A Real-Time Study of Sound Change in Inner-City Dublin-English over Five Decades

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Abstract

The purpose of this study is to identify variation and change in the pronunciation of Dublin's inner-city dialect over the last fifty years, and if so, whether this involves association with or dissociation from traditional local norms (Hickey, 1999). Dublin's inner-city has experienced notable demographic changes since the recession of the 1980s, the economic boom of the 1990s and the subsequent influx of migrants to the city, initially from returning Irish emigrants and some British, but later from other European countries (Darmody, 2011). Dublin English is known for characteristic and stable local productions of /ð/, /θ/ and /t/ e.g. *water* [wɒt̪ər], *thin* [tɪn], *breathe* [briːd̪] and *this* [dɪs] (Hickey, 2004). The demographic changes to the inner-city predict the possible introduction of non-local variants for all three variables. The research question for this dissertation is: What evidence is there for sound change in local Dublin English in an area which has shown substantial demographic shifts? Specifically, to what extent is phonetic variation over time for /ð/, /θ/ and /t/ consistent with a shift away from local norms? For example, have the words *mother, think* and *what* maintained the local realisations [mʌdr], [tɪŋk] and [ʍɒʔ] or, over time has there been a shift towards use of the supralocal or standard Irish English forms [mod̪ər], [t̪ɪŋk] and [ʍɒt̪]? This study analyses the speech of twenty-three recordings from inner-city Dublin school-children in 1961 and seventeen school-children and one adult in 2016 (a total of forty-one speakers). The early recordings were made by the class teacher, but have since been digitised and are well-known as *Give Up Yer Aul Sins*, which is a quote from one of the children and she narrates a Bible story. The more recent recordings were made by me in 2016, when I returned to the same inner-city school in Dublin to interview children of the same age. The adult speaker, now in her early sixties, was one of the children in the 1961 class, although was not one of the children recorded. Results show that over time there is maintenance of local variants, but all three apparently stable variables show a shift to pan-Irish and even some Standard English variants in the children recorded in 2016. For example, /ð/ and /θ/ show a shift from 1961 to 2016, with fewer local alveolar stops, more supralocal dental stops, and even some Standard English dental fricatives. These results are discussed in the context of the impact of mobility and dialect contact on sound change for this inner-city Dublin community.

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Preface

The motivation for this research stems from voice recordings of inner-city Dublin children, in the early 1960s, which became familiar to me in the 1980s, growing up in Dublin. Entitled *Give Up Yer Aul Sins*, a quote from one of the texts, the children, who are all pupils at Rutland Street National School, narrate well-known Bible stories which they have brought to life eloquently and imaginatively. Additions like the Holy Ghost whispering in Elizabeth's ear as Mary approaches 'She's going to be the mother of God; speak nice to her' and Jesus telling the grieving mother to 'Stop that growling and roaring, I'll make him alive again', are not only endearing, but also show how the children owned the stories as they progressed from rote recital to vivid personal understanding. In 1960s Catholic Ireland, hell was known as 'a shocking place' and Satan was 'a dirty aul devil' who 'got braggy and boasty' and told children to 'kick your sisters and eat your Daddy's liver while he's not looking.' Indeed, most of the stories conclude with reference to a moral lesson: regarding one of the ten lepers (or 'leopards' as the child says) who returned to thank Jesus, "I'd better not be showing up m- my bad manners to Jesus, I'd better go back and thank Him."

The children certainly knew their catechesis, thanks to their teacher Peig Cunningham. In an interview with Fr. Brian D'Arcy[1], when the recordings first came into the public domain, she reported disapproving of traditional fairy tales after her own disillusionment as a child. For this reason, she chose to tell Bible stories. At the time she was apparently just trying to motivate the children, but was obviously forward thinking, recording them on reel-to-reel tape, telling them that one day they might be on the wireless. Ironically, two decades later the children were being broadcast on RTÉ (Irish national television and radio) and although the terminology has changed, five decades later this technology-enhanced style combining traditional teaching methods whilst incorporating technology to enhance the lesson, is used in many modern classrooms. According to one of the children in Miss Cunningham's class, Rosie, now in her 60s, whom I interviewed as part of my research, they loved their teacher and her story-telling skills, and were fascinated by the microphone. They all came from deprived backgrounds, nobody had television or travelled abroad, so when they heard these stories their imaginations were awakened as they envisaged every scene in detail: as one child recounts when Jesus sent the blind man to wash his eyes in the river 'made of water'.

The recordings, which were found by chance on a rubbish dump, could so easily have been lost, but the curiosity of the finder has led to both national and international fame with

award winning animations[2] of some of the stories. The children are unwittingly humorous in their detailed narrations, and consequently have captured the imagination and interest of many. The colloquial use of language and strong accents, are clearly what Hickey (1999) defines as local Dublin accents.

From these recordings, the idea developed to investigate whether children today would sound the same as those five decades ago, or whether the huge socio-economic developments and changing demographics of inner-city Dublin in the 1990s would have an effect on speakers. The result is this real-time trend study of the Rutland Street school children which compares contemporary urban Dublin-English to speakers fifty-five years ago.

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1. Fr. Brian D'Arcy reports this on the introduction to the CD recordings.

2. In 2001 Brown Bag Films and RTÉ produced animations of some of the stories for television, which were nominated for the *American Academy of Arts and Motion Pictures* in 2002.

Acknowledgements

I dedicate this dissertation to my sister Mairi,

whose untimely passing has left a void in my heart.

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OVER FIVE DECADES

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1.0   **Introduction**

It is widely recognised that language changes over time. These changes can be lexical, grammatical, morphological and/or phonological, and strongly correlate with external factors such as geographical area and mobility, context, social class, age and identity (Labov, 1994). This study presents a small-scale study of real-time change in Dublin's inner city over the last five decades. It reflects the impact of sociodemographic shifts and social identity on speech. In Ireland, after the recession of the 1980s, economic boom of the 1990s and subsequent influx of migrants to the city, there was a conscious effort 'to redefine Irish society outside traditional models of Irishness' (Waters, 1997), and from this new ideology developed what came to be known as the Dublin 4, or D4 accent, (one of the more affluent areas of the south side of the city). The city is split naturally by the river Liffey and this divide also generally marks the more prestigious south side, what Hickey (1999) refers to as 'non-local' speakers who are generally from the more working-class inhabitants of the north side (with the exception of Howth) and inner-city areas: the speakers of 'local Dublin-English'. This dichotomy of working class versus middle class reflected in an identity split between local (alveolar) – non-local (dental) realisations of the plosive /t/ and fricatives /θ/ and /ð/. This phonological difference was observed as far back as 1781 when the elocutionist Thomas Sheridan noted 'the thickening of certain sounds of d and t in certain situations' (cited in Hickey, 2004:13).

This study analyses recording of inner-city children narrating Bible stories in 1961. These were made by the classroom teacher, but have since been digitised and are now widely available to the public. Over five decades later, in 2016, I returned to the same school to record children of the same age recounting their own stories. These two sets of data form the basis of a real-time trend study of the variables /ð/, /θ/ and /t/ to identify whether there have been any changes in this community given the sociodemographic changes in Dublin over the same period. There is also a quasi-lifespan study of one of the 1961 children, Rosie, who was in the class at the time, but was not one of the children recorded. This quasi-lifespan study examines the same three variables, but without a sample of this person's speech from 1961, any changes will be in relation to her childhood peers, therefore are indicative of a lifespan change, and are not definitive.

To date, there has been little quantitative research on changes in Dublin-English (Kallen, 2013:230; Lonergan, 2013:17, 2013:56; Migge, 2016:15) as well as little evidence on the social significance of any changes (Lonergan, 2013:55; Kallen, 2013:230). Furthermore,

whilst the study of how immigrants are integrating with the Irish people is a new perspective in Irish-English research, how and whether the local speech community is affected by immigrants has yet to be explored. Previous work has shown that various immigrant groups 'have influenced London English' (Kerswill, 2010:246), therefore, the native Dubliners may in some way be affected by the newcomers' linguistic integration.

This dissertation will analyse the development of Irish-English pronunciations in an inner-city school over a five-decade span, which may involve association with or dissociation from local norms. In particular, the characteristic variables /ð/, /θ/ and /t/ will be examined. It is generally thought that 'Dublin-English is phonologically extremely stable' (Corrigan *et al.*, 2012:23). For example, the realisations of interdental fricatives are often alveolar plosives in local Dublin-English, whereas dental plosives are more are widely used as the supraregional educated form (Wells, 1982, Hickey 2005). These have remained stable in the 'new pronunciations' which developed since the 1990s (Hickey, 2005:73). Although in reading style, fricatives may be used 'with varying degrees of success' (*ibid*), Bessell and Mulhall (2014:79) have also found fricatives in the speech of some young women in Cork.

1.1 Results

Results from the trend study, comparing the children from 1961 to 2016, show that there is change in the realisations of the variables /ð/ /θ/ and /t/, which were previously thought to be stable (Labov, 2001; Hickey, 2005; Corrigan *et al.* 2012). Over time all variables in the children's speech show a decrease in the use of local variants and an increase in the use of non-local Irish-English forms, as well as some introduction of standard forms in some contexts. It is interesting to note that speakers are still maintaining a strong local identity and some local variants increase in certain contexts.

The quasi-lifespan study is different. Given that there are no data from her own childhood, comparisons are made placing her within the range of her childhood peers. This speaker seems to have become more local over time. Frequency of use of the main local variants has increased with a corresponding decrease in the non-local variants. There are no tokens of standard fricatives in the speech of this individual. Together, the results are consistent with the impact of sociodemographic changes to the area, alongside construction of strong local identity, which is consistent with findings in Glasgow by Stuart-Smith *et al.* (2007).

1.2   Method

The variables /ð/ and /θ/ and /t/ in working class inner-city Dublin speech have been extracted and analysed from two sets of data. The first was recorded in a school classroom in 1961 as the children narrated well-known Bible stories. The second is children of the same age and from the same school who were recorded by me in 2016 telling their own stories, for the purpose of this research. There has also been a quasi-lifespan study of one of the speakers who was a child in the 1961 class, although was not one of the children recorded. Now in her early sixties, this provides an interesting study into potential lifespan changes, by comparing this participant's speech to that of her childhood peers.

1.3   Research Questions

The following research questions are addressed:

- What evidence is there for change in the characteristic, stable, local Dublin variables /ð/ /θ/ and /t/?

- If there are changes, in which direction are these changes?

- To what extent do these changes reflect the sociodemographic changes of this area of Dublin?

1.4   Hypothesis

The research carried out in this real-time study will attempt to identify whether the influx of migrants to inner-city Dublin, following the economic boom of the 1990s, is reflected in a possible reduction of local pronunciations of certain phonetic features. It is expected that contact between different dialects may have weakened close-knit social ties and that supralocalisation may have led to a shift towards non-local pronunciations of local phonological features (Hickey, 2004).

1.5   Structure of the dissertation

The structure of this dissertation is as follows: Chapter Two presents the research background. Firstly, it looks at general sociolinguistic study of sound change before

examining previous literature on Irish-English then Dublin-English to identify the gap in research on change in inner-city Dublin-English consonants. This chapter continues by looking specifically at the variables in question /ð/, /θ/ and /t/. Chapter Three outlines the methodology used, including information on the samples used, participants and coding methods. Chapter Four presents the results for each of the variables /ð/, /θ/ and /t/. The variables are presented individually; first the results for 1961, then for 2016, before making the real-time comparison. Then the real-time quasi-lifespan study of Rosie is presented. This same pattern of presentation is followed for the subsequent variables. Chapter Five includes a discussion of the results in relation to previous literature and the research questions addressed. Chapter Six concludes this dissertation summarising the findings as well as considering limitations of the current study and potential areas for further research.

2.0   **Research Background**

This chapter reviews some of the relevant literature for this real-time and quasi-lifespan study of sound change in Dublin. It begins with different approaches to sociolinguistic studies of language variation and change, and the different social factors which are intrinsically linked to these changes (Labov, 1963:274). This is followed by a review of the literature regarding Irish-English in general, before focussing on Dublin-English, which is the specific context of this study.

2.1   <u>Language change</u>

William Labov's research in 1961 on Martha's Vineyard, was the beginning of modern variationist sociolinguistics. He demonstrated that not only was there change on the island, but that the changes occurred within a specific 'time and place that [demand] an explanation' (*ibid*). He identified that the phonological variants of the diphthongs /au/ and /ai/ were assimilated to or dissociated from the local forms as markers of identity. Variation was also associated with occupation, geographical region and age. Those west of the island, with a strong identity with the traditional fishing lifestyle, regardless of age, had more centralised diphthongs than those in the east. East islanders typically relied on seasonal tourism or moved to the mainland to work, therefore with weak ties to the island, often changed or adapted their vowels. This dissociation could be explained as a response to social or economic pressures in that area at that time with local identity being key to explaining the variation in that community.

On a larger scale, further research by Labov in New York City in 1966 revealed that there are correlations between linguistic variation and factors such as social class (Labov, 2006). In order to understand these changes, it is necessary to consider the social changes in progress within the community in which they occur (Labov, 1963:275). Although no one aspect is consistent across all studies, external linguistic factors such as social class, sex, age, ethnicity, context and relationship of interlocutors are found at different levels for different speakers, with "social class and situational formality [being] the most consistent" (Campbell-Kibler, 2006:22). In one section of the study, Labov gathered samples of natural speech in three different department stores to examine the social differences of /r/ in New York speech. This was done covertly to avoid the Observer's Paradox. That is, interviewing and/or recording without participants' awareness in order to gather as authentic speech as possible, without speakers accommodating their style or register to that

of the interviewer. He identified that the frequency of a speaker's usage of the /r/ variable depends upon their social class; the higher the socioeconomic status, the more /r/ is used, in comparison with speakers of lower socioeconomic groups. These studies demonstrate the role of social factors in accounting for linguistic variation. Labov was also important in developing the two approaches which can be used when studying sound change: apparent and real time methods (Labov, 1994). These are explained in the following section.

2.1.1 Apparent Time Studies

Apparent Time Studies involve analysis of the speech of speakers of different ages, recorded at the same time, within the same community. The speech gathered in apparent time studies is assumed to reflect that of the generation in which it was learned. The crucial period of language acquisition is in childhood, and for some, continues into early adolescence (Roberts, 1994; Smith *et al.* 2007; Jeffries, 2015; Foulkes & Hay, 2015). This synchronic approach to language variation will identify any linguistic changes in progress and be, as Meyerhoff explains, 'a window on what has been happening in a community over the last few generations' (2011:140). The apparent time construct is a 'well-tested means of inferring the start and direction of change' Meyerhoff (2011:160).

2.1.2 Real-Time Studies

The real-time perspective tracks actual change (Sankoff and Blondeau, 2007:561) because data is gathered from the same community at two or more points in time, which can then be compared. There are two types of real-time studies: panel and trend.

Panel studies involve analysis of the speech of exactly the same participants over a period of time and are relatively rare due to the logistics of maintaining contact with participants. For this reason, Labov (1994:76) advises that 'the initial sample of real-time panel studies must be large enough to take the inevitable losses into account'. Sankoff's Seven-Up study (2004) is a well-known example of a real-time panel study in which two speakers were observed over a period of twenty-eight years, to establish the extent of phonological variation at different stages in their lives. Whilst most speakers do not change phonologically post-adolescence, results of this study identified that these speakers did show variation, although individual life-experiences need to be considered, because stylistic variation is used to construct identity throughout their lifespan.

Trend studies are those which analyse the speech of the same community over a period of time, with speakers of 'roughly the same social, ethnic and economic backgrounds' (Meyerhoff, 2011:139) as the participants of the initial study. If this is not the case and the demography of the area has changed significantly, any potential changes may be internal and also external to the language, adaptations to incoming dialects and towards the national mainstream (Trudgill, 1999:139). Although still relatively rare, after five decades of sociolinguistic research, real-time studies are increasing, either by the original linguist *e.g.* Trudgill in Norwich (1968 and 1983), Cedergren in Panama City (1969 and 1987), or by other researchers *e.g.* Stuart-Smith *et al.* (1999) in Glasgow, using recordings by Macaulay (1977) (*ibid*) and Stuart-Smith *et al* (2017) who compared recordings of Glaswegian speakers over a century in the *Sounds of the City* project.

Both panel and trend studies permit diachronic observation of real-time, linguistic variation within a community, and when both methods are combined, not only can they identify language change in progress, but also the lifespan change of individuals can be considered in order to interpret the language change in question (Sankoff and Blondeau, 2007). Changes may be from above *i.e.* social attitudes to language and evaluations such as from stigmatised to prestige forms, or changes from below *i.e.* gradual changes across generations which are below the level of consciousness and are generally initiated by upper-working or lower-middle class, female speakers.

2.1.3   Age-Grading

Favouring the use of one variant over another at any given age, regardless of the variable's stability within the speech community, is known as age-grading. Despite the apparent time method being 'unquestionably a valid and useful analytical tool' (Bailey *et al.*, 1991:263), age-grading is 'one of the major issues in contemporary sociolinguistics' (Tagliamonte, 2012:247). As changes across a speaker's lifespan may be generational, they do not automatically provide reliable evidence of sound change in progress (Labov, 1972:24) *e.g.* Macaulay's 1977 study on glottal stops in Glasgow (in Sankoff, 2004:2) and Sankoff and Blondeau (2007) /r/ in Montreal French. It is also recognised that language change and age-grading may occur simultaneously, so in an attempt to overcome this ambiguity, Labov (1994) introduced four possible patterns of change. Later, Sankoff (2005) proposed a further category of 'lifespan change' in which an individual's speech changes over their

lifespan in the same direction as a change in progress within the community, as shown in table 2.1 below:

	Individual	**Community**
1. Stability	Stable	Stable
2. Age-grading	Unstable	Stable
3. Generational Change	Stable	Unstable
4. Communal Change	Unstable	Unstable
5. Lifespan Change	Unstable	Unstable

Table 2.1: Patterns of Individual and Community Change (Labov, 1994, Sankoff 2005)

2.2   Social Factors

Sociolinguistic research has shown that linguistic variation and change is constrained by both internal linguistic and external social factors, such as age, gender, social class, identity and style.

2.2.1   Age

Language acquisition is largely complete by about seven to eight years of age (Macaulay, 2006:19), Kerswill (1996:192) places it earlier at six to seven years. Although most speakers tend not to change significantly over their lifespan, as needs and social interactions change, speakers can accommodate to or dissociate from the language of their interlocutors. As linguistic competence is developed choices can be made, either consciously or subconsciously, to convey social meaning in relation to the acquired indexicality, even from an early age (Roberts, 1994, Foulkes *et al.* 2005, Foulkes, 2010). Research has shown (Williams and Kerswill, 1999; Smith *et al.* 2007) that younger children produce speech which is more similar to their parents', but throughout the school years, as their environment widens and social networks expand, their speech increasingly reflects adult norms (Chevrot *et al*., 2013:5), whether that is the local or the non-local vernacular. Variation and indexicality is acquired in relation to other adults in the social

networks *e.g.* teachers, before gradually becoming increasingly like that of their peers (Kerswill, 1996:192). Eckert (2000) notes that awareness of the relationship between linguistic variation and its social meaning continues well into adolescence when peer-group influence is at its greatest, but is always in relation to the local indexical value of any given variant.

Labov (1964) presented a theory of a lifespan development of sociolinguistic competence in which it was thought that awareness of sociolinguistic variation began to emerge around early adolescence, but was not incorporated into speech until late adolescence, by adapting to the formality of the discourse (in Chevrot *et al.,* 2013:5). However, as speech is considered to be fundamentally a social act, with a given purpose such as to inform, to request, to humour *etc.* it seems logical that children learn the social aspect of speech simultaneously with the linguistic (Foulkes, 2010:16). Acquisition of variation is not only linked to age, but also to adult's input becoming more local as the children grow older (Foulkes *et al.*, 2005:201 in Smith *et al.,* 2007:73). Macaulay (1977), Reid (1978) and Romaine (1984) found that children can identify and use linguistic variation appropriately according to context, by the age of eight to ten years. Smith *et al.* (2007), like Patterson (1992), places this much younger. Indeed, Smith *et al.* (2007) found that whilst younger children mirrored the speech of their caregivers, from about the age of four 'older children use more of the local variety' (p.73). This however, is a more complex discourse which must also consider that acquisition of variation is not 'a by-product of the learning process, but is an integral part of acquisition itself' (Roberts, 2005:154 in Smith *et al* 2007:64). It is a continuous process involving frequency of input, function of use and type of variable in question. See Smith *et al*. (2007) for further reading of these aspects which, for reasons of time and space, cannot be further developed here.

