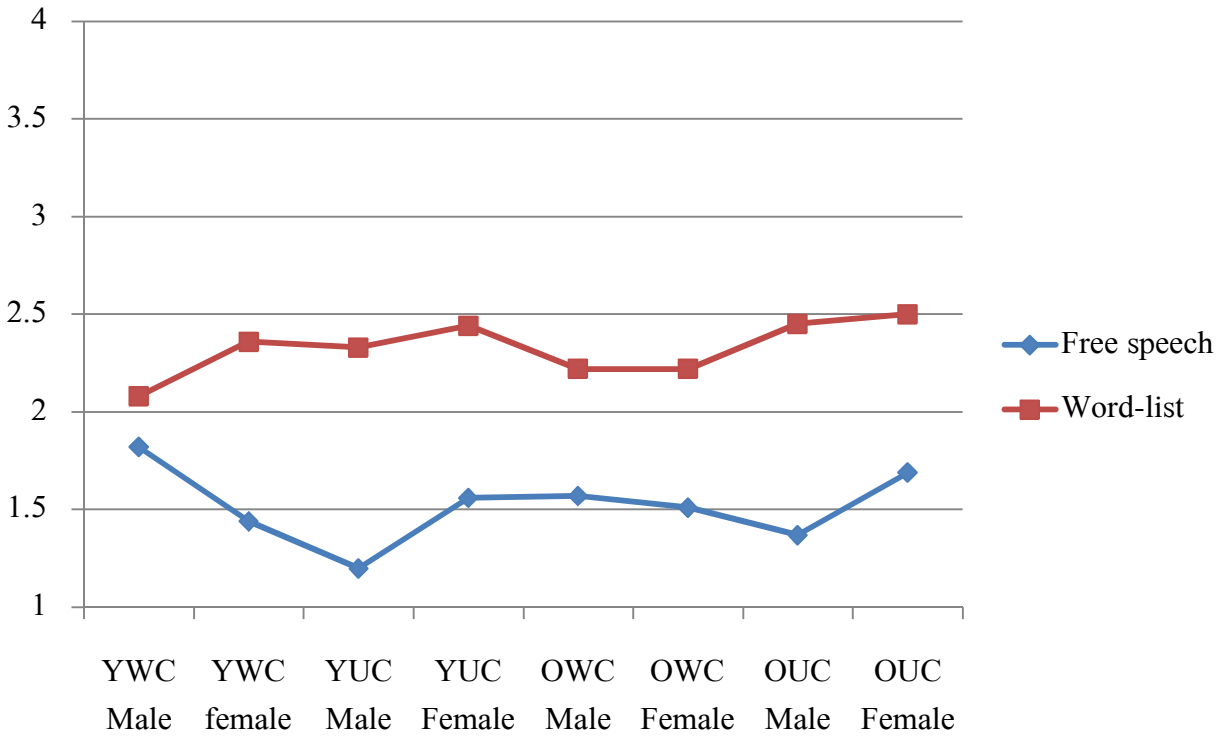
4.4 Distribution of the TRAP/ BATH/ PALM variants: Social Data

Interestingly here, the differences in speech styles in the variation of /a/ is the most notable feature, as Figure 4.11 demonstrates the two styles to be almost polar opposites. In the conversational speech of the younger lower-working class, the males approximate closer to a more lengthened realisation than the females, whilst the opposite occurs in word-list data. This is due to the different nature of the tasks in that the word-list demonstrated class differences in words such as *master* and *plaster*, in which the upper-working classes use a higher frequency [a:] in these words (cf. Beal (1985)). Similarly, *father* in the North is often pronounced with [a] despite it belonging to the PALM lexical set. This word found a class distinction also, whereby the upper-working class speakers pronounced *father* with [a:] typical of PALM words in the North, whereas the lower-working class speakers more

[37] The word <library> occurred quite frequently in the speech as the discussion centred on the town centre: this building in being closed down and rumoured to be replaced with a Wilkinson's store.

typically used [a]. In free speech, however, these words did not occur as frequently; instead, the negative strain of the conversation held by the working class groups led to a greater frequency of [a:] due to the word *can't*, which is usually pronounced with lengthened variants in the North (cf. Wells (1982: 135)), being said more frequently by this social group.

Figure 4.11: *Distribution of the TRAP/ BATH/ PALM variants: Free speech and word-list data*

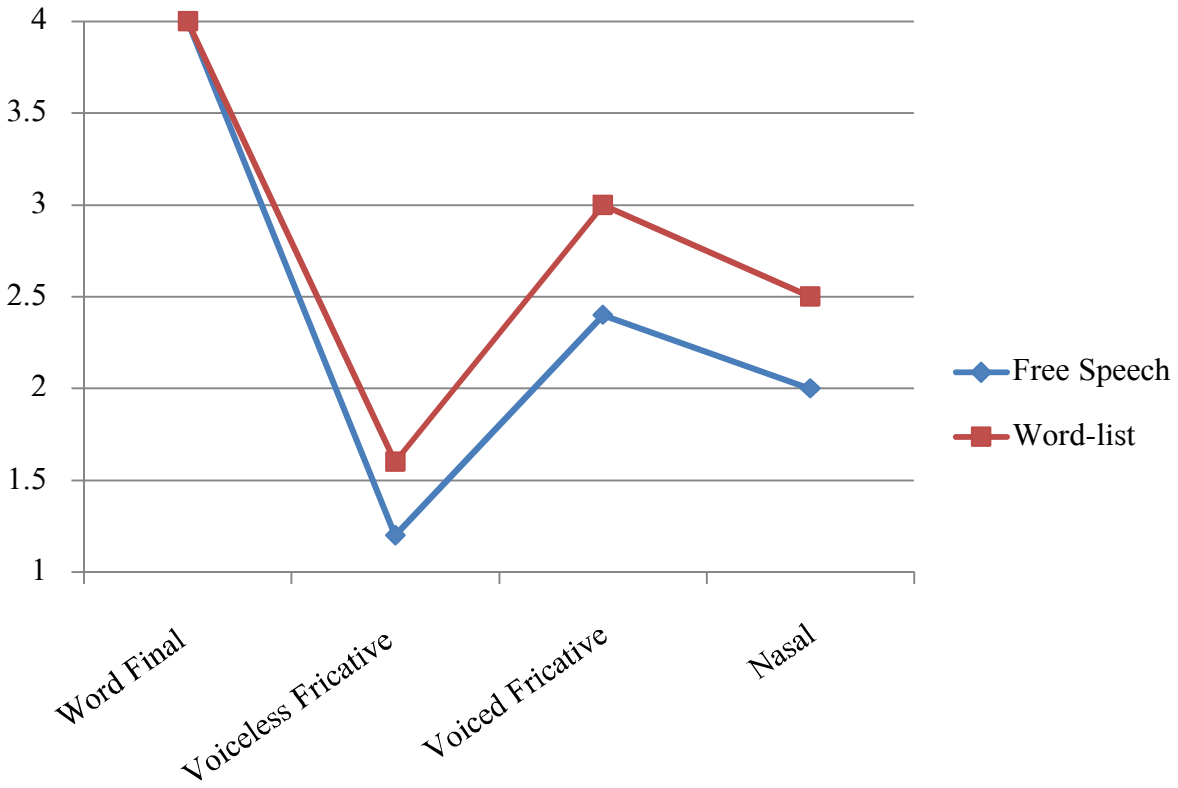


4.4.1 Distribution of the TRAP/ BATH/ PALM variants: Linguistic environment

The distribution here is similar to that found in the PRICE vowels above, in that the Type 1 variants demonstrate a preference for following voiceless segments. The occurrence of Type 1 variants in front of voiced fricatives is due to the lower-working class pronunciations of *father, plaster* and *master* having [a] as opposed to [a:]; particularly in free speech data, see Figure 4.11 above. Similarly mentioned above, the variants with [+ length] demonstrate the highest frequency in front of [+ voice] segments; hence the pronunciation of *can't* which

frequently occurred in the lower-working class speech, usually has the Type 3 realisation, [a:], or Type 4, [a:'], due to this word belonging to the group of words that are usually pronounced with the PALM vowel in the North (cf. Wells (1982: 135)). As Figure 4.12 demonstrates below, the Voicing Effect appears considerably to determine the distribution of the variants.

Figure 4.12: *Distribution of the TRAP/ BATH/ PALM variants: Free speech and word-list data*



As demonstrated above, the short vowel appears most frequently preceding a voiceless segment, whilst the [+ length] variants appear most frequently with voiced segments and word finally. This distribution is discussed at length in relation to the theories surrounding the phonetic naturalness of the Voicing Effect and the notions of contact that simultaneous govern its appearance in the dialect (section 5 below).

As with the other lexical sets, the difference between speech styles is again indicative of the carefulness of speech in reading tasks. In particular, the Type 3 variant displays over 90%

realisation before voiced fricatives in the word-list data. In free speech, however, in this context this number is reduced by approximately 20%. Thus, it can be assumed that in the reading tasks, words such as *father* and *master* were lengthened due to carefulness, despite the frequent occurrence of [a] in these words in the free speech of the working class groups. Naturally, the longest vowels are predominantly confined to word final position, as like the PRICE vowels, the lack of the stop in these positions lengthens the vowel considerably.

5 Discussions and Analysis

In comparing the SED data, presented above in section 2.4, to the data collected for this paper, the processes of levelling and standardisation[38] are strongly indicated as the differences between the data in relation to the number of variants present, demonstrates a considerable reduction of localised forms; whilst other variants have dramatically increased. The FACE and EIGHT sets are indicative of such change as the interviews discovered no realisations of [ɪə]/[ɪa] or [aɪ], which were so numerously evident in the SED data, whilst the [e:] variant now demonstrates a very high percentage. Similarly in the GOAT set, which historically also had the [ɪə]/[ɪa] variants and demonstrated high levels of [a] in certain contexts, were not present in the contemporary recordings, whilst [o:] was realised in copious amounts; the reduction of the former variants further indicating processes of relexification through standardisation (cf. Trudgill (1999)).

The PRICE set also demonstrated a number of reductions, as pronunciations such as [nit] for *night* were not used by the speakers, though [aɪ] appeared very strong in the data. Similarly, the SVLR variant [ɛɪ] did not occur in the recordings at all. That is not to say that these reduced forms categorically no longer exist, or that they do not ever appear in Newton Aycliffe speech, but that their non-appearance in the recordings are indicative of their reduction.

This section analyses the internal, external and extra-linguistic models of language change within the realms of theoretical linguistics, in conjunction with the data found in this study in order to assess which mechanisms are conducting these changes, within the context of the New-Town. Starting the discussion with an analysis of internal forces, notions of chain shift and rule governed alternation of lengthened variants; this paper then turns its attention to

[38] Note here that standardisation does not refer to language ideology, merely the overall process that encompasses the reduction of minority forms; levelling and the adoption of more regional, widespread variants; diffusion. See section 2.3.3.

the social implications behind change; the behaviour of speaker groups and the theories surrounding the effect on language in social interaction. Finally, the discussion analyses the psychological patterns behind these groups and the ramifications of variant ideologies which can drive and/or disrupt patterns of change.

