

Cardiff English

A sociolinguistic study of phonological accent variation and change in
Cardiff English

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Abstract in Norwegian

Denne masteroppgaven utforsker den fonetiske utviklingen i den Cardiff Engelske aksenten. Med utgangspunkt i fem forskjellige fonetiske trekk, ser jeg på utviklingen fra et bruk av tradisjonelle til nye supra-regionale trekk som kan forbindes med den Sør-Øst Engelske aksenten. Dette er gjort ved å intervjuet et utvalg av mennesker fra tre forskjellige aldersgrupper. Hovedfokuset i studiet har vært på arbeiderklassen og de fonetiske trekkene har blitt diskutert i forhold til både alder og kjønn. Utvalget bestod av tre kvinner og to menn i den yngste aldersgruppen, fire kvinner og to menn i den midterste aldersgruppen og fem kvinner og en mann i den eldste aldersgruppen. De fem trekkene er konsonantene (r) og (t), og vokalene i PALM/START/BATH, NEAR og GOAT ord. Dette studiet er utført som en kvantitativ analyse basert på en endring fra tradisjonelle til nye trekk.

Tidligere studier har funnet høye tall for bruken av tradisjonelle trekk i arbeiderklassen i Cardiff, men disse studiene mangler ny data fra dagens ungdom, derfor er det usikkert om deres data er representativt for aksenten i dag.

Det kan sies at de fleste trekkene som er undersøkt i dette studiet viser en forventet utvikling i forhold til etablerte teorier om fonetisk variasjon og endring og bekrefter derfor hypotesene, med noen unntak. Det er klart fra resultatene at utviklingen av de fonetiske trekkene er rettet mot et større forbruk av nye trekk mens bruken av tradisjonelle trekk minsker. Det er fortsatt mye som kan undersøkes i Cardiff Engelsk da aksenten i utgangspunktet er lite studert.

Med denne oppgaven er målet å bidra med ny forskning i forbindelse med Cardiff Engelsk, i forhold til nyere data og informasjon om fonetiske trekk som ikke har blitt studert systematisk før.

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Abbreviations and conventions

CE	-	Cardiff English
WE	-	Welsh English
RP	-	Received Pronunciation
SEE	-	South-Eastern English
WC	-	Working class
MC	-	Middle class
//	-	Phonemic transcription
[]	-	Phonetic transcription

1: INTRODUCTION

1.1 Aim and scope

This thesis looks at phonological variation and change in Cardiff English (CE). Speech data has been collected from three different age groups. This study focuses primarily on the movement away from traditional variants towards the use of supra-regional variants, associated with South-Eastern English (SEE). I have looked at a selection of variable features associated with CE: the realisation of intervocalic /r/ and /t/, the quality of the vowels in the *lexical sets*¹ PALM/START/BATH, NEAR and GOAT.

These variables are firmly established as features associated with CE and they have been studied to various degrees before. Even though Cardiff is the capital city of Wales, few studies have been conducted on the speech of Cardiffians. The main authorities on CE are Nikolas Coupland and Inger M. Mees, in collaboration with Beverly Collins and Christina Høock Osorno. The results from their studies will be presented in chapter 2. There are other descriptions which focus on general features of Welsh English (WE) conducted by Wells (1982:377–93), Coupland (1988:24–42) and Penhallurick (2008). The language situation in Cardiff is one of diversity, and different areas are associated with different kinds of realisations. CE is however, considered as one accent, encompassing the surrounding areas. The CE accent is often referred to as ‘harsh’ by speakers who have grown up outside of the city centre and there is stigma associated with the accent.

With this study, I aim to provide new insights into the current status of CE, based on quantitative data. I also aim to provide recent speech data from male informants, as male speech has not been systematically studied in CE after the 1980s. This will hopefully provide valuable new information about the recent phonological changes in CE. In order to identify possible changes in progress I have interviewed 17 working class (WC)

¹ Lexical sets are groups of words that share the same stressed vowel and are indicated by capital letters, see Wells (1982:78)

informants from various parts of Cardiff and the surrounding areas, and divided them into three age groups: adolescents, young adults and older. The findings will be discussed in light of established theories regarding variation and change, in order to identify patterns.

1.2 Research questions and hypotheses

The research questions and hypotheses listed below are based on sociolinguistic theories of variation and change as well as previous studies of CE. The main focus in the present study is on whether there is a change from traditional to supra-regional features by studying the phonological realisations of 17 informants of both genders, from three different age groups. The purpose is to find out whether the distribution of linguistic variants reflect general patterns of change associated with established theories.

Research questions:

1. How have the linguistic variables changed in the Cardiff English accent from the older to the young adult and adolescent informants?
2. Are there systematic differences in the accent of the male and female informants with regard to the linguistic variables?
3. Do the changes in the linguistic variables reflect general patterns of change?
4. Are the linguistic variables moving towards more instances of supra-regional variants compared to the traditional variants in Cardiff English?

Hypotheses:

1. There is a change from the older to the younger age groups where traditional CE features are becoming recessive or markedly less used in the younger age groups.
2. There is a difference between genders where women lead in the use of supra-regional variants, while males typically retain more of the traditional variants.

3. The youngest informants use more supra-regional variants, moving the CE accent closer to South-Eastern English.

1.3 The phonological variables

The following is a short introduction to the phonological variables studied in this thesis. The features will be presented in more detail in ch. 3.

1. (r) – The realisation of /r/ intervocalically and after consonants /b, v, θ/ (as in *lorry, through, every*), either as a traditional alveolar tap [ɾ] or a new post-alveolar approximant [ɹ].
2. (t) – The realisation of intervocalic /t/ (as in *city, butter, platter*), either as a traditional voiced alveolar tap [ɾ], a new glottal stop [ʔ], or a standard fortis plosive [t].
3. NEAR – The realisation of the vowel in the lexical set NEAR. The traditional variant is realised as a palatal approximant followed by a close-mid front rounded vowel [jø:], while the new variant is realised as a centring diphthong with a close front starting point [iə]. Collins and Mees (1990) note that the traditional variant only occurs in a small set of words: *year, ear, here, mere, near, hear* and their derivatives.
4. PALM/START/BATH – The realisation of the vowel in the lexical sets PALM/START/BATH. (as in *Cardiff, father, art* and *glass*). The traditional variant is realised as a long open front [a:], while the new variant is realised as a long open back [ɑ:].
5. GOAT – The realisation of the vowel in the lexical set GOAT (as in *soap, load, pole* and *home*). The traditional variant is realised as a back-closing diphthong with a close-mid back rounded starting point [oʊ], while the new variant is

realised as a back-closing diphthong with a mid-central unrounded starting point [əʊ].

1.4 Structure

Having introduced the aim and scope of this study as well as the research questions and hypotheses, this chapter also briefly presents the phonological variables examined in this study. The second chapter contains a discussion of the theoretical background and previous studies conducted on the WE and CE accents. Chapter 3 presents the linguistic variables that have been studied systematically. The fourth chapter contains a presentation of methods used for the present study when finding informants, as well as collecting and analysing data. It also contains a discussion of the informants as well as token classifications and the data presentation method. Chapter 5 provides a presentation of the findings for each phonological variable, as well as individual discussions of the variables. The data collected from the interviews is presented by individual scores as well as group scores according to age and gender. These social factors will be discussed individually for each variable before being brought together into a more general discussion in chapter 6, which provides a more general discussion of the results in relation to theories of variation and change. This means linking the data presented and discussed in chapter 5, together with theories presented in chapter 2. The conclusion sums up the previous chapters while considering the research questions and hypotheses, as well as noting my contributions to the study of CE. It also comments on the shortcomings of the present study and presents ideas for further research.

2: LINGUISTIC THEORY AND PREVIOUS STUDIES

A reason why language should be studied with social factors in mind is because ‘language is a form of social behaviour’ (Labov 1972:183). According to Milroy and Gordon (2003:1–3), William Labov began to study language change in progress with his studies in Martha’s Vineyard and New York City. The approach he used was radically different from studies conducted by previous linguists. Labov introduced an innovative way to study language which focused on social factors and the idea that language is in a constant state of change. This means that the only way to study language change productively is through observed data. This kind of linguistic study has since developed into its own field of sociolinguistics and ‘the direct study of language’ is now considered both a ‘practical and fruitful procedure’ (Labov 1972:205). This chapter aims to provide a discussion of theories connected to the study of variation and change as well as an introduction to the English spoken in Wales and Cardiff. Findings from previous studies conducted on CE will also be presented.

2.1 Variation and change

This thesis will focus on the *variationist sociolinguistic* approach, and according to Tagliamonte (2009:4–6) this approach focuses on studying language by integrating linguistic and social factors in the data collection process. The approach is based on language as something that is constantly changing, in patterns that reflect social factors. The goal of a variationist sociolinguistic study is to say something about how and why language changes, essentially, the connection between ‘social meaning and the evolution and development of the linguistic system itself’ (Tagliamonte 2009:5). This kind of study is concerned with *how* things are said, which is why it depends on samples of natural speech to portray an accurate picture of an accent at a particular point in time, as well as to be able to identify potential changes by studying more than one age group at that time. As Milroy (1992:1) states, language is variable, it changes perpetually due to geographical factors as well as social factors and in which situations it is used. Milroy

(1992:1–2) stresses that there is no such thing as a stable, unchanging language, therefore it follows that one must accept that studying a language entails that one can only study it at one or more points in time with a focus on a few variables. It is therefore impossible to get a complete picture of the language situation in one single place. This is why the variationist sociolinguistic approach is particularly concerned with changes in the *vernacular* variety of speech. The vernacular is ‘the variety of speech most free from hypercorrection or style-shifting’ (Tagliamonte 2009:8), and can therefore be considered as the most natural form of speech. The vernacular represents low-status accents acquired as a native variety growing up. Conducting a study which aims to record the vernacular relies on the *sociolinguistic interview* when collecting data. The sociolinguistic interview is, according to Milroy and Gordon (2003:57–8), a loosely structured form of interview which aims to elicit longer sections of conversational speech from the informants. Milroy and Gordon considers the sociolinguistic interview to be a flexible form of data collection, due to the fluidity of the questions and the possibility of long answers. By not requiring specific questions answered, this kind of interview can follow the structure of a conversation focused on subjects of interest to the interviewee, which in turn can elicit their natural, vernacular speech. The use of the sociolinguistic interview introduces some disadvantages which will be explored in section 4.1.1.

2.2 Apparent-time vs. real-time

When studying sociolinguistic variation, we look at factors that can determine change, such as age, gender and class. There are two approaches to consider when studying language in relation to social factors. One of these is the *real-time* study ‘whereby linguists make a series of observations of similar populations over many years’ (Chambers 2003:212). This kind of study is rare because it is time consuming, spanning several years and therefore need more resources, but it is also the most reliable in terms of studying change in progress. The other approach is the *apparent-time* study. The apparent-time study is ‘when different age groups are observed simultaneously and the observations are extrapolated as temporal’ (Chambers 2003:212). This approach makes information about change in progress available within a shorter time frame, as well as providing a generally reliable set of data. Milroy and Gordon (2003:35) state that these

kinds of studies maintain that an older age group represents the speech of an earlier time while a younger age group reflects the speech of a more recent time period. The underlying assumption is that ‘once the features of the sociolect are established in the speech of young adults, under normal circumstances those features remain relatively stable for the rest of their lives’ (Chambers 2003:197). An apparent-time study, while being less reliable than the real-time option, is a much more realistic approach when collecting data for the present study. It is however, important to remember that ‘synchronic indications of generational differences are not necessarily evidence of change in progress’ (Milroy & Gordon 2003:36). An issue with the apparent-time study is that one should be aware of the phenomenon of *age-grading*, which according to Chambers (2003:212–3) is when a feature is altered or corrected at a later age. He also states that this occurs rarely and usually in identifiable patterns, but that one should be aware of the possibility of age-grading when conducting an apparent-time study. Another issue regards the reliability of this kind of study. Both Chambers (2003:219–25) and Bailey (2002) have compared the results of an apparent-time study with real-time studies of the same accent, conducted to test the apparent-time hypothesis. They both found that the results from the real-time study reflected the expected changes found in the apparent-time study. Chambers (2003:223–25) looked at two scenarios however, and the second one did not reflect the same results as the apparent-time study. Therefore, it is important to keep in mind that language changes perpetually and that an apparent-time study predicts that future changes will happen in the same way they do at that moment in time, while the real-time study tracks changes over time. Bailey (2002) calls the apparent-time study a surrogate for the real-time study, while at the same time acknowledging the value of the apparent-time study. He goes on to say that it is important to be aware of the limitations of the apparent-time study, as it cannot faithfully represent linguistic development in the same way that real-time studies can.

2.3 Accent levelling

When researching accent variation and change it is important to look at reasons why the changes are happening in the way that they do. An explanation for much of the change happening in different accents of English can be traced to *accent levelling*. Accent

levelling is a 'process whereby differences between regional varieties are reduced, features which make varieties distinctive disappear, and new features emerge and are adopted by speakers over a wide geographical area' (Williams & Kerswill 1999:149). Essentially it is a movement away from traditional towards supra-regional pronunciation features, resulting in accents of English becoming more alike. Foulkes and Docherty (1999) found that accent levelling in local accents are the result of external influences, where speakers adopt features that are found in other varieties, which are considered as standard forms. This type of change may be the result of *accommodation*, which is according to Kerswill (2003), a process where speakers who meet modify their accent to accommodate the other person, so as to be better understood. This process over time may result in a change in that person's pronunciation, usually towards more standard forms as they are generally more recognised and understandable. Accent levelling may also be the result of *geographical diffusion*, which according to Kerswill (2003), is when features from a culturally and economically dominant urban centre spread out gradually to cities and towns nearby, who are more likely to adopt new features than the rural parts in between. According to Foulkes and Docherty (1999), there has recently been a rise in the spread of some non-standard forms, which might be due to the influence of London WC speakers, who are considered to be the most influential innovators of all speakers of English. These are features like H-dropping and TH-fronting. This suggests that one cannot always assume that changes develop in the direction of standard features. Foulkes and Docherty go on to say however, that levelling does not mean the same as standardisation in that the term levelling refers to a process where a change is happening, but that does not always inherently mean a change towards standard variants. It means rather that the current trend is a movement towards features found in larger urban centres. According to Foulkes and Docherty (1999) the recent rise in accent levelling is due to higher social mobility, commuting and other factors which contribute to short- and long-term contact between speakers of different accents. It is also evident that the MC is often where the changes start, though research has shown that WC speakers also lead the changes in many communities. As a last point, made by Foulkes and Docherty, it is also apparent that linguistic influence through media exposure plays a part in the process of change, though it is unclear to which extent, because it is such a recent phenomenon.

2.4 Social factors

The next sections will focus on the social aspects used to identify patterns of change in the present study. As a sociolinguistic study, the focus on demographic information about the informants is important. The informants are divided into groups based on age and gender, though they all represent the same social class.

2.4.1 Class

Social class is an important aspect to consider in a sociolinguistic study due to the variation in the speech of people from different classes. Indeed, Milroy and Gordon (2003:40) state that the social class variable is so important that it should always be considered at some level of an analysis. Chambers (2003:39) describes class as a group where people have similar incomes and opportunities which lead to similar attitudes and values, separating them from other groups. Wells (1982:13) notes that there is a connection between social class and speech patterns. In the present study, all informants represent the working class. According to Chambers (2003:42–3), the WC includes clerks, manual workers and labourers. He notes the difficulty of classifying social class, especially with regards to the smaller categories, like *upper working class* and *lower middle class*. The middle class (MC) and WC classifications can also be described through the terms blue collar and white collar, though these terms are problematic due to the indication that style of dress has anything to do with which class you belong to. Chambers (2003:43) goes on to say that these kinds of categories work better with straightforward cases than borderline ones, due to the ambiguity of such categories. In the present study, some of the informants are borderline, but either due to the person's own background, family or academic history they have been placed into the category of WC, broadly defined. Initially, the present study aimed to include both WC and MC informants. However, since my contacts in Cardiff mostly belong to the WC, their acquaintances were WC as well, which limited the study to WC informants only. The social class in the older and young adult age groups has been determined based on their own occupation, while the younger informants' social status is determined by their

parents' occupations. The informants in the present study will be discussed further in 4.1.2.

2.4.2 Gender

In a variationist sociolinguistic study, gender is one of the main social factors used to identify language change. Gender 'is often used as little more than a synonym for "sex", sex is generally understood to be a biological attribute ... and gender a social construct' (Milroy and Gordon 2003:100). Though sex determines the social category used in sociolinguistic studies, gender has a much more complex meaning. In the present study, the word gender is used as a division between biologically male and female informants, while keeping in mind that the speech of males and females differ due to the social expectations and roles put upon them. Chambers (2003:116) states that based on previous studies of gender differentiation, women are more likely to adopt prestigious features, while men are more likely to retain traditional ones. Hudson (1996:193) calls this the 'Sex/Prestige Pattern' which he finds to be a universal trait. A potential reason for this is according to Hudson, that men and women pursue different ideals. What he means by this is that men often like to associate themselves with 'roughness' while women like to associate themselves with 'sophistication' (1996:198). Therefore, women are more likely to adopt features which they perceive as being prestigious or as in the present study, supra-regional features which are spreading from larger urban centres like London. Males typically keep local or traditional variants longer. This might be linked to Hudson's (1996:190–3) observation that men have closer relationships with the people they work with than women, and in the WC these people are more likely to be manual labourers from the local community, which means that they would use local features. Women typically do not form such strong bonds with the people they work with. Therefore, they are more likely to adopt features from a larger area. This theory is problematised however, as previous studies have focused on small communities with this theory in mind. As much variation was found in those studies, it is likely that that the variation in large urban centres is subject to much more variety. It is, nonetheless, a point to keep in mind when considering reasons behind gender variation.

As a further point Labov (1990:205–6) found that in stable situations women tend to use more prestigious forms than males, while in unstable situations the reverse happens. He goes on to say that though this has been researched extensively, there are still no answers as to why this is so. An example of where the sex/prestige pattern (Hudson 1996:193) has been found is in J. Milroy, L. Milroy and Hartley's (1994) study of phonological changes in British English, particularly glottaling. Their findings indicate that females prefer the supra-regional variants, and that males favour the local variants. They also found that females not only lead the changes towards the use of more supra-regional variants, but that they create the prestige variants. This means that the variant females choose to favour, becomes the prestigious variant. The same trend can be found in Watt's (2002) study of FACE and GOAT in Tyneside. His findings also reflect a pattern of variation where the males prefer the traditional variants, while it is no longer found in the speech of females, who are leading the changes towards new variants. The gender division in the present study is skewed in the favour of women, due to the difficulty of finding enough males to interview, see section 4.1.1. This means that I have to be careful making generalisations, although I do have enough male informants for a comparison.