2.2.2   Gender

Gender differences have been observed in many varieties of English. According to Trudgill, this is 'the single most consistent finding to emerge from sociolinguistic work around the world in the past thirty years' (2000:73). In all social classes, along a stylistic continuum, women tend to use more prestigious forms than men (Chambers, 2004), and assert their identities more through language than men. Thus, status can be gained through the use of prestigious forms as a gender marker of social identity. In that respect boys are 'much more likely than girls to use nonstandard local pronunciations' (Trudgill, 2000:72), possibly due to a covert prestige for local varieties in some areas *e.g.* Glasgow (Stuart-

Smith *et al* 2007), although there is evidence that girls' phonetic production can be similar to boys' as a marker of identity or dissociation from a particular group (Stuart-Smith, 2007). Also, in Belfast, Milroy (1992) identified that generational sex differences are more evident than class differences, which may contribute to the use of non-local forms (*op cit.* p.104).

However, Eckert (1989) argues that because females are often more conservative than males in their use of stable variables, this does not imply that men never lead linguistic change e.g. Labov's study of Martha's Vineyard. Where boys lead, it is in the use of local variants, whereas 'girls are the exclusive leaders in the use of suburban variables' (Eckert, 2000a:137). Prestigious forms can be either non-local or local, based on identity within the community, therefore gender variation cannot be reduced to just male-female accommodation to or dissociation from vernacular/prestige forms: it is more a question of social identity within a group, rather than choices made according to gender. This view is supported by Milroy (1987) where women, given the same socioeconomic context as men, formed similar weak ties in their social networks, and as a consequence, produced similar speech patterns to men, thus showing that gender differences correlate more to social context and identity within that context.

2.2.3   Social Class

Social class can be difficult to determine due to the range of factors such as education, occupation and income which can all mark social and linguistic differences. Speakers tend to be similar to their parents, although because of occupational mobility and cultural attitudes of individuals and the community, class-lines are often blurred. Standard English is considered the dialect of power and prestige and whilst there is variation amongst all varieties of English, there is greater variation in lower social groups. When determining class, sociolinguistic studies often consider manual and non-manual jobs, although even within these occupational categories, education and economic levels can vary, which is why a combination of indicators can be useful. Through mobility some variables from one social class may be found in another; the more stigmatised variables can be eliminated whilst others may persist as part of identity construction. This is what happens in dialect levelling, where there is a dichotomy between convergence towards the supralocal forms whilst maintaining a strong social and linguistic identity within the community (Milroy, 2002). However, it is the frequent use of many phonological features which is indicative of

social class *e.g.* interdental or dental fricatives associated with standard or middle-class Dublin speech or alveolar plosives associated with working-class speech.

2.2.4 Identity

There has been much research on language variation and identity which shows that identity is intrinsically connected to how individuals perceive themselves, *and* want others to perceive them, in relation to external social factors. Identity is expressed not only linguistically, but also in other areas such as clothes, music and friendship preferences, particularly in adolescents (Eckert, 1989; Alam & Bramwell, 2014). The linguistic choices made, also reflect national, local and group identities; thus, it is multi-faceted, varying according to interlocutors and contexts. The adoption of certain linguistic features can be used to mark membership to a given group, whether in school: teachers/pupils, at home: parent/child or peer members in social contexts. Identities are created in these 'communities of practice' (Eckert & McConnell-Ginet, 1992:96) where the language used performs both an ideational and interpersonal function which reflects the goals of the communicative acts, as well as the social and emotional identities, and relationships within the communities. Therefore, in this process, speakers have a key role in actively establishing and conveying who they are.

2.2.5 Style

Identity is constructed along a cline, and children are aware of the need to switch styles according to context. In Reid's study in Edinburgh (1978), one eleven-year-old child reported that he spoke differently in school because 'that's what we're really here for…to talk nice and that' (Reid, 1978:169). Whereas another child was aware that he changed his accent when he was out of school, so that 'they'll just think… you're one of us.' (*ibid*). Thus, in the construction of social identity and, having generally acquired the local phonological features of the speech community by the age of six (Kerswill, 1996:190), children can use stylistic variation in order to create the desired identity.

The children in Reid's study had learned that stylistic variation and indexical social meaning can change identities in different contexts. Smith *et al*'s study in Buckie (2007) found that the younger the child, the more their language mirrored that of their carer. However, as cognitive, linguistic and social development progressed, there was a gradual

increase in the range of styles used, leading to more local, stylistic variants in the speech of the older children, which were more akin to those found in the wider community. Children's speech is often reflected in imaginative play as they adopt different identity roles such as mummy/teacher or baby voice. The use of these different styles reflects real-world situations in which instruction and discipline tend to use more standard forms than the informal contexts of play and intimacy (Labov, 2001:420). Thus, through play and real-world situations, children, like adults, try to understand their semiotic landscape in order to establish their place within each different community of practice, expressing social and interpersonal relationships through stylistic variation.

To investigate this variation, Labov (1994:157) developed sociolinguistic interviews which encouraged the use of a range of speech styles, from casual to careful speech, with topics and tasks which elicit these forms. He observed that the more formal the situation, the more attention is paid to speech (1972:208), whereas in free speech, such as story-telling, non-standard forms are more frequent, which reduce to 'virtual non-occurrence' when reading passages and word lists (Bell, 1984:156). Similar results were found by Milroy & Milroy (1977) in Belfast where there was a 'radical switch rather than a gradient style shift' in reading. This is not surprising because in school, children are overtly taught to self-monitor their speech styles in certain contexts *e.g.* when reading or speaking more formally in class presentations or to teachers. This prescriptivism on the vernacular-standard continuum leans towards the use of standard forms because of the more formal context: what Bell (1984) refers to as 'audience design'. However, stylistic variation is not just a response to external stimuli; speakers use language as agents, to shape relationships and identities (Schilling-Estes, 2008) and it is this 'process of identity construction [which] leads speakers to construct their own styles' (Eckert & Wenger, 2005:584).

Although general attitudes to language mark standard forms as being more prestigious than local forms, there is increasing research which shows that this is not always the case *e.g.* in Glasgow RP 'has little status' and is 'regarded with hostility in some quarters' (Stuart-Smith, 1999:204). Likewise, in Ireland RP-like accents are considered 'pretentious and likely to evoke derision' (Hickey, 2007:22), which reflect Foulkes and Docherty's view (1999:12) that it cannot be assumed standard forms will automatically be taken as the stylistic norm towards which speakers will always wish to orient. Linguistic styles will reflect speakers' social and cultural identities regardless of whether these are prestigious or vernacular forms.

2.2.6   Social Networks

The work of the Milroys in Belfast in the 1970s established a strong correlation between the vernacular forms used and the density of the speaker's social network within the community (Milroy, 1987:179). While class reflects a hierarchical structure of society, networks reflect an affiliation to contacts within a society just as significant as socioeconomic status (Eckert, 2005:14). Strong ties are associated with close-knit, dense social networks and are characteristic of both lower and upper class social groups, who tend to be less socially and geographically mobile than the middle-classes, thus maintain a strong bond with the local area. Conversely, weak ties are characteristic of those who lack strong interpersonal connections with the community, or may be loosely attached to close-knit groups, such as migrants to the inner-city. Although, as Milroy's Belfast study shows (1985:365), affiliation to one social network does not exclude the possibility of loose contact with another. The connections between over-lapping social networks offer the possibility of linguistic innovation and diffusion.

2.2.7   Dialect Contact and Dialect Levelling

Contact between different dialects is a feature of the changing demographics of contemporary societies, and whether for social, political and economic reasons, increased mobility can weaken strong close-knit social networks, particularly in inner cities. This in turn, can have an effect on the language of the area. While first-generation migrants can make lexical, grammatical and phonological changes to their speech, it is the second-generation who acquire local community norms because they are still within the critical age of language acquisition. Also, because during the school years, where exposure to local norms is heightened, there is a shift towards peer-oriented networks and a desire to create an identity which allows entry into the desired group (Labov, 2001:423; Kerswill, 1996; Williams and Kerswill, 1999:150-151). A good example of this is in William and Kerswill's dialect contact research in Milton Keynes, Reading and Hull (1999) which showed diffusion of TH-fronting and t-glottaling. Although there were similar rates of these features in each area, the social context and ideologies for adopting these features appeared to be different in Hull than in the other two, more southern towns. In Hull, the speech of the young, working-class speakers maintained features of the older local variety, reflecting the dense, close-knit community, whilst simultaneously expressing 'strong statements against "posh" people' (*op cit.* p.56). Conversely, in Milton Keynes and Reading where there were more open networks, contact with speakers from elsewhere

resulted in dialect levelling, with the working-class speakers frequently adopting standard forms. Interestingly, in Hull middle-aged and older speakers used some glottal stops, which was uncharacteristic of the old dialect, while the adolescents showed similar patterns of use to adolescents in Milton Keynes and Reading.

The term 'levelling' is used in different ways and is sometimes known as accent levelling because it usually refers to pronunciation (Williams and Kerswill, 1999:149) or 'regional dialect levelling' when there is geographical diffusion (*Kerswill, 2003:223*). Levelling is defined as part of the process of change whereby distinctive, local, linguistic features of one speech community are gradually eroded and new features are adopted, leading to change in the variety through contact with speakers of other local varieties. This process is possible only in 'relatively compact geographical areas, such as new towns' (Kerswill, 2002:187) and inner-city communities. To facilitate comprehension, when speakers of different dialects communicate face-to-face, there is a certain degree of accommodation in the use of local linguistic features. This may be short-term as a precursor to levelling (Kerswill in Chambers *et al.* 2005:682) because when there is a high level of convergence the changes may gradually become permanent linguistic features of that area for the next generation, even if this may lead to negative stereotyping (Clarke, 2017:69). This was the case in Newfoundland where despite evidence for the increased use of supralocal norms in both rural and urban areas, local features 'remain extremely robust' in rural areas, not to index 'place', but as affiliation to particular social groups. This view is supported by Johnstone *et al,* (2006:92) and Stuart-Smith *et al* (2007:247) who argue that levelling does not necessarily entail the loss of minority variants; it is in establishing or maintaining a local, ideological identity that speakers choose to retain or even exaggerate linguistic features which have strong local indexical meaning, regardless of whether they are local or non-local. This dissertation is mainly concerned with levelling in this sense *i.e.* that levelling refers to the gradual loss or depletion of certain local features, usually through a shift towards non-local features.

Like Clarke (2017) and Stuart-Smith (2007), Williams and Kerswill (1999) found that although close-knit communities tend to resist language change, contact, together with other social factors such as age, identity and ideology also influence the effect of levelling.

2.2.8   Summary

In this section I addressed Labov's contribution to modern sociolinguistic studies which intrinsically links language change to social factors. Apparent and real-time approaches to studying language change are explained and the key constructs for this study and relevant social factors are developed in relation to previous research. The importance of social networks and dialect contact and levelling is also introduced as relevant theoretical contexts for this real-time research in inner-city Dublin.

Much early research on Irish-English offers descriptive articles about the history of the language and aspects which have been influential in the development of this variety *i.e.* dialect contact and language shift. The following section provides a brief overview of the historical and political background of Ireland which places the development of contemporary Irish-English in context.

2.3   Context for this study: Irish-English

The English language was first introduced into Ireland in the twelfth century with the Anglo-Norman invasion (Leith, 2003:151). However, for several centuries, little change was seen in the Irish language spoken by the natives. Initially the settlers integrated with the locals and according to the words of the Statute of Kilkenny (1366), colonists married among the Irish and adopted the 'manners, fashion and language of the Irish enemies', with 'no evidence of [bilingualism]' (Hickey, 2007:33). However, the foundations for change were laid in the sixteenth century under the plantation scheme of Henry VIII. Throughout the following century the situation deteriorated when Catholic landowners of Irish and Anglo-Norman descent were forced to surrender their land. The colonisation continued with the arrival of English and Scottish settlers in Ulster during this century.

By the early 1800s, at the time of the Act of Union, about half of the Irish population spoke English as their first language. Irish became increasingly associated with poverty and ignorance. Because of a ban on Catholic education, illegal hedge schools were established. Lessons were in the local vernacular, but English was also taught as it was not seen as allegiance to the English crown. Despite Catholics and non-English speakers being banned from entering social and political life, English was seen as the language of social, economic and political advancement (Hickey, 2007), so Irish was only spoken by about 23% of the population, mainly in the Irish-speaking Gaeltacht areas in the west (Ó Baoill, 1990). Today that figure lies only at about 1.7% (Census 2016).

Depopulation, by approximately a quarter, through death or emigration during the Great Famine (1845-1849) was another contributing factor to the decline of Irish as the main language of the country. Daniel O'Connell, a prominent, early 19th century Irish politician and Irish speaker himself, openly encouraged the people to learn English in order to advance both socially and politically (Hickey, 2007:46). Consequently, English was perceived to be the language of power and prestige. However, the influence of Irish on the acquisition of English was noticeable because contact was mainly with speakers of non-standard forms of English (Bliss, 1972a). The conditions were such that this resulted in a linguistic hybrid of different varieties of Irish-English; a contact language which developed its own distinctive grammatical, lexical and phonological features.

2.3.1   Early Research in Irish-English

Despite being 'the oldest overseas variety of English', (Kallen, 2012:25) Irish-English has received relatively little attention from researchers, compared to other world Englishes (Stuart-Smith & Haddican, 2009; Migge, 2012; O'Dwyer, 2015). It was not until the early twentieth century that Irish-English began to be recognised as a distinct variety (Hickey, 2005a:18), and in recent years interest has grown so that it is now an expanding field of research. Joyce (1910) is considered to represent the beginning of research into this variety. His collection and observations of Irish-English dialect reflect the language of that time. Although he acknowledged that dialect is not 'bad English' and can add 'sparkle' to a language, he reflects the linguistic ideologies in saying 'those who are educated among us ought of course to avoid [it]' (p.4). Clery (1921) also refers to 'an Irish dialect of English' (p.551) noting that fricatives varied across the country with /θ/ being used by 'Northerners' and /t/ by 'Dubliners'. He too is prescriptive and concludes 'we [the Irish] have certainly not learned how to speak English, for we have not acquired its sounds'.

The initial descriptive research on Irish-English is either from the historical perspective, which also addresses issues of contact studies and language shift (Filppula, 1990; Corrigan, 1993; Hickey 1995) or from a dialectal perspective (Bertz, 1987; Wells, 1982; Hickey, 2004a, 2005), which examines salient features of this variety. These features *e.g.* interdental fricatives as alveolar or dental plosives, or morphosyntactic forms such as 'I'm after finishing it' or 'I do be working on it' are often explained in relation to contact. Opinions have swayed between the substratist position, in which non-standard features in the vernacular are attributed to parallel features in Irish *e.g.* Joyce (1910), Bliss, (1972) and

the retentionist position *e.g.* Lass (1990) and Harris (1993), in which the non-standard features are believed to stem from regional or archaic forms from the input varieties (Hickey, 2007a, 2012). After further research, thus better understanding of language shift and contact dialect, contact is 'an objective and linguistically acceptable' explanation for both substrate and retentionist views (Hickey, 2005a:20).

2.3.2   The north / south divide in Irish-English research

The north/south divide in Ireland is not only political and geographical, but also linguistic. Because of the historical aspects of English being introduced into Ireland, the linguistic differences and their origins are of interest. The following section will look briefly at some previous research in both northern and southern Ireland before focussing on Dublin and the variables under investigation in this study.

2.3.2.1   The North

A large part of the research focuses on Ulster, in Northern Ireland, comprising of nine counties: six belonging to Northern Ireland and three which politically belong to the Republic of Ireland (see Appendix A). The language in the north can be divided into three areas which reflect the origins of the settlers who arrived during the plantation period *i.e.* from Scotland and northern England. The varieties which have developed are: Ulster-Scots, mid-Ulster English and south-Ulster English, which is a transitional variety with features from both north and south of the border (Hickey, 2007:93). Given that Donegal is closest to the Irish-speaking Gaeltacht area in the west of the Republic, Hickey suggests a further category: contact-Ulster English (*op. cit.* p.94). Much research has focused on the main cities both north and south of the border – in the north: Belfast (Harris, 1984; Milroy, 1987; Sullivan, 2012), Derry (McCafferty, 1999) and Armagh (Corrigan, 1999), but in this dissertation, only Milroy's study (1987), on the importance of social networks in understanding sound change, will be addressed.

2.3.2.2   The South

Hickey (2016:4) classifies research into two main categories: the result of linguistic change which has already taken place due to historical language shift, and ongoing change in

contemporary Irish-English. This research on Southern Irish-English has focussed mainly on linguistic features such as syntax and grammar (Corrigan, 2003; Filppula, 2012), lexicon (Dolan, [1998] 2004; Share, [1997] 2008), pragmatics (Barron and Schneider, 2005; Clancy and Vaughan, 2012) and phonology (Wells, 1982; Bertz, 1987; Hickey, 2004). There are some extensive texts on this variety of English such as Kallen's (2013) *Irish-English Volume 2: The Republic of Ireland* (Volume 1 by Corrigan (2010) refers to Northern Ireland), but Hickey is by far the most prominent author on Southern Irish-English, having written extensively on many aspects of the subject since the early 1980s as well as maintaining frequently updated websites on English, Irish-English and Dublin-English. His recorded survey (2004a) A *Sound Atlas of Irish-English* covers each county, therefore provides samples of phonetic variation across Ireland. This includes 1,500 recordings of both male and female speakers between the ages of 11-80 years, gathered between 1990s and 2002, and lends itself well to further variationist studies. Other publications by the same author include *Dublin-English: Evolution and Change* (2005) which although not exclusively on Dublin phonology, has a strong focus in that field, while also addressing other aspects of Dublin-English. An extensive text, also by Hickey is *Irish-English: History and Present-day Forms (2007)* which, as the title suggests, offers extensive coverage from a historical perspective, through to contemporary use and new areas of research, such as Irish-English as second language acquisition (p.376) and Traveller communities (p.379).

Whilst early research tended to be descriptive, often focussing on the origins of Irish-English, modern studies are what Eckert (2005) calls first wave variation studies, in which the linguistic variables in question correlate with external social factors. More recently, there has been an increasing number of linguists who follow a second wave approach, 'characterized by ethnographic studies of more locally-defined populations' (*op. cit.* p.1). This change can be seen when comparing several edited publications which draw together different aspects of current research, without focussing on any one approach. In *Focus on Ireland* (Kallen, 1997) there are several chapters on the origins of Irish-English, others address syntax, prosody and phonology with just one chapter on the influence of Irish emigrants on overseas varieties of English. In a comparable text, *New Perspectives on Irish-English* (Migge & Ní Chiosáin, 2012), the 'new perspectives' are evident with more sociolinguistic studies than in the 1997 publication (p.XI), with a clear slant towards more recent areas of research: diaspora: Newfoundland (Clarke, 2017:65) and Argentina (Amador-Moreno, 2012:289), corpus linguistics (McCafferty & Amador Moreno, 2012:265) and immigrants (Migge, 2012:311, Nestor *et al*, 2012:327). One of Hickey's

more recent publications *Sociolinguistics in Ireland* (2016) presents papers from a variety of authors covering a wide variety of topics from both historical and contemporary perspectives, with further evidence of the new perspectives developing in current Irish-English research *i.e.* language planning and politics (McDermott, 2011, cited in Hickey, 2016:7); corpus-based research (Vaughan and Clancy, 2015:365; Kallen and Kirk, 2012, cited in Hickey, 2016:7); language and ethnicity relating to Travellers (Clancy, 2015, *ibid*) and translation studies (Shields, 2016:344).