5.1 Internal Motivations

In a structuralist model, the symmetrical nature of the vowel system and the orderly positioning of vowels in the vowel space suggest that internal mechanisms are governing the patterns of language change. The parallels identified between the FACE and GOAT sets here, which are often identified as 'being of equivalent height and tenseness' (cf. Watt (2000: 91)), are symptomatic of such an underlying system in operation. As Pfalz (1918) identifies, the parallel pattern of these sets are speculated to have a causal relationship in which '/e/ determines that of /o/ in a given language or dialect' (cited in Watt (2000: 91)). Embedded within the structuralist analysis is the theory of chain shifts as the vowels 'locate themselves in an orderly and quasi-predictable way' (Watt (2000: 91)). Within these parameters, Labov (1994: 124) schematises the general progression of /e/ and /o/ as follows:

ē > *(raises)* ɪə > eɪ

ō > *(raises)* ʊə > əʊ

Thus, as mentioned above, the centring diphthongs are speculated by Labov (1972) to be derived from the high-mid variant, whereby the monophthong rises and breaks and then the subsequent diphthong progresses to the up-gliding variant (cf. Watt (2000)). This analysis, however, highlights numerous problems, in reference to the data presented in this study. As Watt (2000) similarly highlights in his study of Tyneside vowels the progression of [e:] > [ɪə]/ [o:] > [ʊə] to is highly unlikely, considering that the monophthong forms are massively dominant in the contemporary data, whilst evidence suggests that the diphthongs

are in recession rather than succession as these forms are present only in the SED data. Similarly, the progression of the centring diphthongs, [ɪə] and [ʊə], to the up-gliding diphthongs favoured by the upper-working class females, [eɪ] and [əʊ] is very unlikely for these reasons, as these forms 'depend upon the adoption of [ɪə] and [ʊə]' (Watt (2000: 92)). Another argument centred on the derivation of the centring diphthongs in the North of England is that presented by Lass (1976: 99) and Trudgill (1986: 90) below, whereby they agree the development of [ea] as the following:

aa→ɛɛ→eɛ:→iɛ→ɪa→ea

In looking at the last two components, this schema appears more reasonable in conjunction with the data presented in sections 2 as both variants are present in the SED data. As [ea] (corresponding to [eə] in the contemporary data) is the only surviving form in the apparent time data, the above progression would appear to be more likely; hence, subsequently we can apply the parallel shift for GOAT [ʊə] > [oə].

As Figures 4.3 and 4.8 identified, the centring diphthongs displayed a preference for following liquid segments and plosive segments, from which, no particular pattern could be drawn. Yet, when reviewing the distribution in accordance with spelling a considerable correlation with the etymology could be drawn. In particular in the GOAT words, the [oə] pronunciation was nearly always used in words with the spelling <oa> by the older working class men, always in the words *goat* and *goal* (see appendix 36 for complete word-list). Similarly, this group of speakers demonstrated a tendency to use [eə] in words with the spelling <ai>, though with less of a correlation than GOAT words. As the SED data highlighted, the etymology of the words, particularly with the GOAT set, proved as an indicator to their historical pattern; hence, similarly here the distribution of the centring

diphthongs appears to be indicative of this pattern (see above). The social correlation with these forms will be returned to below in light of external and extra-linguistic factors.

Moving now to the PRICE lexical set within these parameters; the data presented in Figure 4.10 points to more internalised mechanisms driving the change as the following segment demonstrates considerably more intra-variation than the social factors presented in Figure 4.9 above. As the data found, the realisation of <i> is affected by the following segment being +/ − [voice]; whereby /aɪ/ is lengthened or the second element is weakened or fully lost (monophthongised) depending on the variants linguistic context. As the SED data indicated, a variant generally associated with Scottish dialects in this word set, [ɛɪ] (cf. Lass (1976)), was present in the Durham area; hence the presence of SVLR was indicated due to the presence of this form. As the contemporary data found, however, the distribution of the short vowels were nearly always found preceding voiceless segments, whilst the lengthened and monophthongised variants distributed before following [+ voice] consonants. Though the quality of the short vowel was otherwise unaltered in terms of vowel raising, the extension of environments whereby the short variant was selected over lengthened forms, demonstrates a process of simplification of the SVLR and more indicative of the Voicing Effect implicit in Canadian Raising (cf. Britain (1997) for the English Fens; Trudgill (1986) for Canadian English). This phenomenon is similarly reported by Trudgill (1986: 156) to be a feature of East Yorkshire speech, 'being of the type *night time* [naɪt ta:m]'. Moreover, similar to the contemporary data presented here, the Voicing Effect is implicit only in regards to lengthening, unlike Canadian Raising which raises the vowel before voiceless consonants.

The extension of environments covered by Canadian Raising is argued by Trudgill (1986: 159) to be a simplification of SVLR, not only on grounds of a natural progression inducing this change, but also through high levels of contact and the in-migration of numerous

variants, whereby the speakers have simplified the Voicing Effect to apply to less specific contexts than those specified by SVLR, as he states:

> 'Present in the mixture that preceded the formation of Canadian English were variants of /ai/…from many different English, Scottish, Irish and American varieties of English. Prominent among them were [əɪ]… of the type found in Scotland and northern England… the generation that first spoke a unified, focused dialect of Canadian English rationalized the situation by redistribution variants according to … natural phonetic tendencies.'

This hypothesis is supported by Britain (1997) who attributes the same patterns governing the distribution of /ai/ as caused by the mass in-migration of peoples and variants into the Fens (above). Hence, in the situation of a New-Town the theory of reallocation posited by Trudgill (1986) and Britain (1997), provides a convincing analysis of the growth and simplification from the SVLR evidence presented in the SED to the simplified, high contact induced Voicing Effect indicated in the contemporary data. As with Trudgill's (1986) observation of East Yorkshire Voicing Effect, /aɪ/ is dissimilar to Canadian Raising as the vowel does not raise preceding voiceless consonants above. Instead, the predominant [aɪ] form, highlighted in the SED data, can be seen to be the focused form from the numerous variants, which is subsequently altered in the contemporary data by the reallocated and simplified process, dictating that the short vowel precedes all voiceless contexts and vice versa. Moreover, due to the presence of the Voicing Effect in East Yorkshire, the adoption of this effect into Newton Aycliffe through lower-working class speech can also be attributed through contact if we assume that the Voicing Effect is now a feature of Darlington speech, which borders Yorkshire.

Thus, the data presented in this study is indicative of the corroborative interaction of 'natural' phonetic tendencies (cf. Trudgill (1986)), and the external factors surrounding the theories of dialect contact, as the social data (Figure 4.9 above) indicates inter-variation

between social groups. As this paper discusses below, in relation to external factors, the nature of New-Towns in relation to the theories of contact and dialect levelling support this theory of reallocation to a simplified Voicing Effect, which have led to the extended distribution of lengthened variants from the original SVLR in Newton Aycliffe speech.

Finally, in examining the distribution of the TRAP/ BATH and PALM variants within these parameters, patterns indicated by Wells (1982) found that words in the BATH set which alternated with the PALM vowel in General American, such as *can't* and *shan't*, were always pronounced with [+length] variants in the data of this paper. Moreover, the pattern identified by Beal (2004), whereby the words *master* and *plaster* are usually pronounced with [+length] variants are similarly attributed here.

The most salient distribution, however, can be found in relation to the Voicing Effect, as similar to the PRICE words, the short vowels select voiceless codas, whilst the lengthened variants appear preceding voiced segments. This, then, highlights the 'phonetic naturalness' described by Trudgill (1986) and Britain (1997) above, by which the Voicing Effect operates. Yet, as the social data indicates, this phonetic naturalness is being simultaneously affected by the external behaviour of the speakers of variant classes, whereby the Voicing Effect appears considerably more in the speech of the upper-working classes. This distribution, however, can not be attributed to notions of prestige due to their non-salience in speech, as Trudgill (1986: 10) identifies:

> 'Speakers do not accommodate on /a:/ anymore than they style-shift. Simply to point out that (a:) is an indicator and (t) a marker … Labov suggests in fact that markers are relatively high in a speaker's consciousness, as compared to indicators.'

Hence, as with the PRICE data above, subconscious contact between speakers appears to be inducing this system. As the following section highlights, the social network patterns which

are attributed to cause the Voicing Effect in the PRICE lexical set, can be attributed to TRAP/ BATH/ PALM also.

5.2 External Motivations

The SED data for the FACE, EIGHT and GOAT lexical sets, as mentioned above, demonstrated a much wider selection of variants present in these dialects; the apparent time data, on the other hand, clearly demonstrates that [e:] and [o:] are the dominant speech forms, accounting for 80% of the realisation overall,[39] when averaged across both speech styles in these lexical sets. Hence, these lexical sets clearly indicate that dialect levelling and diffusion have taken place due to the reduction of marked variants and the adoption of more regionally spread ones. As out-lined above, we can attribute these variants to the wider process of diffusion due to their spread across the North, as indicated by several studies (cf. Kerswill (2003); Watt and Milroy (1999); Watt (2002)). Yet, the presence of the low-mid variants indicates a potential take over, causing the high-mid forms to lose ground, a possibility which will be analysed presently.

Considering the distribution of the FACE, EIGHT and GOAT variants, several patterns appear that confirm the principles set out by Labov (2001) (see section 2.3.2). Firstly, the majority of the centring diphthongs are found in the speech of older males, particularly the lower-working class, affirming Labov's Principle I. Secondly, the up-gliding variants restricted to the speech of older upper-working class females obeys Principle Ia as the most likely group to adopt variants above the level of consciousness. With both the up-gliding and centring diphthongs, the regard of these forms as prestigious is highlighted by their increased frequency in elicitation tasks that heighten the informant's consciousness of their speech. This point is discussed at length in section 5.3, in relation to ideological factors. Finally, the

[39] As mentioned earlier, it is not unreasonable to group these variables in this way due to the parallel progressions of these sets, as highlighted in section 5.1.

spread of the monophthong variants both indicate change from below; the [eː] and [oː] forms, which are the most dominant in the speech of older lower-working class females, indicates that this group may have instigated this change. In the same vain, then, the new variants [ɛː] and [ɔː], which display the highest instances in the speech of younger lower-working class females, are being permeated across the dialect in the same way. Hence, in light of this observation, it can be assumed that as the low-mid forms, which are the most prominent within the social group Labov (2001) labels as the instigators of change, will in time infiltrate the speech of the other speakers; as has already taken place in the younger groups, though at varying rates.

There were, however, a number of patterns that did not concur with these Principles, as we saw with the younger upper-working class males in the GOAT lexical, who demonstrated a higher percentage of usage with the incoming variants in reading tasks (cf. Mees and Collins (1999); Stuart-Smith (2006)). Similarly, in the EIGHT free speech data, older lower-working class women, rather than men, retained the local variant [ɛɪ]. The unsatisfactory nature of analysing language change without exploring the motivations behind these Principles, then, is highlighted as questions remain as to why these different social groups display varying rates of change and varying notions of preference. Thus, in order to answer these questions, the necessity to place the individual social groups under scrutiny in regard to density of network, contact, accommodation and an analysis of ideological factors, is fully recognised and put into practice.

As highlighted in section 2.3.2 above, the importance of face-to-face contact and subsequent accommodation are essential in dialect levelling and the adoption and spread of variant forms (cf. Trudgill (1986); Torgersen and Kerswill (2004)). The extent of contact within the parameters of a New-Town is widely understood to accelerate these processes of language change (cf. Williams and Kerswill (1999)). In light of this, the identification of the new

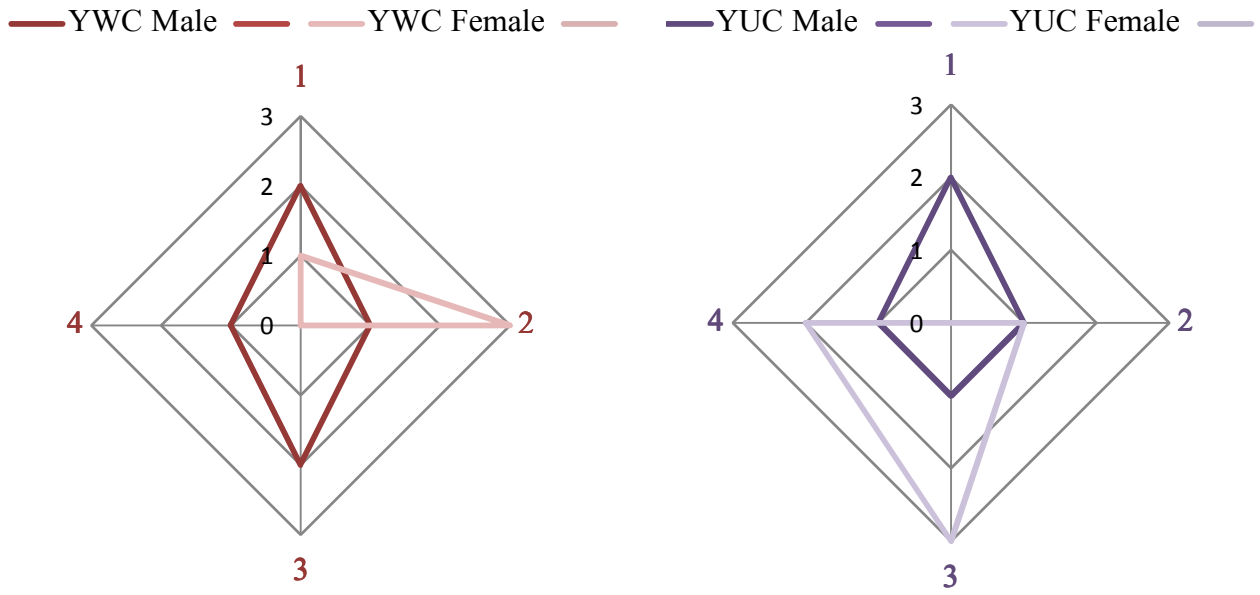
variants [ɛː] and [ɔː] within these parameters should provide answers as to the origin of these forms. The speculation of these variants being inter-dialect forms is unlikely, as confirmed by the evidence presented by these social networks, as presented in Figures 5.1 and 5.2 below, which demonstrate the densities of speaker networks.