2.4.3 Age

Milroy and Gordon (2003:35) state that age is regarded as a main social factor in the study of language change. This relates particularly to apparent-time studies where differences found across generations can be considered as language change in progress. Age as a social factor in the present study has the function of differentiating between the three groups of informants, as well as trying to identify change in relation to each group. As Chambers (2003:187) points out, the accent of adolescents change more drastically and rapidly due to their need to establish their own identity outside of the family situation. The social circles outside of the family are extended even further now that technology plays a part both in the socialisation process as well as the education of adolescents. Therefore, it might be valuable in the present study to look at a group of adolescents in relation to young adults as well as the older age group. According to Chambers (2003:194), the early adult years are when a person's accent sets, and when personal

preferences are determined. Therefore, a person's accent from that time onwards can be considered as representative of that time. This applies to the older informants, who's accent can be considered as representing their speech at the time when they were young adults. This relates back to the apparent-time study discussed in 2.2 above. Eckert (1997) argues as well that adults become more conservative with age, and that accents are less likely to change post-adolescence. Therefore, this study will look at older, young adult and adolescent speakers. The findings in all three age groups will be compared to each other. Initially, the informants were going to be divided into two age groups. For the present study, however, due to the age of my informants it was more natural to divide them into three groups. I thought it was important to differentiate the adolescents from the young adults due to the substantial differences between them, which will become evident as the findings are presented in chapter 5.

2.5 Previous studies

In this part of the chapter, I am going to discuss previous studies conducted on the CE accent and provide a brief presentation of the linguistic situation in Wales in general. I will also look at how the CE accent stands out compared to the English spoken in the rest of Wales.

2.5.1 Wales

Wells (1982:378) states that Cardiff, which today is the largest city in Wales was only a small village of under two thousand inhabitants in 1801. The linguistic development in Cardiff and the surrounding areas was heavily influenced by the coal industry. According to Thomas (1997), this resulted in many immigrants moving to Cardiff over a short period of time, looking for work. According to Awbery (1997), this resulted in many mixed language marriages where the children were brought up speaking English only. Awbery further notes that the coastal towns Cardiff, Barry and Newport developed so rapidly that the English accent there is completely its own. The English accent found there does not retain any Welsh language features, nor does it resemble the English spoken in the

longstanding English-speaking areas. The Cardiff, Barry and Newport areas are considered as ‘quite different, and a law unto itself’ (Awbery 1997:88). The rest of Wales was not as affected by the large influx of immigrants because it was largely centred on the port towns due to the coal export industry.

Welsh English is a term used to refer to the general phonological features of WE, though according to Penhallurick (2008) it can be further divided into two subcategories because of the substantial differences between the North-West and Mid-South accents, due to different influences. These include the Welsh language, which is particularly influential in the North. The border areas to England have different linguistic influences in the north and south as well. Welsh English as a term is problematised by Penhallurick (2008) who argues that it ‘masks diversity’, meaning the many varieties of English spoken within Wales. This also applies to the term Cardiff English, as CE is an umbrella term which does not account for the different variations within Cardiff itself, as well as Barry and Newport. He does however, state that it is a useful label insofar as it is ‘a language used by and belonging to the Welsh people’ (Penhallurick 2008:107).

A description of Welsh English features can be found in Wells (1982:377–93) and Penhallurick (2008). The following is a short presentation of linguistic features that are characteristic of the WE accent. According Penhallurick (2008) rhoticity can be found in the Welsh influenced areas, as well as some places along the English border. WE usually have long monophthongs in FLEECE /i:/, GOOSE /u:/ and NURSE is either /æ:/ or /ɔ:/. FACE and GOAT are monophthongal /e:/ and /o:/ in the north and diphthongal /ei/ and /ou/ in the south. Consonants are usually of a longer duration in the WE accent, especially in intervocalic position.

Among the features looked at in the present study, are the realizations of /r/ which according to Penhallurick (2008) ranges between the use of tapped [ɾ], rolled [r] and approximant [ɹ] in most of Wales, while Mees and Collins (1999) report that Cardiff only has the tap [ɾ] and approximant [ɹ] realisations. The /t/ variable is according to Penhallurick (2008) sometimes dental in Wales due to Welsh influence, and the realisation of /t/ is usually strongly aspirated. According to Collins and Mees (1990), /t/ in Cardiff is usually plosive or tapped. The long fronted [a:] is found for START, PALM and BATH across Wales, as well as the fluctuation between the fronted [a:] and the backed [ɑ:] variants, which is also found in Cardiff. The NEAR vowel, realised as [jø:],

can according to Penhallurick (2008) only be found in south Wales, as well as a few places in the west. GOAT is usually a monophthong in Wales, as mentioned above, except in the southern peripheries where [ou] can be found. The general pattern is that the English spoken in Cardiff and the surrounding areas stand out in different respects in relation to the English spoken in Wales.

2.5.2 Cardiff

The English spoken in South Wales has historically not been recognised as different accents, but as a homogenous whole. It is only recently that linguists have started researching the different varieties of English in South Wales. According to Mees and Collins (1999), South Wales is divided into three types of linguistic areas. The CE accent belongs to the third linguistic area, which consists of:

Border or coastal areas where English has been spoken by the vast majority of the population since well before 1800, in some cases possibly from the time of the Norman Conquest. This category includes not only marginal regions such as southern Pembrokeshire, south Gower, Powys and Eastern Gwent, but also crucially the densely populated low-lying parts of southern Glamorgan and Gwent. (Mees and Collins 1999:186)

My study focuses on the last-mentioned region of southern Glamorgan, where the city of Cardiff lies. The English spoken in Cardiff can also be said ‘to extend to other urban centres around the capital along the south-east Wales coastal belt – Barry and Penarth to the south-west of Cardiff and Newport to the east’ (Coupland 1988:5).² Most Cardiffians are, as Coupland (1988:40) points out, monolingual English speakers despite the presence of the Welsh language in Cardiff. The city is known for bilingual road-signs, the many Welsh speaking schools and nurseries, bilingual documents, brochures, public notices and administrative forms, as well as place names and street names. Due to the extended influence of the English language in Cardiff and the surrounding areas, there is a definite lack of Welsh features in Cardiff speech, so much so that ‘the Cardiff pronunciation is

² For a further discussion of the areas included in the description Cardiff English, see Coupland 1988:4-5.

notable for its lack of concession to and recognition of the Welsh language' (Coupland 1988:46).

There are two main authorities in the study of CE, Nikolas Coupland and Inger M. Mees. Coupland (1988:121–40) conducted a study designed to find out whether one person speaking to a variety of different people varies her speech accordingly. This was called the Accommodation Theory, which was confirmed as the subject did accommodate her speech according to whom she was talking to. Coupland (1988) also elaborates on linguistic variables described by Collins and Mees (1990)³ which are specific to CE. Following is a description of some general features associated with CE, provided by Coupland (1988:24–31). The RP /aɪ/ is /əɪ/ in Cardiff as in *nine* and *light*. The NURSE vowel has /ɜ:/ in RP while it is /ø:/ without full lip-rounding or /ë:/ in CE. H-dropping and G-dropping are common features in CE. H-dropping means leaving out the H. G-dropping is where /ŋ/ is replaced with /n/ in unstressed positions, usually in –ing endings. Another particular feature is that *tooth* is realised as /tʊθ/. In all, 'the model for the more "evolved" dialects of the urban south Wales communities are the same as that for most other varieties of British English – RP and Standard (English) English – and this must be particularly true of Cardiff English' (Coupland 1988:50). CE therefore have a lot in common with the English spoken in the counties across the border, namely parts of Gloucestershire and Somerset.

Inger M. Mees is the more recent authority on the CE accent, having been part of all studies of CE since 1999. One of these studies, conducted together with Beverly Collins, include a description of vowels and consonants in CE, as well as a systematic study of glottalisation in CE. This was a real-time study, where Collins and Mees (1990) looked at /t/-glottaling in a limited set of high-frequency words in a small selection of 4 female informants, all from WC backgrounds at three points in their lives. The results showed that two of the informants, who were social climbers, significantly increased their use of /t/-glottaling compared to the two other informants, who had an overall low score.

Mees and Osorno (2015) used the data from the real-time study in a later investigation of CE. This involved 11 informants interviewed two times over a period of 35 years, where 5 of the informants were interviewed three times. Each time the

³ Coupland refers to Mees 1983, which is her then unpublished doctoral dissertation, which he later included in *English in Wales* (1990).

interviews were conducted, a subset of informants from the initial sample were tracked down and interviewed again, a smaller number each time. These were females from both the WC and MC. The linguistic variables focused on in this study was h-dropping and the realisation of /r/. The /r/ can be realised in CE either as an alveolar tap [ɾ] or a post-alveolar approximant [ɹ]. They found that the traditional tap variant is a non-stigmatised feature and that its use remained stable for the WC informants, and in some cases even increased as the informants grew older and was for all WC informants used in over 50% of instances. In the MC, the informants' use of the tap variant decreased with age, while some never used the variant at all. H-dropping showed a consistent pattern where the use decreased with age in both the WC and MC, though the use in the MC was low to begin with. This reflects an expected pattern, as the feature is socially stigmatised. An interesting find in Mees and Osorno's (2015) study regards the transition from one social class to another in the course of the informants' lives. Mees and Osorno (2015) found that even though informants have climbed up on the social ladder, they do not significantly change linguistically. They found that 'even though it is possible to modify one's speech in post-adolescence, it appears to be difficult to break the pronunciation patterns which have been established early in life' (Mees & Osorno 2015:68). This means that even though there are marked differences in their use of the variants, the change is not to the extent where it reflects the usage of someone who was born into a higher social class. Therefore, their speech does not completely reflect the social class that they have entered. This can be linked to the present study, where there are several informants born into the WC who despite their later education and workplace, which can be considered as a part of the middle class, still consider themselves as part of the WC (see 3.2). These studies conducted by Mees and Collins and Mees and Osorno include only female informants. This means that no research tracing the linguistic development of the male CE accent has been done since 1983, when Mees (1990) conducted a study of sociophonetic variation in Cardiff schoolchildren, the first interviews and basis for the real-time study.

Osorno (2011) conducted her master thesis on the study of CE. This investigation was based on the informants used in the real-time study by Mees, where Osorno interviewed 5 informants from the original sample a third time, as well as including previous data from 6 female informants, 11 in all. Among the features, Osorno focused on H-dropping in lexical items versus grammatical items. She also looked at the

realisation of /r/ word-medially, across-word boundaries and as an intrusive form. This variable is either realised as a traditional alveolar tap [ɾ] or as a post-alveolar approximant [ɹ]. The last variable looked at is BATH words with a focus on whether they use the same vowel as in TRAP [a] or the vowel in PALM front [a:] or back [ɑ:]. Osorno (2011) found that the use of h-dropping in lexical items decreased substantially for the WC informants before the age of 25, where the use stabilised. The MC had no instances of h-dropping in lexical items. H-dropping in grammatical items however, still showed a decrease in usage but had a much higher realisation rate initially. In the WC, the use decreased from approximately 80 to 70% of instances, while in the MC, the use decreased from approximately 20 to 5% of instances over time. The tap [ɾ] variant showed a different pattern, where the use increased for the WC informants over time by about 10%. In the MC, the use decreased from approximately 17–0% of instances. Osorno (2011) found that the backed [ɑ:] variant in the PALM vowel was used in over 80% of instances in the MC. The WC however, showed an overall inclination towards the use of the fronted [a:] realisation of the PALM vowel, while the use decreased from 60 to 30% of instances over time. They also had a high usage of the TRAP [a] variant as well as a beginning tendency towards the use of the backed [ɑ:] realisation of PALM, with approximately 17% use in the last interviews.

2.6 Summary

The aim of this chapter has been to provide a discussion of the theoretical background for the present study. Theories which incorporate social factors in the study of phonological variation and change are well established in the field of sociolinguistics. The apparent-time approach allows for a small-scale study with a limited time-frame, and the process of accent levelling looks at reasons behind changes. I have discussed the function of the social categories age and gender, which are the primary categories used for this study as well as the function of social class.

What seems to be the trend in Cardiff English is a tendency to move towards RP-like features and away from features which are socially stigmatised. Previous studies have found that features that are not stigmatised, such as the tap [ɾ] for /r/, remain relatively

stable, and even in some instances increases slightly with age. The fronted [a:] variant is used to a varying degree, but because it is socially stigmatised, it is difficult to construct a consistent picture of the state of this feature. Although, it is more common in the WC than the MC, where the feature is generally avoided. Glottaling is a recent feature in CE, introduced by the MC where it has moved into the speech of ambitious people from the WC, and it is slowly moving into the speech of the WC in general. There is little recent information regarding GOAT and NEAR, leaving them open for discoveries.

3: THE PHONOLOGICAL VARIABLES

This section describes the phonological features this study is focusing on when identifying changes happening in the CE accent. The phonological variables are based on features which have been systematically researched before, as well as some which lack previous systematic studies, as mentioned above. The variables represent both consonant and vowel features which include traditional and new variants.

3.1 (r)

The (r) variable refers to the realisation of /r/ intervocalically and after consonants /b, v, θ/ (as in *lorry, through, every*), either as a traditional alveolar tap [ɾ] or a new post-alveolar approximant [ɹ]. The CE accent is non-rhotic. The approximant occurs in all prevocalic contexts but is limited in this study to reflect the context where the tap [ɾ] occurs. Collins and Mees (1990) state that the tap variant found in CE is different from the one that is occasionally found in RP. They found that a larger portion of the tongue is used, as well as a less rapid movement resulting in a sound of longer duration. Historically, there is no record of how long the tap variant has been a part of the CE accent. However, Lewis (1990:104), in a phonetic transcription of CE from 1964, uses both the tap [ɾ] and the approximant [ɹ] variants. This indicates that both variants have been around in CE, at least since the 1960's. The change pattern for this variable is concerned with the replacement of the tap [ɾ] variant by the approximant [ɹ] variant. The tap [ɾ] variant is, according to Mees and Osorno (2015) a non-stigmatised feature which people are unaware of or indifferent to producing. In their real-time study, the results showed a slight rise in the use of the tap [ɾ] variant with age in the WC informants. Osorno (2011) found the same trend, though as these two are the only studies that have systematically researched the /r/ variable in CE, I cannot compare their findings to anything else. It is important to underline, that both the 2011 and 2015 study rely on data from the same set of 11 female informants. There are no other systematic studies on the CE /r/ variable.

3.2 (t)

The (t) variable refers to the realisation of intervocalic /t/ (as in *city*, *butter*, *platter*), either as a traditional voiced alveolar tap [ɾ], a new supra-regional glottal stop [ʔ] or a standard fortis plosive [t]. According to Collins and Mees (1990) the intervocalic /t/ in CE is generally a voiced tap or a plosive. Coupland (1988:29) refers to the tap variant as non-standard and particular to CE, and it is also the same tap variant as for /r/. For the purpose of this study, the tap variant is referred to as traditional, while the plosive is referred to as standard. Glottaling in CE is only found before syllabic [l], as in *little*. In a later study by Mees and Collins (1999) they found that glottaling has indeed become a part of the CE accent in broader contexts. Glottaling was initially introduced into the speech of Cardiffians by the MC in the 1980's as a prestigious feature. This may be because glottaling symbolise a movement away from local features and towards a more modern variant, associated with London. Since then, it has been introduced into the speech of the WC. The glottal stop can be used in different environments, but the present study focuses exclusively on the intervocalic context. This is done to examine the tap [ɾ] variant, which according to Collins and Mees (1990) only occur in intervocalic position. Crystal (2008:213) describes glottaling as a sound which is made in the larynx when the glottis is either closed or narrowing, where the audible release of the closure is called a glottal stop [ʔ]. The tap [ɾ] is a brief touch of the tongue to the alveolar ridge. A plosive is the sudden release of built up air pressure in the vocal tract. The tap [ɾ] for /t/ is not represented in the phonetic transcription of the CE accent by Lewis (1990:104) from 1964. It has only been mentioned in later studies as a variant which is frequently used in intervocalic position. This is reported by both Collins and Mees (1990) as well as Wells (1982:388). It is therefore difficult to pinpoint how long the tap has been a part of the CE accent.

3.3 NEAR

The NEAR vowel refers to the realisation of the vowel in the lexical set NEAR. The traditional variant is realised as a palatal approximant followed by a close-mid front rounded vowel [jø:], while the new variant is realised as a centring diphthong with a close

mid front starting point [iə]. Collins and Mees (1990) note that the traditional variant only occurs in a small set of words: *year, ear, here, mere, near, hear* and their derivatives. Wells (1982:381) does not make this distinction, he notes that it can occur in BEER words as well, which might indicate that the variant has been used in larger contexts earlier. It is difficult to make this assumption, however, as the quality of the NEAR vowel has not been researched systematically before. Coupland's (1988:26) description of the NEAR vowel confirms that the traditional [jɜ:] variant only occurs in the limited set of words listed above. Wells (1982:154) states that the new realisation of NEAR, the new, supra-regional [iə] variant is a feature which is found in non-rhotic accents like that of London. This is a diphthong with a less centralised starting point than the variant most commonly used in RP, which is transcribed as [ɪə]. Due to the lack of previous systematic research for the NEAR vowel in CE, little is known about the social distribution of the two variants.

3.4 PALM/START/BATH

The PALM/START/BATH vowel refers to the realisation of the vowel in the lexical sets PALM, START and BATH (e.g., *Cardiff, father, art* and *glass*). The traditional variant is realised as a long open front [a:], while the new variant is realised as a long open back [ɑ:]. The fronted [a:] variant is according to Mees and Collins (1999) a socially stigmatised feature in Cardiff, and the word *Cardiff* is often stereotyped by drawing out the pronunciation ['ka:dɪf] when referring to the city, indicating how stigmatised the feature is. When asked about stereotypical features in CE, all informants in the present study mentioned the fronted [a:] variant first. Penhallurick (2008) states that [a:] is found mostly in the mid- to south-eastern borders, while a shorter variant [a] is used in most other parts of Wales. According to Penhallurick (2008), the [a:] variant in WE vary in all three lexical sets, either between long/short, and front/back. The present study is only concerned with the variation between front and back realisations in the three lexical sets. This extensive variation indicates that the situation in regard to PALM/START/BATH 'is not altogether clear' (Wells 1982:387). Osorno (2011) found that there is much variation in the realisation of the vowel, and that there are no clear patterns for individual speakers, although she did find an overall trend (see 2.5.2).

3.5 GOAT

The GOAT vowel refers to the realisation of the vowel in the lexical set GOAT (e.g., *soap, load, pole* and *home*). The traditional variant is realised as a back-closing diphthong with a close-mid back rounded starting point [oʊ], while the new variant is realised as a back-closing diphthong with a mid-central unrounded starting point [əʊ]. According to Penhallurick (2008), the GOAT vowel is realised as a monophthong in most varieties of WE. In the areas surrounding Cardiff and Newport, GOAT words are realised with a diphthong. Wells (1982:146–7) notes that the back-closing diphthong with a mid-central unrounded starting point [əʊ], is the realisation used in RP. No previous systematic studies have been conducted on the vowel quality of GOAT in the CE accent, apart from a brief mention in Mees and Collins (1999). They report that the GOAT vowel was initially realised as a potential diphthong [o^v] and that it is moving towards a back/central glide [ɤu]. Penhallurick (2008) notes, on the other hand, that [ou] is found in the southern peripheries including Cardiff and the surrounding areas.

4: METHODOLOGY

In a variationist sociolinguistic study, it is important to use the appropriate methods which provide the best starting point for acquiring and processing the data. In this chapter I will discuss my fieldwork methods as well as my data analysis process in relation to established linguistic methods. I will also present the informants and provide an overview of the token classifications for my phonological variables.