Like Northern Ireland, research in the Republic focuses on the main cities, with a noticeable east-west divide: Galway (Sell, 2012; Peters, 2012) Cork (Lunny, 1981, cited in Lonergan, 2013:39), Cork and Kilkenny (Bessell & Mulhall, 2014) and Dublin, (which will be dealt with in a separate section). These small-scale studies use quantitative sociolinguistic methods to investigate local speech communities: Sell investigates schwa-epenthesis in Galway, whilst Peters examines /ð/ and /θ/ variation stating that 'virtually nothing [is known] about the realisation of [these variables] in Galway City English' (p.26). Results show that both male and female speakers use fricatives, alveolar and dental plosives in informal speech with younger speakers preferring fricatives, whilst older speakers prefer dental or alveolar plosives. This shows a change in progress with an increase in the use of the supraregional interdental fricative by young, working-class females. Bessell and Mulhall's research concerns listeners' perceptions of accents regarding location, occupation and class, which are then related to phonetic features and recent changes in Irish-English (p.63). Results show that speech varies according to location and gender, that there is a link between perceptions of class and occupation, and the gender of the speaker and type of phonetic feature used. As in Galway, there is an increase in the production (and perception) of supraregional forms by young Cork speakers.

Third wave qualitative studies in Irish-English are rare. These acknowledge that the linguistic choices made are used to construct identity and interpret meaning according to socially accepted norms within the community (Eckert, 2005). However, recent research is beginning to address these issues *e.g.* Rieder (2013) explores the use of and attitudes to the Travellers' Cant language in relation to individual and social identity. O'Dwyer's (2015a) research examines how language is used to construct male identity in a north Dublin sports club. Other research has focussed on migrants. Historically, Ireland has been known for its high levels of emigration, but with the economic boom of the 1990s the number of foreigners entering the country for employment or education increased significantly. The

majority of these are Polish (2.7%) (2016 Census). Consequently, questions of language proficiency and integration have arisen (Diskin, 2013) which have led to several studies in this field. Migge (2012) investigates migrants' attitudes to Irish-English and how its use can '[further] integration and [add] to one's identity' (p.325). Nestor *et al.* (2012) analyse the use of 'like' as a discourse marker by Polish speakers, and suggest that it too, is linked to identity (p.349). Likewise, Lynch (2014) investigates Polish, female-migrants and their use of Irish-English to mark their social identities and integration. Thus, identity and integration clearly play an important role in the acquisition and use of Irish vernacular speech.

2.3.3   Supraregionalisation

Hickey writes extensively about supraregionalisation (2003a, 2007, 2011). It is 'a type of language change' (Hickey, 2007:311) in which supralocal forms spread regionally, but should not be confused with dialect levelling. Supraregionalisation refers to local features being replaced by more supralocal, less regionally bound forms (p.309), whereas dialect levelling is a process whereby, after contact with different dialects, either non-local or local realisations of the same variable prevail (Britain, 2009:3; William and Kerswill, 1999:9). The difference between standard and supraregional forms is that there is no written code for the supraregional *e.g.* 'city' in Irish-English can be pronounced [sɪʈɪ] or [sɪʔɪ] (Hickey, 2011:539).

The supraregional variety of Irish-English stems from the introduction of compulsory education in the mid nineteenth century. This gave rise to an educated middle-class whose speech became the accepted standard form, with subsequent prejudices towards vernacular speech. Thus, it is an historical process which happens 'at a particular time in the development of a country' (Hickey, 2011:537). Supralocal is the term used for these changes at a local level and is generally thought to be the result of increased mobility and contact, typical of modern societies (Britain, 2009), although Hickey (2005, 2007) argues that supralocalisation is the result of dissociation, with speakers distancing themselves from stigmatised local varieties. Naturally there are certain accent features which are identifiable to specific cities, but there are also certain linguistic features which are not locally or regionally bound, and it is these that form the supraregional variety. Some examples in Irish-English include:

- Rhoticism (with a velarised [ɰ])

- Dental stops for dental fricatives /ð/ and /θ/

- Intervocalic and pre-pausal fricativisation of /t/ (also known as slit-t [ṱ])

- Alveolar /l/ in all positions

- Contrast between /w/ and /ʍ/   (Hickey, 1999:267)

Although these features can identify an Irish accent to foreigners, they do not identify speakers as members of social networks, the way vernacular forms do because they are not locally bound (Hickey, 2007:310). For example, the /t/ in 'better' in Dublin-English can be realised as the supraregional variant or through a range of local variants [ʔ] [ɾ] [h] or [ø]. Being able to distinguish the difference between vernacular and supraregional varieties is part of a native speaker's linguistic competence (*op cit.* p.312).

The homophonic merger between voiced and voiceless alveolar plosives /t, d/ and voiced and voiceless interdental fricatives /θ, ð/ is highly stigmatised in Irish-English *e.g.* [θɾɪ] and [trɪ] or [ðen] and [den], whereas dental plosive realisations are the accepted supraregional variants *e.g.* [ṱɾɪ] and [d̪en]. Generally, speakers are unaware of supraregionalisation (Hickey, 2011:539), however, style-switching downwards, towards local salient features, may be used in specific contexts to highlight the speaker's identity, as a marker of 'Irishness' (*op cit.* p.314). Like any sound changes, actuation, propagation and conclusion (Weinreich, *et al.*, 1968) are necessary for supraregionalisation to take place. Actuation, Hickey explains (2011:541), is a speaker-awareness of one's own speech-style being less prestigious than other's. Propagation may take two forms: either the abrupt elimination of local features in all words or, as in the case of supraregionalisation, local features are gradually replaced by non-local variants which are less regionally bound therefore are less stigmatised. Wells (1982) and Bertz (1987) attribute this to social class and education, which differs from Hickey's (1999, 2005) view of dissociation, in the case of the Dublin vowel shift in the 1990s.

2.3.4   Summary

This section of the literature review has looked at the historical aspects of Irish-English and how it came to be the main language spoken in Ireland. Some early research on this variety

is introduced and continues with more recent studies from the latter part of the twentieth century. There is a clear linguistic divide between the north and south with early research focussing on external social factors. More recent research has taken a second wave approach addressing ethnographic perspectives, and to date, there have been very few third wave studies which recognise linguistic choices indexing social meaning with speakers as active participants in their identity construction. In relation to this, supraregionalisation is presented as language change which arises from dissociation from a stigmatised local variety. The following section addresses the local context for this study, which is Dublin, the capital city of Ireland.

2.4   The Local Context for this study: Dublin

Figure 2.1: Map of Dublin City Area

Dublin is the largest city in Ireland with a population of 1,173,179 (2016 Census), which is approximately a quarter of the entire country. Topographically the River Liffey divides the city in two parts; north and south. The north east inner-city, where the speakers in this study are from, was one of the wealthier parts of the capital in the 18th century (Sheridan, 2001). However, over time it declined as the middle class moved to the suburbs, leaving the working class in the city, resulting in strong class divisions which are still evident today (O'Connor 2008). The middle class tend to live on the south side of the river, whereas the north side and inner-city is associated with the working class (with the

exception of Howth and surrounding areas). Rehousing programmes in the 1930s and 1940s caused the break-up of tight-knit social networks and created some council estates near middle-class areas *e.g.* Crumlin in the south west (McManus, 2002). These programmes continued over the next few decades as overcrowding in the city 'remained a major issue until the 1950s and early 1960s' (*ibid*), with further suburbanisation which led to the population of inner-city Dublin being halved by 1991 (O'Connor, 2008:4). Dispersion of these tight-knit social networks and the potential for language change due to contact with other suburban communities with different language ideologies, has yet to be explored in Dublin-English.

This inner-city demographic decline led to high levels of unemployment, closure of local facilities, further decay and social disorder (Hall, 1981, 1992), but with the Urban Renewal Act of 1998, along with substantial European funding and private sector investment, this area began to regenerate (O'Connor, 2008:5). Five inner-city areas were chosen as the most in need of 'physical and socio-economic rejuvenation' (*op. cit.* p.6), which included the Rutland area in the Dublin 1 postcode, where all the children in this study live. Tax incentives for office developments and private residential apartments boosted economic growth in the 1990s which led to Dublin's inner-city population growing for the first time in decades.

The period from the mid-1990s to the economic depression of 2008 is known as the Celtic Tiger years, and it gave Ireland one of the fastest growing economies in the European Union (O'Donnell, 1998). Ireland became a country of net in-migration for many EU citizens, particularly Eastern Europeans, when ten new countries entered the Union in 1994[3]. According to the 2016 census the population of Ireland has increased 3.8% and now stands at 4.76 million, of which 11.6% are immigrants. Many of these are middle-income professionals who are on average younger and more affluent than members of the original community (Howley & Clifford, 2009; O'Connor, 2008). In-migration to Dublin was not only foreigners; many Irish from other counties were attracted to the city for employment in the many white-collar jobs which arose. However, these jobs were inaccessible to the less-educated for whom low-incomes persisted.

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3. The European Union's most significant enlargement came into force on 1st May 2004 when Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, the Slovak Republic, and Slovenia joined the EU.

Government and EU funding helped schools in these inner-city areas, such as the school in this study, who (in their case) moved to 'a brand-new state of the art building' (see Figure 3.2). Specific, targeted programmes were established, such as literacy and Maths, sports and music as well as home-school liaison support (school website and personal communication with the acting Principal, 2016). As a result, levels of education have improved thanks also to the number of foreign children in the school whose parents often have higher expectations which has been motivating for the locals. Statistics currently show 42% of the population as having completed tertiary education; a 28% increase since

1991 (2016 Census). Despite these improvements, deprivation is still an issue in some parts of the city and it is still the dominant trend for inner-city residents to relocate to the suburbs when starting families (Howley *et al.*, 2009). Consequently, the same tight-knit social networks of the older, more established inner-city community are weakened through social mobility. This facilitates the diffusion of linguistic innovations, although not necessarily always towards standard forms (Milroy & Milroy, 1985:381) because the linguistic and social factors of a location play a significant role (Stuart-Smith *et al.*, 2017) according to speaker identity and local linguistic ideologies.

2.4.1   Research on Dublin-English

Despite the increase in research of Irish-English, there is still relatively little available on Dublin-English. Wells (1982) and Bertz (1987) are well cited: their work is largely descriptive of characteristic phonological features attributing them to education and social class. Gender and age differences are also observed (Lonergan, 2013:15). Social class divisions are reflected in the phonology, therefore Hickey offers a 'twofold division with a further subdivision' (1999, 2003b, 2005:8) which is necessary when referring to Dublin-English. These divisions are shown below (Table 2.2):

1. *Local* Dublin-English
2. *Non-local* Dublin-English   a) *mainstream* Dublin-English
                                            b) *advanced*[4] Dublin-English

(Hickey 2005:8)

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4. The original term used was 'fashionable' Dublin-English (1999), but over time Hickey has adapted the term, first to 'new' (2005) then to 'advanced' (2012a), to convey a more precise meaning.

'Local' refers to those who have strongest ties to the city and is closest to the working-class vernacular, whereas non-local speakers are broadly the 'educated' or middle class. This latter group is subdivided into 'mainstream', which is the largest group of speakers who do not identify with the popular Dublin culture. 'Advanced', refers to a smaller group, generally females, who aspire to the sophistication of city life, whilst strongly dissociating from the local vernacular (*ibid*). Initially it was known as 'fashionable' Dublin-English (Hickey, 1999), but over time Hickey has adapted the term; first to 'new' (2005), then to

'advanced' (2012a), when through supraregionalisation, this variety spread across the city and country. Given that mainstream Dublin-English is taken as the national standard, it is no longer just 'fashionable' or 'new' to Dublin, thus 'advanced' seems to be a more appropriate term (Hickey, in O'Sullivan, 2013:358).

2.4.2   D4 / Dartspeak

The D4 accent is one of the areas which has been researched in Dublin-English (Hickey, 1999; Moore, 2011; Lonergan, 2013; O'Sullivan, 2013). It was so called because of the affluent, southside, Dublin 4 postcode where it began. Later it became known as 'Dartspeak' (or mockingly 'Dortspeak' given the alterations to vowel sounds in this accent), from an acronym of the Dublin Area Rapid Transit: the railway line which runs through this area. It began in the 1990s as a strong dissociation from local Dublin-English, mainly spoken by a relatively small number of young, aspiring females (Hickey, 2005:48). Apart from vowel sounds, other linguistic areas affected were /r/ retroflection, /l/ velarisation, a merge between /w/ and /ʍ/ and SOFT-lengthening (Hickey, 2007b:182). However, it was considered to be an artificial accent (Moore, 2011:49), consequently it became unpopular and was satirised by Dubliners and in the media, therefore did not develop further as it did not convey the 'cool' image to which its speakers aspired (Hickey, 2003b).

2.4.3   The Dublin Vowel Shift

The Dublin vowel shift has also attracted researchers' attention (Hickey, 1986, 1999; Lonergan, 2013; Kallen, 2013; O'Dwyer, 2016). In-migration, due to increased job prospects in the 1990s, continued to change the city demographically: there were more socially mobile, weak-tie speakers who could lead to sound change (Hickey, cited in O'Sullivan 2013:361). The desire for non-local speakers to dissociate from the urban forms

continued which resulted in maximising the phonetic differences for both mainstream and fashionable speakers (Hickey, 2003b:364). Some of the vowel sounds from Dartspeak were carried forward into this 'new pronunciation' *e.g.* raising and rounding of low back vowels' *e.g.* 'toy': [tɒɪ] → [tɔɪ] → [toɪ], retraction of /ai/ diphthongs with a low or back starting point and raising of the /ɒɪ/ diphthongs *e.g.* 'time': [taɪm] → [tɑɪm] are amongst some of the changes identified (Hickey, 2005:49).

Both the D4 accent and the Dublin vowel shift are reactions to the contemporary urban setting which developed throughout the Celtic Tiger years. They developed as a form of dissociation from the local, vernacular variety, thus, they are socially motivated (Hickey, 2000). This highlights the fact that social diversity should not be overlooked when considering supralocalisation (Britain, 2009). In the Dublin vowel shift it appears that actuation may have begun when fashionable speakers *i.e.* non-local speakers, became aware of differences in local and mainstream varieties. Propagation continued, initially with these 'motivated participants' (Hickey, 2005:63) following the Neogrammarian view of abrupt elimination of local features being replaced by the new pronunciations in Dublin-English (Hickey, 2011:541). However, these phonological features spread across the city and country through 'detached participants' *i.e.* 'socially conscious urbanites from outside Dublin' (Hickey, 2005:63) through lexical diffusion. These forms gradually became supralocal for the young adults of the economic-boom years. In fact, female speakers born around 1980 were those who used the new pronunciation features, those born before then only sometimes did.

Hickey argues (2005:87) that the media played a significant role in this process given that many of the television and radio presenters are young and have many of the new pronunciation features in their speech. Also, new RTÉ staff are offered pronunciation guides to avoid stigmatised pronunciations (Lonergan, 2013:148). Interestingly, these are mainly consonants, with dental and alveolar stops being identified as 'problems', encouraging the use of interdental fricatives instead. The non-local speech of Dublin is the national standard which is heard universally across the country on RTÉ. Therefore, the accents of many young, female speakers are heard and unconsciously emulated as the desirable urban variety of the capital (Hickey, 2007b:186) which supports the theory of lexical diffusion.

From the research discussed above, it can be seen that whilst there is an increasing amount of interest in Irish-English, particularly grammatical, pragmatic, phonological and lexical

fields, there is still a shortage of research on sociolinguistic variation and change in Dublin and in other urban and non-urban environments across the country.

2.5   The variables for this study

This section continues with a brief look at consonants in Dublin before examining the phonetic variations found in the variables of this study /ð/ and /θ/ and /t/. These variables are also known as the THIS and THINK lexical sets and GET for /t/ (Hickey, 2005:29), but in this dissertation the phonetic symbols /ð/ and /θ/ and /t/ will be used.

2.5.1   Consonants of Dublin-English

Most consonants in Irish-English are similar to Standard English so the body of literature on Irish-English consonants focusses on the sounds which differ, such as r-retrofexion, hiatus-r, non-velarised-l [l] and dark-l [ɫ], voiceless-w [ʍ], and those which are relevant to this dissertation: t-lenition, and dental and alveolar plosives for fricatives. The social stratification of Dublin is also reflected in phonetic variation which strongly reflect speakers' social class and identity. Different terms are used to refer to the levels of prestige associated with each linguistic variety, which can be considered on a cline from 'popular' (Bertz, 1987) or 'local' (Hickey 1999), to 'educated' (Bertz, 1987) or 'advanced' (Hickey, 2012a). The non-local forms are those found in middle-class Dublin, educated speech and increasingly include the newer, 'advanced' pronunciation features which have developed since the 1990s (Hickey, 2012a). The three variables under examination in this study are the voiced and voiceless interdental fricatives /ð/ and /θ/ and the alveolar plosive /t/.

2.5.2   Phonetic variation for /ð/ and /θ/

The voiced interdental fricative /ð/ is produced by narrowing the vocal tract so that pressure is created as the air flowing through is restricted. The tongue is placed, as the name suggests, between the upper and lower teeth before a burst of air is released resulting in friction noise (Ogden, 2012). This friction can be seen clearly in the spectrogram in Figure 2.2 below.
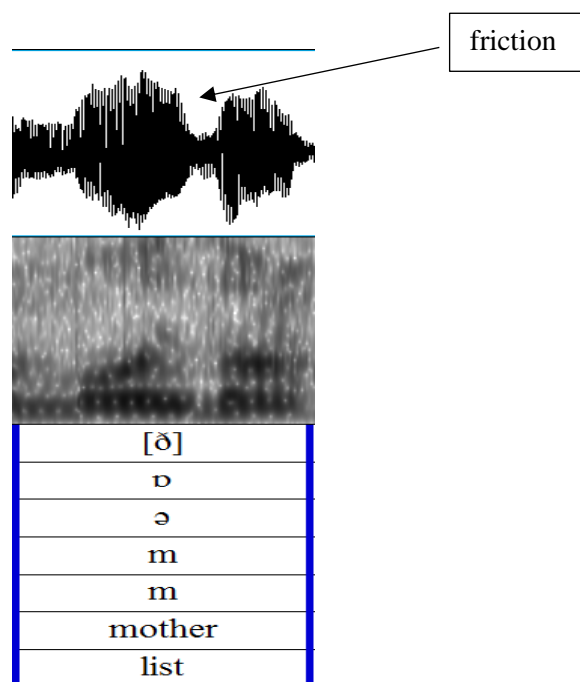
Figure 2.2: A token of *mother*, coded auditorily as [ð]

Similarly, the voiceless fricative /θ/ is produced by narrowing the vocal tract, but without voicing so that more air flows through and consequently friction noise increases (Ogden, 2012). Figure 2.3 shows voiceless frication in the word 'mouth'.
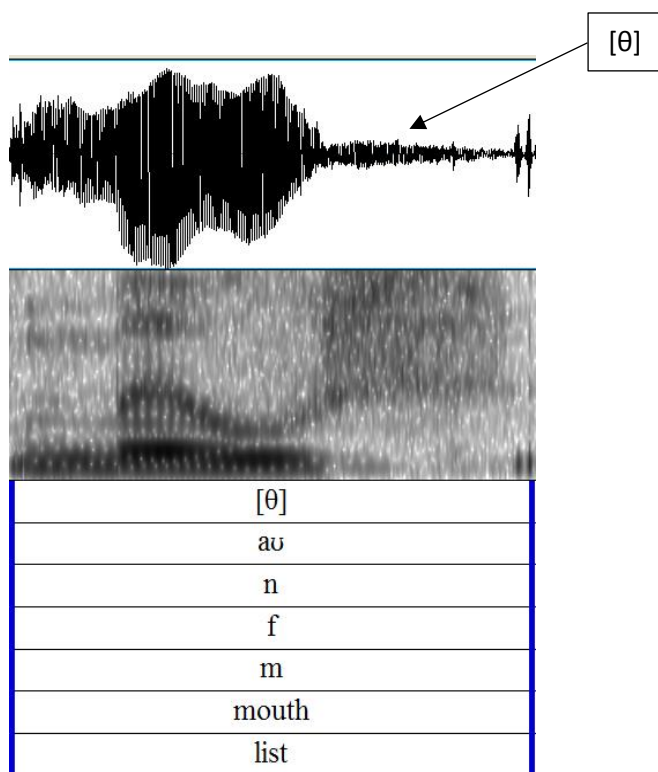
Figure 2.3: A token of *mouth*, coded auditorily as [θ]

However, these variables are not always produced as fricatives. [θ] and [ð] are the Standard English variants which are not emulated in Irish-English as to do so is not part of the national linguistic identity (Hickey, 2007:21). However, use of standard fricatives is increasing in post-tonic *e.g.* 'Maths', word final 'fourth' position in more formal contexts or careful speech (Hickey, 2005:73) and by 'those making a conscious effort at elegance' (Wells, 1982:429). In Irish-English the non-local, standard forms for /θ/ and /ð/ are dental plosives [t̪], [t̪ʰ] or [t̪θ] and [d̪], [d̪ʰ] or [d̪ð] respectively, and are used by middle-class speakers who tend to fluctuate between dental stops and interdental fricatives.