The data presented by Figures 5.1 and 5.2 have been schematised for the purposes of this study to demonstrate the extent of speaker networks diagrammatically. The four points of each diagram represent distance as follows:

1 = ***Very Local*** (within Newton Aycliffe),
2 = ***Local*** (region spanning from Newcastle to York),
3 = ***National*** (beyond Newcastle and Yorkshire, stretching throughout the rest of the British Isles),
4 = ***Abroad*** (the speaker's network extends beyond British Isles).

The speakers were then given a score depending on the number of associations with each distance, for example if a speaker worked in Aycliffe but had relatives in Newcastle; they would score 1 point for *Very Local* and 1 point for *Local*. Each of the informant's family, friends and place of work were considered with the following results:

Figure 5.1: *Density Networks of Younger Informants*



Looking at the distribution of network for the younger groups primarily, the evidence clearly points to the upper-working class speakers operating on a more uniplex network as the majority of their contact is demonstrated to take place outside of the very local area and region. The upper-working class females are particularly indicative of this fact as they demonstrate most of their ties lying outside the local region, followed by a number of ties abroad; whilst the lower-working class demonstrate a connection with the local area.

When breaking the extent of the distance down further by looking at the individual response in identity questionnaires, though the lower-working class females have fewer ties in Aycliffe than the males of both groups, the extent of the travels on a regional level extends only as far as Darlington. This then points to face-to-face contact and subconscious accommodation as the causal factor in the introduction of the low-mid variants, as this town lies just to the North of Yorkshire. As out-lined above, the data in the SED, Figure 2.11 and other studies of Yorkshire towns identify this variant as originating from this region (cf. Williams and Kerswill (1999)). As the ideological data below will identify, however, these

external factors may be externally motivated themselves as correlating patterns can be drawn between local contact and notions of local identity (see section 5.3).

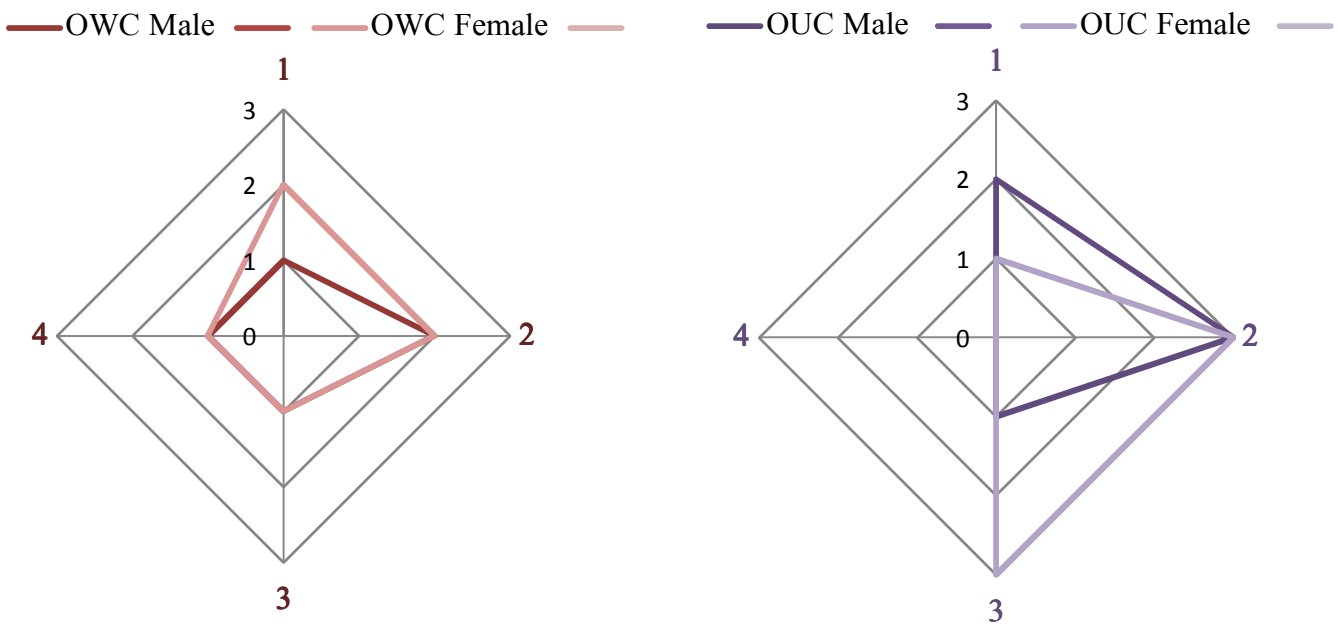
The differences between the males of each social group are minimal as both demonstrate local ties. Interestingly, however, the lower-working class males demonstrate ties over a wider geographical area than the upper-working class males. This is identified as a consequence of differing occupations, as the lower-working class males are employed or had been employed in jobs outside the local area (cf. Llamas (2001b)); whilst the upper-working class males are still engaged in further education, within Newton Aycliffe. The similarly local ties with the lower-working class females goes towards an explanation as to why the upper-working class males demonstrate a higher instance of [ɔ:]; however, due to this variants high number being confined to the reading task and due to the identity of one of the speakers, this phenomenon can be fully explained in regard to face-to-face contact and accommodation.

As mentioned in the methodology, informants who had lived in Newton Aycliffe all of their lives were difficult to come by due to the complicated social make up of New-Towns, (see section 2.2); thus one of the young upper-working class males had lived in Darlington a for a number of years. This speaker accounted for all the realisations of the low-mid variants as presented in section 4, whilst, as the data shows, also demonstrating a high percentage of the high-mid variants, which the other speaker used categorically. The increase in the low-mid forms in reading tasks, then, is due to this speaker no longer having face-to-face contact with the speaker who displayed [e:] and [ɔ:] categorically, thus reducing subconscious accommodation. This ratio between the speakers is further indicative of the influential presence of these forms in Darlington rather than these forms being created through a mixture of varying dialects; inter-dialectal forms.

Furthermore, as Watt and Milroy (1999) identify, these forms have began to emerge in Newcastle, in particular in the speech of females; suggestive of urban hierarchical diffusion (cf. Britain (2005); Kerswill (2003)). As Watt and Milroy (1999) did not quantify this variant separately from [e:], their significance within Newcastle English is as yet unknown. The presence of low-mid forms in both Yorkshire and Newcastle, however, demonstrate a pattern of spread similar to that of the high-mid variants, described by Kerswill (2003) whereby reinforced levelling occurs in Newcastle from Yorkshire, so that the form then infiltrates the region in-between (see section 2.4.2 above).

Moving now to the data for the older speakers, presented in Figure 5.2, it is evident that the differences found above between gender and social class apply here also:

Figure 5.2: *Density Networks of Older Informants*



The lower-working class data displays little difference between males and females as both demonstrate local ties. The females in this group, however, display an equal connection with Aycliffe and the surrounding region, whilst the males demonstrate less association on a very local level. Once this social pattern is broken up further by looking at precisely which

locations this group visit, the answers from the males demonstrated a strong affiliation with Newcastle in support of the Newcastle United football team. The wives of these men would sometimes accompany them but would often go shopping, whilst the men would go to the matches; one couple reported to going to Newcastle as regularly as once a fortnight to this end.

Hence, when we map this precise social pattern onto the linguistic data, it is not surprising that the highest instances of [eə] and [oə] are found in the male speech as these forms association with Newcastle speech, coupled with this groups' connection with this urban centre, would explain their contact with these variants resulting in their adoption. Yet, as the historical data demonstrated, these forms are a feature of dialect varieties much closer to home. This then points, not to external factors, such as contact in the attribution of these variants, but to notions of stereotypes; as the apparent-time data identifies, these forms have been significantly reduced to marginal proportions. As the extra-linguistic data identifies in more detail below, despite the stigma surrounding these forms, the inter-variation of ideologies between speech varieties and social groups can cause unexpected and over-riding patterns to occur (section 5.3).

Looking now at the upper-working class data, the distribution of contacts in this social group demonstrates a much more uniplex network than that of the lower-working class informants. The female group in particular display this type of network as the extent of their association with Newton Aycliffe is minimal in comparison to their contact with the surrounding region and beyond. When placing this finding onto the linguistic data, the presence of the up-gliding diphthongs becomes more explicable as it can be assumed these females have had more contact with more widespread varieties such as RP which contain these forms.

The interplay between social contact, linguistic salience and ideology are highlighted here; the contact with these varieties heightens their necessity to accommodate, whether out of notions of prestige and solidarity or through a desire to be understood. As Trudgill (1986) and Labov (2001) recognise above, however, for this form of accommodation to take place, these forms need to be salient in order for them to be adopted. This point is clearly indicated in the FACE, EIGHT and GOAT data, as in comparison to the PRICE data, the social variation of /aɪ/ displays the most considerable variation when analysed with linguistic factors. The variation of FACE, EIGHT and GOAT, on the other hand, displayed substantial social deviation as the older upper-working class women, for instance, were the only ones to select a high number of up-gliding diphthongs, particularly when they were more conscious of their speech. As Figure 5.3 identifies below, the notions and ideologies this social group has of dialects and variation, confirm this fact.

Referring back to the linguistic behaviour of the upper-working class males in FACE, EIGHT and GOAT, this group similarly displayed usage of the centring diphthongs, albeit not as much as the working class group. The networks for the males in this group similarly displayed a strong local tie to the surrounding region rather than with Newton Aycliffe, and when analysed more closely, the choice of location within this region, once again, was Newcastle for precisely the same reason as the lower-working class males. As identified with the lower-working class males above, however, the reason for the occurrence of these forms is unlikely to be attributed to contact with Newcastle, due to these forms similarly being reduced here (cf. Watt and Milroy (1999); Watt (2002)); rather, the stereotypes and ideologies which surround Newcastle are more attributable to determining the distribution of the centring diphthongs, as section 5.3 below goes on to identify at length.

The variation between age groups is minimal, with the classes and genders of both ages acting very similar to one another. A distinction can be made, however, between the groups

when the extents of their networks are examined more closely on a regional level. Though both age groups show considerable affiliation with the surrounding region, particularly the lower-working classes, the older groups' contacts reside primarily in Newcastle, whilst the younger speakers are predominantly confined closer to home, venturing only as far as Darlington. This is due to a variety of reasons, which the questions of the identity questionnaire (see appendix 35) managed to highlight. The majority of the younger lower-working class did not own a car. Furthering this, when asked about local transport, the response was categorically negative with complaints that the services were not only to expensive, but very irregular and limited in destination. Moreover, as the extra-linguistic data identifies below, the density of their networks is further added to due to the lack of affiliation and often negative attitude towards urban centres found further a field in the region.