4.1 Sampling

The method for choosing a sample for this study is called the *quota sampling* approach. This is explained by Milroy and Gordon (2003:30–3) as a process where the researcher plans in advance the kind of informants needed for the study, then purposefully seek out people who fit the description. This kind of approach needs to be justifiable as a rational, defensible framework for the type of study being conducted because it relies on the judgment of the researcher. ‘For this reason, the approach is often called *judgment sampling*’ (Milroy & Gordon 2003:30). An issue with judgment sampling according to Milroy and Gordon, is that it cannot claim to be strictly representative of the whole population, as *random sampling* can. Random sampling is when ‘anyone within the sample frame has an equal chance of being selected’ (Milroy & Gordon 2003:25). However, judgment sampling has been useful in revealing patterns of change as well as providing generalisations for the linguistic variation in a dialect area when the researcher is restricted by time and resources. Therefore, this kind of sampling is useful for the present study. When searching for informants representing the CE accent, the area in which I could look for informants was the city of Cardiff, as well as the surrounding areas, including Penarth and Barry to the east and Newport to the west. According to Coupland (1988:5) and Mees and Collins (1999), these areas should be included in Cardiff English as previously discussed (see 2.5.2). Figure 4.1 below is a map of Cardiff and the surrounding areas.

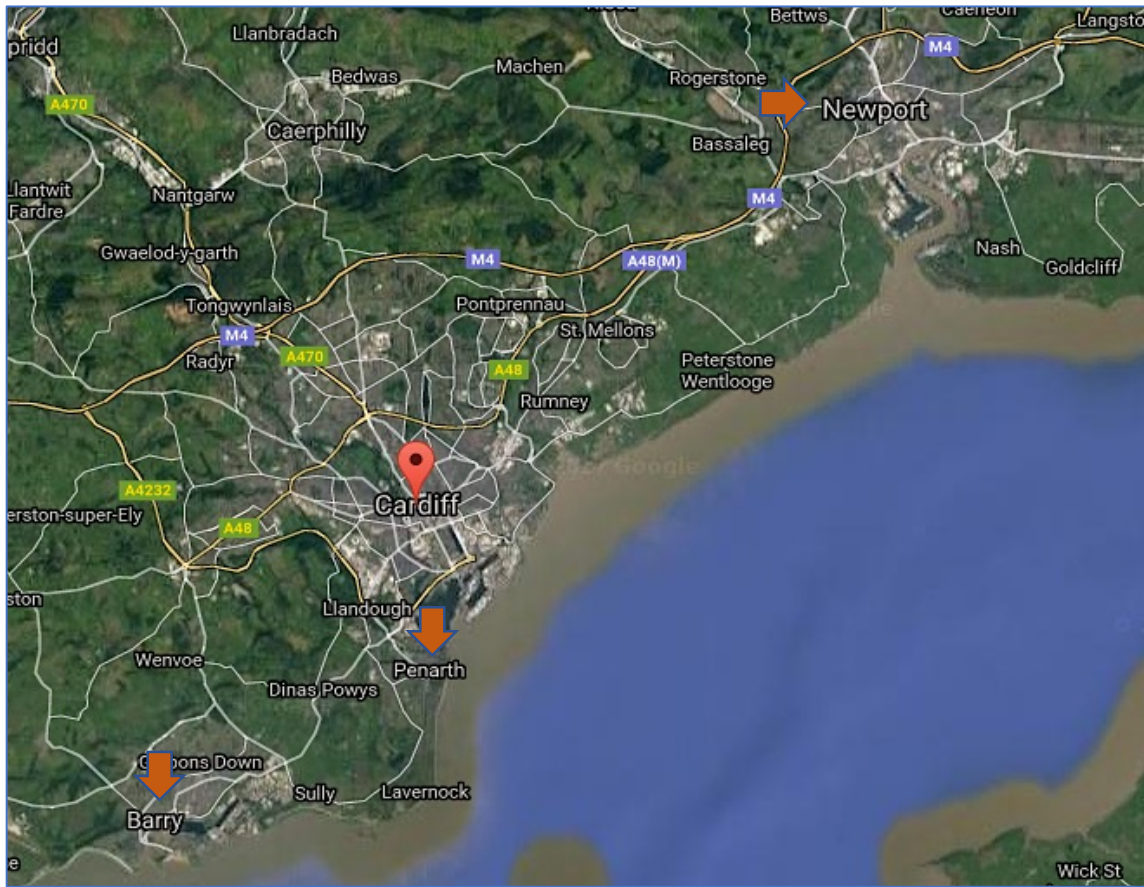


Figure 4.1 Map of Cardiff, Newport, Penarth and Barry.

The intended sample base for this study was both male and female informants from two different age groups. Because of the age distribution of the informants, I found it much more useful to divide them into three age groups due to noticeable differences between the two younger groups. The age groups are therefore 16-18, 25-28 and 55-69 years old, respectively. In addition to judgment sampling, I also used the ‘friend of a friend’ (Tagliamonte 2009:25) approach, also called *snowball sampling* by Milroy and Gordon (2003:32). Using this method, I informed my contacts in Cardiff of the kinds of people I needed for my study. They proceeded to contact people from their social circles and people within these circles also provided further informants. I was also able to get in touch with a teacher I had while living in Cardiff myself, who could help me by providing informants from her class during their lesson.

The main issue I found by largely depending on others to provide informants was their preconceptions about the people they know. This became a particular problem when looking for men in the older age group. My contacts in Cardiff were mostly women, and

some said that they would not even ask their husbands if they wanted to participate, because they already knew they would not want to. I found that there was a general preconception that men would not like to participate in a study like this and that they therefore did not even need to ask them. To rectify this I tried some alternative methods of gathering informants. I asked people on the street, in the main library and in some pubs. This did not work as none of the males I encountered were born and raised in Cardiff, and were therefore not suitable for the study. This is the reason why I was unable to add more informants to the older male age group. The result is an over-representation of the female participants compared to the males. Unfortunately, this extended to the other male groups as well. In the end, the numbers were 3 females and 2 males in the adolescent age group, 4 females and 2 males in the young adult age group and 5 females and 1 male in the older age group. Initially, I had two males in the older category as well, but I later found that I had to exclude one of the interviews, because he did not have any of the traditional features associated with the CE accent. This was due to extended stays in other countries during most of his adult life, during which he lost his CE accent features. In the next section I will discuss the different elements of the interview process, as well as highlight some issues surrounding it.

4.1.1 Data collection

When collecting speech data for this study, I used the sociolinguistic interview method. The sociolinguistic interview is according to Milroy and Gordon (2003:57–61) a conversational interview which allows for a loosely structured environment where the interviewer can be flexible with the questions asked, and requires no fixed answers from the informants. The interview is the primary approach when collecting data for a sociolinguistic study. Sociolinguistic interviews are typically conducted on a one-to-one basis, though this can vary. It has been noted by Tagliamonte (2009:37–49), that the most successful sociolinguistic interviews are the ones that encourage the informants to relate personal experiences. The reason for this is that animated speech, when the informant is emotionally involved, is more likely to gain access to the vernacular, which is the aim of a sociolinguistic study. The vernacular has been described in many ways, but Milroy (1992:66) describes it as ‘the real language in use’. Tagliamonte (2009:8) argues that the

study of the vernacular is crucial as it is the variety of speech that one acquires first, pre-adolescence. It can also be described as the variety of speech furthest from the standardised norm. Therefore, it is considered to be closest to that of natural speech. Tagliamonte (2009:37–9) also notes that despite the nature of the sociolinguistic interview, one should prepare a list of questions which are more likely to access the vernacular. This entails some prior knowledge about the community the informants live in. My knowledge stems from living in Cardiff for one year, which provided me with a network of people who proved very useful in my sampling process.

An advantage of the sociolinguistic interview is that you can conduct in-depth studies of phonological features, in contrast to studies based on questionnaires. A disadvantage of the sociolinguistic interview is that the process is time consuming and that in a small-scale study there will be a limited number of informants. A further disadvantage is the *observer's paradox*, explained by Milroy and Gordon (2003:49) as the fundamental challenge of wanting to observe how people speak when they do not know they are being observed. The main problem with this is how to limit the interviewer's influence on the informants' speech, and reduce the informants' self-consciousness.

Milroy and Gordon (2003:49) state that there are ways to limit the effects of the observer's paradox. One of these is to leave the interviewer free to explore topics that appeal to each individual informant. This encourages the informants to produce bursts of vernacular speech which can be linked to emotional reactions like happiness, anger, irritation, frustration, etc. This is because when people are excited, they are less likely to edit how they speak, although all speech varies in any situational context. Therefore, it is impossible according to Milroy and Gordon (2003:50), to record an entirely vernacular speech event. Coupland (1988:21–2) attempted to overcome the observer's paradox by recording customers at a travel agency where the employees were aware of the situation, but the customers were not. (They were informed after the recordings were made.) This was a successful way to limit the influence of the observer's paradox, even though the customers may have been modifying their speech in relation to the employees. When conducting my interviews the informants in the adolescent age group were interviewed two at a time for about half an hour. The purpose of this was to make the situation more comfortable for the pupils. Three of the young adult informants

were also interviewed in a group due to a limited time frame on their part. All the remaining interviews were conducted one to one and ranges from thirty minutes to an hour each.

The length of the interviews for the present study varies based on the informants' willingness to elaborate, and some were restricted by time as they were conducted in a school setting. It is noted however, that 'useful phonological data can often be obtained in a relatively short period of time – perhaps as short as 20 to 30 minutes' (Milroy & Gordon 2003:58). Therefore, Milroy and Gordon argue that one can conduct shorter interviews and still gain valuable information, though the general conception is that the vernacular is more likely to emerge after a longer period of time. Feagin (2002) states that the level of informality needed for a sociolinguistic interview can be an obstacle in itself because of what an interview situation entails. She goes on to say that this kind of interview is most successful when studying frequently occurring phonological and morphological variables, where one is likely to obtain enough data for a valid study.

During the interview process, some informants were more affected by the situation than others, but my general impression was that most of my informants were happy to talk. Some initiated topics themselves, and in some instances my prepared questions were barely used at all. Keeping the conversation going was usually easy, except for a few of the adolescents who provided rather short answers to broad questions. I also noticed that my presence may have influenced the speech of some of the informants. One informant asked several times if what she was talking about was relevant and stated that she was very nervous at the beginning. However, this changed as the conversation developed and she visibly relaxed. Later, she stated that the interviewer was very easy to talk to. Overall, I felt that most informants were comfortable with my presence, but it is difficult to know how much, or if it affected their speech.

The beginning of each interview focused on collecting demographic information about the informants, e.g., age, where they were born and raised, parents' occupations, education and occupation. The rest of the interview focused on subjects of interest to the informants. All interviews developed differently, but as a precaution two different sets of questions were prepared targeting the different age groups. After the interview the informants were asked to read out a list of sentences containing tokens for all my variables. The sentences were constructed to contain as many relevant tokens as possible

to provide me with extra tokens if the interview yielded too few. Milroy and Gordon (2003:164) state that the ideal number of tokens is 30, which should be an achievable amount and that 30 tokens mark the dividing line between small and large samples. The minimum number of tokens should be no less than 10, as a smaller sample is not representative. The number of tokens found for each variable varies, but a number between 10 and 30 was obtained for my informants for most of my variables. The exception was the NEAR vowel due to the limited lexical distribution of the variants. The sentences were initially included to ensure enough tokens for all variables. The sentences ended up only being used for the NEAR vowel and a few other instances where less than 10 tokens were found. I decided that the informants would read out the sentences at the end of the interview so that they would be as comfortable as possible. I am fully aware that reading-style speech does not represent the vernacular, but they may provide useful supplementary information.

All interviews were recorded with an Olympus VN-711PC 2GB digital voice recorder. The informants were asked before the interview to read a brief presentation of the study which included my contact details and information about what the interview would be used for. I explained the presence of the dictaphone before it was turned on and stressed that everything they said is confidential and anonymous. After the interviews, the audio files were saved on my computer. The interviews were then transcribed orthographically. During this process, some of the longer interviews were shortened by only transcribing thirty minutes, which was enough to ensure a sufficient number of tokens. The total transcribed corpus consists of approximately 48 000 words.

4.1.2 Informants

The informants are divided into three groups based on age. The first group are adolescents in upper secondary school, the second group are young adults who have started working after various levels of education and in the third group, all but two are retired. The third group represents the older generation. All three groups will be compared with each other. Table 4.1 below shows a list of the informants along with their demographic information.

Table 4.1 List of Informants

Informant n.	Age	Sex	Born	Address	Parents' occupation
1	17	F	Cardiff	Ely	Carpenter/assistant teacher
2	18	F	Cardiff	Roath	Council worker/welfare officer
3	18	F	Cardiff	Aberdare	Unknown/unemployed
4	16	M	Newport	Roos	Mechanic/hairdresser
5	16	M	Cardiff	Pentwyn	Truck driver/unemployed

Informant n.	Age	Sex	Born	Address	Own occupation
6	25	F	Kenya	Rumney	Train mechanic
7	25	F	Cardiff	Roath	Assistant teacher
8	26	F	Cardiff	Witchurch	Assistant teacher
9	28	F	Cardiff	Splott	M Phil student
10	25	M	Cardiff	Wadlow Gardens	Assistant teacher
11	25	M	Cardiff	Riverside	Phone salesman

Informant n.	Age	Sex	Born	Address	Own occupation
12	57	F	Cardiff	Rumney	Waitress/carer
13	69	F	Cardiff	Penarth	Housewife
14	69	F	Cardiff	Ely	Bank clerk/housewife
15	55	F	Cardiff	Penarth	Cafe owner
16	62	F	Cardiff	Rumney	Police Secretary
17	67	M	Cardiff	Rumney	Car mechanic

All informants have been classified as WC. This classification is part of a broad spectre and no Upper WC or Lower MC categories are included in this classification. The social classification is based on parent's occupations or their own occupation and or education. While I have a varied selection of informants, they can still be considered to belong to the WC broadly defined.

The informants were all born in Cardiff except for two who were born in Newport and Kenya. All informants grew up around the Cardiff area while some of the older participants moved to Penarth during their adult lives. Informant 5 grew up in both

Newport and Cardiff. As discussed earlier in 2.5.2, CE includes the areas surrounding Cardiff as well, these are Newport, Barry and Penarth. Informant 6 who was born in Kenya moved to Cardiff at a young age which is consistent with Labov's (2006:110) theory that if the informant moved to the area by the age of 8, they can still be considered as native speakers. She grew up with a Welsh mother and her speech data does not stand out in relation to the other informants for any of the variables.

Areas of Cardiff including Ely, Rumney, Riverside, Pentwyn and Splott are all heavily associated with the WC, while the other areas are mixed. All informants in the adolescent age group can be considered as belonging to the WC according to their parent's occupations when considering Chambers' (2003:43) class division (see 2.4.1). Informant 2 can be considered a borderline case, as both parents are office workers. With a broad interpretation, however, the informant can still be considered WC, as they are not managers.

In the young adult age group, informants 6, 8 and 11 have no education past upper secondary school. Informants 7 and 10 have Bachelor degrees. Speaker 7 grew up with a father who was a lorry driver and speaker 10, a mother who was an assistant teacher without higher education. Therefore, these informants can be considered as WC with ambition, which means that they are social climbers. Informant 9, the M Phil student specifically said in the interview that she was from a very WC family and area despite her educational background, her father was a car mechanic and her mother a housewife.

In the older age group, none of the informants have any education past GCSE levels, also called secondary school. Informant 13 was a housewife who did some volunteer work in the community until she retired. Informant 14 worked as a bank clerk for 9 years until she had children. Informant 16 who is now a café owner worked as an office clerk as well as a shop assistant until recent years. All informants can therefore be regarded as belonging to the WC, broadly defined. (It is also important to note that the informants might regard themselves as belonging to a different class or division of class for reasons outside of my knowledge.)

4.2 Methods for data analysis

In the following sections I will introduce and describe the methods used while analysing the collected data. This includes a description of the auditory analysis, as well as token classifications for the five phonological variables.

4.2.1 Auditory analysis

After the interviews were transcribed orthographically and the tokens for each linguistic variable was identified, I conducted an *auditory analysis*. Until recently, according to Milroy and Gordon (2003:144–5) the auditory analysis method has been the most common technique when identifying realisations of linguistic variables. Other approaches using instruments that measure acoustic signals have become available in recent years. The *acoustic analysis* is such an approach. This is according to Milroy and Gordon (2003:145–7), a method which uses technological instruments to provide a spectrographic analysis which can show the manner of articulation in consonants, though the main use of the acoustic analysis has been in the study of vowels. The present study has been analysed with the auditory analysis method, which has its limitations due to the reliance on the researcher's perception of the produced variant. Therefore, the method can be referred to as *impressionistic coding*. The main advantage of an auditory analysis is that it takes less time than an acoustic analysis and may therefore be the best option for a project with a limited time frame. A disadvantage of using this method is a certain element of subjectivity. Milroy and Gordon (2003:144) state that to conduct a successful auditory analysis, the researcher must provide clear classifications of the difference in realisations by establishing boundaries for the variables and by staying consistent. The auditory analysis conducted for the present study was a time-consuming process because of the time it took to satisfactorily differentiate between the various realisations of the linguistic variables. The consonants /t/ and /r/ were relatively straightforward and easier to differentiate than in the case of the PALM/START/BATH vowel. In the case of this vowel, there was a difference between informants in the length of the realisations, which made it difficult to differentiate consistently for some of the speakers. The two variants [jɔ:] and [iə] for the NEAR vowel are qualitatively very different and therefore easy to distinguish. The same could be said for the two variants [oʊ] and [əʊ] of the GOAT

vowel. The auditory analysis process was overall unproblematic due to the quality of the audio recordings. The supervisor of the present study did a cross analysis of parts of four of the sociolinguistic interviews. The auditory analysis was approved as stable and reliable, as the supervisor agreed with the analysis to an extent where the respective findings were similar in most respects. The tokens which have been included in my analysis were all produced clearly. Due to the excess of tokens in most interviews, any unclear or indiscernible tokens have been excluded. A limit of three tokens of the same word analysed in the interviews were also enforced on all variables, except for the NEAR vowel due to the limited set of words the [jø:] variant can occur in. This was done to provide a lexically varied set of data.

4.2.2 Token classifications

The tokens for the variable (r) will be limited to intervocalic word-internal position and after the consonants /b, v, θ/. According to Collins and Mees (1990) the CE /r/ is generally an approximant, but can also be realised as an alveolar tap, especially in the broader varieties. In the auditory analysis, the realisations of /r/ will therefore be divided into the traditional tap [ɾ] variant and the new approximant [ɹ] variant. Some examples of tokens for this variable: *hurry, through, bread* and *every*.

The analysis of the variable (t) focuses on both the alveolar tap [ɾ] and the glottal stop [ʔ] intervocalically before unstressed vowels and between a vowel and syllabic [l]. In the auditory analysis as well as the data presentation, the realisations will be divided into three categories. The alveolar tap as the traditional variant, the glottal stop as the new variant and the fortis plosive [t] as the standard variant. Glottaling is according to Collins and Mees (1990) a recent addition to the CE accent as a prestigious feature adopted by sophisticated speakers. Some examples of tokens for the (t) variable: *city, butter, little* and *waiting*.