Lonergan's research on Dublin-English (2013) shows dental stops are used between 50% and 60% of the time, depending on position, with little variation according to age or gender (p.327-8). Furthermore, dental stops are commonly found in word initial positions, following a pause or a stop consonant *e.g.* 'at three o'clock'. Other variants are used according to phonetic and social factors, most notably [t] and [d] (Wells, 1982; Bertz, 1987; Hickey, 2005, 2007).

Alveolar stops are strongly characteristic of the local Dublin variety, but are highly stigmatised (Hickey, 2007:330). There is a lack of contrast between the dental and alveolar realisations in local Dublin vernacular (Wells, 1982, Hickey, 2005) *e.g.* 'three' and 'tree' as /triː/, and 'they' and 'day' as /deɪ/, whereas, the more prestigious middle-class speech does distinguish these minimal pairs *e.g.* /t̪riː/ - /triː/ and /d̪eɪ/ - /deɪ/. Lonergan (2013) found Dublin inner-city women to use alveolar [t] for /θ/ in 80% of cases (p.328), dental stops were almost totally absent (p.330), whilst men tend to show a wider range of local variants (p.328). Below are waveforms and spectrograms for some of the local and non-local variables of /ð/ and /θ/. Firstly, Figure 2.4 below shows the local alveolar plosive [d] and the non-local dental plosive [d̪] variants for /ð/.

Burst for stop

[d]		[d̪]
ʊ		#
ə		i
m		o
m		o
another		this
list		story
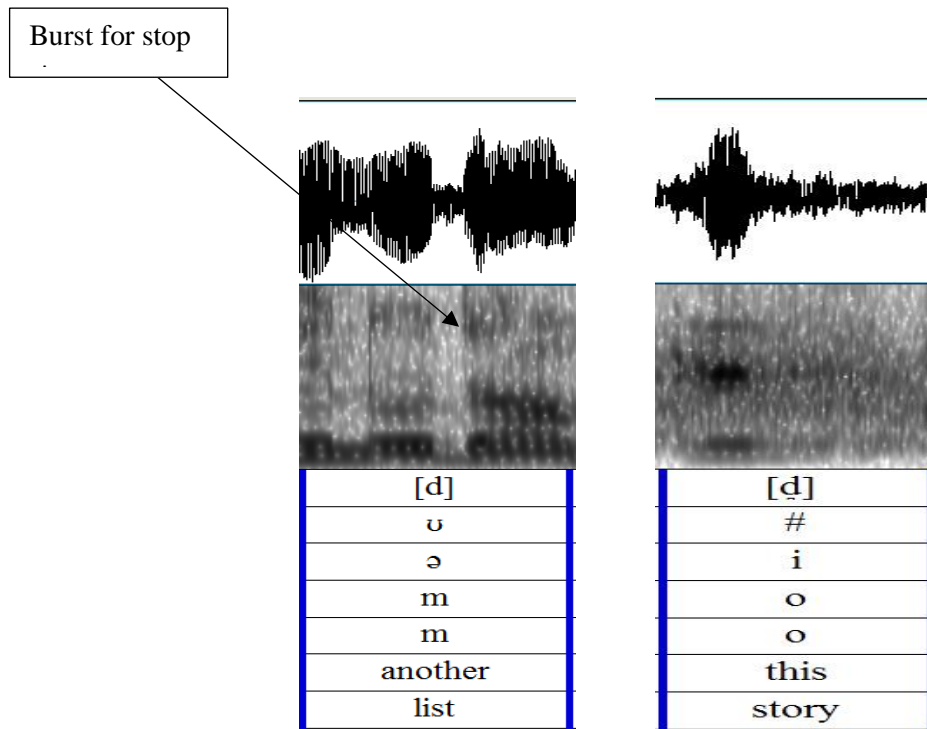
Figure 2.4: A token of *another*, coded auditorily as [d] and a token of *this* coded auditorily as [d̪]

On the following page, Figure 2.5 shows the main local and non-local variants for /θ/. Firstly, the local aspirated alveolar plosive [t] realised in the word 'three', followed by the non-local dental plosive [t̪] in the word 'bath'.

[t]		[t]
d		a
r		#
o		f
m		m
three		bath
story		list
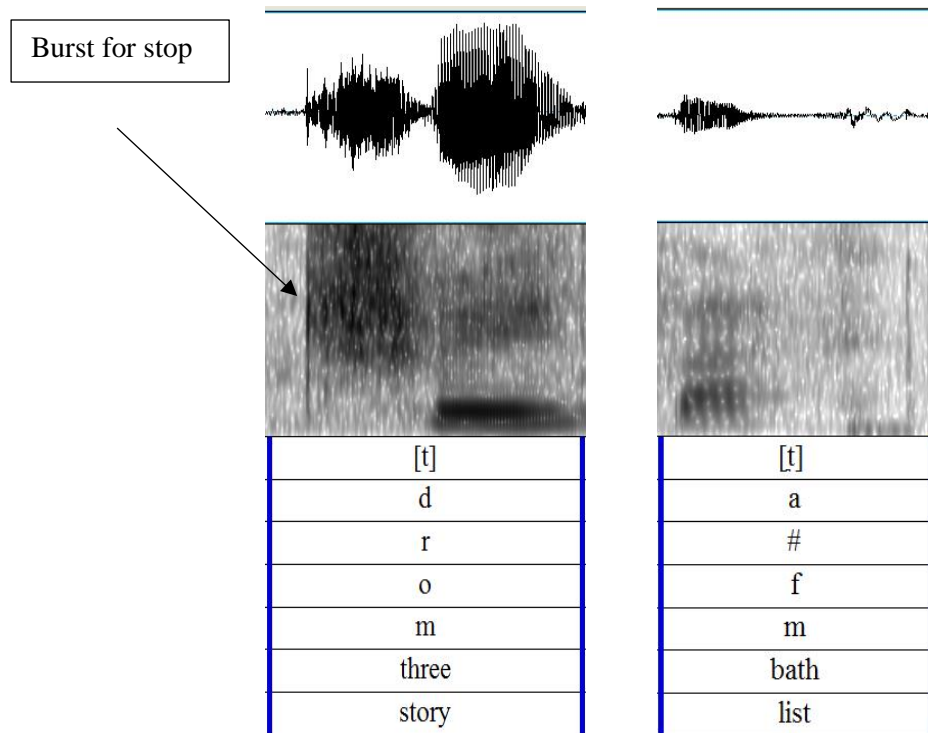
Figure 2.5: A token of *three*, coded auditorily as [t] and a token of *bath* coded auditorily as [t̪]

2.5.3   Phonetic variation for /t/

The variable /t/ is usually realised as a voiceless alveolar plosive, produced when the velum is raised to seal the vocal tract and nasal cavity, thus preventing the escape of any air. Further closure, made by the tongue blade against the alveolar ridge or behind the upper teeth, is held for just a few milliseconds before the pressure which has built up behind is released in plosion, (Ogden, 2012). Figure 2.6 shows both the standard [t] and the supralocal slit-t [t̪] with weak plosion at the beginning of the word 'toilet', oscillation of the vocal folds during vowel production and transition of the articulators before the final apico-alveolar fricative of [t̪].
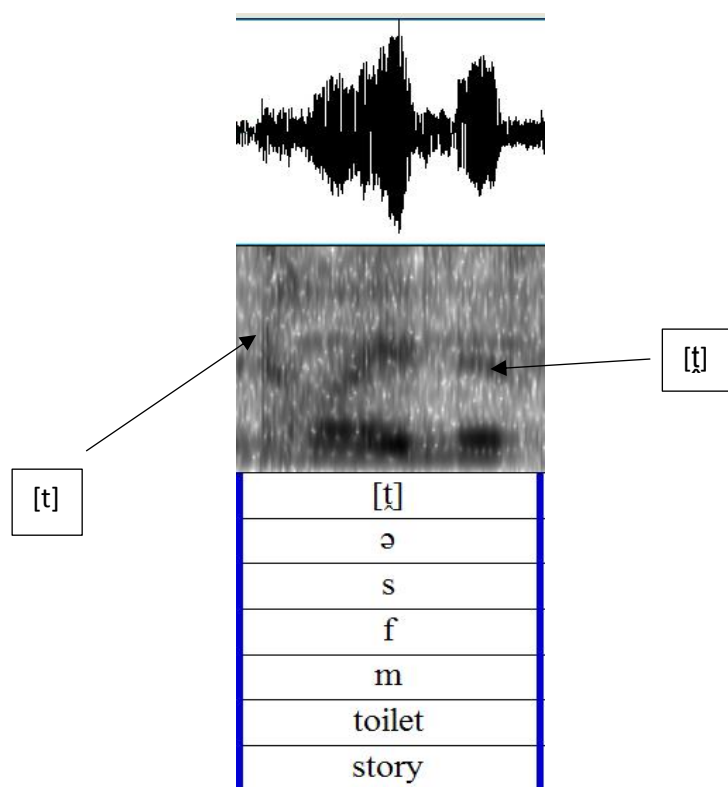
Figure 2.6: A token of *toilet*, coded auditorily with [t] and then [ţ]

Articulation of /t/ results in many potential variants, depending on context (Wells, 1982:430, Ogden 2012:96). Allophones found in inner-city Dublin speech in this research include the local variants [ʔ] [ø] [ɾ] [ţ] [d] [h] and the non-local forms [ʈ] and [t].

2.5.4   Alveolar plosive /t/: [t]

Dublin local pronunciation of the variable /t/ is alveolar plosive [t] in pre-tonic positions *e.g.* word initial and before a stressed vowel *e.g.* 'time' and 'Italian'. When unlenited, it can also be found in post-tonic, intervocalic and word final positions *e.g.* 'water' and 'but', although these positions often show substantial variation (Lonergan, 2013). This variation lies in the level of lenition which Hickey (2005:39) places on a cline from [t] − [ţ] − [ɹ] − [h] − [ʔ] − [ø] according to level of formality, thus tends to increase in local Dublin-English. Surprisingly, unlenited [t] is found in the inner-city 'far more' than in other areas of Dublin (Lonergan, 2013:294). Lonergan suggests that this may be hypercorrection to avoid the more stigmatised variants as lenition progresses past the slit-t (p.333).

2.5.5   Lenition of /t/

Lenition is the phonetic weakening of articulation of a sound from a stop to a fricative, which is common in Celtic languages (Hickey, 2007:322). There is substantial lenition in Irish-English which affects both /t/ and /d/, although the latter is affected less (Kallen, 2013:53) because it has low phonetic salience (Hickey, 2007:331). Given that the IPA lacks a specific symbol for slit-fricatives, there have been many symbols suggested over the years (see Pandeli *et al.* p.69), but the symbol used in this dissertation is Hickey's [ṯ], with a subscript carat to show that it is realised as a continuant (Lonergan, 2013:35).

2.5.6   Slit-t /t/: [ṯ]

This variant is described as an 'apico-alveolar fricative formed with a broad central channel' (Pandeli *et al.* 1997:68) and is widespread in all varieties of Irish-English, thus is indexical of an Irish accent (Hickey, cited in Pandeli *et al.* 1997:66). Slit-t is the non-local variant in Dublin and is also supraregional as it is not confined to any specific location. It can occur in post-tonic, intervocalic and word final positions *e.g.* [kaṯ], [wɔ:ṯər] and [ʌʊṯ] (Wells, 1982, Hickey 2007), but not if another consonant precedes or follows *e.g.* 'lately' and 'battle' (Pandeli *et al.* 1997). Slit-t is also more common in word final position in local speech (Lonergan, 2013:327). At a phonetic level, non-natives may hear two sibilant fricatives as homophones, when there is in fact a contrast *e.g.* /meṯ/ and /mes/ (O'Baoill, 1990).

2.5.7   Tapping /t/: [ɾ]

Tapping is more common in men's speech than in women's, whose use is 'negligible' (Byrne, 1996 cited in Kallen 2013:52). Its use is also increasing in the speech of young males (Wells, 1982:430), but is restricted to intervocalic position *e.g.* 'letter', word boundaries *e.g.* 'get up' as [gerʌp] or multisyllable words with a stressed vowel before the /t/ *e.g.* 'catechism' as [karəkɪsm]. In this study, Hickey's alveolar [ɹ] has been transcribed as a tap [ɾ] because only [ɾ] was observed. It is generally a stigmatised variant, but Hickey explains, for some younger non-local speakers 'it is fashionable to use tapping as an alternative to frication' (2007:323) so is spreading into the supraregional pronunciations of Irish-English. This was also confirmed in Lonergan's research on Dublin-English phonology (2013:325).

2.5.8   /t/: [h]

The lenited form of [h] in Irish-English probably stems from the lenited form of /t/ in Irish *e.g.* 'four', 'a ceathair' /ah kahər/ which is then transferred to other words *e.g.* 'Saturday' [sahərdɛi] (Kallen, 2009; Ó Baoill, 1990). Because of its etymology, it can be found in all positions in Irish-English (Hickey, 2007:322, 2009:9), and is 'a common feature of contemporary Dublin' (Kallen, 2009:62). However, Lonergan (2013:332) disagrees, and argues that because it is stigmatised, it is relatively rare and is mainly found in word-final position of local Dublin speech *e.g.* [ʍɒh].

2.5.9   /t/: [ʔ]

Glottal stops, also called glottal replacement, are another lenited form of /t/ (Smith and Sophie-Holmes, 2017). They have been widely studied in Standard English but less so in Irish-English. Early research (Joyce, 1910, Hogan, 1927) does not mention t-glottaling, but Wells (1982:430) noted that it is typical of young, male, working-class Dublin speech. More recent research (Lonergan, 2013: Hickey, 2005, 2007) confirms Wells' findings: t-glottaling is in fact confined to local Dublin-English, is more common amongst men and is not used in middle-class vernacular. In contrast to British varieties, t-glottalisation in Irish-English is stigmatised (Hickey, 2005:42) and for this reason is unlikely to spread from Dublin across the country as a supralocal form.

Glottal stops are found in post-tonic, intervocalic and word final positions, but there are gender and age differences. Inner-city men tend to use glottaling and tapping equally, but in word final position, women use glottal stops more than men, favouring unlenited [t] in post-tonic and intervocalic positions (Lonergan, 2013:325). Likewise, young inner-city speakers tend to use unlenited [t] more than glottaling or tapping, although realisations of /t/ can vary greatly in post-tonic and intervocalic positions (*ibid*). An unpublished study (Pardy, 1987 cited in Kallen, 2013:53) reported that young inner-city Dublin girls used glottals 63% of the time in casual speech, compared to boys' 45%. When reading passages this fell for both genders and reduced further when reading lists, with boys' use exceeding girls' in these more formal contexts (*ibid*). Similarly, Kallen and Devitt (1993, cited in Kallen 2013:53) found that young inner-city girls' use of glottals was greater than the boys' in casual contexts, which reduced in classroom contexts without showing any gender differences. Figure 2.7 below shows a clear glottal stop in the word 'water'. This variant is a prominent allophone of /t/ in inner-city Dublin-English.

[ʔ]
ɒ
ə
m
f
water
story
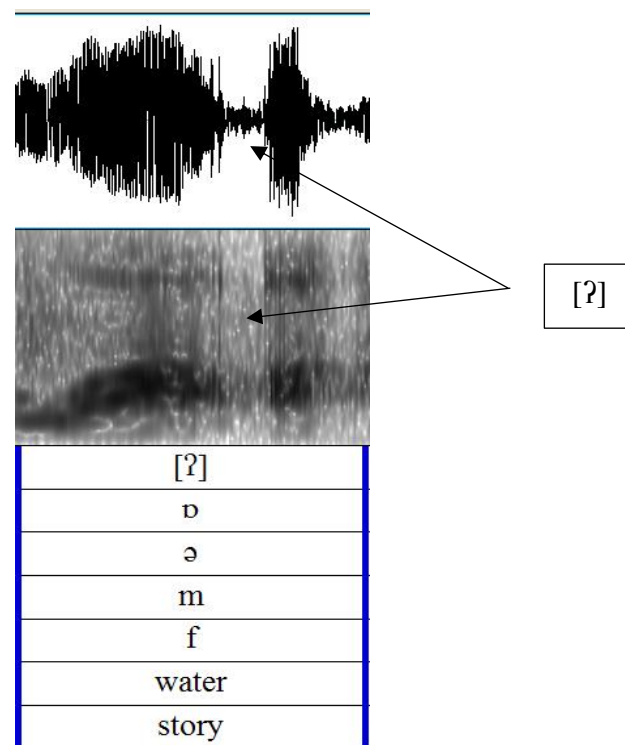
Figure 2.7: A token of /t/ in *water*, coded auditorily as [ʔ]

2.5.10 Deletion /t/: [ø]

Deletion, as an allophone of /t/, is the furthest along the cline of lenition, thus, it is the most stigmatised and is confined to local Dublin-English (Hickey, 2007:312). It is found in intervocalic positions *e.g.* 'better', word final positions *e.g.* 'what' or post sonorant, word-final consonant clusters *e.g.* 'went' (Hickey, 2007 cited in Lonergan, 2013:51). Kallen (2009:66) does not completely agree, stating that 'deletion never occurs intervocalically' because it usually occurs in complex syllable codas *e.g.* 'must' and 'servant', with other forms of 'lenition [being] common in intervocalic position.'

2.6   Summary of consonants

This final section of the literature review has looked at the local context of the capital city Dublin. Considerations have been given to both past and present Dublin to highlight the changing demography of the city which has resulted from the socio-economic boom of the 1990s. Previous research on Dublin-English was presented, followed by consonants of Dublin-English with particular attention to the variants of /ð/, /θ/ and /t/ and the many allophones which are found in both local and non-local pronunciations.

The following chapter will describe the methodology used in gathering and analysing the data in this study.

3.0   **Methodology**

3.1   Data collection

In order to gather the information deemed necessary to examine whether there have been
any changes over time in the pronunciation of /ð/, /θ/ and /t/ in inner-city Dublin, an
analysis was made of a real-time, recorded sample of Dublin-English, spoken by eight to
nine-year-old children from Rutland Street National School in 1961 and in 2016. The map
below, in Figure 3.1, shows the location of the school in 1961 (blue dot) and today (red
dot), both in the north-east of the city.

Figure 3.1: Map of Dublin city with school locations

3.2   The Local Area

Dublin in socially divided with the area north of the River Liffey being predominantly
working-class. In 1961 this area was one of deprivation, with families living in close-knit
communities in council properties. Overcrowding in Dublin 'remained a major issue until
the 1950s and early 1960s' (McManus, 2002) so rehousing programmes, which began in
the 1930s and 1940s, continued over decades. This inner-city demographic decline led to
high levels of unemployment, closure of local facilities, further decay and social disorder
(Hall, 1981, 1992), until the Urban Renewal Act of 1998, along with substantial European

funding and private sector investment, this area began to regenerate (O'Connor, 2008:5). Five inner-city areas were chosen as the most in need of 'physical and socio-economic rejuvenation' (*op. cit.* p.6), which included the Rutland area in the Dublin 1 postcode, where all the children in this study live.