In light of these findings, then, it is clear that the inter-variation of social network within Newton Aycliffe is rather more complex than the homogeneous uniplex network Williams and Kerswill (1999) identify for New-Towns in general. Whilst the uniplexity of network is true of the upper-working classes, in particular the females, the lower-working classes demonstrate much more dense networks that are more typical of older urban areas (cf. Williams and Kerswill's (1999) description of Hull). Hence, the inter-variation between social group and patterns of convergence are identifiable within the parameters of variant social networks; the younger lower-working classes in closer contact with Darlington are adopting forms from this region below the level of consciousness, subsequently demonstrating divergent trends from the North-East region. The upper-working classes in the mean-time, due to greater mobility than the other groups, express increasing patterns of diffusion, in adopting more regional forms below the level of consciousness, as well as

more salient and prestigious variants. These points are further complemented by variant speaker notion and ideology, as highlighted in section 5.3.

Moving now to the identification of the PRICE in reference to these factors; the variation is far less notable. Nonetheless, despite this variable producing more considerable differences between varying linguistic/ internal factors, as mentioned above in section 5.1, several social variations were highlighted. The most striking variation is found between social class as the upper-working class demonstrate a higher usage of the Type 1 variants, whilst the lower-working class speakers display considerable orientation towards lengthened and monophthongised realisations. Though the data showed this variation to be due to more internalised factors, the theories of contact posited by Britain (1997) and Trudgill (1986) (above) are applied here to account for this social variation.

As highlighted above, Britain (1997: 35) convincingly argues that the distribution of the Voicing Effect implicit in Canadian Raising in the Fens, which gives rise to the variant [əɪ] is due to a process of *simplification*, induced by high contact situations causing the vowel to reallocate itself. In other words, due to the mass in-migration of variants the dialect focuses on 'the prominent variant [əɪ]' and subsequently the first generation 'focused the dialect on Canadian English by redistributing the variants according to natural tendencies' (Britain (1997)). The data presented here, can be seen to correlate with such an analysis, as a simplification of the Voicing Effect has similarly taken place in Newton Aycliffe speech; the vowels in question do not raise preceding voiceless contexts which indicate that the predominant incoming vowel was [aɪ] rather than [ɛɪ]. A parallel can be drawn, however, with the effect of the voicing which appears to have undergone a process of reallocation similar to that in the Fens, whereby all following voiced environments select a lengthened or monophthongised vowel, and vice versa, rather than just environments governed by SVLR. When we correlate this to speaker network, however, a pattern similar to the

reallocation described by Britain (1997) above is apparent predominantly in the lower-working classes who demonstrate that the higher density networks demonstrate the greatest tendency to monophthongise in certain linguistic contexts.

As cited in Britain (1997), Milroy and Milroy (1985) state that, new communities over time develop to become denser and multiplex (see Figure 3.1 above). Under this observation, this paper maintains that this process of reallocation and simplification is the most convincing explanation of the distribution of variants found above; the rules of SVLR have fed into the dialect in its initial stages, as indicated by the SED data above, and have subsequently undergone a process of simplification, whereby the marked variant [ɛɪ] has been eradicated, however, the Voicing Effect has reallocated. The Voicing Effect is then preserved by the lower-working class speakers as they stay within the context of the New-Town and with other dialects which have similarly have this rule of length distribution (cf. Williams and Kerswill (1999) for Hull; Docherty and Foulkes (1999) for Derby; Trudgill (1986)); as this paper speculates (above), this form has spread into Darlington which borders Yorkshire as this group assume a high level of contact with this urban area. On the other hand, the upper-working class speakers display less of the Voicing Effect as they are in contact with dialects outside of Aycliffe which have not undergone this process, such as Newcastle and further afield.

Unlike the FACE, EIGHT and GOAT variants, however, it is less likely that the [aɪ] forms are adhered to due to stigma of lengthened variants, as the latter appear to be acquired subconsciously due to their motivation being more 'naturally' driven (see section 5.1 above). Therefore, we can attribute their distribution to internal and external forces working in parallel with one another, in which the internal mechanism comes into play as the speaker comes into contact with other varieties that demonstrate this process; notions of prestige in this case then, do not appear to be interceding and over-riding the internal forces,

reiterating these variables' lack of salience; below the level of consciousness (cf. Britain (1997).

Finally, in weighing up the variant distribution of TRAP/ BATH and PALM in relation to external factors, the variation imitates that of the PRICE set above. The natural distribution of the Voicing Effect is applicable here in governing the selection of [a] and /a/ [+length], as discussed in section 5.1 above. Like the PRICE set, however, a considerable degree of variation was found in the social data; particularly between gender and class. Looking primarily at the free speech data, the younger upper-working class males demonstrate the highest instance of un-lengthened variants, whilst the females of this group show quite a high number of [+length] forms. Interestingly, this pattern is similarly recognised in the older upper-working class in this style of speech. The lower-working class groups both display high instances of more lengthened variants.

This distribution can be explained in terms of contact as in relation to the simplification process described above, as the lower-working class speakers, who demonstrate the densest networks, have simplified the distribution of lengthened variants as *master* and *plaster* are not pronounced as they are regionally with lengthened variants (cf. Beal (2004)) but with the short vowel, due to the presence of the following voiceless segment. This then, is indicative of the mechanisms causing reallocation that are similarly occurring in the PRICE set, due to the contact situation of the New-Town Newton Aycliffe; a mass of local and regional dialects have fed into the town in its early stages with [a] and [a:] being the two major forms (SED data above). Thus, the inhabitants have undergone a simplification process to reallocate these variants in accordance with the Voicing Effect. Finally, as the community of the lower-working class speakers has developed and increased in density, this group then preserve this rule as they remain in interaction on a local level, whilst the upper-

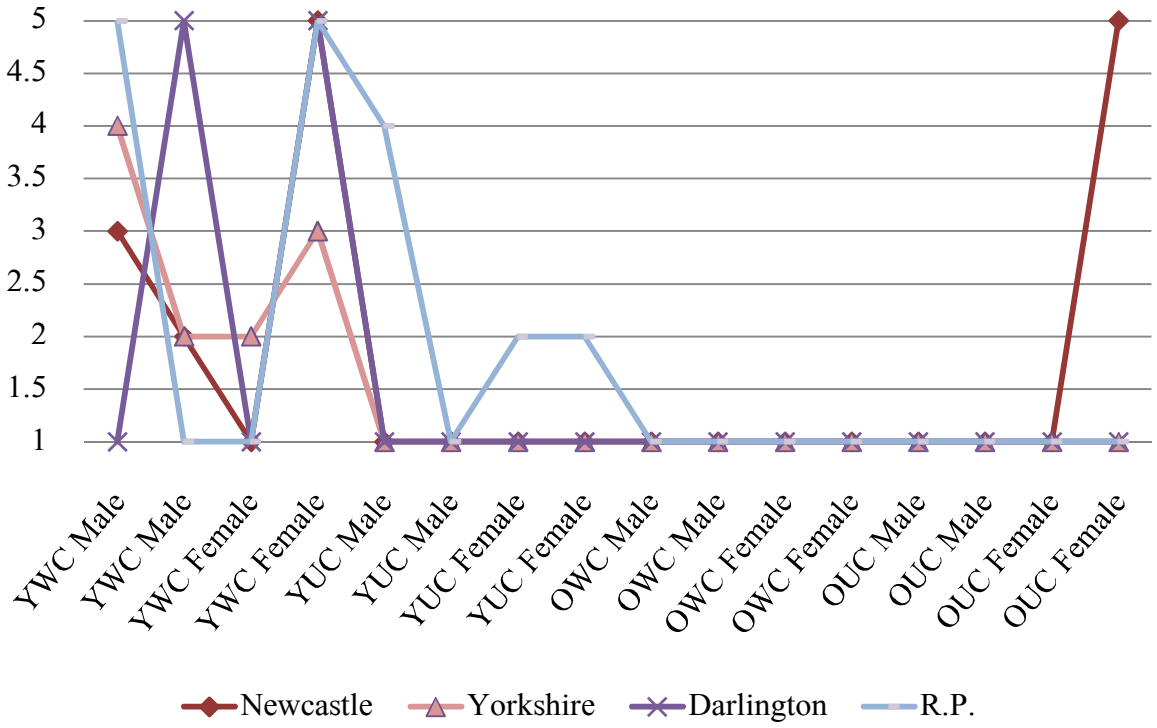
working class demonstrate more of a resistance to this simplification due to their more regionalised networks away from the local area.

The anomalous frequency of the younger lower-working class with lengthened forms can also be explained, though in terms of word frequency as this group frequently used the word *can't* which, as the linguistic data indicates, is generally realised with [a:] due to the Voicing Effect and this word contain the PALM vowel [ɑ:] in GenAm (cf. Wells (1982: 135), though surfaces in the North as /a/ [+length]. In an abstract sense, the frequency of this word can be linked to social network as the younger working class informants' frustration at being more restricted to a declining town was frequently expressed; *'can't afford the bus, its too expensive', 'can't stand the town centre', 'can't go shopping cos their int any shops'* are just some of the utterances expressed by this group.

5.3 Extra-Linguistic Motivations

The informants' struggle for identity can be predominantly pinned to the juxtaposition of Newton Aycliffe between the notable cultural/linguistic zones of Geordie, Yorkshire, and Middlesbrough. In relation to this is the ideological intra-variation between the speakers of the variety; whilst some speakers are un-offended when recognised as being Geordie, other informants express positive indignation if accidentally identified as such. The identity questionnaire was incredibly successful in recognising these variant attitudes; hence the correlating patterns that can be drawn between these data and the linguistic distributions are highly conclusive. The data presented in Figure 5.3 demonstrate the varying response to the statement *'I would be offended if somebody called me; Geordie, Yorkshire, Darlington, RP'* (see appendix 35). The responses were added to a scale of 1-5 in which 5 corresponds to the informant would be highly offended and vice versa; with the following results:

Figure 5.3: *Attitudinal data: Degree of offence taken when mistakenly identified from the following localities.*



From the results of this graph, striking correlations can be drawn with the external data surrounding individual speaker network and the consequent co-variation with the variant distributions presented in the social data in section 4 above. Looking primarily at FACE, EIGHT and GOAT, the older upper-working class females display an extreme dislike at being associated with Geordie. This highlights this social group's adherence to the [eɪ] and [əʊ] as the centring diphthongs are clearly considered stigmatised by these speakers; hence their adoption of the up-gliding diphthongs conversely identifies the notions of prestige these speakers have surrounding these variants.

Moving on to the low-mid and high-mid variants in this vein, the identification of these forms as being below the level of consciousness is made apparent by the younger lower-working class females. As section 4 identified, [ɛ:] and [ɔ:] displayed the highest frequency amongst the speech of the younger lower-working class females in particular. Moreover, these forms were identified as originating from Yorkshire with their possible spread into

Darlington; speculated due to the extent of this group's contact being confined to this urban centre. The data here, however, demonstrate an expressed annoyance by this group if identified with this town, thus emphasising the lack of salience with these forms.

In light of this, the data further confirm that as an innovative change from below, Labov's (2001) Principle II is recognised here. Equally the [e:] and [o:] variants display similar origins (cf. Kerswill (2003)). In addition, this group expressed an extremely local affiliation in refusing to accept any other recognition than that of Newton Aycliffe; a point which is reiterated by this groups' high density network, as portrayed in Figure 5.3 above. In analysing the younger lower-working class group as a whole, the variation between individual speaker notions display a very unsettled pattern. For instance, one young lower-working class male expressed an extreme aversion to the prestige variety above, whilst the other male in this group shares the same ideology with the upper-working class females in the older group. Darlington, similarly displays very mixed feelings. The variation dwindles, however, on a more regional level as the agreement in aversion towards Newcastle and Yorkshire increases; hence, when correlated to the external factors the multiplex nature of this social groups' network, demonstrate a complete motive to the divergence from the high-mid variant, as well as the diphthong forms used by the other groups, due to their hyper-localised identities.