In the analysis of the NEAR vowel I have focused on a small subset of words where [jø:] is the traditional pronunciation: *year, ear, here, mere, near, hear* and their derivatives. The realisations will be divided into the palatal approximant followed by a close-mid front rounded vowel [jø:] as the traditional variant and a centring diphthong with a close front starting point [iə] as the new variant. Mees and Collins (1999) reports

that both realisations are common, though at the time their paper was written they report a slightly more common tendency to produce the traditional realisation [jø:].

The analysis of the PALM/START/BATH vowel is divided into the fronted [a:] as the traditional variant and the backed [ɑ:] as the new variant. Mees and Collins (1999) note that the CE [a:], also symbolised [æ:], to call attention to the potential raising of this feature, suffers the greatest stigmatisation of the variants particular to CE. For this variable, intermediate centralised realisations have been grouped with the fronted realisations, while only clear backed realisations have been grouped as fully within [ɑ:]. Some examples of tokens for this variable: *Cardiff, father, art* and *glass*.

The tokens for the GOAT vowel include only words spelt with *o* and *oa*, where Welsh English traditionally has a monophthong. The realisations will be divided into a diphthong with a close back rounded starting point [oʊ] as the traditional variant and a diphthong with a close central unrounded starting point [əʊ] as the new variant. Mees and Collins (1999) have looked at the change from monophthong to diphthong in their research and briefly commented on the vowel quality, which they described as a move from a potential diphthong toward a back central glide [ɤu] in the 1980's. Some examples of tokens for this variable: *those, mostly, soap* and *home*.

4.3 Methods for data presentation

Now that the methods concerning sampling and data collection have been described, the next section is concerned with the method used for calculating and presenting scores. There is also a description below of how the scores are presented visually.

4.3.1 Data presentation methods

The results of the data analysis will be converted to percentage scores and presented using figures and tables constructed in Excel. According to Hudson (1996:175–81) the most useful way to present data with several variables, informants and contexts is by using percentage scores according to group averages. First, I will start by presenting individual percentage scores. This is important because ‘information about the speech of individuals

is ... lost if these are included in group averages' (Hudson 1996:181). This is because in some instances it is possible that the scores for some informants can influence the whole group average. I will then proceed by presenting the results using group averages according to age and gender, to show the variation between genders in the three age groups. To present a more general picture of the change in progress for each variable, I will also show percentage scores according to age only. The age differences will be presented in a line chart, which better shows the development of the variants over time.

A different way of calculating scores is described by Hudson (1996:175–7) as the classic Labovian approach which assigns index scores to show similarities and differences in the uses of linguistic variables. This method becomes problematic for variables with more than two different variants. Therefore, it would not represent the preferences accurately in the case of the (t) variable in the present study. I believe that the most useful way to present the findings in the present study is by using percentage scores. To make a further point, it is important to keep in mind that the informants are assigned to a group by the researcher and that they, according to Hudson (1996:180) might not consider themselves as a part of that group. The data will be presented visually in the form of tables and graphs that will show the gender and age differences clearly. I will provide a table for each variable indicating the total number of tokens and their distribution across the variants. In the figures, blue represents the traditional variants, orange represents the new variants and grey represents the third variant for the (t) variable. The total scores will also be presented in a table for each variable. In the figures showing individual scores, the age groups are separated by a line. The informants are arranged as in table 4.1, informants 1-5 are from the adolescent age group, 6-11 are young adults and 12-17 are from the older age group. The data from the females is shown first in all age groups, followed by the males.

4.4 Summary

The aim of this chapter has been to describe the different methods used in the process before, during and after the sociolinguistic interviews. With the use of the 'friend of a friend' approach of judgment sampling, the main issue was the lack of enough male informants, which creates a certain imbalance in the representativeness of the sample.

Nevertheless, there are still informants in every category, though not as many as intended. Therefore, the findings will still be interesting, even though generalisations about change in relation to the older male is not possible when comparing his speech data to the other groups of younger informants. All the sociolinguistic interviews were conducted in an informal setting. I have also explained the methods used to quantify as well as present the data. In the next chapter, the results of the analysis will be presented in the form of figures and tables, with the findings represented as numbers and percentages.

5: DATA RESULTS AND DISCUSSION

In this chapter, the data will be presented using graphs and tables showing percentage scores. The purpose of this chapter is to identify changes in progress by looking at individual percentage scores and group scores according to age and gender. There will be a discussion of each variable after presenting the findings, as well as a broader discussion related to theories of variation and change in chapter 6. As mentioned earlier, the present study aims to look at changes from traditional to new supra-regional variants in three different age groups, in relation to the social factors age and gender.

5.1 (r)

The main focus in the study of word-internal (r) is to identify whether the two younger age groups are favouring the new post-alveolar approximant [ɹ] variant over the traditional alveolar tap [ɾ] variant of /r/ intervocally and before /b, v, θ/. Table 5.1 below shows the total scores for the (r) variable.

Table 5.1 /r/: total scores

Variants	N	%
[ɾ]	113	20
[ɹ]	459	80
Total	572	100

This table shows that the traditional tap [ɾ] variant is realised in 20% of instances, while the new approximant [ɹ] variant is realised in 80% of instances. It is therefore clear that the new alveolar approximant realisation is favoured in the case of the (r) variable. The

individual scores for /r/ are presented in figure 5.1 below, giving a better indication of the individual variation between speakers.

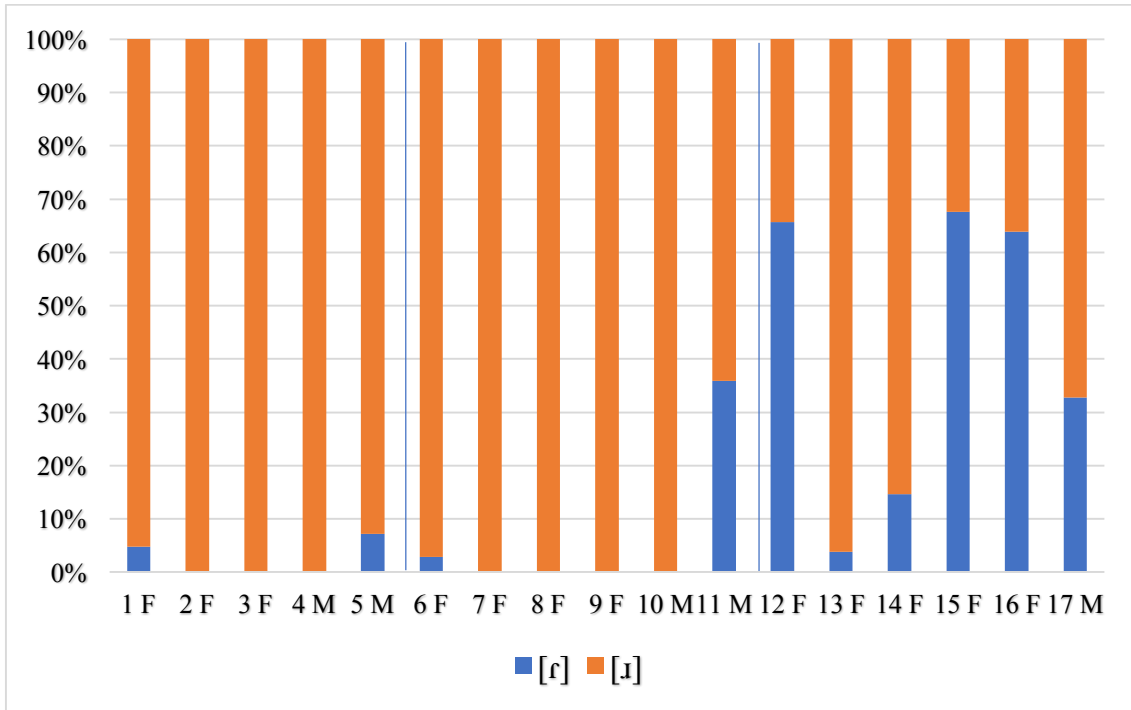


Figure 5.1 Realisations of /r/: individual percentage scores

For this variable, there is a clear trend in the two younger age groups where 93–100% of instances belong to the new approximant [ɹ] variant for almost all speakers. The informants in the younger age groups therefore use the tap [ɾ] variant only between 3 and 7%, except for speaker 11 who stands out with 36% of instances belonging to the traditional variant. The reason for this is unclear, though it will become apparent in the course of this chapter that speaker 11 typically retains more of the traditional variants than the other speakers in the young adult age group.

In the older age group, there is a different trend where the use of the traditional tap [ɾ] variant ranges from 4–68% of instances. Here, speakers 13 and 14 are exceptions, with only 4 and 13% of instances belonging to the tap [ɾ]. Again, the reason why is unclear, although the same pattern can be seen for the tap for /t/ variant. Speakers 1, 5 and 6 in the younger age groups only used the traditional tap [ɾ] variant in 1 token each, which indicate that these are random occurrences of the variant and does not represent the speakers’ actual speech pattern. This may also be true for speaker 13, as only two of

the tokens were realised with the traditional tap [ɾ]. In the older age group, speakers 12, 15 and 16 stand out with the highest use of the traditional variant, ranging from 64–68%. These three speakers are therefore the only ones who use the tap [ɾ] variant more than the new approximant [ɹ] variant. Figure 5.2 below shows the distribution of the (r) variants in relation to the social factors age and gender.

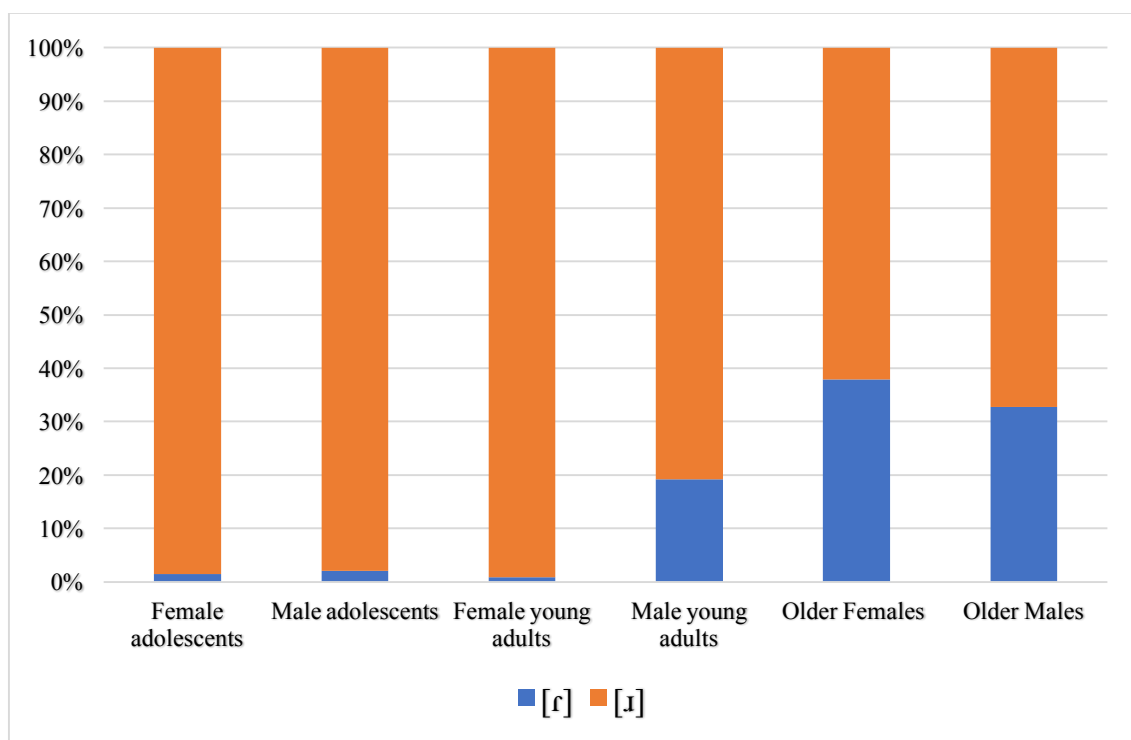


Figure 5.2 Realisations of /r/: age and gender differences

This figure shows that there is little gender variation for this variable. The most substantial difference is in the young adult group, with a variation of 18 percentage points between the males and the females for the traditional tap [ɾ] variant. This variation is due to the high number of traditional realisations for speaker 11. The difference between the genders in the young adult age group reflects Hudson’s (1996:193) theory regarding the ‘sex/prestige pattern’. This pattern anticipates that females are more likely to adopt new prestige variants and that males are more likely to retain traditional variants (see 2.4.2). The average for the older age group does not reflect Hudson’s pattern, as the females use the traditional variant more than the male informant. Due to the lack of more male informants in the older age group, it is difficult to generalise about the results. These findings may therefore not be representative of the general population, this applies to the

findings for all the variables. The adolescent age group shows no gender variation, as 98% and 99% of instances belong to the new approximant [ɹ] realisation. This may be because the use of the traditional tap [r] has already left the speech of adolescent Cardiffians, and is at the end of the process of change (see 6.2) In figure 5.3 below, the (r) variants are presented according to age differences.

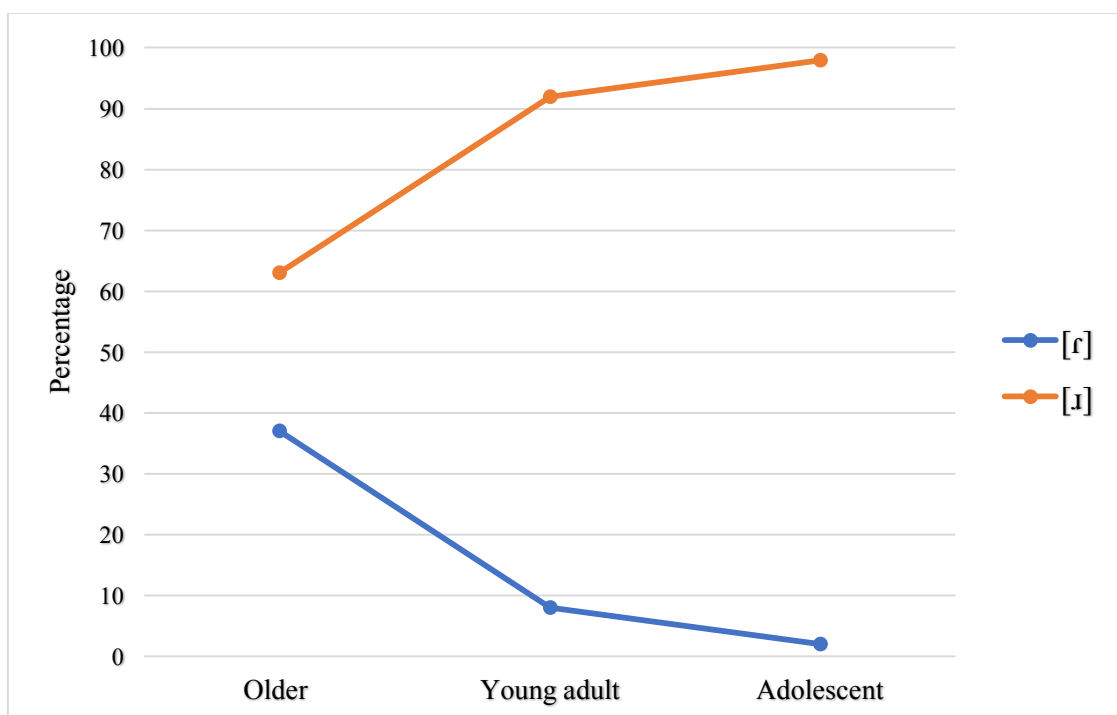


Figure 5.3 Realisations of /r/: age differences

This figure shows the general pattern of change for the (r) variants. There is an overall decline in the use of the traditional tap [r] variant from 37% in the older age group to 2% in the adolescent age group. This indicates that the use of the tap has become recessive in the speech of adolescent Cardiffians. The new approximant [ɹ] variant, however, increases from 63–98% of instances from the older to the adolescent age group. From this information, it is possible to conclude that the two younger age groups are more likely to favour the new variant in nearly all instances of word-internal /r/, intervocalically and after /b, v, θ/. It is evident that this feature was already far along in the process of change, and that the adolescent age group reflects the end stage for the use of the traditional tap [r] variant.

These findings support the pattern of change expected in Hypothesis 1, predicting that traditional variants are becoming recessive or markedly less used. For the (r) variable, there is a clear pattern which shows that the traditional tap [r] variant is used in the older age group. In the young adult age group, only speaker 11 uses the tap [r] to any substantial degree. In the adolescent age group the tap [r] is limited to a very few random occurrences, indicating that the new approximant [ɹ] variant has replaced the traditional variant. The change pattern for the (r) variable can be linked to the process of accent levelling (see further 6.3).

When considering Hypothesis 2 regarding gender differences, only the young adult age group confirms the hypothesis, however, these results are based on the high scores for speaker 11. The results for the older and adolescent age groups do not confirm Hypothesis 2. The findings do support Hypothesis 3, regarding the change towards new, supra-regional variants. The use of the approximant [ɹ] rises from 63% of instances in the older age group to 98% of instances in the adolescent age group. In the two younger age groups, speakers 1, 5 and 6 only used the traditional tap [r] variant in one token each. These instances occurred in words like *parents* and *brother*, both words were repeated in the interviews, where they were realised with the approximant [ɹ] variant. Therefore, it may be safe to assume that these can be attributed to random occurrences.

The traditional tap [r] variant is, according to Mees and Osorno (2015) a non-stigmatised feature most Cardiffians are unaware of or indifferent to producing. In their study of the (r) variants (see 2.5.2), they found a much higher usage of the traditional tap [r] variant than my findings. Their study was conducted in real-time, and their findings showed an increase in the use of the tap [r] variant over time from 74 to 89% of instances in the WC. This does not reflect my findings, which show a very different pattern. A reason for this may be because it is a real-time study, showing changes in the speech pattern of the same informants over time. Their sample size was smaller than mine, with 6 informants from the working class and only three of them were interviewed all three times. Therefore, my data reflects a newer time-period by including young adults and adolescents in the present study. Another reason for the difference may be because they researched the variable from a wider context, as they looked at word-internal instances as well as across word boundaries. This provided a wider token base for their study. Aside from Osorno (2011), there have been no other systematic studies conducted on the (r)

variable in Cardiff. As Osorno's results were based on the same informants and data as the later (2015) study, they represent the same findings.

5.2 (t)

The main focus in the study of intervocalic (t) before unstressed vowels, is to identify whether the two younger age groups are favouring the new supra-regional glottal stop [ʔ] variant over the traditional tap [ɾ] variant, or the standard voiceless plosive [t] variant. Table 5.2 shows the total distribution of scores for the (t) variable.

Table 5.2 /t/: total scores

Variants	N	%
[ɾ]	51	13
[ʔ]	108	28
[t]	233	59
Total	392	100

This table shows that the traditional alveolar tap [ɾ] variant only occurs in 13% of the total instances. The glottal stop variant is realised in 28% of instances, while 59% belongs to the standard plosive variant. Of the traditional and the new variants, glottaling is the one most frequently used. Below, figure 5.4 shows the individual percentage scores for the (t) variants.