Today, this is still a working-class area, but it has benefitted from the tax incentives for office and residential developments. Economic growth during the Celtic Tiger years (mid-1990s and 2008) led to the inner-city population growing for the first time in decades. In-migration was not only Irish people from other counties, but also many foreigners who were attracted to the city for employment. These were often middle-income professionals who were, on average, younger and more affluent than members of the original community (Howley & Clifford, 2009; O'Connor, 2008). Further funding for schools allowed for specific, targeted programmes to be established. As a result, levels of education have improved. This is also due to the number of foreign children in the school, whose parents often have higher expectations, which has been motivating for the school in general (personal communication with the acting Principal, 2016). This sociodemographic change has weakened the tight-knit social networks of the locals and contact with other dialects is now commonplace in Dublin.

3.3 The 1961 Recordings

The first recordings in this study came from *Give Up Yer Aul Sins*: a collection of Bible stories eloquently retold by 'The Communion Class': a class of eight-year-old girls learning their catechism. To motivate the children, they were recorded on reel-to-reel tapes by their teacher, Peig Cunningham, who had been disillusioned by fairy tales as a child, so felt Bible stories were more appropriate.

Figure 3.2

The original Rutland Street National School building, which was often cold and damp. Many of the children had health issues and on the 1961 recordings children can be heard coughing in the background.

These recordings were found on a rubbish dump in the 1980s, cassettes were made but given their success, they have since been digitised and a CD and DVD are now freely available for the public to purchase (EMI and Brown Bag Films, 2002). According to one of the children in Miss Cunningham's class, Rosie, whom I interviewed as part of my research, they loved her, her story-telling skills and liked to imagine they were on the wireless. Coming from deprived backgrounds, nobody had television or travelled abroad, so when they heard these stories their imaginations were awakened as they envisaged every scene in detail and related the stories back to their own lives *e.g.* when Jesus told the widow to 'stop that growling and roaring I'm going to make him alive again.' And as preparations were made to go to the Wedding Feast of Cana 'they got their nylons and head scarves on'. It is this type of detail which is unwittingly humorous and endearing as they narrate the stories in what Hickey (1999) defines as local Dublin accents. These recordings provide an important resource for Dublin vernacular at that time, although it must be remembered that these narratives are part of the oral literature tradition, which is performative (Bauman, 1974:290), therefore are not necessarily typical of natural, casual conversation.

3.4   The 2016 Recordings

The data for comparison were collected in June 2016 by the present author, a native of a middle-class, south-side suburb of Dublin, thus, a speaker of standard Irish-English. I returned to the same school after contacting the Acting Principal and receiving ethical approval from University of Glasgow Ethics Committee. Children of eight to nine years of

age from Class Two and Class Three *i.e.* early to middle years of primary school, were recorded to replicate as much as possible, the same level of cognitive and linguistic development as the 1961 children.

Figure 3.3

Rutland Street National School today.

Covered outdoor play area

This new building, which has been occupied since 2008, is a modern, purpose-built primary school which welcomes boys and girls from many different cultural and linguistic backgrounds. Inside, it has been well planned with bright, spacious areas, secure entry and a covered outdoor play area on the rooftop so that the children can get out in wet weather. The school programme is holistic so after five decades this school offers a very different environment than the children in 1961 experienced.

3.5   Materials for the 2016 Recordings

Initially participants completed a questionnaire with some background information (see Appendix B). All data have been anonymised. In both 1961 and in 2016, the children could choose whether they were recorded or not. This encouraged the confident, more eloquent children to speak, whereas the quiet, shy children listened and enjoyed the stories. Since Vatican II, religious education has changed significantly. Likewise teaching and learning methods have changed. Allowing for these differences, children in the twenty-first century may not have the same familiarity with Bible stories. For this reason, they were encouraged to tell stories about other familiar topics (see Appendix C). The choice was:

- A favourite game
- A favourite television programme
- A favourite book
- The best day of your life
- A favourite Bible Story

Secondly, some words from Wells (1982) lexical sets and some phrases taken from the original recordings were read (see Appendix D) to ensure there were sufficient tokens for each variable for comparison.

3.6   Recording Conditions 2016

A small, familiar, quiet room was used over two days using a Zoom H4nex high quality Handy recorder with a Beyerdynamic Opus 16 microplane headset. All children volunteered to participate and came in pairs to reduce shyness, encourage spontaneous speech and reduce the constraints of the Observer's Paradox *i.e.* unwittingly adapting their speech because of the presence of the interviewer. Each child spoke for approximately five minutes, although some of the children needed much more prompting than others. These recordings provide the basis for a trend study of phonological change in this area.

3.7   The Quasi-Lifespan Study

A further recording was made of one of the children who had been in the class in 1961, although was not actually recorded speaking. Now in her early sixties, Rosie provides an effective quasi-lifespan case-study to identify any potential changes in her speech. Rosie, was born and brought up in the Rutland Street area, where she still lives today. Her classmates were her neighbours and they played on the streets in a close-knit community where everybody knew each other. Amongst other jobs, Rosie worked as a classroom assistant in Rutland Street, where she had been a pupil herself. She is now retired, and her own family have grown up and left home, but she is still active in the community doing church and voluntary work. The same reading lists (see Appendix D) were used for Rosie, but the questions prepared to elicit spontaneous, natural speech were more age-appropriate (see Appendix E). However, these were not needed; over time she has not lost any of her eloquence heard on the original recordings of her peers. The conversation began from the

doorway, before the microphone was switched on, and flowed as if we had known each other for years. At one stage the headset was spontaneously removed to point out from the window where the original Rutland School still stands. Fortunately, the high-quality recording equipment did not lose any of this information. This participant was indeed an interviewer's dream, to whom I am extremely grateful for her time and enthusiasm.

3.8   Participants

In total twenty-three recordings were used from the 1961 set, all of whom were from girls. Seventeen were used from 2016: twelve girls and five boys, as well as one adult in the lifespan study. Seven children were not included because both of their parents were foreign nationals and the children had lived some of their lives outside Ireland and/or had evident non-native accents. Regarding the 1961 recordings, it is not clear precisely how many children actually spoke; some may have been recorded telling more than one story. Identifying individual voices proved more difficult than expected, therefore it was preferred to count one narrator per story to avoid miscategorising.

In total there were 41 speakers in this study: 40 children and 1 adult as shown in Table 3.1 below. In 1961 all children had Irish parents and were born and brought up in Dublin. In 2016, this was true of eleven of the speakers whilst the remaining six children were second generation immigrants.

	1961	2016	
	Children	Children	Adult
Female	23	12	1
Male	0	5	0
	23	17	1

Table 3.1: Number of participants in this real-time study

3.9   The Linguistic Variables

This study focusses on three linguistic variables which are characteristic of the local Dublin area (Wells, 1982; Hickey, 2004) and which have been assumed to be stable (Labov, 2001:196; Corrigan *et al.*, 2012:23). These are /ð/, /θ/ and /t/. These variables are also known as the THIS and THINK lexical sets and GET for /t/ (Hickey, 2005:29), but in this dissertation the phonetic symbols /ð/ and /θ/ and /t/ will be used.

- The voiced interdental fricative /ð/   *e.g.* 'this' and 'mother'

- The voiceless interdental fricative /θ/   *e.g.* 'three' and 'mouth'

- The voiceless alveolar plosive /t/   *e.g.* 'water' and 'what'

The range of variation identified for each variable /ð/ and /θ/ is shown in the tables 3.2 and 3.3 below. The educated form is that of middle-class Dublin-English, which is the supralocal form and is also taken as the national standard form of Irish-English (Hickey, 2007:312). This is represented with the variants [d̪] and [t̪] respectively. It is recognised that orthographic /ð/ and /θ/ in Irish-English are not generally realised 'with the fricatives of Standard English' (Hickey, 2005:56), but some dental fricatives [ð] and [θ] are known to be used by Irish-English speakers (*e.g.* Hickey, 2005 in Dublin; Besssell and Mulhall, 2014 in Cork), and these were also identified here.

	[d̪]		[d]		[ð]		Total	
	No.	%	No.	%	No.	%	No.	%
Children 1961	140	24.31%	434	75.35%	2	0.35%	576	100.00%
Children 2016	144	36.73%	235	59.95%	13	3.32%	392	100.00%
Total	284	29.34%	669	69.11%	15	1.55%	968	100.00%

Table 3.2: Range of variation identified for /ð/ with tokens

	[d]		[ø]		[ɾ]		[t]		[t̪]		[ʔ]		[θ]		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Children 1961	2	1.96%	12	11.76%	5	4.90%	52	50.98%	13	12.75%	17	16.67%	1	0.98%	102	100.00%
Children 2016	0	0.00%	4	1.88%	1	0.47%	136	63.85%	57	26.76%	11	5.16%	4	1.88%	213	100.00%
Total	2	0.63%	16	5.08%	6	1.90%	188	59.68%	70	22.22%	28	8.89%	5	1.59%	315	100.00%

Table 3.3: Range of variation identified for /θ/ with tokens

3.10   Data Processing

Time aligned, orthographic transcriptions (Ogden, 2012:24) were made of each recording. These files were then uploaded and stored in a LaBB-CAT corpus, to create a password protected electronic corpus of real-time Dublin-English. Textgrids and .wav sound files were then exported and analysed in Praat. All possible instances of the three variables /ð/, /θ/ and /t/ were coded for phonetic variants using narrow, auditory transcriptions IPA symbols to identify linguistically relevant information (*op cit.* p.22), see Table 3.4

Any word forms which were unstressed or prosodically reduced were excluded from the analysis.

Variants for ð		**Example**	
[d]	Voiced alveolar plosive	mother	/mʌdər/
[d̪]	Voiced dental plosive	there	/d̪er/
[ð]	Voiced interdental fricative	other	/ʌðər/

Table 3.4: Range of variants for /ð/

Variants for /θ/		**Example**	
[t]	Voiceless alveolar plosive	things	/tɪŋz/
[ʔ]	Glottal stop	within	/wɪʔɪn/
[ɾ]	Tap	with him	/wɪɾ ɪm/
[ø]	Deletion	fifth	/fɪf/
[t̪]	Voiceless dental plosive	month	/mɒnt/
[θ]	Voiceless interdental plosive	thing	/θɪŋ/

Table 3.5: Range of variants for /θ/

Variants for /t/		**Example**	
[ʔ]	Glottal stop	water	/wɒʔr/
[ɾ]	Alveolar tap	pick it up	/pɪk ɪɾ ʊp/
[h]	Glottal fricative	better	/behr/
[t̪]	Voiceless dental plosive	better	/betr/
[ø]	Deletion	weren't able	/wernøeibl/
[d̪]	Voiced alveolar plosive	the	/d̪ə/
[t̺]	Apico-alveolar fricative Slit fricative or Slit-t	beautiful	/bjuːt̺əfəl/
[t]	Voiceless alveolar plosive	want	/wɒnt/

Table 3.6: Range of variants for /t/

3.11   Social and Linguistic Factors

The data were coded for social and linguistic factors as shown in the following tables:

Year of recording	1961
	2016
Gender	1961: female
	2016: female and male
Age	1961: children
	2016: children and one adult

Table 3.7: Social factors for coding the Dublin data.

All of these factors are known to influence phonetic variation (Labov, 2001; Kerswill, 2012). Each variable, the voiced and voiceless interdental fricatives and the voiceless alveolar plosive /t/ was coded phonologically for linguistic factors, position in the word, pre- and following phonological contexts, and speech style. Examples are shown in the following tables:

Preceding Phonological Contexts	
Vowel	*e.g.* 'so <u>the</u>'
Coronal	*e.g.* 'and <u>then</u>'
Other Consonants	*e.g.* 'ehm <u>this</u>'
Pause	*e.g.* '# <u>then</u>'
Position in word	
Onset	*e.g.* '<u>this</u>'
Medial	*e.g.* 'mo<u>the</u>r'
Style	
Storytelling	1961 and 2016
Reading word lists	2016
Reading phrases	2016

Table 3.8: Coding for linguistic factors for /ð/

Preceding Phonological Contexts	
Vowel	*e.g.* 'wi<u>th</u>'
Coronal	*e.g.* 'ten<u>th</u>
Other Consonants	*e.g.* 'some<u>th</u>ing'
Pause	*e.g.* '# <u>th</u>ank you'
Following Phonological Contexts	
Vowel	*e.g.* '<u>th</u>under'
Coronal	*e.g.* 'nor<u>th</u> Dublin'
Other Consonant	*e.g.* 'wi<u>th</u> me'
Pause	*e.g.* 'in the nor<u>th</u> #'
Position in word	
Onset	*e.g.* '<u>th</u>ink'
Medial	*e.g.* 'some<u>th</u>ing'
Final	*e.g.* 'mou<u>th</u>'

Style	
Storytelling	1961 and 2016
Reading word lists	2016
Reading phrases	2016

Table 3.9: Coding for linguistic factors for /θ/

Preceding Phonological Contexts	
Vowel	*e.g.* 'I forge<u>t</u>'
Coronal	*e.g.* 'he wen<u>t</u>'
Other Consonants	*e.g.* 'we kep<u>t</u>'
Following Phonological Contexts	
Vowel	*e.g.* 'go<u>t</u> another'
Coronal	*e.g.* 'shor<u>t</u> day'
Other Consonant	*e.g.* 'go<u>t</u> wet'
Pause	*e.g.* 'all tha<u>t</u> #'
Position in word	
Medial	*e.g.* 'wa<u>t</u>er'
Final	*e.g.* 'wha<u>t</u>'
Style	
Storytelling	1961 and 2016
Reading word lists	2016
Reading phrases	2016

Table 3.10: Coding for linguistic factors for /t/

3.12   Presentation of Results

The coded data were exported to Excel, tabulated and a series of descriptive data charts were created from which to make preliminary interpretation of the results. The total numbers of tokens for each variable and variants are shown in Tables 3.12 to 3.14.

/ð/	Local [d]	Supralocal [d̪]	Standard /ð/	Total
1961 children	434	140	2	576
2016 children	235	144	13	392
2016 adult	565	155	2	722
				1,690

Table 3.11: Numbers of tokens for the variable /ð/

/θ/	Local [d]	[ø]	[ɾ]	[t]	[ʔ]	Supralocal [t̪]	Standard [θ]	Total
1961 children	2	12	5	52	17	13	1	102
2016 children	0	4	1	136	11	57	4	213
2016 adult	1	3	1	51	16	3	0	75
								390

Table 3.12: Numbers of tokens for the variable /θ/

/t/	Local [d]	[d̪]	[h]	[ɾ]	[ʔ]	[ø]	Supralocal [t̪]	Standard [t]	Total
1961 children	1	17	2	64	273	207	16	170	750
2016 children	1	0	0	10	364	91	9	354	829
2016 adult	3	0	1	28	196	52	2	49	331
									1,900

Table 3.13: Numbers of tokens for the variable /t/

3.13   <u>Statistical Analysis</u>

Within the scope of this thesis, only descriptive statistics are provided. This means that the results are interpreted only where clear patterns can be observed. Variational data is usually analysed first using descriptive analysis, showing the patterns of variation by main features. These are then typically subjected to inferential analysis to discover whether the patterns are significant, so not just occurring by chance (Field, 2012). In this dissertation, for reasons of space and time, it was decided to analyse three variables and give descriptive analysis, instead of one variable and full analysis. In this way, overall patterns could be seen. A further step for this study will be to carry our basic statistical tests for distribution *e.g.* Chi square, or more sophisticated tests, *e.g.* multinomial logistic regression *e.g.* local variant for each variable.

4.0   **Results**

This chapter presents the results for the variables /ð/ /θ/ and /t/ and examines the linguistic and social factors which promote the realisation of a range of variants by looking at word position, preceding and following context, style, gender and age and real-time. The results are organised into three distinct sections, one for each variable according to year and age. The first section presents /ð/ begins with the children's /ð/ in 1961, followed by /ð/ in 2016 and concludes with the real-time trend study of these variables over five decades. This is followed by a quasi-lifespan study of /ð/ which analyses sound change over time of the individual who was a child in the 1961 class, although was not one of the speakers recorded. A summary is provided at the end of this part to highlight the most salient findings for /ð/. The second section follows the same pattern, looking at the variable /θ/ in 1961 and 2016 before making a real-time comparison. This is followed by the case study; the quasi-lifespan of potential changes in this person's life. Again, a summary is provided at the end of this part. The final section looks at the variable /t/ in the same fashion. For all variables, the same colour coding is used for the variation: blues for local Dublin brown for non-local Dublin / supralocal Irish-English and green for the Standard English.

4.1   **/ð/ in 1961 Children**
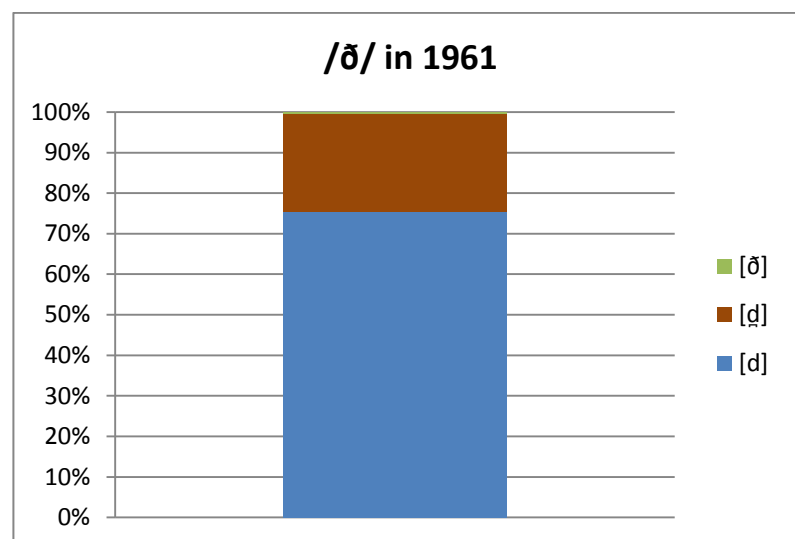
Figure 4.1: Percentage distribution of /ð/ for 23 children in 1961 by variant.

Figure 4.1 shows that in 1961 local alveolar plosives were by far the most frequent variant for the voiced dental fricative. They were used in 75% of cases with non-local dental plosives used for the remaining quarter. Although the Standard English fricative was not

completely absent, it was used less than 1% of the time, therefore is barely visible on the graph.
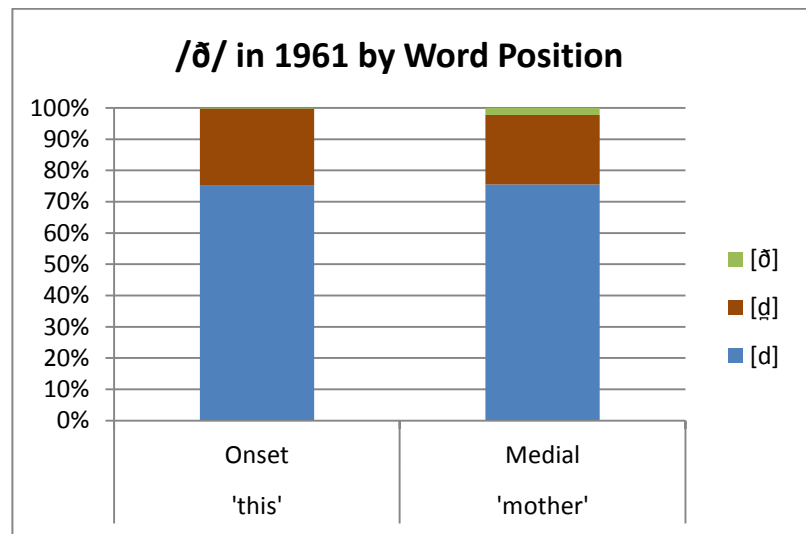
Figure 4.1.1: Percentage distribution of /ð/ for children in 1961 by word position.

Looking at word position, in Figure 4.1.1, we see that the Standard English [ð] occurs only in word-medial position.