Interestingly, the other social groups display very little to no aversion towards being identified as Geordie, Yorkshire and so on. The younger upper-working class did demonstrate a dislike towards Middlesbrough, whilst the older group expressed more an aversion towards both Middlesbrough and Sunderland due to their association with the Newcastle United football team. As mentioned above, distribution of the monophthongal variants is more explicable within the parameters of external factors; the younger upper-working class speakers' high usage of the high-mid variants demonstrate dialect levelling

towards the regional standard[40] due to this forms evidently rapid dissemination through the speech variety. Equally, the appearance of the low-mid forms can be seen to be distributed through the similar Principles denoted by Labov (2001) above, as below the level of consciousness, though instigated through contact. The pattern of the centring diphthong variants highlights an interesting distribution between the older males as both classes within this group demonstrated some usage of this form. As mentioned earlier, in relation to external factors, this distribution could not be linked with contact with Newcastle alone due to these forms' presence in the SED data, demonstrating their existence on a much more local level.

In light of more ideological analysis, however, the adoption of these forms by these informants becomes clearer. As mentioned above; the acceptance of this forms in Newcastle are reduced due to their stigma as being 'old fashioned' and 'associated with flat caps' (cf. Watt (2002); Wells (1982)); it therefore seems unusual that they should appear in Newton Aycliffe considering the negativity surrounding these variants. The shifting nature of speaker ideology, however, as mentioned earlier, can lead to entirely converse opinions of prestige and stigma, inter- and intra-speech variety, which is precisely the case here. Initially, the centring diphthongs which are considered as stereotypically Geordie are at first glance thought to be adopted by the lower-working class speakers' association with football teams. The greater distribution of these forms in the word-list data is demonstrative of the awareness surrounding these forms and the speakers' desire to express their affiliation.

Yet, as the identity questionnaire highlighted, the ideology surrounding Newcastle does not lie with the football team alone, but with associations of class. The fact that this form is present in the upper-working class speech is indicative of this fact for the exact reason that due to informants being selected via the 'snowball' method, all the males in this group are

[40] Note that 'standard' here refers to the most frequent from within the region without referring to notions of prestige or ideology.

associates of the same firm. As the methodology stressed above, the reluctance in referring to the upper-working class informants as middle class is due to the expressed opinion that the speakers belong to the working class through their employment in industry. Consequently, this attitude is signified in the adoption of these variants; the lower-working class males, through a mixture of contact, and affiliations with the Newcastle United football team adhere to the centring diphthongs, whilst the upper-working class as supervisors to the former, demonstrate a covert prestige with these forms by accommodating the lower-working class speakers motivated by the need to be recognised within distinctly *working class* parameters and maintain solidarity with their colleagues. Here then, we have the three motivations working in parallel with one another; the internal factors determine the linguistic distribution, whilst the external and extra-linguistic factors continue this forms presence, rather than over-ride, due to this groups contrary notions of prestige to the other social groups and converse to the ideologies of other speech varieties. This point is felt to nullify the notions surrounding the term 'speech community', thus, authenticating the avoidance of this term within this paper. This point is returned to in more detail below.

In light of these finding, two possible models can be identified to describe the distribution of variants within extra-linguistic realms; the *Variationist* model and the *Conflict* model, which, as their titles suggest, present contrary theories to how social groups as a complete unit interact with language. The Variationist model, propagated by Labov (1966), attributes that the social groups of a particular dialect all share similar values; notions of prestige and stigma surrounding change, thus language change is propelled through the external Principles (above) in that women are quicker to react to 'prestige' forms and men are more conservative. This representation gives rise to the term 'speech community'; however, this renders the individuals of this class as lifeless, making the ideologies behind them appear

entirely unconscious. As we have seen in the data above, however, this is clearly not the case as the speakers' notions of prestige are evidently motivated by the general psychologies of groups, but that these psychologies do not have to be homogeneous within a speech community, as demonstrated between the older informants of different gender. Therefore, in consensus with the Conflict model, propagated by Milroy (2002), account can be taken of 'the inequalities, divisions, and opposing interests found within society' (Williams and Kerswill (2005: 1037-8)).

Moving now to examine the PRICE data in light of these motivations, it is apparent that extra-linguistic factors carry significantly less influence in weighting the distribution of variants. As highlighted in section 4, the distribution of the variants in this lexical set is predominantly conditioned by phonological environment induced by specific contact situation. This is thought to indicate that more internal and external mechanisms are in operation to determine the distribution of lengthened and short variants, due to the simplified effects of following consonantal voicing. Similarly, in the TRAP/ BATH/ PALM words, the variant distribution was found to be governed by internal and external factors, as detailed in section 5.1. Both of these lexical sets, however, demonstrated variation due to social factors, indicating that ideological factors may contribute to this distribution. Yet, as stated in section 5.2 above, these forms are considerably below the level of consciousness, therefore the variation between social groups can be attributed to varying levels of contact through varying densities of network; the lower-working class speakers unconsciously adopt the internalised mechanism to monophthongise PRICE words due to greater exposure to varieties that do so. In TRAP/ BATH/ PALM, word frequency and the Voicing Effect was seen to have the biggest influence, further highlighting more internalised mechanisms of change. Therefore, due to the lack of salience of these variants, the interference of extra-linguistic factors is highly unlikely.

6 Conclusions

In sum there are several conclusions to be drawn here. Initially, strong conclusions can be asserted that dialect levelling has taken place, as indicated by the reduction of variants from the SED to the contemporary data. Yet, the direction the speech variety of Newton Aycliffe is taking provides convincing evidence as to the internal and external notions, from which numerous conclusions are apparent.

Starting with the patterns presented in the discussion, the varying levels of consciousness and salience of variants play a major role in the adoption and rejection of forms. As demonstrated with the FACE, EIGHT and GOAT data, speakers were highly aware of some of the variants and were able to appoint a value to each of them; a point which highlights the Milroyian notion mentioned in section 3.1.1, that women appoint prestige and subsequently the form becomes prestigious. In light of the data presented here, this point is confirmed in the evidence found in the lower-working class males' speech, whereby their treatment of the centring diphthongs emphasises the importance of speaker ideology and the over-riding power this mechanism holds in determining the frequency and distribution of variants between speaker groups. Thus, the notion of a speech community of shared norms and values does not hold as demonstrated by the covert prestige of the centring diphthongs held by the older males; a view entirely contradictory to the other social groups, as well as speakers from other speech varieties.

The view then, that members of the speech variety work in conflict with one another allows for explanations of language change, particularly along unexpected paths. The data from this paper clearly demonstrate the possible divergence from expected trends through the speakers' need to highlight their own sense of identity; selecting forms which they believe to embody their views, and by rejecting forms considered prestigious by other groups. Hence, the overall conclusion asserts that if a form is salient in the language its existence is

purely denoted through speaker perception. If a Variationist model of ideology exists in counting the form as stigmatised then the form will not survive in the dialect.

Moving on to the internalised mechanisms and notions of chain shift, there are several major problems this model faces. Primarily, the data from all the lexical sets confirmed evidence that underlying motivations struggle to take precedence over conflicting external and extra-linguistic factors. As we saw with the data above, whilst the interplay of these factors can lead to more rapid change with variants above the level of consciousness, the consequences of contact and subconscious accommodation alone, can change the direction of sound change. The idiosyncratic behaviour of the low-mid variants of FACE, EIGHT and GOAT demonstrated this fact as their identification below the level of consciousness eliminated their development from being motivated by extra-linguistic factors. This leads to the subsequent problem in positing a pattern of unidirectional change, particularly with variants above the level of consciousness; as we saw with Labov's premise of up-gliding diphthongs being derived from [ɪə] and [ʊə], which was clearly not the case due to the infrequency of these forms in the data. Hence, the provenance for chain shift motivation needs two conditions; a) when the shift is indeed unidirectional; (b) when uninterrupted by *contrary* external factors.

The PRICE data on the other hand displayed a development influenced most strongly by internalised mechanisms. Similarly the data from TRAP/ BATH/ PALM displayed precedence in which the effect of the following segment displayed the most considerable variation in regard to a Voicing Effect. The effect of social network and the unique contact situation of a New-Town proved to be the cause of the Voicing Effect within the Dialect as the numerous variants that were fed into the dialect, coupled with the SVLR instigated a simplification to take place. Hence, the rules of length surrounding SVLR were reallocated so that the vowel lengthened before all voiced segments, rather than being confined to the

contexts described in Aitken's Law. The dialect then simultaneously focused on the predominant variant [aɪ] (SED above) to which this rule was applied and then reallocated. This process was further identified in the TRAP/ BATH/ PALM data, with identical patterns of distribution within the social data, further confirming the theory of contact surrounding the induction of a Voicing Effect and its simplification induced in the New-Town context. The social data in TRAP/ BATH/ PALM, however, indicated an anomaly, contrary to this hypothesis, whereby the younger lower-working class speakers used a high percentage of lengthened variants. As identified, however, this pattern had to be taken with caution, as rather than being attributed to a specific psyche of prestige held by this group, the frequency of the word *can't* was actually the causal factor, due to the frequent expression of frustration at the lack of mobility. Furthermore, the recognition of these forms being below the level of consciousness, further eradicates this variables consideration within extra-linguistic parameters.

The interactions of the motivations then, present the crux of analysing dialect progression, highlighting the need for their identification within sociolinguistic analysis. As the data from the identity questionnaire frequently made apparent, the motivations of speaker notion can be as small as an affiliation with a football team, or a consequence of numerous ideals which each display the same resultant form; the older males use of the centring diphthongs were identified as a consequence of marking working class notions, solidarity between slight class difference and affiliations with sport. As we saw with the younger speakers, however, impressions of negativity towards a variant or speech variety has the same effect. This groups' negativity towards Newcastle resulted not only in the rejection of stereotypical Geordie forms, but their avoidance of this other negatively regarded areas. Thus, combined with low levels of mobility this has led to the speakers' much localised network. Therefore, as mentioned above in the importance of contact in language assimilation, the limit of the

density of these speakers' network has led to a convergence with Darlington and Yorkshire, whereby the wave spread of variants across this county is being introduced into the speech of the innovating speaker groups, below the level of consciousness. Moreover, the spread of these variants is increased through its spread via urban hierarchical diffusion; a point evidenced by this forms presence in Newcastle. Hence, though the speakers display no contact with Newcastle, the spread of these variants through the speaker system may be heightened through the concept of 'reinforced'/ urban hierarchical diffusion as proposed by Kerswill (2003) above.

Thus, it can be concluded from the data presented in this paper that the innovating young females are demonstrating a convergence to Yorkshire in their selection of FACE, EIGHT, GOAT and PRICE variants below the level of consciousness. In contrast, the groups with the highest mobility are converging on a more regional level, selecting the high-mid variants of the former, and [aɪ] with PRICE, which are more typical of speech varieties found further North. The direction future studies might take therefore would be to conduct a real-time study, monitoring the progression of these variants with the hypothesis that those forms introduced by the lower-working class females will take precedence over time in disseminating through the speech variety.