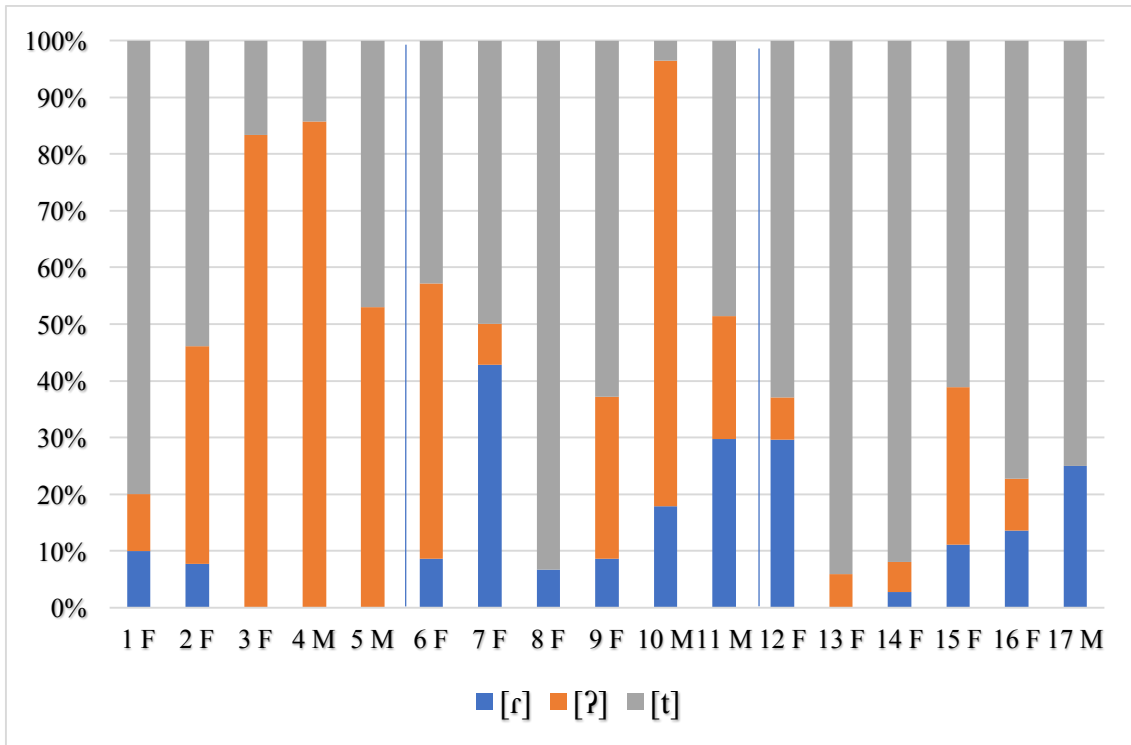


Figure 5.4 Realisations of /t/: individual percentage scores

This figure shows that the traditional tap [r] variant occur most frequently in the young adult group, ranging from 7 to 43% of instances. In the adolescent age group, instances of the traditional tap [r] can only be found for speakers 1 and 2, with a range from 8 to 10% of instances, consisting of one token each and can therefore be considered as random occurrences. In the older age group, speakers 12 and 17 have the most instances of the tap, between 24 and 29%. Speakers 13-16 use the tap in 0-4 tokens altogether, which could be considered as random occurrences.

The glottal stop [ʔ] variant is used to some degree by all speakers except for 8 and 17, though the adolescents use it substantially more than the two older age groups, with a range of instances from 10 to 86%. Speakers 3 and 4 stand out in the adolescent age groups with over 80% of instances belonging to the glottal stop [ʔ] and only a few realisations of the plosive [t] and none of the tap [r] variant. The exception is speaker 10, who stands out in the young adult group with 79% of instances belonging to the new glottal stop [ʔ] variant.

The plosive [t] is clearly favoured in both the young adult and older age groups. Speakers 8, 13 and 14 stand out by using the plosive in 93–97% of instances, with only a few tokens from either of the two other variants. In the older age group the use of the

traditional tap [ɾ] variant ranges from 0 to 30% and the use of the glottal stop variant [ʔ] ranges from 0 to 28%. This shows an overall tendency towards the plosive variant, which ranges from 61 to 94% of instances. 11 tokens for this variable has been added from the sentences to the total tokens for speaker 5 and they divided themselves equally between the new glottal stop [ʔ] variant and the standard plosive [t] variant. Figure 5.5 below shows the realisations of the (t) variants according to age and gender.

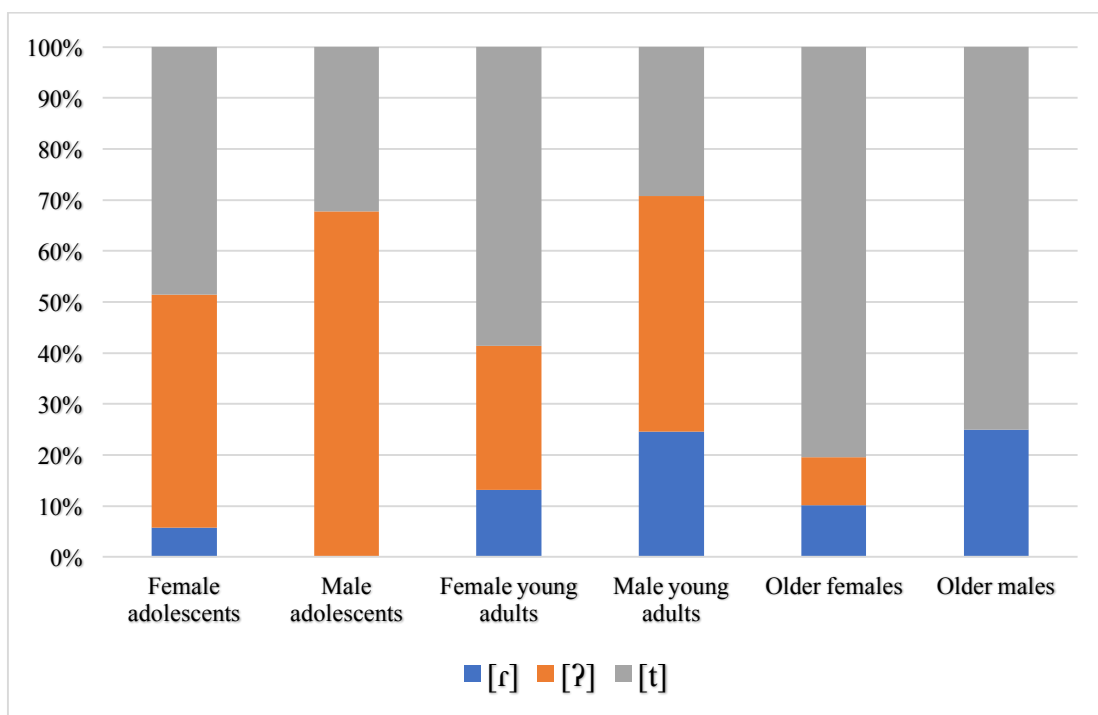


Figure 5.5 Realisations of /t/: age and gender differences

This figure shows that there is substantial variation between the genders in the two younger age groups. In the adolescent group, there is a 22 percentage point difference between the males and the females, where the males are the ones who use the new glottal stop [ʔ] variant more than the females, which in this case does support Hudson's sex/prestige pattern (see 2.4.2). This is because the females use the standard plosive [t] variant 22 percentage points more than the males. The same pattern is found in the young adult age group, with a difference of 18 percentage points from the males to the females, where the females again show a higher preference for the standard plosive [t] variant. The traditional tap [ɾ] variant is in line with the sex/prestige pattern in the young adult group, where the males use it 12 percentage points more than the females. The average score for

the traditional tap [ɾ] variant in the female young adult group is raised due to the high scores for speaker 7. The same difference for the tap is found in the older age group, where speaker 12 raises the group average for the females in the older age group. In the adolescent group, there is little variation for the traditional tap [ɾ] variant, and the few tokens recorded can be attributed to random occurrences of the variant. In the older age group, the standard plosive [t] variant is used in 75–81% of instances for both genders and is therefore the preferred variant. In figure 5.6 below, the (t) variants are presented according to age differences.

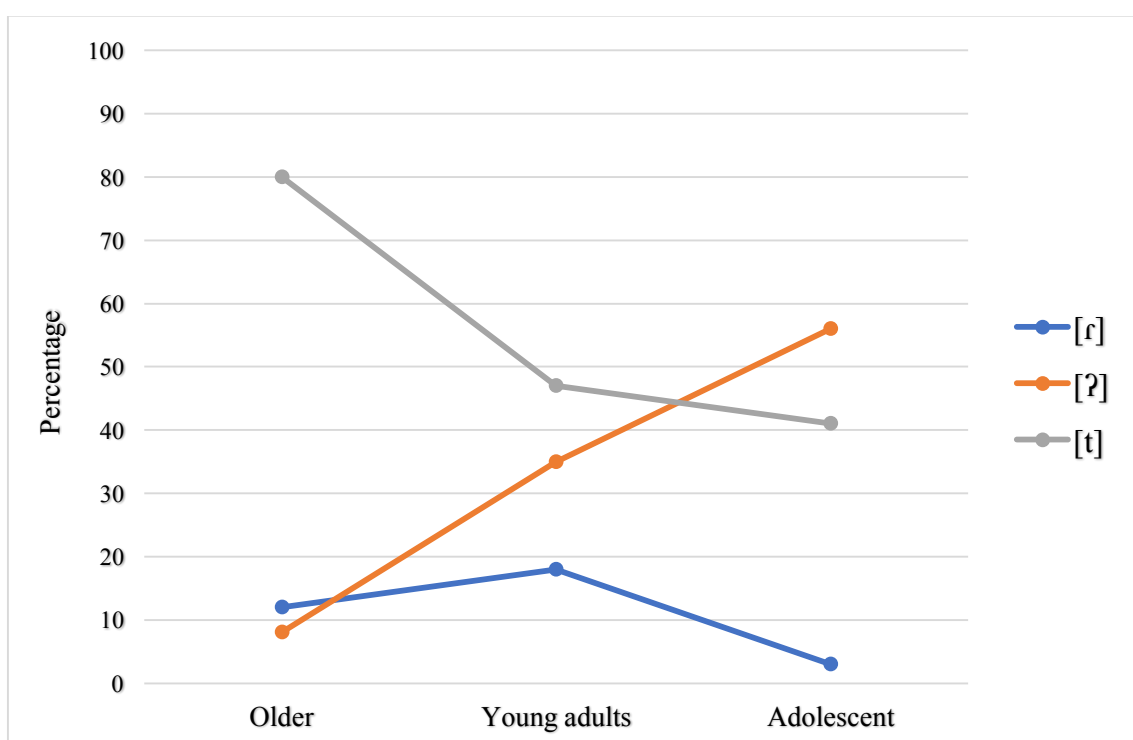


Figure 5.6 Realisations of /t/: age differences

This figure shows an overall rise in the use of the new glottal stop [ʔ] variant, ranging from 8 to 56% of instances from the older to the adolescent age group. The rapid increase of the glottal stop [ʔ] variant indicates that it is replacing both the traditional tap [ɾ] variant and the standard plosive [t] variant. The use of the tap [ɾ] has changed from 12% in the older age group, where it rises to 18% in the young adult group and decreases to 3% in the adolescent group. This increase is attributed to the high scores for speaker 7 of the traditional variant, as well as the slightly higher scores for the tap overall in the young adult age group, compared to the older informants. The low usage of the tap [ɾ] variant in

the adolescent age group indicates that it is already recessive in CE. Figure 5.6 shows that the use of the glottal stop [ʔ] variant is favoured by the adolescent age group and that the use of the two other variants is declining.

The overall findings for the (t) variable indicates that the increased use of the new glottal stop [ʔ] variant can be traced to a bigger levelling trend (see further 6.3). The changes recorded for these variants are in line with Hypothesis 1, regarding the change away from traditional variants from the older to the younger generation. The findings show that the traditional tap [ɾ] variant is used in no more than 18% of instances and has decreased to 3% of instances. Therefore, one may conclude that the traditional variant has become completely recessive in CE.

When considering Hypothesis 2 regarding gender differences, the pattern for the (t) variants do confirm the hypothesis. The general perception that males retain more of the traditional variant is confirmed by the findings for the two older age groups, and the use of the standard plosive [t] variant is used more by the females than the males in all three age groups. This supports the expected gender variation, as females generally prefer the standard variants, while the males favour the supra-regional glottal stop in the two younger groups. However, when considering that the glottal stop variant is viewed as a prestigious feature in CE, it is interesting that the males are the ones who are leading the change.

I found something interesting in the occurrences of the traditional tap [ɾ] variant in two of the young adult informants. Speakers 6 and 9 had three alveolar tap [ɾ] realisations each, though interestingly these were limited to one word for each speaker. Three tap [ɾ] realisations were recorded for speaker 9 only in the word *getting*. The same was found for speaker 6 with the word *little*. As a further note, both speakers had more than one token of both words but only realised the tap in the one mentioned. The reason for this is unclear and due to the small sample of informants these occurrences may be idiosyncratic. Mees and Collins (1999) conducted a study on glottaling in Cardiff where they found that the glottal stop [ʔ] is considered as a prestigious feature, initially adopted by the MC and only sporadically used by the WC. Looking at the findings in the present study it is evident that it has indeed become a part of the speech of WC young adults and adolescents. As the study by Mees and Collins looked at a very narrow set of tokens for the glottal stop variant, their findings cannot be compared to mine.

5.3 NEAR

The main focus in the study of the NEAR vowel is on whether the new [iə] variant is favoured over the traditional [jø:] variant. The traditional variant can, as discussed in 4.2.2, only occur in a limited set of words and their derivatives. The possible number of tokens were therefore limited as well, though a trend has been identified with the help of extra tokens from the sentences. Table 5.3 below shows the total scores for the NEAR variable.

Table 5.3 NEAR: total scores

Variants	N	%
[jø:]	106	42
[iə]	145	58
Total	251	100

This table shows that the use of the new [iə] variant is substantially higher with 58% of instances compared to 42% for the traditional [jø:] variant. Figure 5.7 below shows the individual percentage scores for the NEAR variants.

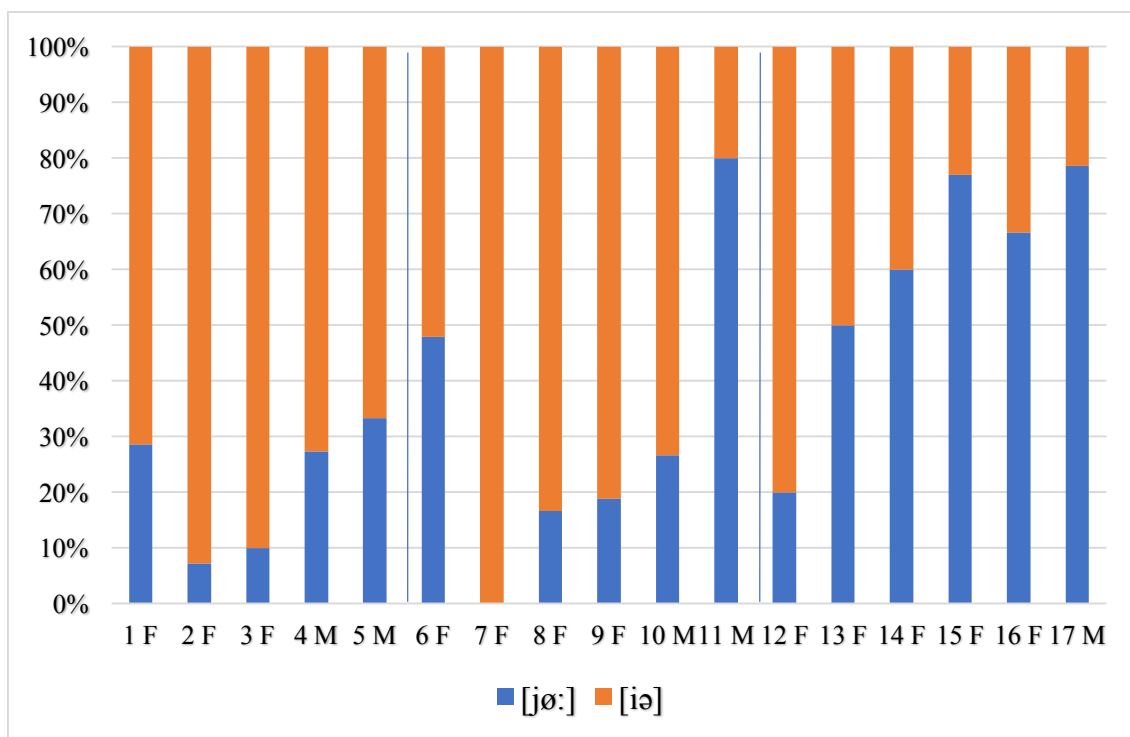


Figure 5.7 NEAR: individual percentage scores

This figure shows that the instances of the traditional [jø:] variant are lowest in the adolescent age group, where the realisations range from 7 to 33%. There is a more substantial range for the traditional [jø:] variant in the young adult age group ranging from 0 to 80% of instances. Speaker 7 and 11 stand out in this group with the lowest and the highest number of traditional instances, where speaker 11 raise the group average substantially. Speakers 8-10 show little variation, with a difference of 10 percentage points overall. The older age group shows a higher number of instances for the traditional [jø:] variable, ranging from 20 to 79%. Speaker 12 stands out in the older group with the lowest number of traditional realisations. Speakers 13–17 show a consistently higher usage of the traditional variant, with an overall variation of 29 percentage points.

The data from figure 5.7 indicates that the traditional variant is still used by most people to some extent. The new [iə] variant is used in 67–93% of instances in the adolescent age group, indicating an overall high usage. In the young adult age group, the instances of the new [iə] variant ranges from 20 to 100%, again speakers 7 and 11 stand out as mentioned above. In the older age group, the use of the new [iə] variant ranges from 21 to 80% of instances. For this variable, 5 extra tokens from the sentences were added to the total for speakers 1, 3, 4, 5, 7, and 8. All instances belonged to the new

variant except two, which belonged to the traditional variant. After the tokens were added, speakers 1, 5 and 7 still have less than 10 tokens for NEAR in total. Figure 5.8 below shows the distribution of the NEAR variants according to age and gender.