Figure 4.1.2 shows variation for /ð/ by preceding context.
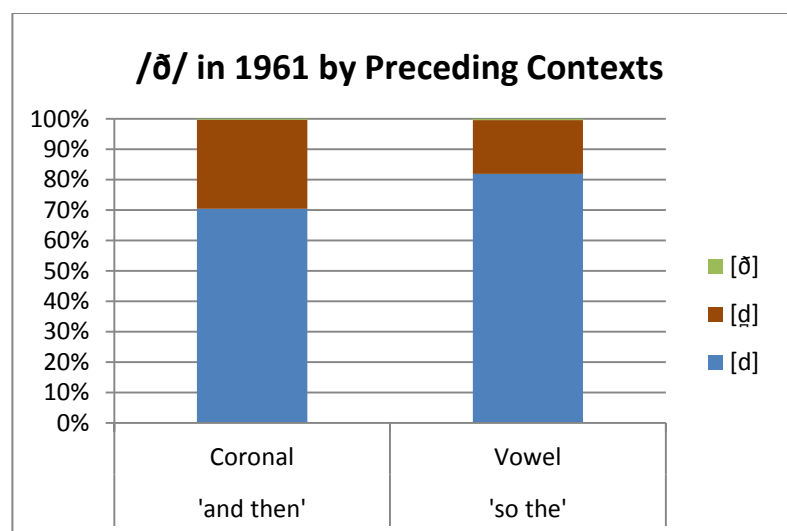
Figure 4.1.2: Percentage distribution of /ð/ for children in 1961 by preceding contexts.

The local alveolar plosive was used over 80% in vowel contexts *e.g.* 'so the', compared to 70% in coronal contexts *e.g.* 'and then'. The non-local dental plosive occurs more in preceding coronal contexts.
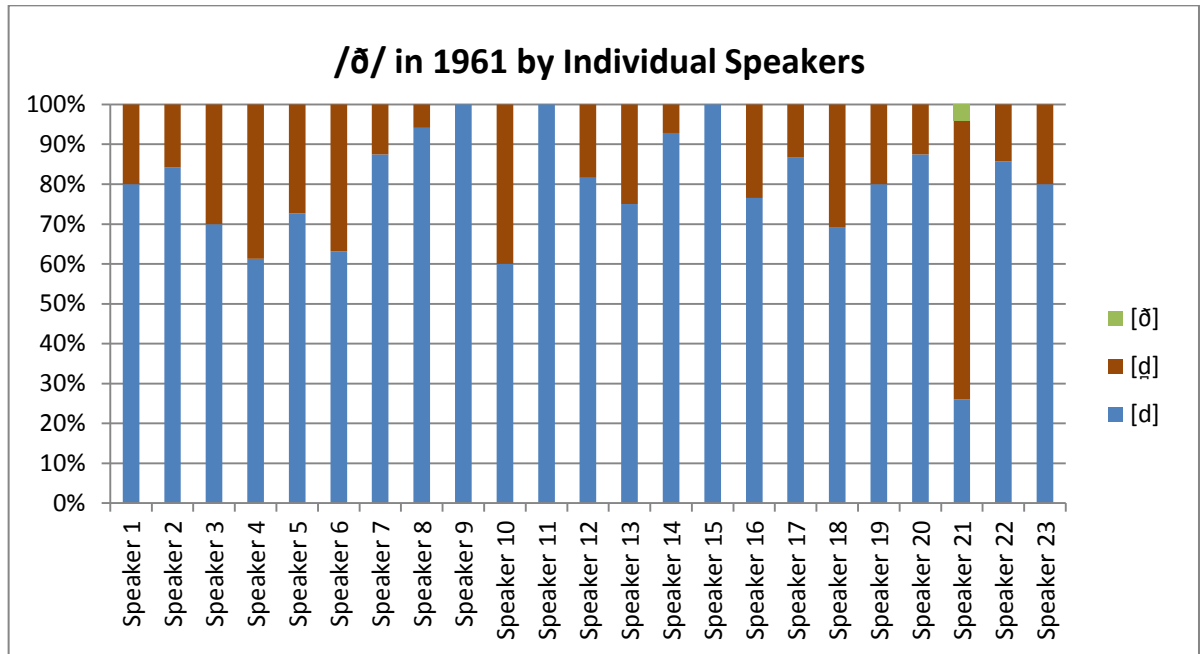
Figure 4.1.3: Percentage distribution of /ð/ for children in 1961 by individual speakers.

There were twenty-three speakers in 1961 and all of them but one, were predominantly local in their realisation of /ð/ *i.e.* 96% of speakers used the local variant more than the non-local ones. Speakers ranged between categorical use of the local alveolar plosive to around 60% use (see figure 4.1.3). The one speaker who shows predominantly the non-local variant was also the only one who used dental fricatives.

4.1.1   Summary of /ð/ in 1961

In inner-city Dublin in 1961, the variant which was used the most for the dental fricative was the local alveolar plosive. This local variant was used in three quarters of cases, with the non-local dental plosive used in the remaining quarter. Variation by preceding context shows more non-local variants following coronal context. The very few instances of Standard English [ð] are found in only one speaker, in word-medial position. This speaker also used predominantly non-local variants.

4.2   /ð/ in 2016 Children
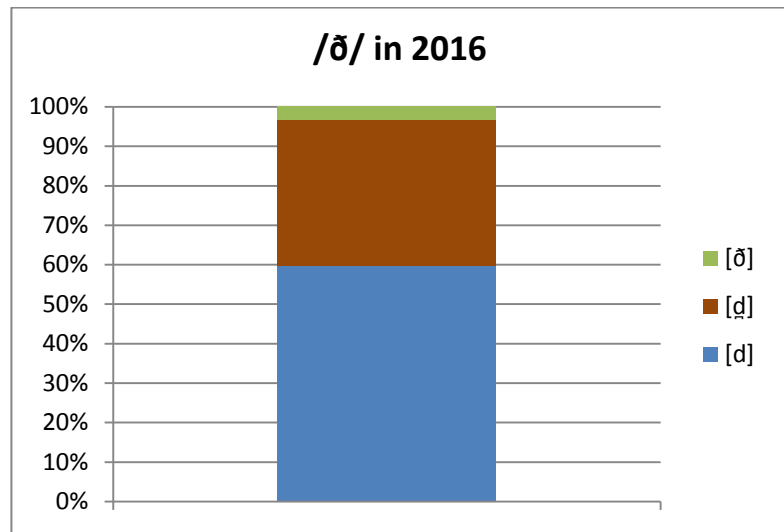
Figure 4.2: Percentage distribution of /ð/ for children in 2016 by variant.

Figure 4.2 shows that in 2016 alveolar plosives are again the most frequent variant /ð/. They are used in 60% of cases with non-local forms used as alternatives. There is also some use of the voiced dental fricative, although minimal at just 3%.

In the 2016 recordings twelve girls and five boys participated. Figure 4.2.1 shows variation for /ð/ according to gender.
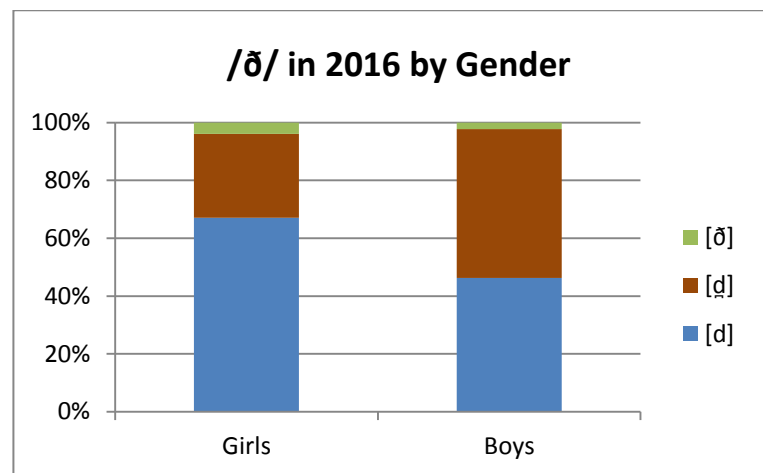
Figure 4.2.1: Percentage distribution of /ð/ for children in 2016 by gender.

Girls use more local alveolar plosives than boys who use over 20% more non-local variants than the girls. Both show a few Standard English dental fricatives.
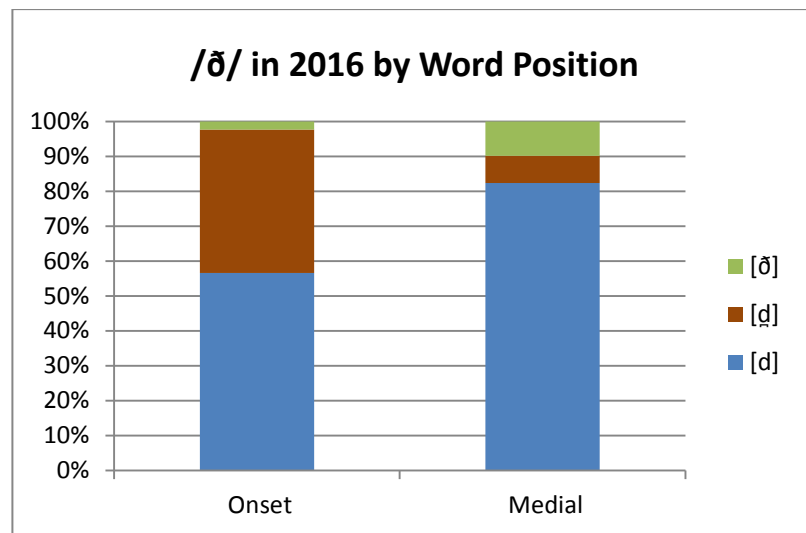
Figure 4.2.2: Percentage distribution of /ð/ for children in 2016 by word position.

Figure 4.2.2 shows that, at over 40%, in word-onset position, the non-local variants are used notably more than in medial position. In medial position there is increased use of the local variant to over 80% and more use of [ð]. Realisations of /ð/ are clearly more local in medial position.
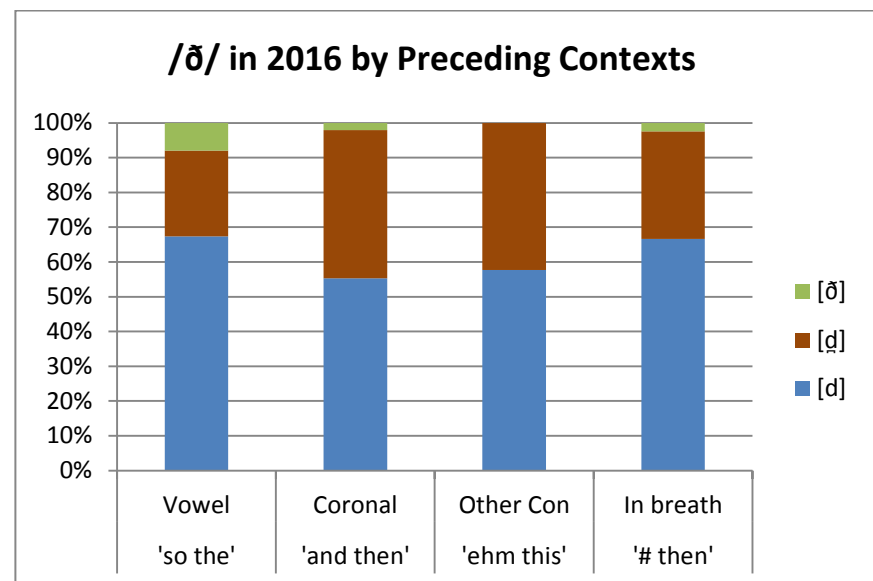
Figure 4.2.3: Percentage distribution of /ð/ for children in 2016 by preceding contexts.

When we look at 2016 children's realisations of /ð/ by preceding contexts in Figure 4.2.3, we see more non-local variants used when preceded by coronal and/or other consonants. Standard English [ð] is most likely when a vowel precedes.
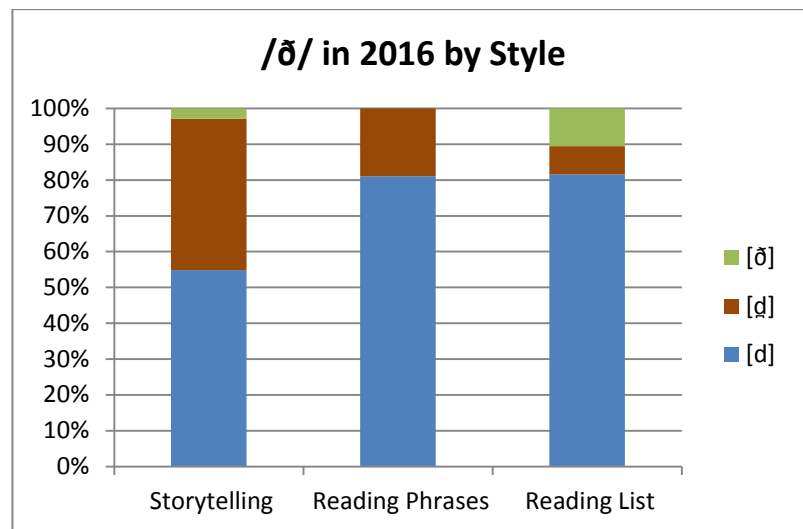
Figure 4.2.4: Percentage distribution of /ð/ for children in 2016 by style.

There is no difference in the 2016 children's use of local alveolar plosives when reading phrases or lists. In both styles this reaches 80%. When storytelling, although alveolar plosives are still preferred, the non-local dental plosive rises to over 40% use. Standard English fricatives are not used at all in reading phrases, but are in the word list.
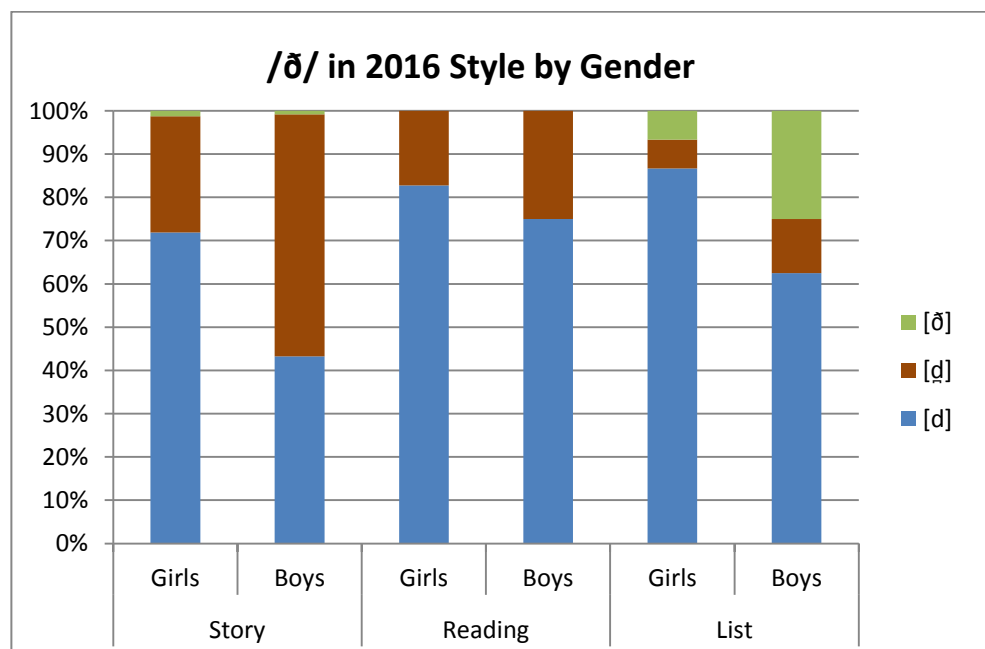
Figure 4.2.5: Percentage distribution of /ð/ for children in 2016 style by gender.

Figure 4.2.5 shows interesting gender distribution by style. For storytelling, boys lead in the use of the non-local variant, with 56% of the realisations being dental plosives, whereas the girls favour the local alveolar plosive almost 72% of the time. Neither gender uses any dental fricatives when reading. While both favour local alveolar plosives in this style, it is still the boys, with 25% use of dental plosives, who are more non-local. Like storytelling and reading, it is the girls who prefer the local alveolar plosives, with almost 87% use when reading wordlists, whereas boys show more [ð] in wordlists. Overall, in all styles, the girls prefer local alveolar plosive, especially for wordlists.
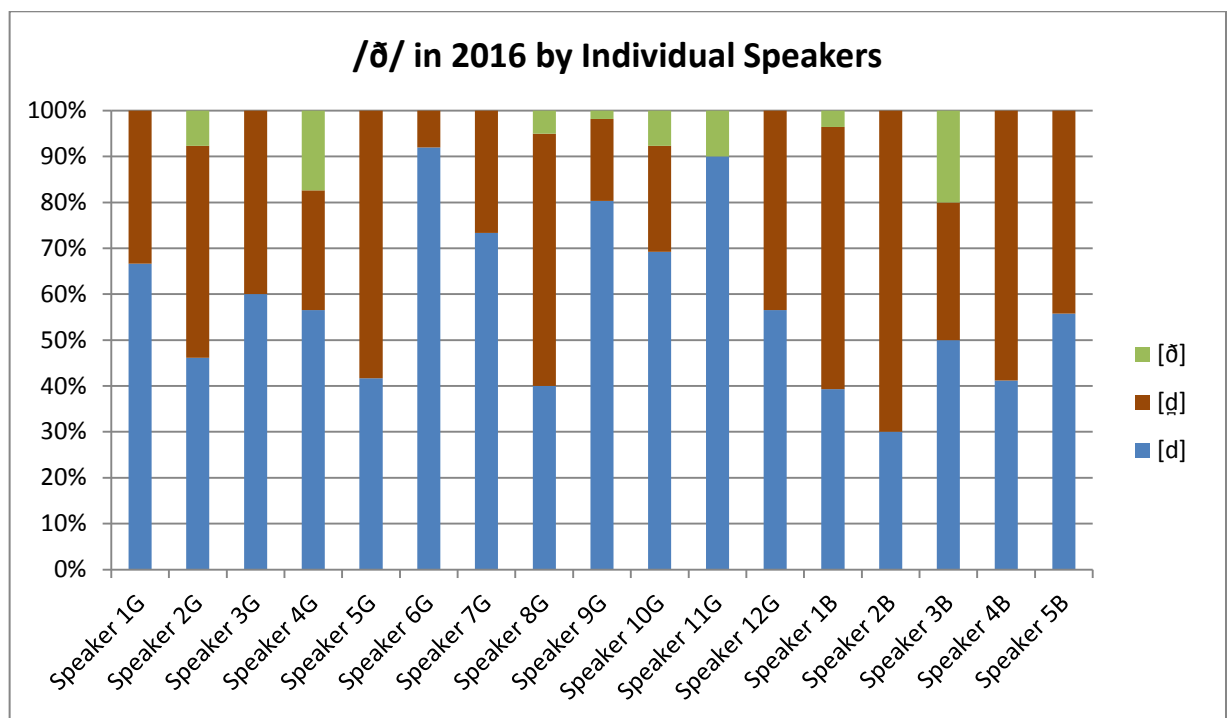
Figure 4.2.6: Percentage distribution of /ð/ for children in 2016 by individual speakers.

Figure 4.2.6 shows that all of the seventeen speakers in 2016 use the local alveolar plosive, but with some individual variation ranging between 30% to over 90%. However, not every speaker favours it above the non-local forms. In fact, six of the children use more non-local forms, and one speaker uses both local and non-local equally. This speaker (3B) also uses the most dental fricatives. Interestingly, dental fricatives are found in speakers irrespective of whether they favour local or non-local variants.

4.2.1   Summary of /ð/ in 2016 Children

In these inner-city Dublin children in 2016, the local alveolar plosive is still the most frequently used variant for the voiced dental fricative. However, the non-local variant, the dental plosive, accounts for about a third of the variation. By position in word, the non-local variant is most frequent in onset *e.g.* 'this', the local is maintained in word-medial position *e.g.* 'mother'. By gender it is the girls who maintain the local variant more than the boys, who prefer non-local dental plosives, especially in read wordlists, the most formal style.