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- http://www.zoopla.co.uk/house-prices/newton-aycliffe

Appendix

(1) Words analysed from SED data: FACE lexical set

	Yorks.1	Yorks.2	Yorks.3	Durham 4	Durham 5	Durham 6
drain	ɪ ə	ɪ ə	ɪ ə	ɪ ə	ɪ ə	ɪ ə
lay	e:	e:	e. ɪ	a ɪ	e: , a ɪ	ɑ ɪ
snails	e: ᵊ	e:	e ə	ɪ ə	e ə	ɪ ə
bake	ɪ a	ɪ ə	ɪ ə	ɪ ə	-	e ə
rake	ɛ	ɪ ə	ɪ ə	e ə	e ə	e ə
gable/ gavel	j a	i ə	e:	ʲɛ	i a	e a
trace	e ə	e ə	ɛ ə	e ə	e :	e: ᵊ
spade	ɪ a	ɪ ə	ɪ ə	ɪ a	ɪ a	e ə
daisy	-	-	-	-	-	-
potato	e:	ɛ ə	ɛ ə	i ə	e ə	e:
flail	e:	ɛ ə	ɛ ə	e. ə	e ə	ɛ:
hay	e:	ɛ ə	ɛ:	e ə	e ə	e:
nail	e:	e ə	e ə	i ə	e ə	e:
tail	e:	e:	i ə	e ə	e ə	e:
bait	e:	ɛ ə	e ə	-	-	e
mange	e:	ɛ ə	e:	ɪ ə	e ə	e:
bacon	e. ə	ɛ ə	ɛ ə	e ə	e ə	e:
mates	e:	e:	ɛ ə	e ə	e ə	e:
grave	e:	ɛ ə	ɛ ə	e ə	e ə	e:
lake	e: ᵊ	ɛ ə	ɛ ə	e ə	e. ə	e:
away	e:	-	e:	e:	-	e:
made	ɪ ə	ɪ ə	ɪ ə	e ə	e ə	e. a
spade	ɪ a	ɪ ə	ɪ ə	e ə	e ə	e. a
sprain	e. ə	ɛ ə	ɪ ə	e ə	e ə	i:

(2) Distribution of SED, FACE variants <ai/ ay>

	Yorks. 1	Yorks. 2	Yorks. 3	Durham 4	Durham 5	Durham 6
ɪə/ ɪa	1	2	2	3	1	2
e:	6	3	1	0	0	5
eə/e:ᵊ	2	1	4	4	6	0
ɛ ə	0	3	1	0	0	0
ɛ:	0	0	1	0	0	1
e. ɪ	0	0	1	0	0	0
ɑ ɪ/ ai	0	0	0	1	1	1

(3) Distribution of SED, FACE variants <aCe>

	Yorks. 1	Yorks. 2	Yorks.3	Durham 4	Durham 5	Durham 6
ɪə/ ɪa	5	6	5	5	2	0
e:	4	1	2	0	1	6
eə/e:ᵊ	2	1	0	8	8	6
ɛ ə	0	5	6	0	0	0
ɛ:	1	0	0	0	0	0
e. ɪ	0	0	0	0	0	0
ɑ ɪ/ ai	0	0	0	0	0	0

(4) Words analysed from SED data: EIGHT lexical set

	Yorks.1	Yorks.2	Yorks.3	Durham 4	Durham 5	Durham 6
weigh	ɛ ɪ	ɛ ɪ	ɛ ɪ	ë	æ ɪ	a ɪ
neigh	a ɪ	-	-	-	-	-
eight	a ɪ	ɛ ɪ	ɛ ɪ	æ ɪ	æ ɪ	a ɪ
neighbours	a ɪ	æ ɪ	æ ɪ	æ ɪ	æ ɪ	a ɪ
straight	æ ɪ	ɛ ɪ	ɛ ɪ	æ ɪ	æ ɪ	ɛ ɪ

(5) Distribution of SED, EIGHT variants

	Yorks.1	Yorks.2	Yorks.3	Durham 4	Durham 5	Durham 6
ɛ ɪ	1	3	3	0	4	1
a ɪ	3	0	0	0	0	3
æ ɪ	1	1	1	3	0	0
ë	0	0	0	1	0	0

(6) Words analysed from SED data: GOAT lexical set

	Yorks.1	Yorks.2	Yorks.3	Durham 4	Durham 5	Durham 6
sole	ə ɷ	ɷ ə	ɷ ə	ɷ ə	o:	-
spokes	-	-	-	-	-	-
crow !!	ɔ:	ɔ:	ɔ:	a:	a:	a:
oats	ɔ:	ɔ ə	ɷ ə	ɷ ə	o:	ɔ:
mow !!	ɔ:	ɔ:	ɔ:	a:	a:	a:
foal	o:	ɷ ə	ɷ ə	ɷ ə	o: ᵊ	o. ə
slope	-	ɷ ə	-	ɷ ə	o:	ɒ:
road	ɷ ə	ɷ ə	ɷ ə	ɷ ə	o:	ɷ ə
coal	ɷ ə	ɷ ə	ɷ ə	ɷ ə	ɒ ə	ɷ ə
yolk	ɒ:	ɔ:	ɒ:	ɷ ə	o:	ɷ ə
bone !!	ɔ. ə	ɪ ə	ɪ ə	j ɛ	ɪ ə	-
dough	-	ɔ:	ɔ:	ɷ ə	a ɷ	o:
coat	ɔ ə	ɷ ə	ɷ ə	ɷ ə	ɷ ə	ɒ:
throat	ɷ ə	-	-	ɷ ə	o:	-
nose	ɔ:	ɷ ə	ɷ ə	ɷ ə	o: ᵊ	ɔ:
no !!	ɷ ə	ɔ: e:	ɪ ə	o:	o:	o:
toad	ɪ. a	ɔ:	ɷ ə	ɷ ə	i a	ɒ:
oak	j ə, ɔ:	j a	j a	j a	j a	j a
smoke	ɪ ɷ	ɪ ə	ɪ ə	ɷ ə	o ə	i u
stone	ɪ a	ɪ ə	-	ɪ ə	-	e. a
clothes	æ ə	i ə	ɪ ə	ɛ ə	e:	e. a
loaf	ɪ a	ɑ:, ɷ ə	ɪ ə	ɒ: ᵊ	o. ə	e a
toes	ɪ. ə	ɪ ə	ɪ ə	ɷ ɪ	o. ᵊ	ɪ ə

both	ɪ a	ɪ ə	ɪ ə	ɷ ə	ɪ ə	e a
Snow	ɑ:	ɔ:	ɔ:	a:	a:	a:

Nb.!! In the process of migration.

(7) Distribution of SED, GOAT variants <oa>

	Yorks.1	Yorks.2	Yorks.3	Durham 4	Durham 5	Durham 6
ə ɷ	0	0	0	0	0	0
ɔ ə	1	1	0	0	0	0
ɒə/ oə	0	0	0	1	3	1
ɷ ə	3	5	6	7	1	2
o:/ ɒ:	1	0	0	0	3	2
ɔ:	1	0	0	0	0	1
a:	0	0	0	0	0	0
j a/ ɪa/ ɪə	3	3	2	1	2	1
e a	0	0	0	0	0	1

(8) Distribution of SED, GOAT variants <oCe>

	Yorks.1	Yorks.2	Yorks.3	Durham 4	Durham 5	Durham 6
ə ɷ	1	1	1	1	0	0
ɔ ə	1	0	0	0	0	0
ɒə/ oə	0	0	0	0	3	0
ɷ ə	0	2	1	7	1	1
o:/ ɒ:	1	0	1	0	2	2
ɔ:	1	2	1	0	1	1
a:	0	0	0	0	0	0
j a/ ɪa/ ɪə	4	6	5	2	2	2
e a	1	0	0	1	1	3

(9) Distribution of SED, GOAT variants <ow>

	Yorks.1	Yorks.2	Yorks.3	Durham 4	Durham 5	Durham 6
ə ɷ	0	0	0	0	0	0
ɔ ə	0	0	0	0	0	0
ɒə/ ɔə	0	0	0	0	0	0
ɷ ə	0	0	0	0	0	0
o:/ ɒ:	0	0	0	0	0	0
ɔ:	3	3	3	0	0	0
a:	0	0	0	3	3	3
j a/ ɪa/ ɪə	0	0	0	0	0	0
e a	0	0	0	0	0	0

(10) Words analysed from SED data: PRICE lexical set

	Yorks.1	Yorks.2	Yorks.3	Durham 4	Durham 5	Durham 6
gripe	a ɪ	a ɪ	a ɪ	a ɪ	a ɪ	a ɪ
side	a ɪ	a ɪ	a ɪ	a ɪ	-	a ɪ
tire	a ɪ	-	a ɪ	a ɪ	a ɪ	a ɪ
tie	-	a ɪ	a ɪ	a ɪ	a ɪ	-
hide	ɑ. ɪ	a ɪ	a:	a ɪ	a ɪ	ɑ ɪ
died !!	a ɪ	i:	i:	a ɪ	a ɪ	i:
dike	a ɪ	-	æ ɪ	ɛ ɪ	a ɪ	a ɪ
stile	a ɪ	a:	i:	a ɪ	a ɪ	a ɪ
iron	a ɪ	a ɪ	a ɪ	a ɪ	a ɪ	a ɪ
mice	a ɪ	æ ɪ	æ ɪ	a ɪ	a ɪ	a ɪ
hive	a ɪ	a ɪ	a ɪ	a ɪ	a ɪ	a ɪ
ivy	a ɪ	a:	a ɪ	a ɪ	a ɪ	a ɪ
fire	a ɪ	a ɪ	a ɪ	a ɪ	a ɪ	a ɪ
white	a ɪ	æ ɪ	æ ɪ	a ɪ	a ɪ	a ɪ
eye	a ɪ	ɪ i:	ɪ i:	a ɪ	a ɪ	i:
Friday	a ɪ	a:	a ɪ	a ɪ	a ɪ	a ɪ
time	a ɪ	a:	a ɪ	a ɪ	a ɪ	a ɪ
five	a ɪ	a:	a ɪ	a ɪ	a ɪ	a ɪ
sky	ɑ ɪ	a ɪ	a ɪ	a ɪ	a ɪ	a ɪ

ice	a ɪ	æ ɪ	a ɪ	a ɪ	a ɪ	a ɪ
dry	a ɪ	a ɪ	a ɪ	a ɪ	-	-
miser	a ɪ	a ɪ	ɑ:	a ɪ	a ɪ	a ɪ
wife	a ɪ	æ ɪ	æ ɪ	a ɪ	a ɪ	-
lie	ɑ. ɪ	a ɪ	e:	a ɪ	a ɪ	a ɪ
slide	a ɪ	a:	ɪ	a ɪ	a ɪ	a ɪ
writing	ɑ ɪ	æ ɪ	æ ɪ	a ɪ	a ɪ	a ɪ
hide	ɑ. ɪ	a:	a ɪ	a ɪ	a ɪ	a ɪ
tried	ɑ. ɪ	a. ɪ	a:	a ɪ	a ɪ	a ɪ
I am	a ɪ	a ɪ	a ɪ	a ɪ	a ɪ	a ɪ
bind	ɪ	-	-	-	-	ɪ
fight	æ ɪ	ɛ ɪ	æ ɪ	[c] ɪ	a ɪ	a ɪ
rind	a ɪ	-	a: [1]	a ɪ	ɪ	-
lights	ɪ i	ɛ ɪ	i:	[c] ɪ	i:	i:
flies	i:	i:	a ɪ	i:	i:	i:
light	i:	i:	i:	i:	i:	i:
blind	ɪ	ɪ	ɪ	ɪ	ɪ	ɪ
right	ɛ ɪ	i:	i:	ɛ ɪ	i:	i:
thigh	ɑ. ɪ	ɪ i	a ɪ	a ɪ	e i	i:
height	æ ɪ	ɪ i	ɛ ɪ	a ɪ	a ɪ	ɪ i
night	ɪ	ɪ	i:	ə	ə	ə
sight	ɪ i	i:	a ɪ	i:	i:	i:
climb	ɪ	ɪ	ɪ	ɪ	ɪ	ɪ
find	ɪ	ɪ	ɪ	ɪ	ɪ	ɪ
might	a ɪ	a ɪ	a ɪ	a ɪ	a ɪ	a ɪ

These words have joined the PRICE lexical set since 1950 onwards.