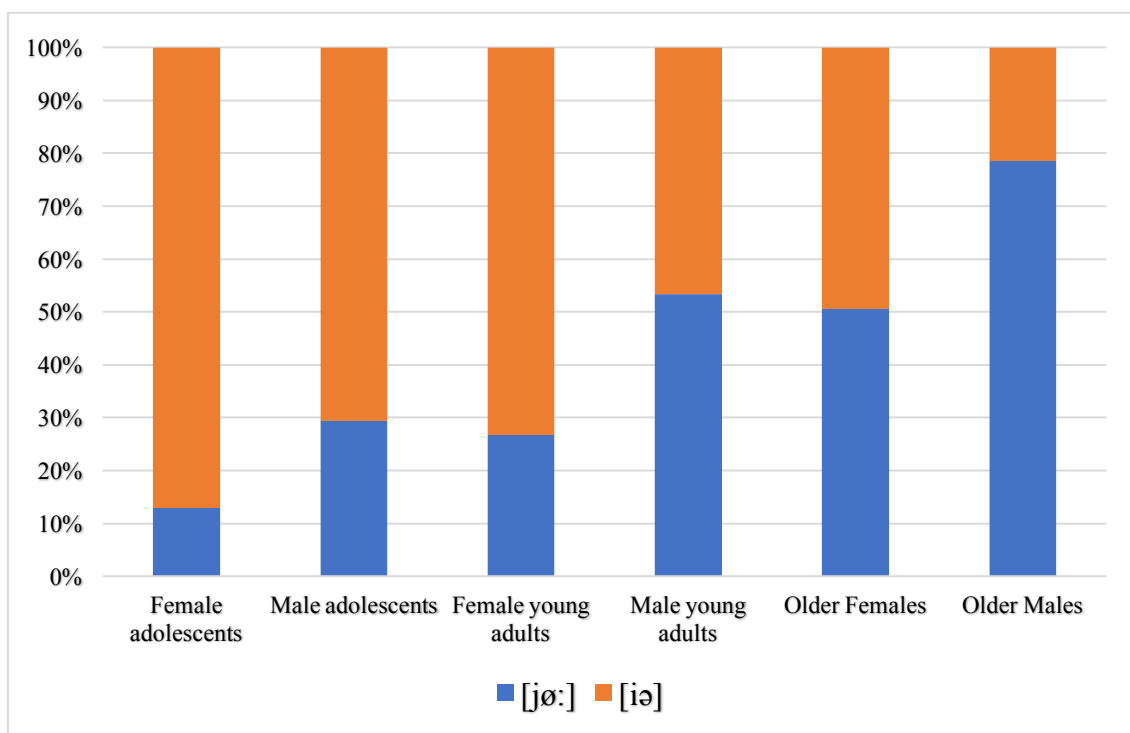


Figure 5.8 NEAR: age and gender differences

The results in figure 5.8 support Hudson's sex/prestige pattern (see 2.4.2), as the males retain more of the traditional [jø:] variant in all three age groups. The adolescent group shows a difference of 17 percentage points for the traditional [jø:] variant. The young adult group shows a difference of 27 percentage points while there is a 28 percentage point difference in the older age group. In all three age groups the males have the higher percentage of the traditional [jø:] variant, while the females have a higher usage of the new [iə] variant. In figure 5.9 below, the NEAR variants are presented according to age differences.

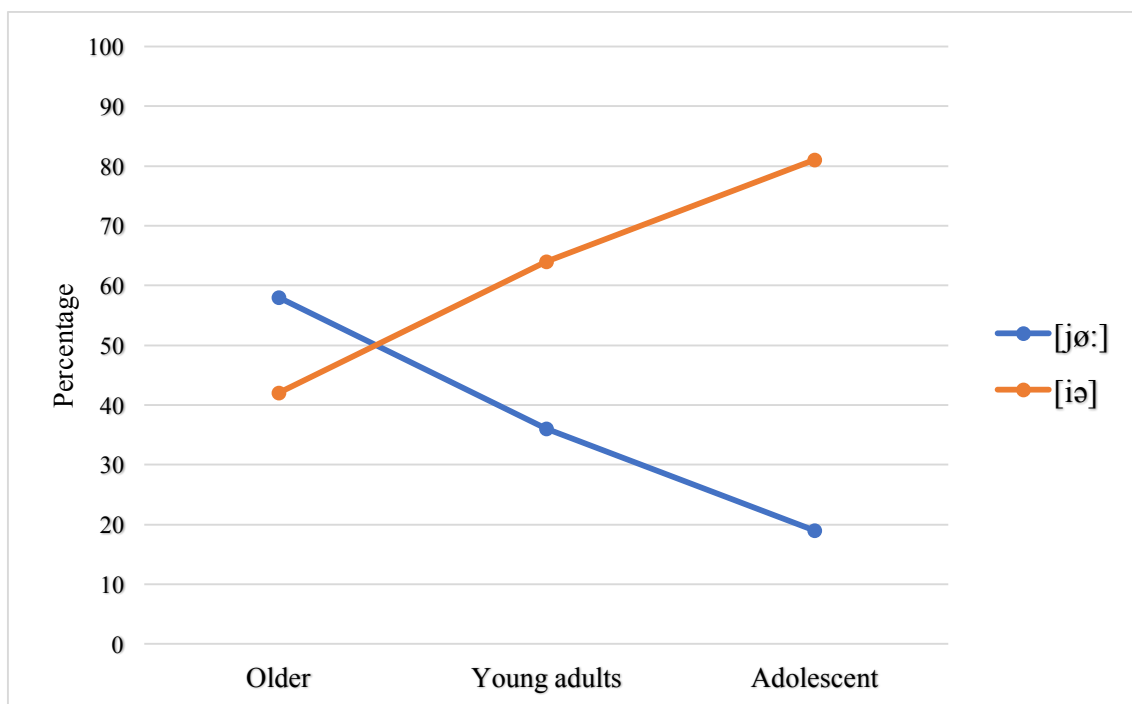


Figure 5.9 NEAR: age differences

This figure shows that the use of the traditional [jø:] variant has gradually declined from 58 to 19% of instances from the older to the adolescent age group. The new [iə] variant has been favoured more frequently over time from 42 to 81% of instances from the older to the younger group, indicating that the new [iə] variant is gradually replacing [jø:].

The overall findings for NEAR show a gradual decrease in the use of the traditional [jø:] variant from the older to the younger age groups, supporting Hypothesis 1. It is evident that this feature is still used, but that the new [iə] variant is being used more and more frequently. Previous research by Mees and Collins (1999) found that the traditional [jø:] variant is a non-stigmatised feature. When I was conducting the interviews for this study the informants were asked about stereotypical features of CE, and no one mentioned this feature. The change for this feature can be linked to the process of accent levelling in that the supra-regional new [iə] variant is taking over and the traditional [jø:] variant is losing ground (see further 6.3).

The results further support Hypothesis 2 regarding gender variation, as it is evident that the male speakers in all three age groups retain a notably higher percentage of the traditional [jø:] variant than the females. With a difference of 17, 27 and 28 percentage points between the genders. When considering Hypothesis 3, it is evident that

the younger age groups are moving towards the new SEE realisation of the NEAR variable. As this feature has not been investigated systematically in any previous research on the CE accent, I cannot compare my findings with anything.

However, the progression of this variable support the general pattern of change seen for the other variables. When analysing NEAR, I had to include all relevant tokens, therefore more than three instances of the same word have been included. This was because of the already limited set of words where [jɔ:] can occur. In table 5.4 below, is a list of the words which occurred in the interviews and the number of instances for [jɔ:] and [iə]. Naturally, *year*, *years* and *here* are the most frequently occurring words. It seems that the traditional realisation is mostly used in the same words *year* and *years*, with 86 instances of the traditional [jɔ:] variant and 77 instances of the new [iə] variant for both words overall. *Here*, however, is realised 49 times with the new [iə] variant and only 16 times with the [jɔ:] variant. This may suggest a further change, where the already limited set of words is further limited to the extent where [jɔ:] only occurs in *year* or *years*. A theory which may explain this development is *lexical diffusion*,⁴ where the use of the traditional [jɔ:] variant has been limited gradually, to the extent where it now only occurs in a few words, as well moving towards being limited further. As the number of tokens for the rest of the words are so low, this is not a conclusion I can fully make, but it might be an interesting point for further research.

Table 5.4 NEAR instances

Words:	[jɔ:]	[iə]
Year (s)	86	77
Here	16	49
Hear	3	6
Mere	0	5
Near	0	6
Nearly	1	0
Ears	0	2
Total	106	145

⁴ Lexical diffusion as described by Hudson is a process in which ‘a diachronic sound-change may spread gradually through the lexicon of a language, rather than affecting all the relevant words at the same time and to the same extent’ (1996:182–3).

5.4 PALM/START/BATH

The main focus in the study of the PALM/START/BATH variable is the change from the traditional fronted [a:] variant to the new supra-regional backed [ɑ:] variant. Table 5.5 below shows the total distribution of tokens for the PALM/START/BATH variable.

Table 5.5 PALM/START/BATH: total scores

Variants	N	%
[a:]	141	25
[ɑ:]	414	75
Total	555	100

This table shows that the new backed [ɑ:] variant is used in 75% of the total instances, while 25% is of the traditional fronted [a:] variant. Even though the traditional variant is heavily stigmatised in the speech of Cardiffians, it is still prevalent in the speech of some of the informants as seen in figure 5.10 below, which shows the individual percentage scores for the PALM/START/BATH variants.

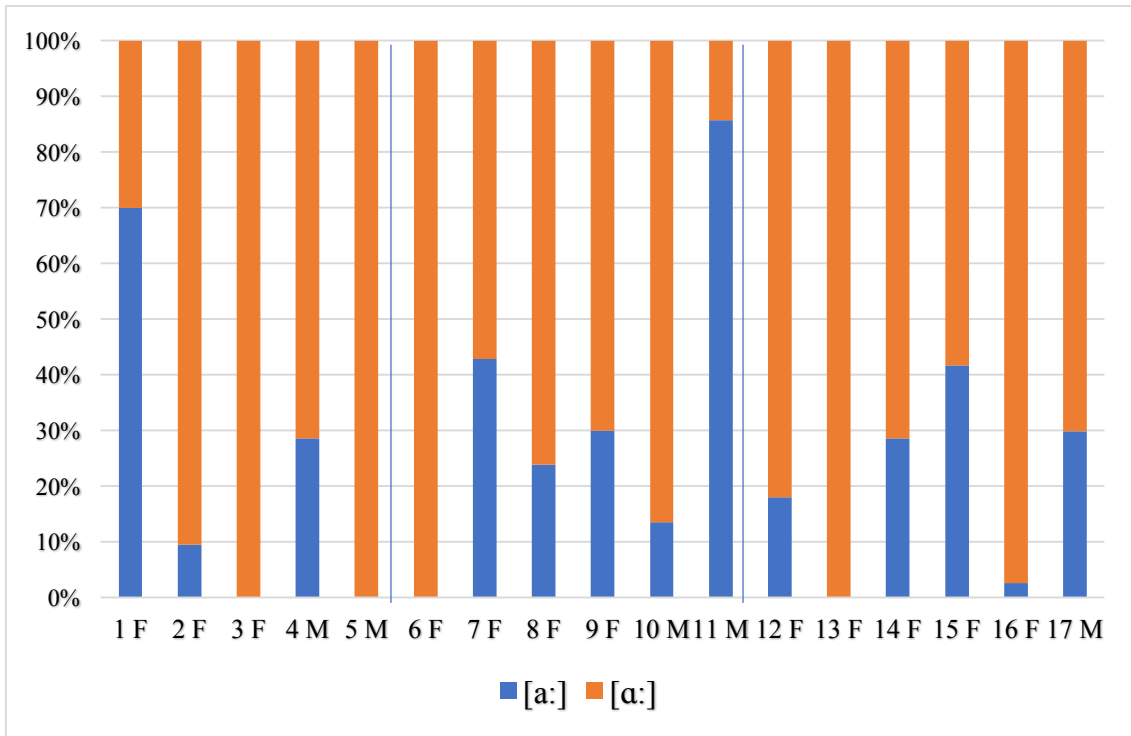


Figure 5.10 PALM/START/BATH: individual percentage scores

This figure shows that there is an overall tendency towards the use of the new backed [ɑ:] variant, except with speakers 1 and 11. In the adolescent age group, the backed [ɑ:] occurs in a range from 30 to 100% of instances. Speaker 1 stands out in this group with the highest number of the traditional variant, which is used in 70% of instances. A reason for this might be because the informant grew up in Ely, which is one of the main areas associated with the WC in Cardiff. During the interview, she mentioned that the use of [a:] is quite common in Ely. Speakers 3 and 5 do not use the traditional variant and speaker 2 uses it only in 9% of instances. Speaker 4 uses the traditional variant in 28% of instances, which is also substantial compared to the rest of the age group.

In the young adult age group, the new backed [ɑ:] variant occurs in a range from 14 to 100% of instances. Speaker 11 stands out in this group with 86% of instances belonging to the traditional [a:] variant. A reason for this can be found in the informant's interview, where he explained that his speech was influenced by his father growing up, as well as his roommate during his studies at university, who had a very stereotypical Cardiff accent. The informant said that his speech had been influenced by the roommate. The rest of the group show less variation, with a difference of 29 percentage points overall between speakers 7 and 10. Speaker 6 also stands out with no realisation of the traditional

variant. In the older age group, scores for the new backed [ɑ:] variant ranges from 58 to 100%. Speakers 13 and 16 stand out in this group with the lowest number of traditional realisations. The other speakers use the traditional variant to different degrees, with a variation of 24 percentage points.

An observation for the PALM/START/BATH variable, is that the individual variation seems unrelated to the stigmatisation of the traditional variant. This is because stigmatised variants typically show low scores overall, whereas the substantially different scores for speakers 1 and 11, as well as the rest of the inter-speaker variation, does not fit the pattern. Regardless of how stigmatised this variant is, it is still used in CE. For the PALM/START/BATH variable, 12 tokens were added from the sentences to the totals for speakers 5 and 7. 12 tokens were added to the backed [ɑ:] variant for speaker 5. For speaker 7, 4 tokens were added to the traditional [a:] variant and 8 for the new [ɑ:] variant. Figure 5.11 below shows the distribution of the PALM/START/BATH variants according to age and gender.

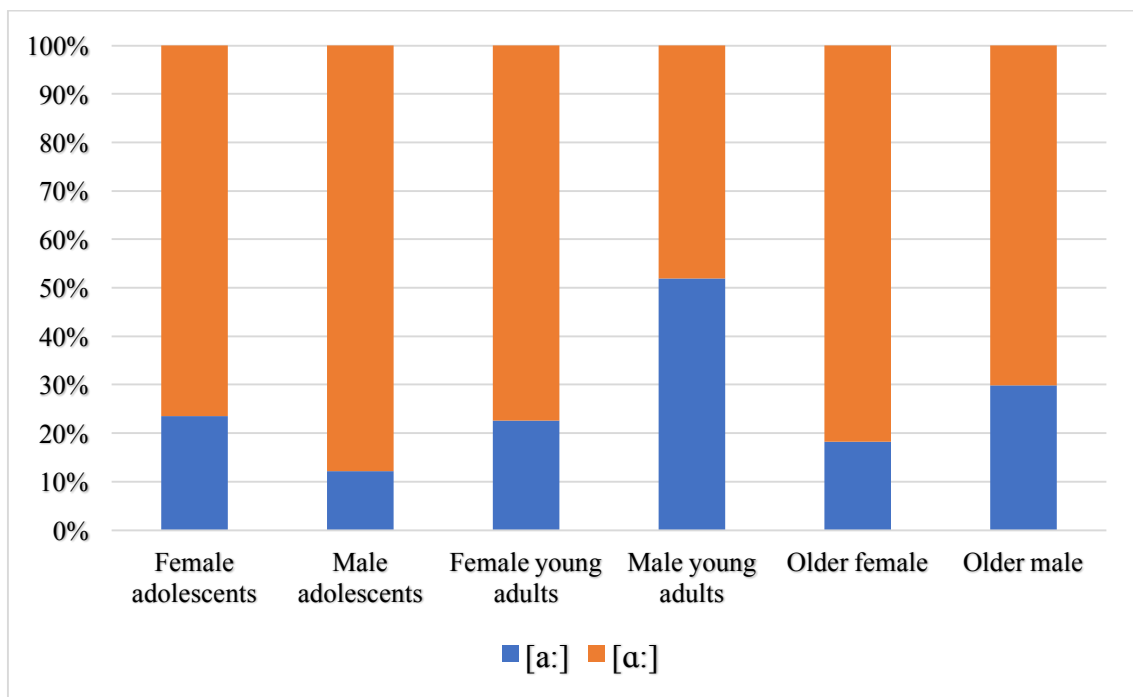


Figure 5.11 PALM/START/BATH: age and gender differences

This figure shows that the most substantial gender difference is found in the young adult age group, where the males use the traditional [a:] variant 29 percentage points more than the females. The high number of traditional realisations in the male young adult group is

because of speaker 11, who raises the group average substantially. In the older age group, there is a 12 percentage point difference where the males also use more of the traditional variant. Both the older and the young adult age groups are in line with Hudson’s sex/prestige pattern (see 2.4.2). In the adolescent age group on the other hand, the females use the traditional [a:] variant 12 percentage points more than the males. This difference is because of the high number of traditional realisations for speaker 1, who substantially raises the female group average. Overall, it is clear that the individual variation influences the group averages for the PALM/START/BATH variable. Figure 5.12 shows the distribution of the PALM/START/BATH variants according to age.

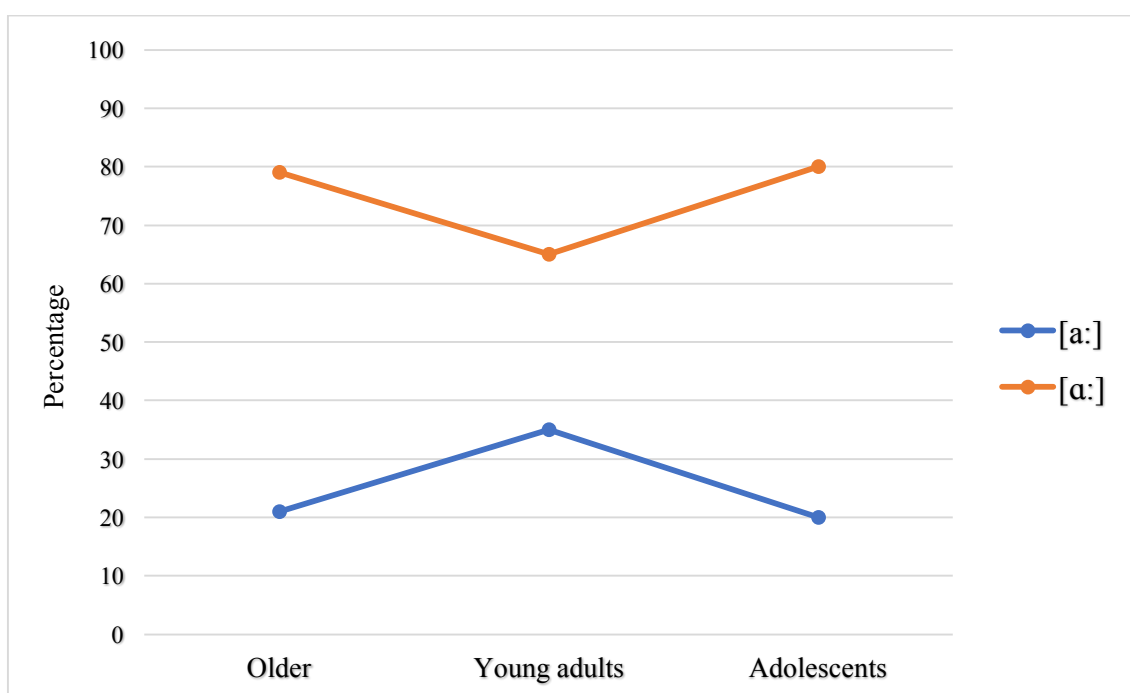


Figure 5.12 PALM/START/BATH: age differences

This figure shows that the [a:] score increases by 13 percentage points from the older to the young adult age group and then decreases by 15 percentage points from the latter to the adolescent age group. Again, this unexpected pattern is because of speakers 1 and 11, who use the traditional [a:] variant to a much higher degree than the other speakers. If I exclude the tokens from speakers 1 and 11, the results show a very different pattern, where there is a definite decrease in use for the traditional variant, going from 21% in the older age group to 20% in the young adult age group, and down to 6% for the adolescents.