4.3   /ð/ Over Real-Time: 1961 to 2016
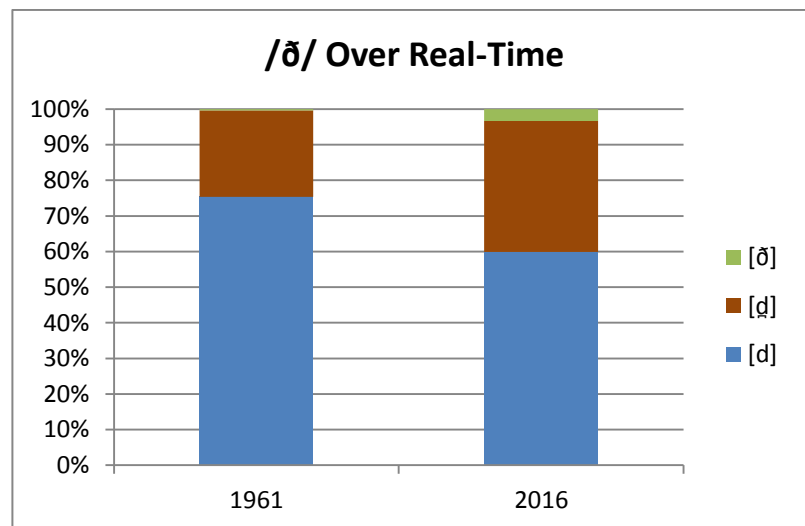
Figure 4.3: Percentage distribution of /ð/ over real-time by variant.

Figure 4.3 shows that in the children's realisation of the voiced dental fricative the local alveolar plosive has decreased by 15%, with a corresponding increase of the non-local variants, over time. Although still minimal, dental fricatives have increased to 3%.

/ð/ Over Real-Time by Word Position
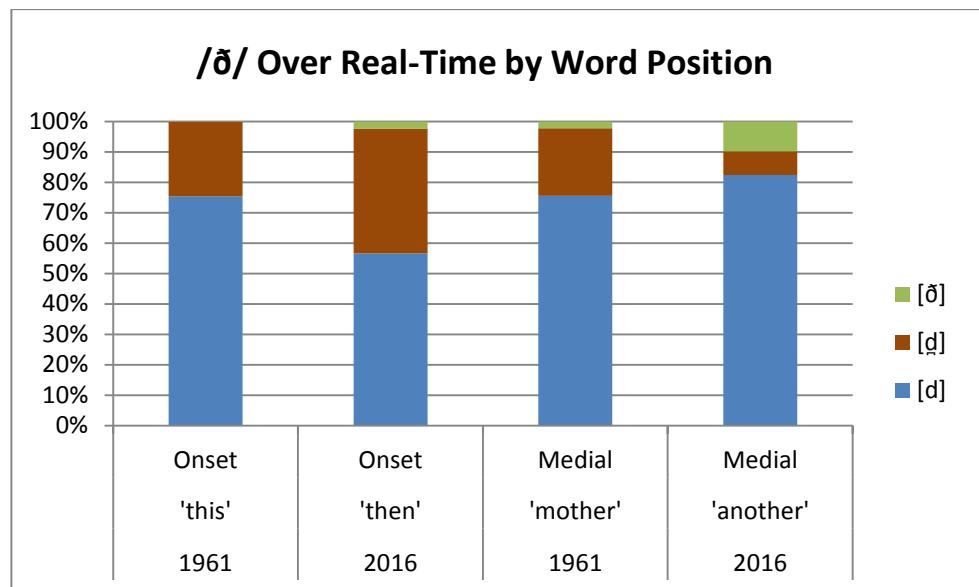
Figure 4.3.1: Percentage distribution of /ð/ over real-time by word position.

When looking at word position, (Figure 4.3.1) we see a change over time is conditioned by linguistic factors. In onset, while the local alveolar plosive remains the preferred variant, there has been a noticeable increase of nearly 20% in the non-local form. In medial position the local variant remains consistently high, increasing only slightly (7%) over time. At the same time, the non-local dental fricative has increased and is now the preferred non-local variant at 10%. Word-medial position is the only context in which the dental fricative exceeds the dental plosive.

/ð/ Over Real-Time by Preceding Contexts
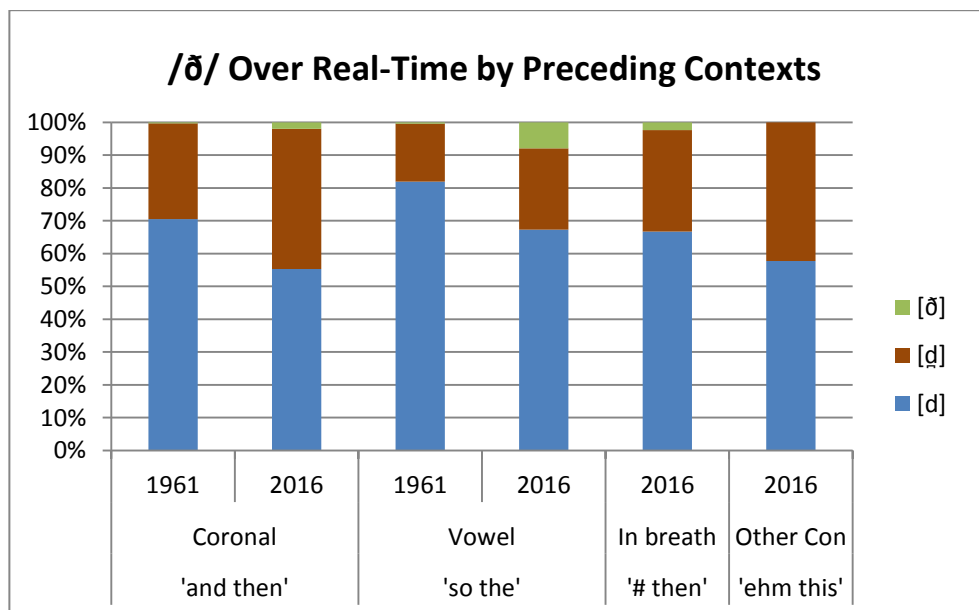
Figure 4.3.2: Percentage distribution of /ð/ over real-time by preceding contexts.

Figure 4.3.2 shows that in both preceding coronal and vowel contexts the use of the local alveolar plosive has decreased by 15% over time Consequently, there has been increase of the non-local variant in both contexts, but more so in preceding coronal contexts *e.g.* 'and then' where non-local forms reach 45% compared to 29% in 1961.

Because of the number of children involved, all speakers cannot be shown clearly on one graph, therefore they are presented separately in Figure 4.3.3 as children in 1961 above and children in 2016 below.
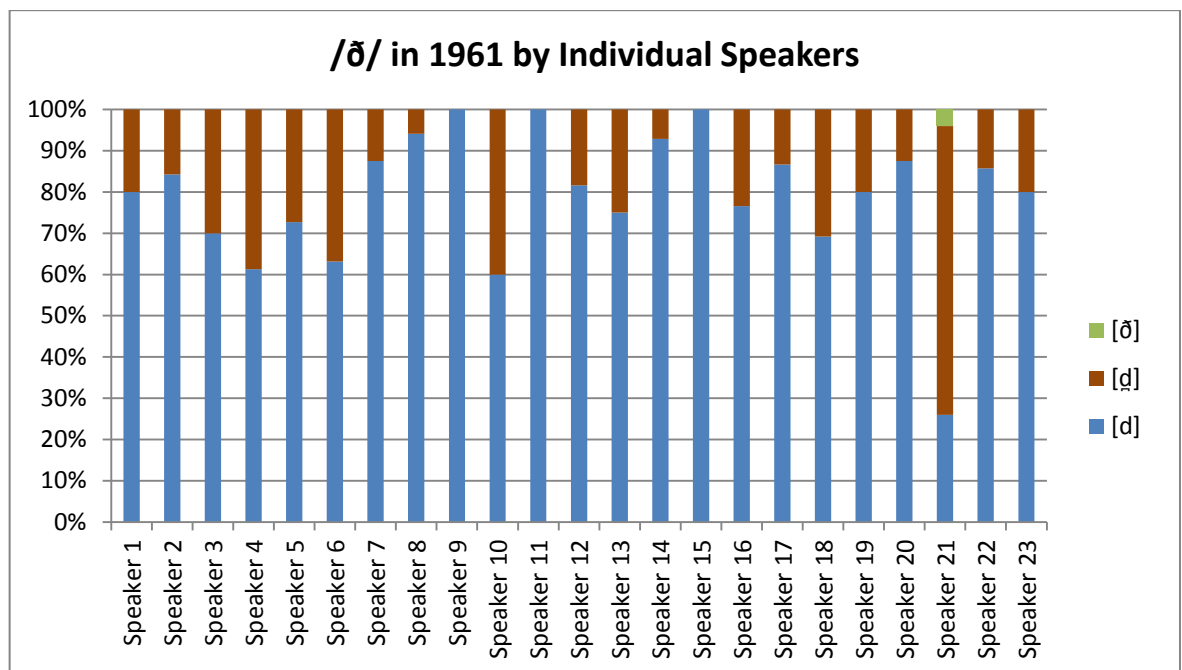
Figure 4.3.3: Percentage distribution of /ð/ over real-time by individual speakers (1961 above – 2016 below)
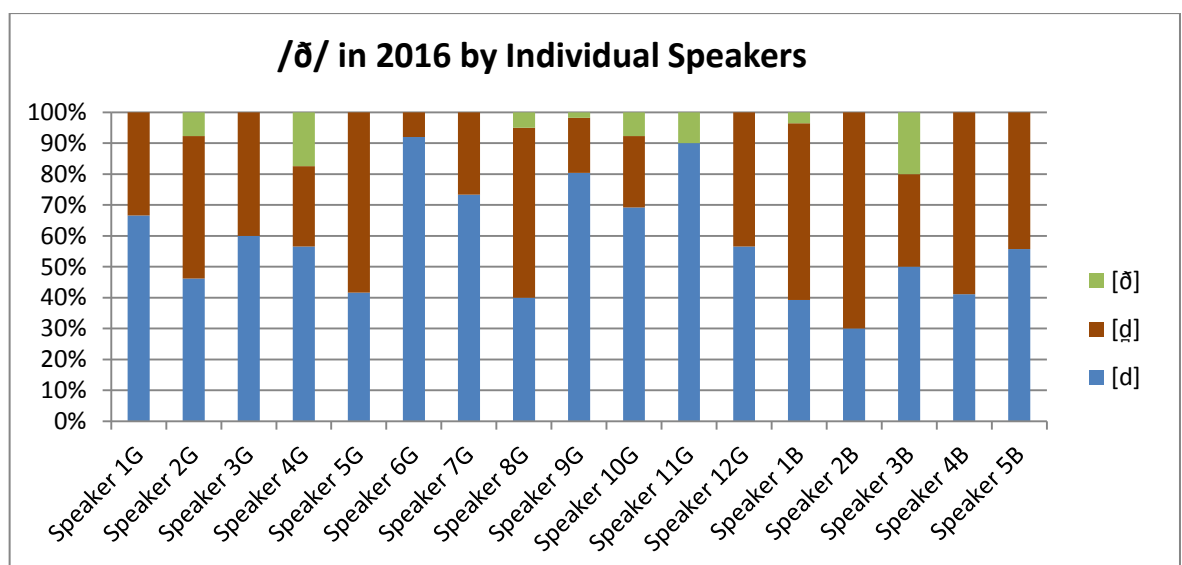
Figure 4.3.3 shows that across the span of fifty years, the local variant is used more frequently than the non-local by the majority of speakers. However, there has been a noticeable decrease in its use by individual speakers: in 1961 alveolar plosives were favoured by twenty-two of the twenty three children, whereas by 2016 it is used more by ten children. In 1961 local variants were used categorically by three individual speakers. In 2016, no speakers are categorical in their use of the local alveolar plosive.

The decrease in this local variant corresponds to an increase in the use of non-local dental plosive, and the Standard English dental fricative. Previously only one child favoured non-local variants, whereas by 2016 this figure had increased to six children and one (3B) who used both local and non-local equally. Similarly, frequency of use of dental fricatives has increased over the years, to eight children.

4.3.1   Summary of Comparison of /ð/ Over Real-Time

In inner-city Dublin in 2016, the variable /ð/ is stable only in the fact that the local alveolar plosive is still the preferred variant. However, there has been a noticeable change, with a decrease overall of 15% in the use of the local variant. This corresponds to an increase in the non-local dental plosive and Standard English dental fricative. The former has increased about 12% and the latter about 3%. This change is due, not only an increased number of speakers using non-local variants, but also in the amount each individual uses them.

These changes over time are influenced by linguistic factors, namely word position. While in 1961 there was no difference between local versus non-local use in both positions, in 2016 the children differ according to position. The dental plosive has also increased, by almost 20%. In word-initial position the children use more non-local variants than in 1961, whereas in word-medial position they are more local.

Change has also been affected by phonological context. In following and coronal contexts all children in 2016 consistently increase their use of non-local forms while decreasing their use of the local form.

4.4   /ð/ in 2016   Adult Case Study
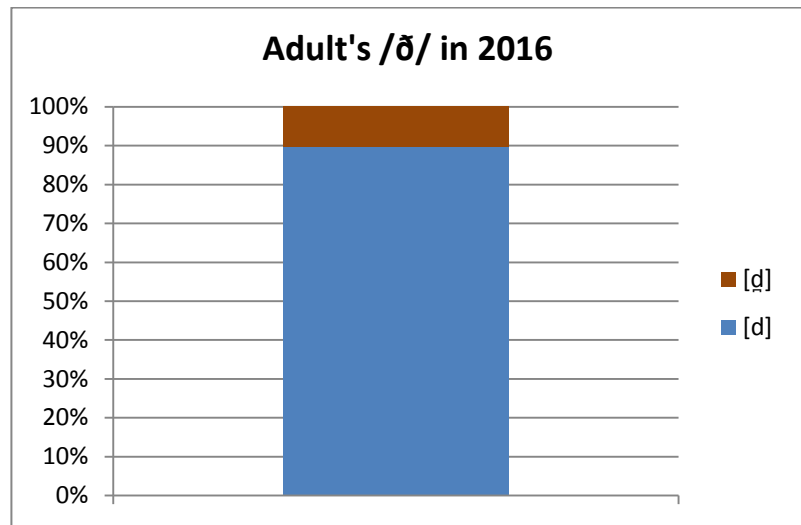
Figure 4.4: Percentage distribution of /ð/ for the adult in 2016 by variant.

Figure 4.4 shows that the adult's pronunciation of the voiced dental fricative is predominantly local with 90% use of the voiced alveolar plosive. In the remaining 10% the dental plosive is used, with no interdental fricatives at all.
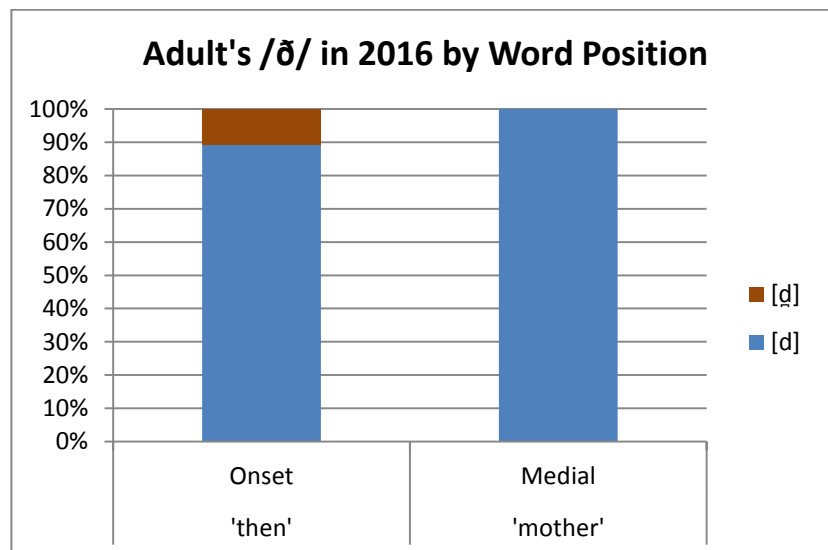
Figure 4.4.1: Percentage distribution of /ð/ for the adult in 2016 by word position.

Figure 4.4.1 shows that the non-local variant is only used in onset position.

Adult's /ð/ in 2016 by Preceding Contexts
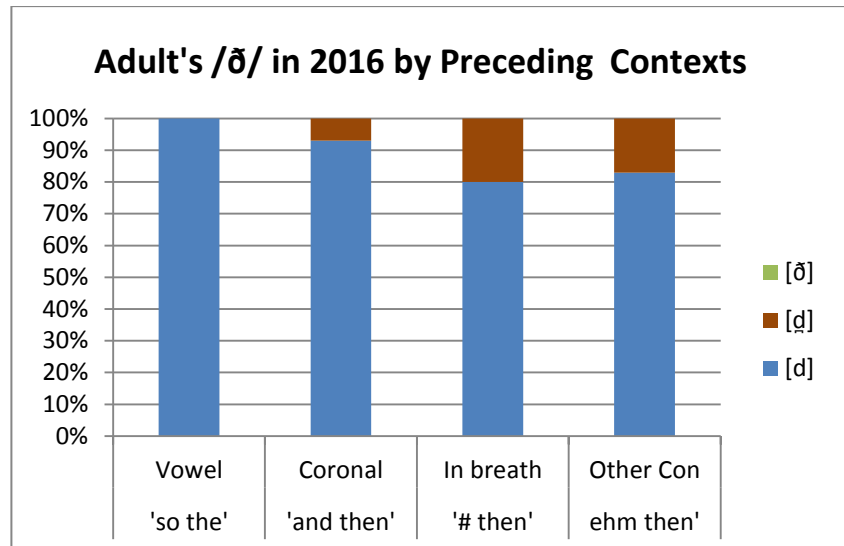
Figure 4.4.2: Percentage distribution of /ð/ for the adult in 2016 by preceding contexts.

When onset position is further inspected for phonological context, Figure 4.4.2 shows non-local variants occur in all positions except after vowels.

Adult's /ð/ in 2016 by Style
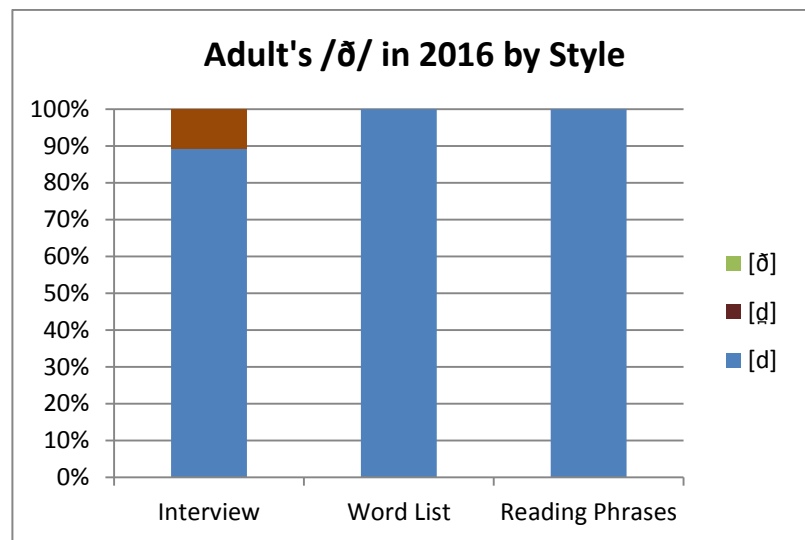
Figure 4.4.3: Percentage distribution of /ð/ for the adult in 2016 by style.

The interview with the adult was mainly spontaneous speech, often telling stories of past events. Figure 4.4.3 shows that the non-local variant is used only in this style. However, when reading both phrases and wordlists, the adult's pronunciation of the voiced dental fricative is categorically local *i.e.* the voiced alveolar plosive.