(11) Distribution of SED, PRICE variants <iCe> and <i> + #

	Yorks.1	Yorks.2	Yorks.3	Durham 4	Durham 5	Durham 6
ɑ:/ a:	0	7	3	0	0	0
ɑ ɪ	6	0	0	0	0	1
ɪ i: / i:	0	2	3	0	0	2
a ɪ/ a:ɪ	22	13	16	27	28	25
æ ɪ/ ɛ ɪ	0	5	5	1	0	0

(12) Distribution of SED, PRICE variants <i> + <-gh>

	Yorks.1	Yorks.2	Yorks.3	Durham 4	Durham 5	Durham 6
æɪ/ ɛɪ	3	2	2	1	0	0
ɪ i/ i:	4	5	4	3	5	7
ɑ.ɪ	1	0	0	0	0	0
a ɪ/ a:ɪ	1	1	4	3	3	2
ə	0	0	0	1	1	1
e i/ e ɪ	0	0	0	2	1	0
ɪ	1	1	0	0	0	0

(13) Distribution of SED, PRICE variants <i> + <-nd>

	Yorks.1	Yorks.2	Yorks.3	Durham 4	Durham 5	Durham 6
aɪ	1	0	1	1	0	0
ɪ	4	3	3	3	4	4

(14) Words analysed from SED data: TRAP/ BATH/ PALM lexical sets

	Yorks.1	Yorks.2	Yorks.3	Durham 4	Durham 5	Durham 6
gang	a	a	-	-	a	a
shank	a	a	-	a	a	a
band	ə	a	ə	a	a	a
shaft	a	a	a	a	a	a
land	a	a	a	a	a	a
chaff	a	a	a	ɑ	a	a

grass	a	a	a	a	a	a
water	a	a	a	a	a	a
wasp	a	a	a	a	a	a
apple	ɑ	a	a	a	a	a
draught	a	a	a	a	a	a
basket	a	a	a	a	a	a
pant	-	a	a	-	a	a
last	a	a	a	a	a	a
what	a	a	a	a	a	a
father	a	a	a	a	a	a
aunt	ɑ	a	a	a	a	a
shan't	-	a:	a:	-	a	-
can't	a:	a:	a:	a	a	a

(15) Distribution of SED, TRAP/ BATH/ PALM variants, Wells (1982: 133) word-lists (a) and (b)

word-list (a) + (b)	Yorks.1	Yorks.2	Yorks.3	Durham 4	Durham 5	Durham 6
a	13	16	13	13	16	16
a:/ɑ	1	0	0	1	0	0

(16) Distribution of SED, TRAP/ BATH/ PALM variants, Wells (1982; 133) word-list (c)

word-list (c)	Yorks.1	Yorks.2	Yorks.3	Durham 4	Durham 5	Durham 6
a	0	1	1	2	3	2
a:/ɑ	2	2	2	0	0	0

(17a) Social-Economic Data: Sedgefield District and Aycliffe.

	Sedgefield (numbers)	Sedgefield (%)	North East (%)	Great Britain (%)
Soc 2000 major group 1-3	12,400	33.1	38	43.1
1 Managers and senior officials	4,500	11.9	12.8	15.4
2 Professional occupations	4,500	12	11.7	12.9
3 Associate professional & technical	3,400	9	13.4	14.6
Soc 2000 major group 4-5	6,900	18.4	22.4	22.4
4 Administrative & secretarial	2,800	7.5	11.3	11.6
5 Skilled trades occupations	4,100	10.8	11	10.8
Soc 2000 major group 6-7	6,600	17.7	17.1	15.8
6 Personal service occupations	#	#	8.3	8.1
7 Sales and customer service	4,300	11.5	8.8	7.6
Soc 2000 major group 8-9	11,500	30.7	22.4	18.7
8 Process plant & machine operatives	5,100	13.5	9.2	7.2
9 Elementary occupations	6,400	17	13.1	11.5

Source: ONS annual population survey

Sample size too small for reliable estimate

(17b) Social-Economic Data: Aycliffe Parish Records.

Parish Profile - Work and Qualifications	Column1	Column2	Column3	Column4
				Great Aycliffe CP Parish
All people aged 16 to 74	Count	Persons	Apr-01	19140
All people aged 16 to 74: Economically active : Employed	Count	Persons	Apr-01	10987
All people aged 16 to 74: Economically active : Unemployed	Count	Persons	Apr-01	828
All people aged 16 to 74 : Economically inactive	Count	Persons	Apr-01	7001
All males aged 16 to 74	Count	Persons	Apr-01	9237
All males aged 16 to 74: Economically active: Employed	Count	Persons	Apr-01	5990
All males aged 16 to 74: Economically active: Unemployed	Count	Persons	Apr-01	503
All males aged 16 to 74: Economically inactive	Count	Persons	Apr-01	2608
All males aged 16-74 in employment: Average (mean) hours worked	Hours	Persons	Apr-01	41.81
All females aged 16 to 74	Count	Persons	Apr-01	9903
All females aged 16 to 74: Economically active: Employed	Count	Persons	Apr-01	4997

All females aged 16 to 74: Economically active: Unemployed	Count	Persons	Apr-01	325
All females aged 16 to 74: Economically inactive	Count	Persons	Apr-01	4393
All females aged 16 to 74 in employment: Average (mean) hours worked	Hours	Persons	Apr-01	31.4
All people aged 16 to 74 in employment: Extractive and Manufacturing Industries	Count	Persons	Apr-01	4354
All people aged 16 to 74 in employment: Service Industries	Count	Persons	Apr-01	6901
All people aged 16 to 74: No qualifications or highest qualification at level 1 or other qualifications / level unknown	Count	Persons	Apr-01	11602
All people aged 16 to 74: Highest qualification at level 2	Count	Persons	Apr-01	3880
All people aged 16 to 74: Highest qualification at level 3; 4 or 5	Count	Persons	Apr-01	3658
All people aged 16 to 74: NS-SeC Managerial and professional occupations	Count	Persons	Apr-01	3957
All people aged 16 to 74: NS-SeC Intermediate occupations	Count	Persons	Apr-01	1594
All people aged 16 to 74: NS-SeC Small employers and own-account workers	Count	Persons	Apr-01	759
All people aged 16 to 74: NS-SeC Lower supervisory and technical occupations	Count	Persons	Apr-01	1924
All people aged 16 to 74: NS-SeC semi-routine and routine occupations	Count	Persons	Apr-01	5164
All people aged 16 to 74: NS-SeC never worked and long-term unemployed	Count	Persons	Apr-01	712
All people aged 16 to 74: NS-SeC not classified	Count	Persons	Apr-01	5030
All people aged 16 to 74 in employment: Travel to work by public transport	Count	Persons	Apr-01	689
All people aged 16 to 74 in employment: Travel to work by motorcycle; car or van	Count	Persons	Apr-01	8242
All people aged 16 to 74 in employment: Travel to work by other means or work at home	Count	Persons	Apr-01	2324
All people aged 16 to 74 in employment: Average distance travelled to fixed place of work	Kilometres	Persons	Apr-01	15.48

(18) Social Stratification: Average of housing price and council tax.

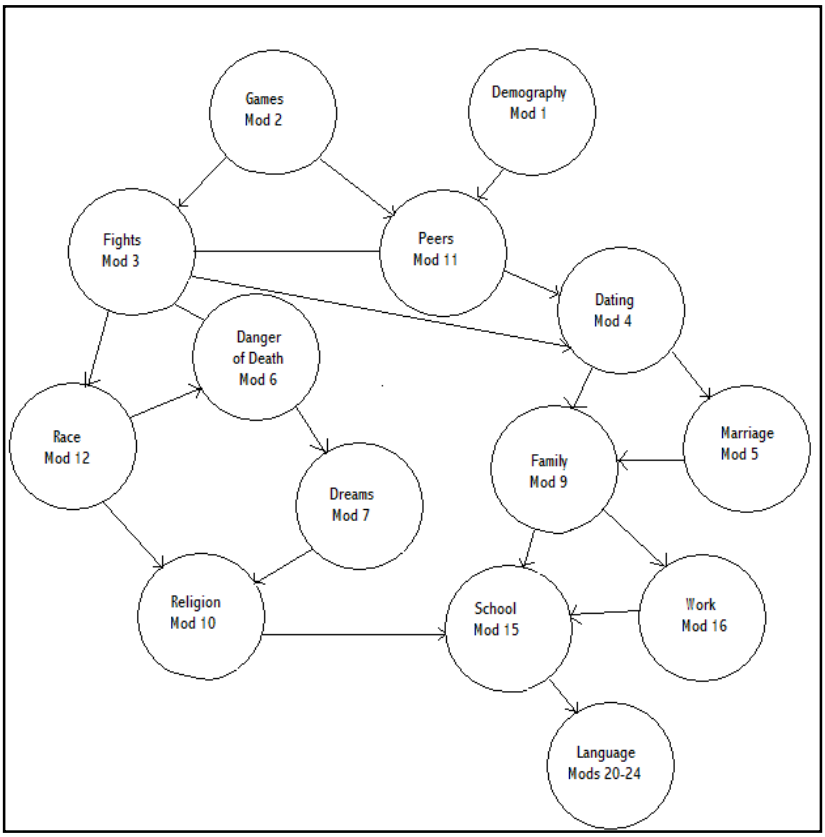
http://www.zoopla.co.uk/house-prices/newton-aycliffe

Area	AVG. House price	Council Tax	Average House Value £	AVG. House Value + Council Tax £
Bewick Crescent	**£88,807**	£40,000		
The Blue Bridge	**£65,000**	£40,000		
The Black Estate, (Bates Close)	**£66,934**	£40,000		
Marshall Road	**£75,000**	£40,000	**73,935**	£56,968
Coverdale court	**£158,290**	£88,000		
Elstob close	**£150,293**	£52,000		
Woodham	**£205,000**	£88,000		
Heighington	**£253,211**	£88,000	**191,699**	£135,549

(19) Census 10% Sample: Origin of Population

Area of Origin	1966	1971
Durham	107	254
Darlington	15	20
Sedgefield	18	190
Northumberland	0	4
Newcastle and Tyneside	0	20
Yorkshire	23	19
London	4	17
Scotland	9	11
Elsewhere in England	32	17
Abroad	5	2

(20) Labov Topic Model



(21) Distribution of FACE variants: Free speech

Column 1	YWC Male	YWC female	YUC Male	YUC Female	OWC Male	OWC Female	OUC Male	OUC Female
[ɛ:]	42	68	20	9	1	0	0	0
[e:]	97	90	45	43	128	124	132	113
[eə]	1	0	0	1	11	1	2	1
[eɪ]	0	0	0	0	0	0	0	13

(22) Distribution of FACE variants: Word-list

Column 1	YWC Male	YWC female	YUC Male	YUC Female	OWC Male	OWC Female	OUC Male	OUC Female
[ɛ:]	14	37	37	2	0	0	0	0
[e:]	65	42	42	77	57	75	75	40
[eə]	0	0	1	0	23	1	5	0
[eɪ]	0	0	0	1	0	0	0	40

(23) Distribution of FACE variants: Linguistic environment

Column 1	Voiceless Plosive	Voiced Plosive	Liquid	Word Final	Voiceless Fricative	Voiced Fricative	Nasal
[ɛ:]	13	9	10	17	17	14	10
[e:]	69	76	57	71	68	74	59
[eə]	7	3	7	2	3	1	7
[eɪ]	6	6	4	7	6	6	6

(24) Distribution of GOAT variants: Free speech

Column 1	YWC Male	YWC female	YUC Male	YUC Female	OWC Male	OWC Female	OUC Male	OUC Female
[ɔ:]	32	64	21	10	0	0	0	1
[o:]	176	179	123	118	267	240	258	269
[oə]	2	0	0	0	2	0	0	0
[əʊ]	2	0	0	1	0	1	0	32

(25) Distribution of GOAT variants: Word-list

Column 1	YWC Male	YWC female	YUC Male	YUC Female	OWC Male	OWC Female	OUC Male	OUC Female
[ɔ:]	24	29	35	4	0	0	0	1
[o:]	56	49	47	76	78	80	79	41
[oə]	1	0	0	0	3	0	3	0
[əu]	0	0	0	0	0	1	0	41

(26) Distribution of GOAT variants: Linguistic environment

Column 1	Voiceless Plosive	Voiced Plosive	Liquid	Word Final	Voiceless Fricative	Voiced Fricative	Nasal
[ɔ:]	14	12	11	17	20	15	7
[o:]	68	70	66	70	61	68	63
[oə]	3	0	3	1	0	0	0
[əu]	6	6	6	6	6	7	5