These numbers are consistent with an expected change pattern, but they are only added as an interesting observation.

The overall findings for PALM/START/BATH show that the use of the traditional [a:] variant is staying steady. In relation to Hypothesis 1, the overall findings for PALM/START/BATH show no marked difference in the use of the traditional variant from the older to the adolescent age group, and a rise for the young adults. This means that there is no support for Hypothesis 1. However, without the scores for speakers 1 and 11, there would be a certain decrease.

When considering Hypothesis 2, there is a difference between genders in the young adult and older age groups consistent with Hudson's sex/prestige pattern (see 2.4.2), where the males use more of the traditional variant than the females. In the adolescent age group, the females have the highest number of the traditional [a:] variant, which is not in line with Hypothesis 2. The reason for the difference in the adolescent age group is, as discussed, because of the high number of traditional instances for speaker 1, who raises the female group average.

When considering Hypothesis 3, the overall scores show that the new [ɑ:] variant is replacing the traditional [a:] variant with 75% compared to 25% of the total instances, respectively. This change seems to have started some time ago, considering the low scores for the older age group. Osorno (2011) studied the vowel quality of TRAP and PALM, looking at the use of the fronted [a:] variant compared to the backed [ɑ:] variant in a real-time study of CE (see 2.5.2). Her findings showed high scores for the traditional [a:] variant in the WC, where the use decreases over time from 60% in the first interviews to 30% when the informants were older. This movement towards lower scores are supported by my findings, which show that my informants are further along in the process of change for the traditional variant, with the two exceptions.

5.5 GOAT

The main focus in the study of the GOAT vowel was initially centred on the transition from monophthong to diphthong, which turned out to be completed for the present informants. Therefore, I shifted my focus to look at the vowel quality in the GOAT lexical set, as there seems to be a movement away from the traditional [oʊ] variant towards the new [əʊ] variant. Table 5.6 below shows the total distribution of tokens for the GOAT variants.

Table 5.6 GOAT: total scores

Variants	N	%
[oʊ]	396	81
[əʊ]	93	19
Total	489	100

This table shows that the traditional [oʊ] variant is favoured with 81% of instances while 19% belong to the new [əʊ] variant, indicating that the process of change is relatively new. Figure 5.13 shows the inter-speaker variation for the GOAT variants.

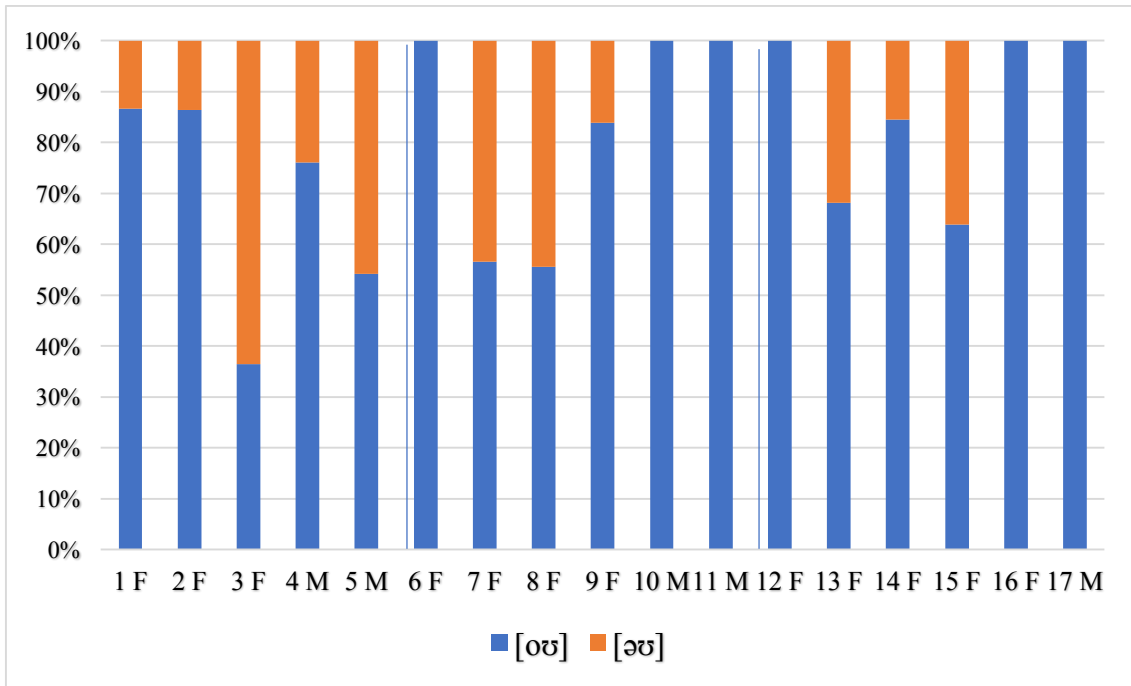


Figure 5.13 GOAT: individual percentage scores

This figure shows that the traditional [oʊ] variant is used substantially more than the new [əʊ] variant. Speakers 5, 10, 11, 12, 16 and 17 have no instances of the new variant. All informants except for speaker 3 use the traditional [oʊ] variant in over 50% of instances. In the adolescent age group the usage of the traditional [oʊ] variant ranges from 36 to 87%. Speakers 3 and 5 stand out with the highest usage of the new [əʊ] variant, with 46 and 64%, respectively. For the young adults, the usage of the traditional [oʊ] variant ranges from 56 to 100% of instances. Speakers 7 and 8 have the highest scores of the new [əʊ] variant with 43 and 44% of instances. In the older age group, the use of the traditional variant ranges from 64 to 100%. The new [əʊ] variant in the older age group can only be found for speakers 13, 14 and 15, with a range from 16 to 36% of instances. For the GOAT variable, speakers 5 and 7 had 13 tokens each added from the sentences, which distributed themselves evenly across the two variants. Figure 5.14 shows the distribution of variants for the GOAT variable according to age and gender.

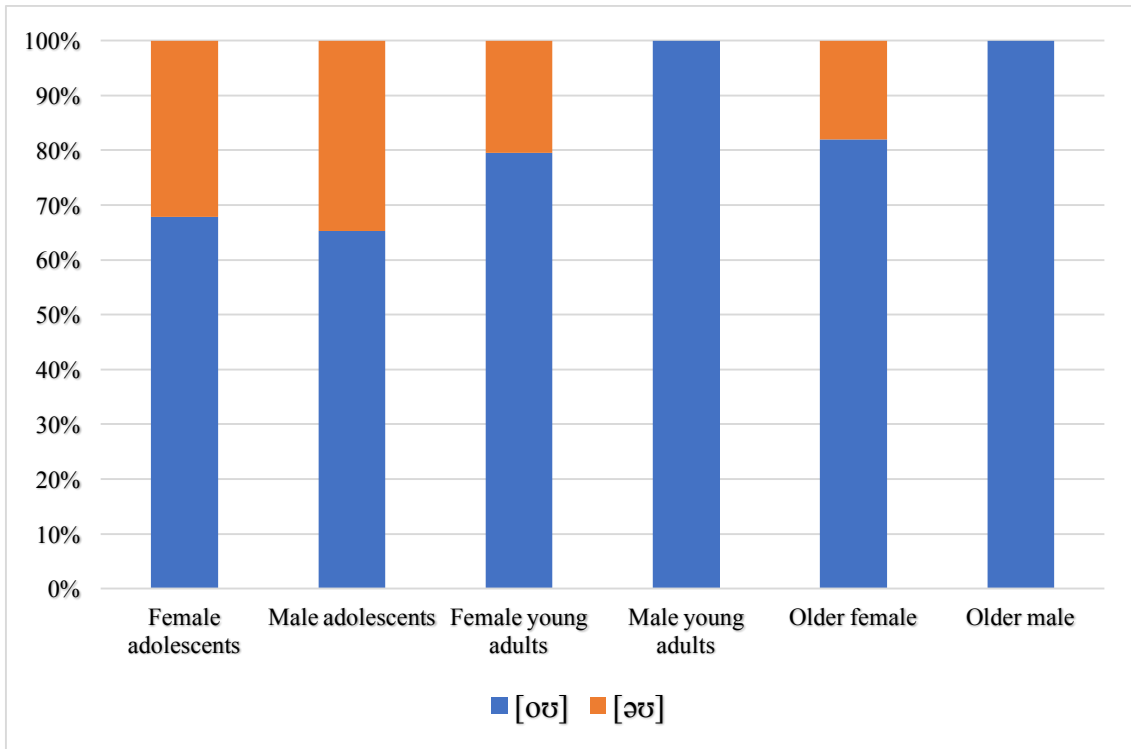


Figure 5.14 GOAT: age and gender differences

This figure shows a similar pattern of gender differences as the traditional [a:] variant in figure 5.11 and the traditional tap [ɾ] for /t/ variant in figure 5.5. This consists of the males in the older and young adult age groups using the traditional [oʊ] variant in 100% of instances, while the use in the female groups ranges from 82 to 79%. These findings are in line with Hudson's sex/prestige pattern (see 2.4.2). In the adolescent age group, the females use the traditional [oʊ] variant 3 percentage points more than the males. This does not support the sex/prestige pattern, though it does reflect the pattern found for the adolescent informants regarding the [a:] and tap [ɾ] for /t/ variants. This difference can be traced to the individual scores for speakers 1 and 2. They have the highest scores for the traditional [oʊ] variant, while speaker 3 has the lowest scores. These scores affect the average in the female group, which shows a different gender pattern than the two older age groups. The main observation regarding gender variation is that the females are clearly leading the change towards the use of the new [əʊ] variant and that the different pattern in the adolescent age group shows that the change is new and rapid. Figure 5.15 shows the distribution of the GOAT variable according to age.

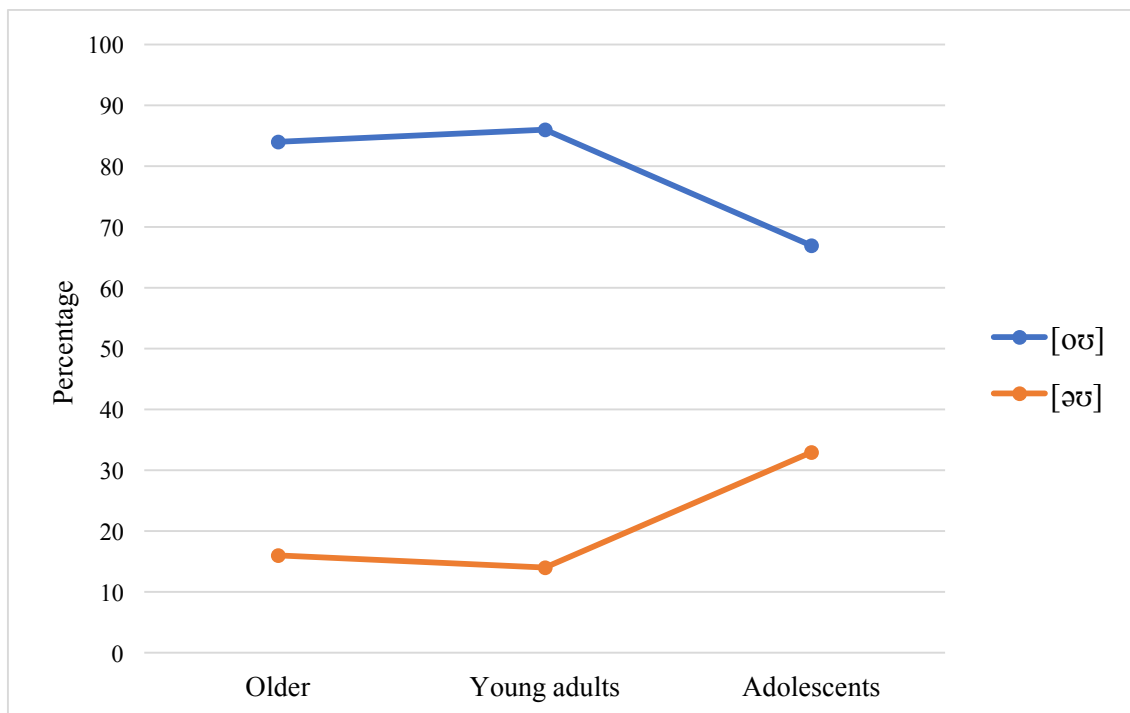


Figure 5.15 GOAT: age differences

This figure shows a slight increase of 2 percentage points between the older and the young adult group for the traditional [oʊ] variant. From the latter to the adolescent age group, the variant declines by 19 percentage points, indicating that the variable is in the beginning stages of change. This consists of a movement away from the traditional [oʊ] variant towards the new supra-regional [əʊ] variant. The main observation from figure 5.16 is that the variants were stable from the older to the young adult age group, which is consistent with an early stage in a process of change. That this is a new change is indicated by the rapid increase in the use of the new [əʊ] variant from the young adult to the adolescent age group.

The overall findings for GOAT show that in the adolescent age group the use of the traditional [oʊ] variant is decreasing while the new [əʊ] variant is increasing, with a score of 33%. When considering Hypothesis 1, the change found for GOAT supports the expected pattern, where the traditional feature is markedly less used in the adolescent age group, compared to the two older age groups. Looking at Hypothesis 2, the gender differences in the older and young adult age groups are in line with the expected pattern of change, where the males use more realisations of the traditional [oʊ] variant than the females. This variant clearly shows that the females started the change. In the adolescent age group however, there is only a difference of 3 percentage points, where the females

use the traditional [oʊ] variant more than the males. Therefore, the results show that the adolescent age group does not support the expected pattern of gender variation. The findings support Hypothesis 3, where the use of the new supra-regional [əʊ] variant is gradually increasing in favour of the traditional [oʊ] variant. No previous systematic research has been conducted on the vowel quality in the GOAT lexical set in CE. This means that my findings regarding the new [əʊ] variant is recorded for the first time in the present investigation, making this an interesting new observation in the study of CE.

5.6 Summary

The aim of this chapter has been to identify changes based on individual scores, as well as patterns of change according to the social factors age and gender. The results show that most informants use both the traditional and new variants to some extent. However, in some cases like (r) and (t), instances of the traditional variants could be viewed as random occurrences in the two youngest age groups. In this chapter, the overall perception is that in most cases the variables show an expected pattern of change. This consists of a gradual shift from traditional variants to new supra-regional variants. The variables are at different stages in the process of change. In this chapter, the findings for each variable has been explained and discussed. The next chapter will include a more general discussion of the results found in this chapter, in light of theories on linguistic variation and change.

6: DISCUSSION

This chapter aims to bring together the findings presented and discussed in chapter 5. I will discuss the variables in relation to theories of language variation and change in order to identify general patterns and to which extent my variables reflect these patterns. I also aim to link these theories and my findings back to the research questions and hypotheses presented in chapter 1.

6.1 Gender

Gender as a social factor is used in most sociolinguistic studies of variation and change and according to Hudson (1996:193–9), there is a pattern which has become evident by the results from many previous studies. This pattern consists of females using more prestigious variants than males. Therefore, the expected pattern of change in the present study would be that the males use more of the traditional variants than the females, while the latter are more likely to use the new variants. One of the main aspects of the present study has been to look at the linguistic variables in relation to gender. As discussed in chapter 5, it is evident that there is a lot of variation between individuals for all variables. It is possible to see certain general patterns, even though some speakers stand out with either very high or very low scores for some variants. This affects the whole group average, and when this happens it has been discussed for each variable in chapter 4. It is important to keep in mind that in the older age group there is only one male informant and that I therefore cannot link his scores to the general population. In the other two age groups, there are two males in each group, which allows for a comparison and therefore generalisation.

There is no strong stigma associated with the variants for the (r) variable, but they have different values related to the geographical spread. The use of the traditional tap [ɾ] variant is no longer found in the adolescent age group, other than a few random occurrences. Therefore, there is no gender variation for this age group. The young adult age group, which represents the second stage of a change in progress does show an

expected difference between genders. This consists of the male informants using the traditional variant more than the females, while the latter are leading the change towards the new approximant [ɹ] realisation. The older age group shows that the male informant uses the traditional variant slightly less than the females, which does not support the expected pattern of gender variation.

The (t) variable shows a different distribution, where the males in the two older age groups reflect the expected pattern of gender variation in relation to the traditional tap [ɾ] variant. The females use the tap variant 12 and 15 percentage points less than the males. The males in the young adult and adolescent age groups seem to be leading the change towards the new glottal stop [ʔ] variant, which does not support the expected pattern of gender variation. The plosive [t] variant does reflect the pattern due to its status as standard in CE. For this variant, the females in all three age groups have the highest scores. This indicates that the plosive is the variant with the highest social prestige in CE since the females use it in 48% of instances overall. This may be why the females use less of the glottal stop variant than the males.

The change in the quality of the NEAR vowel shows that the findings are in line with the expected pattern of gender variation. The females lead the change towards the new [iə] variant in all three age groups, while the males retain more of the traditional [jɔ:] variant. There is no social stigma associated with the traditional [jɔ:] variant, and no informants mentioned this variant when asked about stereotypical features in Cardiff. This may indicate that the change for this variable is happening on a subconscious level.

For the PALM/START/BATH variable, the gender variation is less clear, this may be because of extreme individual variation, as the use of the traditional [a:] variant ranges from 0-86%. In the older and young adult age groups, the males retain more of the traditional fronted [a:] variant, while the females are leading the change towards the new backed [ɑ:] variant. In the adolescent age group the opposite is happening, though this may be due to the high number of traditional realisations recorded for the female speaker 1, raising the group average substantially. If we disregard the results from speaker 1, the adolescent age group would also support the expected pattern of gender variation.

The results for the GOAT variable show that the change towards the new [əʊ] is a recent one, and that there are substantial gender differences in the older and young adult age groups. The males have no occurrences of the new [əʊ] variant, while the females are

leading the change towards the use of it, supporting the expected pattern. The adolescent age group again shows only a slight difference of 3 percentage points between the genders, where the females use the traditional [oʊ] variant more than the males, which does not support the expected pattern.

When considering Hypothesis 2, there is a lot of variation between genders, especially in the young adult and older age groups. The differences between individual speakers are substantial in all three age groups for almost all variables. Hypothesis 2 predicted that the female informants would use more of the new variants than the males, and research question 2 aimed to find out whether there are systematic differences between the genders. My results show that the females do not lead the changes in all three age groups, though the overall tendencies in the young adult and older age groups support the hypothesis. The (r) variable in the older age group does not support the hypothesis, as the male informant uses more of the new supra-regional variant than the females, while keeping in mind that his scores are not representative. In the adolescent age group, only the change for the NEAR variable supports Hypothesis 2. For the other variables, the adolescent males seem to be leading the change toward the new variants, especially when looking at glottaling [ʔ] and the fronted [a:] variants. The same can be said for GOAT, though the difference is slight in comparison. The results for the (r) variable in the adolescent age group show no variation, which does not support the expected pattern of gender variation, while the young adult and older age groups do. This answers research question 3 in relation to gender, as the variation does not in all cases reflect general patterns of change in the adolescent age group, while the young adult and older age groups do, except for the (r) variable in the older age group. This shows that in the young adult and older age groups, there are systematic differences between the male and female informants for nearly all variables, while the adolescent age group shows a different pattern by not conforming entirely to the expected pattern of change.

6.2 Age

In an apparent-time study looking at three different age groups, Chambers (2002) identifies three different stages of change. In the older generation, there is an ‘initial stasis’ followed by a ‘rapid rise’ in the middle age group which is ‘trailing off’ in the

youngest age group (Chambers 2002:361). Chambers goes on to say that not all stages necessarily need to be captured for an apparent-time study to be successful (see 2.2). In the present study, the three stages are accounted for, though the gap between the young adult and older age group is substantial. According to my findings, this does not seem to be a problem as the groups represent all three stages of change for some of the variables.

The three age groups in the present study consists of the older age group born between 1947 and 1961, the young adult age group born between 1988 and 1991, and the adolescent age group born between 1998 and 2000. The older informants all have the same educational background, which is the equivalent of GCSE levels or lower. None of the older informants have lived anywhere other than Cardiff and the surrounding areas. The informants in the young adult age group have a more varied educational background and some have lived in other cities during their studies. This generation has had much better access to higher education than the older age group and this has resulted in some social mobility. They also grew up while social media and the internet was introduced more and more into the general population, which may also have influenced the way that they speak. In the adolescent age group, all informants were considering going on to higher education and has grown up with social media and the internet as a constant. In table 6.1 we can see that the adolescent age group clearly favours the new variants for all variables, though to a varying degree, based on the different stages of change.

Table 6.1 Percentage of use for the new variants.

New variants	Older	Young adult	Adolescent
[ɹ]	63 %	92 %	98 %
[ʔ]	8 %	35 %	56 %
[iə]	42 %	64 %	81 %
[ɑ:]	79 %	65%	80 %
[əʊ]	16 %	14 %	33 %

The variables which are furthest along in the process of change is (r), NEAR and PALM/START/BATH. For these three variables, it is clear that the new variants have been present in the CE accent for quite some time, due to the high scores in the older age group, ranging from an average of 42 to 79%. In the young adult age group the change is substantial for both (r) and NEAR, with 64 and 96% scores for [ɹ] and [iə], though for

PALM/START/BATH there is a decrease in the use of the new variant in the young adult age group to 65% of instances. This difference is due to the high number of traditional realisations by speaker 11 particularly, as discussed in 5.4 and may therefore not reflect the actual pattern of change. In 6.1, the adolescent age group uses the new variants in 80–98% of instances for these three variables. In the case of the approximant, the high number of instances show that the traditional tap [ɾ] variant has now completely disappeared except for a few random occurrences.

The glottal stop [ʔ] and [əʊ] variants are not as far along in the process of change as the other three variants. The results for t-glottaling show that [ʔ] is fairly recent in the speech of the older informants with a score of only 8%. The usage in the young adult age group rises to 35%, while for the adolescents, the score has increased to 56%. This is a substantial change which shows that the glottal stop [ʔ] now stands for over 50% of intervocalic /t/ realisations in the speech of CE adolescents, replacing both the tap [ɾ] and gradually the plosive [t] variants. The pattern of change towards the [əʊ] variant shows a slower progression from 16% of instances in the older age group. There is a slight decrease in the young adult age group with 14% of instances, which indicate that the use of this variant has remained relatively stable in the span between the older and the young adult age groups. For the adolescents, there is a substantial rise in usage with 33% of instances belonging to the new variant. What we see here might be the ‘rapid rise’ stage as described by Chambers (2002:361). The glottal stop [ʔ] and [əʊ] variants can therefore be considered to be in the second stage of change while the three other variants are in the third stage of change, as defined by Chambers.

From these results, it is evident that there is a definite change from traditional to new variants in the CE accent and that the variants are at different stages of change, as discussed above. These findings support Hypothesis 1, in that all the traditional variants have either become recessive or is showing a substantial decrease in use from the two older age groups to the adolescent age group, except for PALM/START/BATH. This in turn answers research question 1, in that all variables show a movement from the use of traditional towards new variants from the two older age groups to the adolescents. This corresponds with the results I expected to find, based on previous studies of sociolinguistic variation and change. Considering research question 3, when the variables are looked at in regards to the social factor age, all variables reflect general patterns of

change except for the PALM/START/BATH variable where the young adult age group shows a rise in the use of the traditional variant from the older age group and otherwise remains stable.

6.3 Accent levelling

Accent levelling as discussed in 2.3 is a process in which accents are becoming more similar by adopting the same features. This process is a big part in spreading new features from large urban centres, particularly London. In a levelling situation, marked features tend to disappear. As described by Kerswill (2003), a marked feature usually refers to one that is local, traditional or socially stigmatised. Vowel features usually spread regionally, while consonant features can spread much further. In this process, CE seems to be influenced by features from SEE.

Both variants of /r/ have been around for a long time and as discussed in 3.1, it is unclear when the approximant [ɹ] entered the speech of Cardiffians. However, the (r) variable shows that there is a movement away from the marked traditional variant which has resulted in the approximant replacing the tap [ɾ] variant completely. These results are in line with the process of accent levelling, though when this process started, where it came from and how it entered CE is unclear.

T-glottaling is according to Mees and Collins (1999) a relatively new feature, which at the time of their study had been introduced into the speech of the WC to different degrees. The main innovators of t-glottaling in Cardiff is the MC, as the feature is viewed as prestigious in CE. As presented in 2.5.2, they found that ambitious people tended to use t-glottaling to a much higher degree than people who remained in the same social situation all their lives. The present study shows that since the results presented by Mees and Collins in 1999, there have been substantial changes in the distribution of glottaling in Cardiff, with high [?] scores in the adolescent and young adult age groups. The reason why the feature was introduced into the speech of MC Cardiffians in the first place was, according to Mees and Collins (1999), that they wanted to identify themselves more with the speech of London, rather than the traditional Cardiff accent, symbolised by the tap [ɾ]. Therefore, glottaling fits into an expected pattern of change, because the feature

spread from SEE into the speech of MC Cardiffians and from there into the speech of the WC.

With regard to the quality of the NEAR vowel, the new [iə] variant can be associated with SEE. It is unclear when the new variant entered CE due to the limited lexical distribution of the traditional [jɔ:] variant. According to Wells (1982:381), the traditional variant could be found in a wider set of contexts, including the BEER lexical set. It is evident, that when considering the limited context in which [jɔ:] can occur (Mees & Collins 1999), there is a definite trend moving away from the traditional realisation towards the new [iə] variant which is used in SEE. This feature can therefore be considered as an outcome due to the process of accent levelling.

The PALM/START/BATH variable is likely the result of accent levelling due to the stigmatised nature of the traditional [a:] variant. Osorno (2011) found that the MC is leading the change towards the new backed [ɑ:] variant, though in her results the traditional [a:] variant had high scores in the WC. The individual scores in the present study varies greatly. The traditional [a:] is used according to Penhallurick (2008) in other parts of Wales, where its use is just as unclear, where the realisations varies between [a:] and [ɑ:] in the lexical sets PALM, START and BATH. This variation is found in Cardiff as well and can be attributed to the influence of the MC, who uses the backed [ɑ:] variant in over 80% of instances according to Osorno (2011). It is possible that the SEE feature first influenced the speech of the MC, where the stigmatisation started to influence the speech of the WC, who now uses the backed [ɑ:] variant in the majority of instances in the present study, except for speakers 1 and 11. Therefore, the change towards the new backed [ɑ:] variant could be linked to the influence of accent levelling.

The change in the quality of the GOAT vowel seems to be a recent one due to the high number of traditional realisations, though the results indicate a clear pattern showing that the use of the new [əʊ] variant is slowly increasing. The [əʊ] realisation is a supra-regional feature coming from SEE, which is being introduced into the speech of WC Cardiffians. I cannot be sure whether it is the MC, or the WC, who are leading the change towards the new GOAT variant. The reason for this is that all previous studies were concerned with the change from monophthong to diphthong and not vowel quality, as well as being a very recent change. Nevertheless, the change for this feature is likely the result of accent levelling due to the influence of SEE.

It is evident that marked CE variants are disappearing, while new variants are increasingly becoming the preferred realisation. In this way, CE is experiencing the same change as most other urban centres outside of London, which consists of accents becoming more and more alike. When considering Hypothesis 3 and research question 4, which regards a change from traditional to supra-regional variants, all variables show results consistent with an increase in the use of supra-regional variants associated with SEE in the adolescent age group, and a decline in the use of traditional variants. The PALM/START/BATH variable shows a slightly different pattern here as well, where there is no marked difference from the older to the adolescent age group and an increase of 14 percentage points from the older to the young adult age group. Again, this unusual pattern is due to extensive individual variation, where speakers 1 and 11 raise the group average for the traditional [a:] variant in the young adult and adolescent age groups. When answering research question 3, all variables except PALM/START/BATH reflect the expected change when considering the process of accent levelling.

6.4 Other phonetic observations

The observations made here are of features that have not been quantified, but rather observed in the process of analysing the five variables for the present study. A rather interesting observation that only occurred once for speaker 1, was her realisation of the word *café* which she realised with a long /i:/ as in: ['kæfi:]. A further observation relates to TH-fronting, a feature which is associated with accent levelling and should therefore, according to patterns in nearby urban centres have entered the speech of CE. When conducting the auditory analysis, I did hear some instances of it, especially in the speech of the adolescents. R-fronting is another such feature, though this was not something I heard in the speech of my informants. Breaking before dark [ɫ] (as in: *school, meal, feel*) is also a feature traditionally associated with Cardiff English, though it did not occur in any of the interviews, indicating that it may not be used in CE anymore.

7: CONCLUSION

Chapter 6 aimed to further discuss the findings presented and discussed in chapter 5 in relation to theories of variation and change, which are discussed in chapter 2. This chapter concludes the discussions by outlining the main findings for the phonological variables. The main conclusion from chapter 5 and 6 is that nearly all of the variables are in line with established patterns of variation and change, except for a few instances. Below is a list of concluding remarks based on the research questions and hypotheses which are presented in 1.2.

1. The pattern of change from the perspective of age for (r), (t), NEAR and GOAT show a steady decrease in the use of traditional variants, while PALM/START/BATH differs, as the use of the traditional variant has remained relatively stable.
2. In both the young adult and older age groups, the males typically use more of the traditional variants than the females for all variables except (r) in the older age group. The reverse is found for the adolescent age group, where the males are leading the change towards the supra-regional variants [ʔ], [ɑ:] and [əʊ]. There is no gender variation for (r) in the adolescent age group, while for NEAR, the females are leading the change toward the new supra-regional variant [iə].
3. There is considerable individual variation between speakers. In some instances, the score for one individual substantially changes the group average, as with speaker 1 in the adolescent age group and speaker 11 in the young adult age group, for the traditional fronted [a:] variant. The adolescent speakers typically use more of the supra-regional features than the young adults. The new supra-regional variants dominate for all variables except GOAT, where the change is fairly recent as well as the use of t-glottaling, which is only dominant for the adolescents.

4. The findings show that there are changes in progress for all variables, except for the PALM/START/BATH variable. These changes consist of SEE features being used to an increased degree in CE. The main process involved in these changes can be traced to accent levelling.
5. The variants (r), NEAR and PALM/START/BATH are furthest along in the process of change where the new supra-regional variants are used in 80, 58 and 75 percent of instances, respectively. (t) and GOAT still show a high number of traditional or standard realisations, though there is a distinct gradual decrease which may be leading towards the replacement of the traditional variants with the new supra-regional variants.

These points show that Hypothesis 1 and 3 regarding changes across age groups, and the movement towards new supra-regional variants is confirmed for most variables. The findings do not confirm Hypothesis 2, in relation to gender in the adolescent age group for all variables. There is some variation in the results, but overall, the general tendencies in the findings support the expected change patterns associated with phonological variation and change. The informants in the older age group uses more of the traditional variants for all variables except PALM/START/BATH, which is consistent with the expectation that the older generation represents an earlier stage in the process of change. The young adult age group typically use the traditional variants less than the older informants, though the substantial age gap between the two groups indicates that the changes have been slow. From the young adult to the adolescent age group, the change has been more rapid due to the much shorter age gap. This seems to be the case for all variables except the GOAT vowel, for which the change is more recent. The findings for (r) were the most surprising in light of recent studies, which found very high scores for the traditional tap [ɾ] variant. My findings show that the tap [ɾ] variant is only realised in 113 out of 572 tokens, nearly all of them in the older age group. (t) showed a very high increase for the glottal stop [ʔ] variant, to the extent where it is realised from 50 to over 80% of instances, even over the standard variant. This indicates a change towards the use of [ʔ] in most intervocalic realisations in the speech of adolescents. The result for [ʔ], is strongly associated with the accent levelling change which is happening in large parts of

the UK, due to an influence from London. NEAR, while showing a similar decline in the use of the traditional [jɔ:] variant as the other variables, also shows a pattern indicating that [jɔ:], which is already limited to a small set of words, is changing in a direction indicating lexical diffusion. This means that the variant eventually might only occur in the word *year*. Because I have few tokens for the other words, however, I am unable to firmly draw this conclusion, but it is an interesting point regardless. The results for PALM/START/BATH show an uneven distribution of variants with significant inter-speaker variation affecting the group averages. The inter-speaker variation ranges by 42 percentage points in the older age group, 86 percentage points in the young adult age group and 69 percentage points in the adolescent age group. The GOAT variable shows an expected pattern of change in relation to age as well as gender, except for the adolescent age group, which is consistent with the patterns found for the other variables. GOAT is not as far along in the process of change as the other variables, although the use of the new [əʊ] variant is rising steadily according to my results.

The findings for all the linguistic variables show that there is an active change from traditional variants to new, supra-regional variants and that the traditional tap [ɾ] for both /r/ and /r/ is no longer used in the speech of CE adolescents, except for a few random occurrences. The traditional [a:] and [jɔ:] are not used to any substantial degree in the speech of adolescent Cardiffians. The change in the traditional [oʊ] has only recently begun and the use of the glottal stop [ʔ] is rising rapidly. The main observation is that traditional variants are being replaced by new, supra-regional variants associated with SEE and that CE is subject to a process of anglicisation.

7.1 Contributions

While conducting this study, I have been able to fill some gaps in the investigation of the CE accent. The present study is the first variation and change study since 1983, which includes male informants. This provides a valuable new insight into the variation between genders. A further contribution is by providing recent data from the younger generations, which again has not been done since 1983. This study is also the first to focus on the vowel quality of the GOAT lexical set and thereby discovering the recent change towards the use of [əʊ] in CE. I have also been able to connect the overall changes for the variables

to the process of accent levelling, which confirms the spread of SEE features to the speech of Cardiffians.

7.2 Shortcomings

Because of limited time and resources, as well as unpredictable factors, there are bound to be certain weaknesses and shortcomings. Initially, this study aimed to collect data from an equal number of males and females from two different age groups. Since the data collection process is generally unpredictable, this proved difficult. Therefore, an equal gender divide was not possible. However, interesting patterns of change were found regardless. If it had been possible, I would also have limited the study to one or two areas of Cardiff, to get a clearer picture of the variation within a certain area, for example Rumney and Ely, or maybe compare one of the areas associated with the WC with one associated with the MC, instead of the widespread area looked at in the present study. I would also have wanted to include a social class divide, though it proved to be beyond the scope of the present study. I would also have liked to be able to interview the adolescent informants for the same period of time as the other informants.

7.3 Further Research

The variables studied in this thesis would benefit from larger scale studies. The NEAR vowel in particular, in order to establish the extent the lexical diffusion has limited the use of the traditional [jø:] variant. Studies into the change in vowel quality for other lexical sets may shed some light on a lot of changes that are happening. Further research on the (r) variable might clarify the substantial differences between my findings and that of Mees and Osorno (2015). I also think that studies based on areas in Cardiff, as opposed to Cardiff as a whole would be interesting. This is due to the substantial inter-speaker variation found for some variables in the present investigation. Therefore, I think that a study looking at inter-city variation would shed some light on where the introduction of new features has been more successful, as well as where traditional features are retained

to a higher degree. Many CE features would benefit from further studies as so few have been studied systematically before.

APPENDIX A

Sentences

I'm going to the Cardiff Arm's Park later.

My favourite time of the year is summer.

I am from Wales, so I am Welsh.

I was putting butter on a large slice of bread.

Did you see his face?

You look so beautiful!

Hold out your palm like that.

Whatever you say...

How could you not hear that?

Please tell me you got that on tape.

It was much hotter today.

How do you feel, are you getting a little better?

Could I have a pint of Brain's Dark?

Go on then, throw him the bone.

Have you ever been to Cardiff before?

Are you going to tell us a joke?

Have you written the letter yet?

I can't believe he's that old.

She was a near relation.

The project I was starting turned out to be a dead end.

Why is there a goat outside your house?

I'm not starting, you are.

Did he have his last meal?

I was going to do everything this year.

I just got told this really lame horror story.

Could you wipe the soap off the floor?

Why are you biting my head off, I'm old enough!

Do you feel calm enough? Are you cold?

Could you wash a load of clothes please?

It was a mere accident, its already fading from my mind.

APPENDIX B

Raw numbers for all speakers and variants

Adolescents:

Informant	(r)		(t)			NEAR		PALM/START /BATH	[ɑ:]	GOAT	
	[r]	[ɹ]	[r]	[ʔ]	[t]	[jə:]	[iə]	[a:]		[oʊ]	[əʊ]
1	1	20	1	1	8	2	5	14	6	13	2
2	0	32	1	5	7	1	13	2	19	19	3
3	0	14	0	10	2	1	9	0	27	8	14
4	0	35	0	12	2	3	8	4	10	19	6
5	1	13	0	9	8	2	4	0	19	13	11
Total	2	114	2	37	27	9	39	20	81	72	36

Young adults:

Informant	(r)		(t)			NEAR		PALM/START /BATH	[ɑ:]	GOAT	
	[r]	[ɹ]	[r]	[ʔ]	[t]	[jə:]	[iə]	[a:]		[oʊ]	[əʊ]
6	1	34	3	17	15	11	12	0	33	40	0
7	0	20	6	1	7	0	9	9	12	13	10
8	0	22	1	0	14	2	10	5	16	10	8
9	0	45	3	10	22	3	13	12	28	26	5
10	0	34	5	22	1	4	11	5	32	22	0
11	14	25	11	8	18	12	3	36	6	32	0
Total	15	180	29	58	77	32	58	67	127	143	23

Older:

Informant	(r)		(t)			NEAR		PALM/START /BATH	[ɑ:]	GOAT	
	[r]	[ɹ]	[r]	[ʔ]	[t]	[jə:]	[iə]	[a:]		[oʊ]	[əʊ]
12	23	12	8	2	17	5	20	7	32	28	0
13	2	51	0	2	32	6	6	0	40	30	14
14	7	41	1	2	34	12	8	14	35	38	7
15	23	11	2	5	11	10	3	15	21	23	13
16	23	13	3	2	17	10	5	1	38	35	0
17	18	37	6	0	18	22	6	17	40	27	0
Total	96	165	20	13	129	65	48	54	206	181	34

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