(27) Distribution of PRICE variants: Free speech

YWC Male	YWC female	YUC Male	YUC Female	OWC Male	OWC Female	OUC Male	OUC Female
1.62	1.4	1.19	1.13	1.44	1.58	1.27	1.29

(28) Distribution of PRICE variants: Word-list

YWC Male	YWC female	YUC Male	YUC Female	OWC Male	OWC Female	OUC Male	OUC Female
1.55	1.55	1.55	1.58	1.54	1.61	1.58	1.59

(29) Distribution of PRICE variants: Linguistic environment

	Voice-less Plosive F/S	Voice-less Plosive W/L	Voiced Plosive F/S	Voiced Plosive W/L	Liquid F/S	Liquid W/L	Word Final F/S	Word Final W/L	Voiceless Fricative F/S	Voiceless Fricative W/L	Voiced Fricative F/S	Voiced Fricative W/L	Nasal F/S	Nasal W/L
1	754	124	11	4	19	93	44	1	82	66	16	1	43	1
2	6	0	47	135	7	3	46	78	0	0	50	99	78	79
3	1	0	10	0	0	0	10	0	0	0	7	0	25	0
4	1	0	5	1	2	0	5	0	0	0	6	0	14	0

(30) Distribution of TRAP/ BATH/ PALM variants: Free speech

YWC Male	YWC female	YUC Male	YUC Female	OWC Male	OWC Female	OUC Male	OUC Female
1.82	1.44	1.2	1.56	1.57	1.51	1.37	1.69

(31) Distribution of TRAP/ BATH/ PALM variants: Word-list

YWC Male	YWC female	YUC Male	YUC Female	OWC Male	OWC Female	OUC Male	OUC Female
2.08	2.36	2.33	2.44	2.22	2.22	2.45	2.5

(32) Distribution of TRAP/ BATH/ PALM variants: Linguistic environment

Column 1	Word Final F/S	Word Final W/L	Voiceless Fricative F/S	Voiceless Fricative W/L	Voiced Fricative F/S	Voiced Fricative W/L	Nasal F/S	Nasal W/L
1	0	0	120	76	3	0	23	12
2	0	0	6	2	3	1	45	1
3	0	0	12	36	11	26	20	35
4	1	24	1	1	0	1	0	0

(33) Speaker Density Networks

	1	2	3	4
	Very Local	Local	National	International
YWC Male	2	1	2	1
YWC Female	1	3	0	0
YUC Male	2	1	1	1
YUC Female	0	1	3	2
OWC Male	1	2	1	1
OWC Female	2	2	1	1
OUC Male	2	3	1	0
OUC Female	1	3	3	0

(34) Grades of speaker attitude towards surrounding speech varieties

	Newcastle	Middlesbrough	Yorkshire	Darlington	Sunderland	Bishop	General Northern	R.P.
YWC Male	3	3	4	1	5	5	1	5
YWC Male	2	5	2	5	5	1	1	1
YWC Female	1	2	2	1	1	5	0	1
YWC Female	5	5	3	5	5	3	1	5
YUC Male	1	2	1	1	1	1	0	4
YUC Male	1	5	1	1	5	4	0	1
YUC Female	1	1	1	1	1	1	0	2
YUC Female	1	1	1	1	1	1	0	2
OWC Male	1	1	1	1	1	1	1	1
OWC Male	1	5	1	1	5	5	1	1
OWC Female	1	1	1	1	1	1	1	1
OWC Female	1	5	1	1	5	1	1	1
OUC Male	1	5	1	1	3	1	1	1
OUC Male	1	1	1	1	1	1	1	1
OUC Female	1	5	1	1	1	1	1	1
OUC Female	5	5	1	1	5	1	1	1

(35) Identity Questionnaire.

Personal Information.

1/ AGE:

- ☐ 16-25
- ☐ 35-50

2 / GENDER:

- ☐ Male
- ☐ Female
- ☐ Other (Please State) ……..

3/ Have you lived in Newton Aycliffe all your life? Y / N (Please Circle).
4/ Which district do you live in? For example, 'Bousfield', 'The Yellow Estate'
……
……..……..
5/ Where are your parents from?
…….....
.....
6/ Are any of your close friends or family from outside Newton Aycliffe? Y / N
b) Where are they from?
…….....
.....
c) How often do you see them? :

- ☐ More than once a week
- ☐ Once a week
- ☐ Once a fortnight
- ☐ Once a month
- ☐ Less than once a month

(If more than one, please write details below)
……
……
…….

Town and Region Perception

From the Scale of 1-5 indicated below, please circle the number you feel best describes the town. Please answer the following questions (1) – (5).

1=VERY POOR	2=POOR	3=AVERAGE	4=GOOD	5=VERY GOOD

(A) The Town

1/ Newton Aycliffe is a nice place to live? 1 2 3 4 5

2/ I am proud of where I live? 1 2 3 4 5

3/ The town centre is;

(a) clean 1 2 3 4 5

(b) a nice place to shop 1 2 3 4 5

(c) meets all my needs 1 2 3 4 5

4/ The town in general is;

(a) good for a night out 1 2 3 4 5

(b) has good restaurants 1 2 3 4 5

(c) has good public houses 1 2 3 4 5

5/ My neighbourhood is;

(a) well kept by the council 1 2 3 4 5

(b) a nice place to live 1 2 3 4 5

6/ Any comments on the town centre or your neighbourhood you would like to add please state below.

……
……
……
…….

(B) The Region

7/ For grocery shopping, where do you go? (Please state the town).

……
……..

8/ For general shopping (clothes, gifts, furniture, and specialist items) where do you go? (Please state the town).

……
……

9/ When planning a DAY out which of the following are you likely to visit? (Please arrange them in order from most likely to least likely by numbering them 1- 7).

- ☐ Stay in Aycliffe
- ☐ Darlington
- ☐ Bishop
- ☐ Middlesbrough
- ☐ Newcastle
- ☐ Sunderland
- ☐ York

(b) Why? (Please comment on choices 1 and 7)

……..…….……
……
……
……

10/ When planning a NIGHT out which of the following are you most likely to visit? (Please arrange them in order from most likely to least likely by numbering them 1- 7).

- ☐ Stay in Aycliffe
- ☐ Darlington
- ☐ Bishop
- ☐ Middlesbrough
- ☐ Newcastle
- ☐ Sunderland
- ☐ York

(b) Why? (Please comment on choices 1 and 7)

……
……
……

11/ I visit the following at least: (Please tick)

(a) Newton Aycliffe Town Centre:

☐ Daily ☐ Weekly ☐ Fortnightly ☐ Monthly ☐ Never

(b) Darlington:

☐ Daily ☐ Weekly ☐ Fortnightly ☐ Monthly ☐ Never

(c) Bishop:

☐ Daily ☐ Weekly ☐ Fortnightly ☐ Monthly ☐ Never

(d) Middlesbrough:

☐ Daily ☐ Weekly ☐ Fortnightly ☐ Monthly ☐ Never

(e) Newcastle:

☐ Daily ☐ Weekly ☐ Fortnightly ☐ Monthly ☐ Never

(f) Sunderland:

☐ Daily ☐ Weekly ☐ Fortnightly ☐ Monthly ☐ Never

(g) York:

☐ Daily ☐ Weekly ☐ Fortnightly ☐ Monthly ☐ Never

12/ Do you follow sports? Y / N (Please circle)

(b) If YES, please state which sport and the team.

……
……

Your Accent

Accent Key:

Geordie = Newcastle Accent

Mackem = Sunderland Accent

Smoggy = Middlesbrough Accent

R.P. Received Pronunciation (Queens/ Standard English)

1/ If someone asked you, 'what is your accent', what would you say?

……
……

2/ If someone who did NOT know Britain very well asked you where are you from, how would you respond?

……
……
……

3/ If you were give your accent a label, what would it be?

……
……

4/ From the scale of 1-5 indicated below, how would you respond to the following statements? (Please circle).

1=STRONGLY DISAGREE	2=DISAGREE	3=NEITHER AGREE NOR DISAGREE	4=AGREE	5=STRONGLY AGREE

(a) My accent is very DIFFERENT to:

1) Geordie	1	2	3	4	5
2) Smoggy	1	2	3	4	5
3) Yorkshire	1	2	3	4	5
4) Darlington	1	2	3	4	5
5) Mackem	1	2	3	4	5
6) Bishop	1	2	3	4	5
7) General Northern	1	2	3	4	5
8) Standard English (R.P.)	1	2	3	4	5

(b) I would be OFFENDED if someone called me:

1) Geordie	1	2	3	4	5
2) Smoggy	1	2	3	4	5
3) Yorkshire	1	2	3	4	5
4) Darlington	1	2	3	4	5
5) Mackem	1	2	3	4	5
6) Bishop	1	2	3	4	5
7) General Northern	1	2	3	4	5
8) Standard English (R.P.)	1	2	3	4	5

5/ Have you had elocution lessons? Y / N (Please circle).

6/ Any further comments on any of the above questions surrounding the town/ region/ your accent.

……
……
……
……
……
……
……

(36) Randomised Word-list: FACE, EIGHT, GOAT, PRICE and TRAP/ BATH/ PALM

Neighbour	Bra	Mice	Lice
Sighed	Chafe	Trace	Pried
Poke	Day	Doze	Same
Oat	Dole	Blaze	Tyne
Fade	Fail	Disaster	Fine
Side	Fire	Pave	Game
Site	Flow	Save	Safe
Life	Goal	Ice	Loaf
Case	Hole	Father	Time
Rogue	Know	Clothe	Cast
Vogue	Lay	Writhe	Plague
Jibe	Lie	Skive	Tone
Able	Low	Beige	Prime
Soap	Master	Daze	Plaster
Tied	May	Caster	Pile
Bite	Mile	Lies	Lime
Babe	Mole	Lava	Pant
Tide	No	Chose	Pride
Like	Oaf	Blithe	Bowl
Aid	Pay	Size	Chain
Weight	Pie	Strife	Vague
Mope	Pry	Calf	Palm
Hike	Rail	Grove	Vibe
Gate	Sale	Staff	Gnome
Make	Say	Loath	Calm
Goat	Show	Dive	Phone
Load	So	Laugh	Wife
Ape	Sole	Dose	Bail
Hide	Spa	Half	Can’t
Ache	Sty	Coast	Fame
Oak	Style	Home	Boast
Pipe	Tail	Both	Lobe
Mate	Tie	Pain	Straight
Toad	Tire	Lace	Foam
Hype	Way	Bathe	Robe
Eight	Wire	Bath	Chase
Cape		Stove	

(37) Informant Consent Forms

Linguistics & English Language Archives
Informed Consent: Use of Recorded Speech

You are about to participate in a study which involves recording your speech. Please read the information below and tick all boxes that apply. Please sign and date below to confirm your willingness to participate, once you are happy with how the recordings will be used.
Thank you.

Consent for participation

Yes ☐ No ☐

I consent to having my speech recorded for the specific research project _____ (PI: _____). I have been given the opportunity to ask questions about the tasks.

Yes ☐ No ☐

I understand that I have the right to terminate this recording session at any point. The recording of my speech will be deleted at that time, and will be returned to me upon request.

Use of Recordings:

Specific research project use

Yes ☐ No ☐

I agree that these recordings may be used for the specific research project

_____ (PI: _____),
and understand that these recordings may be used in teaching or research-related presentations and publications. My name will not be revealed under any circumstances.

General research use

Yes ☐ No ☐

I agree that these recordings may be kept permanently in the Linguistics & English Language archives, and that they may be used by the above-named researcher as well as by other researchers for teaching or research purposes, in presentations, and publications. My name will not be revealed under any circumstances.

General public use

Yes ☐ No ☐

I agree that these recordings may be kept permanently in the Linguistics & English Language archives, and may be made publicly available for general use, e.g. used in radio or television broadcasts, or put on the world-wide web. My name will not be revealed under any circumstances.

Yes ☐ No ☐ **Are you willing to participate in future experiments?**

Name:_____ Email:_____

Address:_____

Signature _____Date _____