4.5 Quasi Lifespan Study of /ð/ over five decades: 1961 to 2016
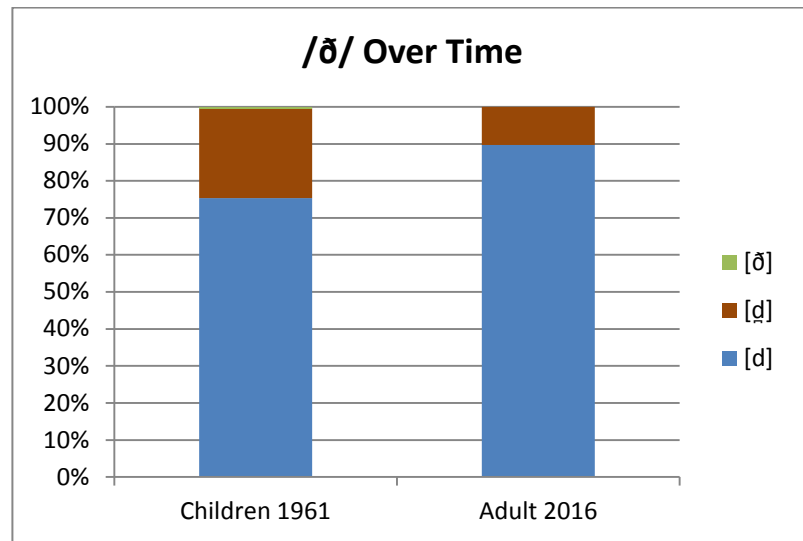
Figure 4.5: Percentage distribution of /ð/ quasi-lifespan by variant.

Figure 4.5 shows that over time the adult's use of the local alveolar plosive appears to have increased from 75% to 90% with a corresponding decrease of the non-local dental plosive by 15%.
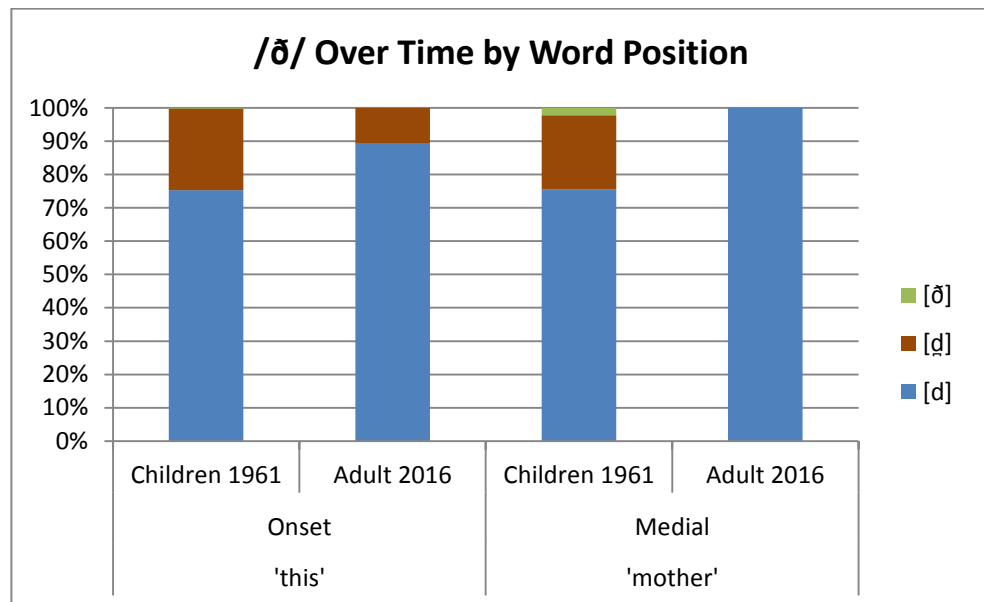
Figure 4.5.1: Percentage distribution of /ð/ quasi-lifespan by word position.

In word-onset position, the adult's use of local alveolar plosives, in comparison to her childhood peers, has increased by 15% to nearly 90% use, whereas in medial position she shows categorical use of this local variant (Figure 4.5.1)
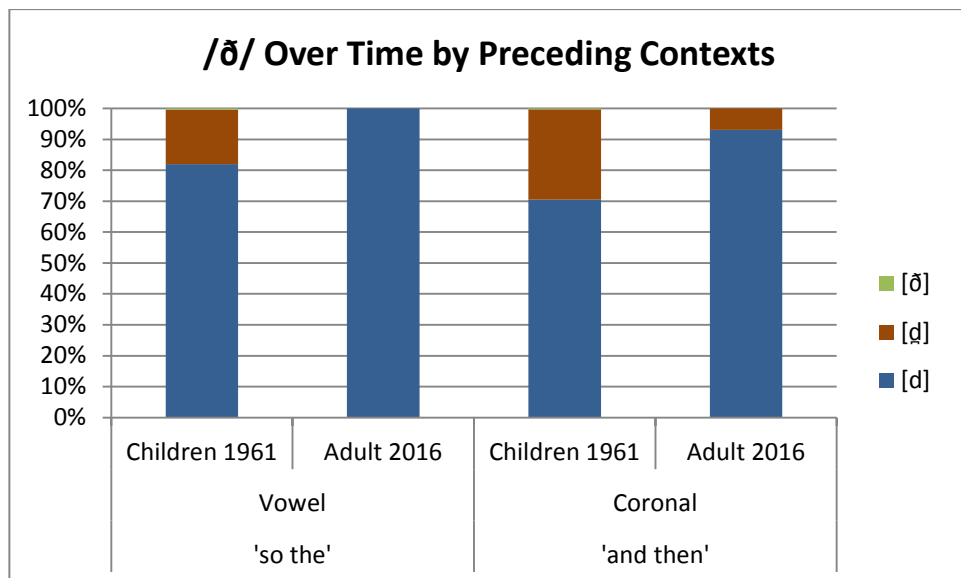
Figure 4.5.2: Percentage distribution of /ð/ quasi-lifespan by preceding contexts.

Likewise, in all preceding contexts (Figure 4.5.2), by 2016 the use of alveolar plosives has increased to categorical use when vowels precede *e.g.* 'so the', which is an increase of almost 20%. A similar change is seen in preceding coronal contexts where the use of the local variant reaches over 90%.
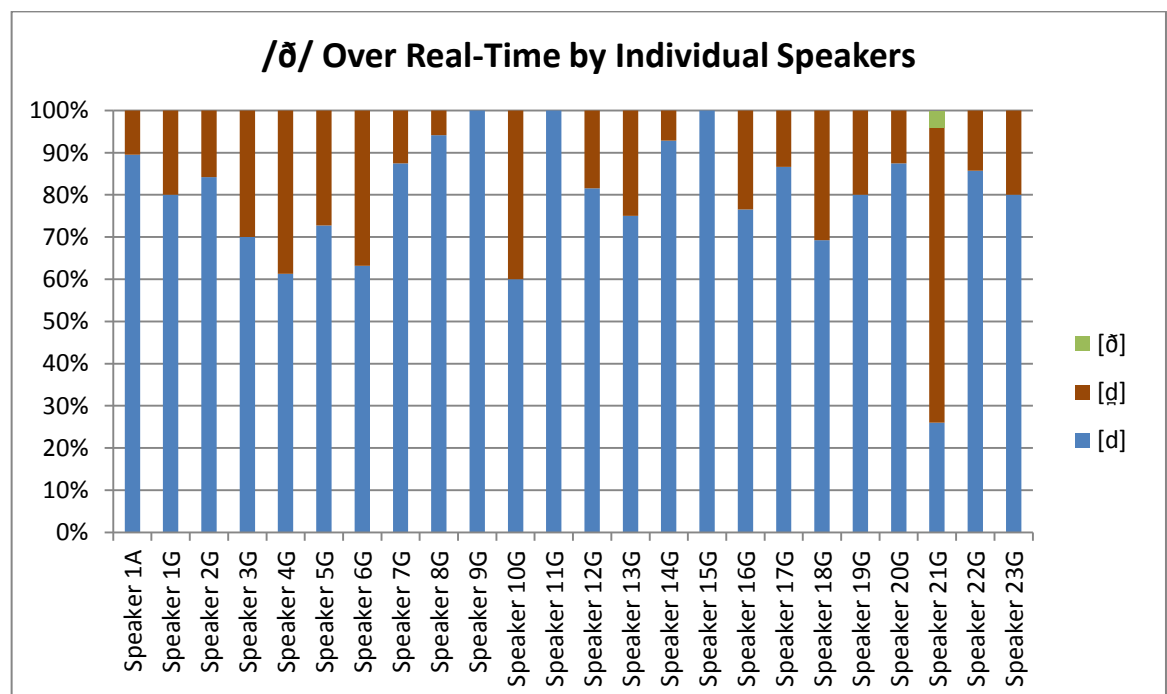
Figure 4.5.4: Percentage distribution of /ð/ quasi-lifespan by individual speakers.

Only one speaker in 1961 (21G) favoured the use of non-local forms, using both [d̪] and [ð] 75% of the time, and the local variant only for the remaining 25%. All other speakers

were predominantly local in 1961, with use of the voiced alveolar plosive ranging between 60% and categorical use. In 2016, the adult speaker (1A) in Figure 4.5.4, is still predominantly local with 90% use of the local alveolar plosive. This is within the range of her childhood peers, but she is at the higher end of the local versus non-local cline.

4.5.1   Summary of Quasi-Lifespan Comparison of /ð/

The children's use of the local alveolar plosive in 1961 ranged between categorical use to 60% (except one speaker), compared to the adult's use in 2016 which was 90%. This increases about 20% over time to categorical use in word-medial and preceding vowel contexts. The 10% use of the non-local dental plosive is found only in word-initial position when a coronal precedes *e.g.* 'and then', or when a vowel follows *e.g.* 'another'. The adult is still within the range of individual speakers from 1961, although is situated at the higher end of a local → non-local cline. Conversely, the children's use of the non-local variants reached a maximum of 40% in 1961, while the adult's now reaches 10%, placing it at the lower end of the cline. Overall, throughout this speaker's lifetime, she has not only maintained the local forms, but has increased them with respect to her peers. Her stylistic variation she more local forms in the most formal styles.

4.6   **/θ/ in 1961 Children**
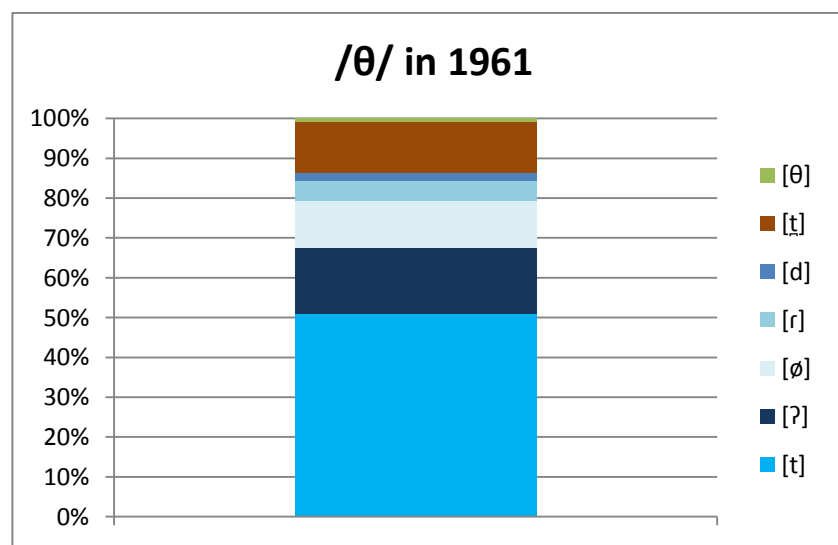
Figure 4.6: Percentage distribution of /θ/ for children in 1961 by variant.

Figure 4.6 shows that in 1961 the local variants, at 85%, were notably more present than the non-local ones. The voiceless alveolar plosive was the most frequent, being used in just over 50% of cases, with the remaining local variants being, in order of frequency, glottal stops, deletion, some tapping and a minimal amount of the voiced alveolar plosive *e.g.* 'with' [wɪd]. Non-local variants were used nearly 15% of the time, with minimal use of the Standard English voiceless dental fricative.

/θ/ in 1961 by Word Position

Legend: [θ], [t̪], [d], [r], [ø], [ʔ], [t]
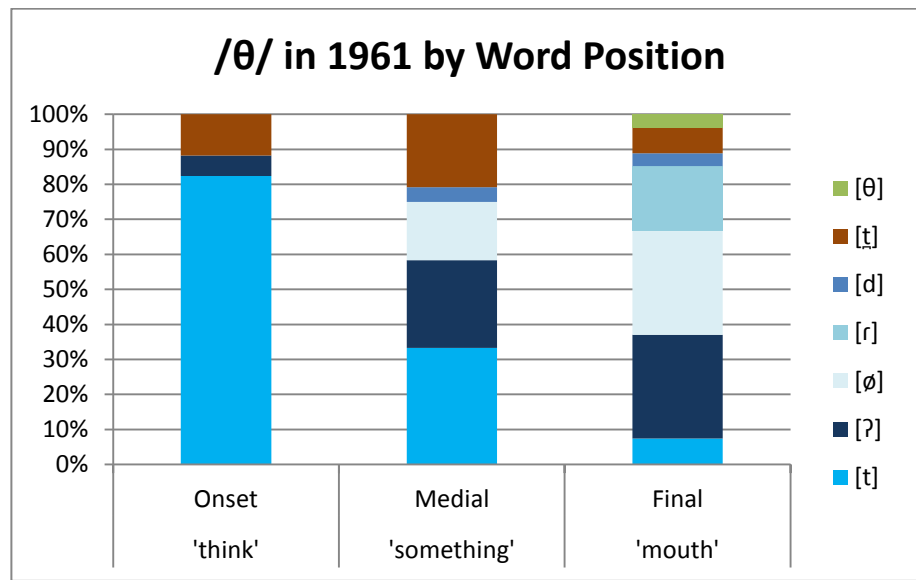
Figure 4.6.1: Percentage distribution of /θ/ for children in 1961 by word position.

Figure 4.6.1 shows that slightly fewer local variants (blue) are used in word-medial position. In word-initial position, *e.g.* 'think', the voiceless alveolar plosive was the main local variant with some glottal stops. Dental plosives were the only non-local form used at just over 10%.

In medial and final positions there was a wider range of local variants used. In medial, *e.g.* 'something', about one third was the voiceless alveolar plosive with some glottal stops and deletion but only minimal use of the voiced alveolar plosive. The non-local dental plosive was used 20% of the time.

In final position *e.g.* 'mouth', use of the local voiceless alveolar plosive is less than 10%, while glottals and deletion are similar at 30%. As in word-medial position, in final position, voiced alveolar plosives were used less than 5%, but in this position, there was nearly 20% tapping, which was not present in other positions. The non-local dental plosive, which was used at 20% in medial position, is less than half that amount in final position,

although 4%, voiceless dental fricatives were used as well. This is the only word position in which any Standard English dental fricatives were used in 1961.
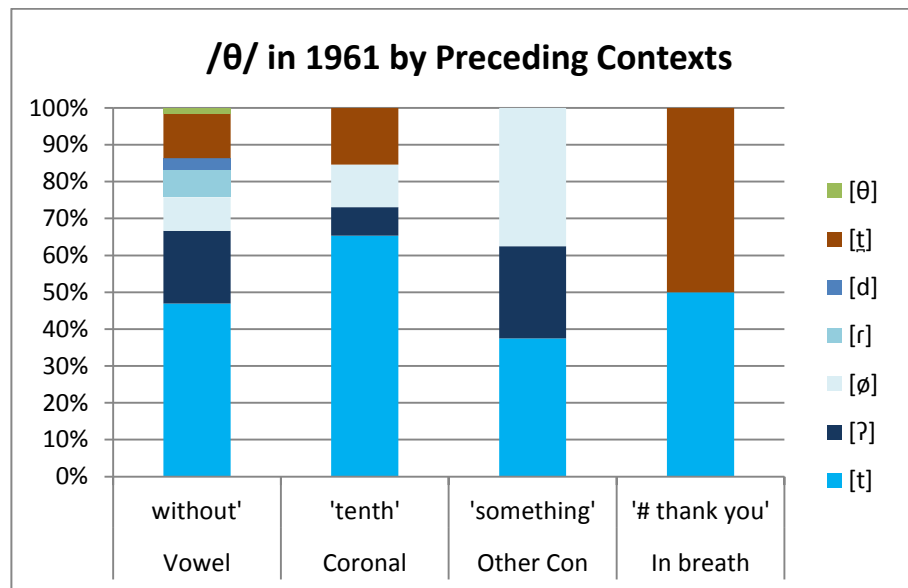
Figure 4.6.2: Percentage distribution of /θ/ for children in 1961 by preceding contexts.

Figure 4.6.2 shows that while preceding vowel and coronal contexts had similar amounts of local variants, at 85%, a wider range of the local variants were used in vowel contexts. In this context, the main local variant was the voiceless alveolar plosive, at nearly 50%, with, in order of frequency, glottals, deletion, tapping and some voiced alveolar plosives. About 15% was non-local variant with minimal use of Standard English dental fricatives. In coronal contexts the preferred variant was the voiceless alveolar plosive, at 65%. At 15%, more non-local was used than deletion or glottal stopping. In this context and in other consonant contexts the same three local variants were found, [t], [ʔ] and [ø], but when other consonants preceded, *e.g.* 'something', there was categorical use of local variants, with slightly fewer glottal stops, but equal use of both deletion and voiceless alveolar plosives. When an in-breath proceeded, only two variants were used: local voiceless alveolar plosives or non-local dental plosives, in equal proportions. Overall, in 1961 all preceding contexts had more local than non-local variants, except when an in-breath preceded.
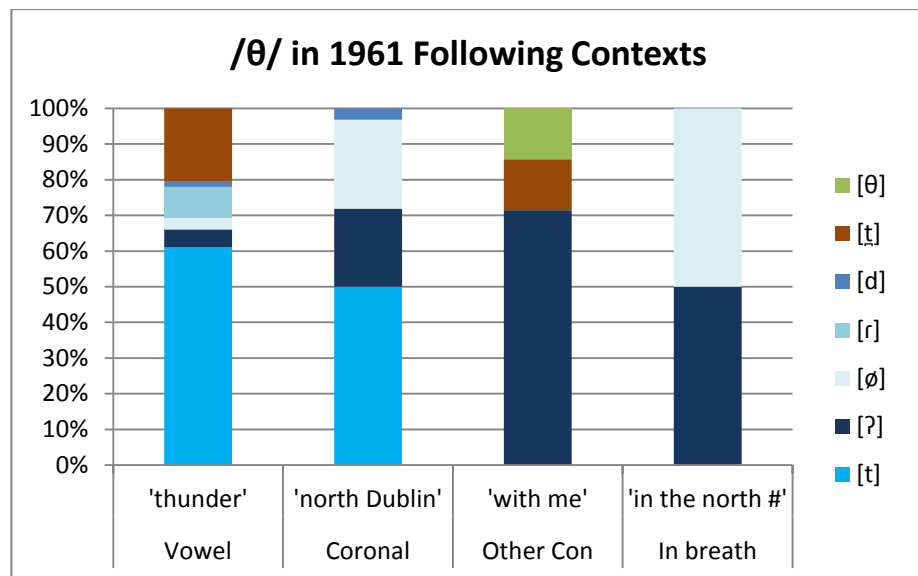
Figure 4.6.3: Percentage distribution of /θ/ for children in 1961 by following contexts.

There was categorical use of local variants in both following coronal and in-breath contexts. In the former, voiceless alveolar plosives were used half of the time, with near-equal use of glottals and deletion. There was also some minimal use of voiced alveolar plosives. When an in-breath followed, glottals and deletion were used in equal proportions. As can be seen in Figure 4.6.3, the full range of local variants was found in following vowel contexts: over 60% were voiceless alveolar plosives and with 20% non-local dental plosive, the four remaining local variants; glottals, deletion, tapping and voiced alveolar plosives, were at or below 8%. In following other consonant contexts, the only local variant was the glottal stop, used over 70% of the time. The remaining variants were both non-local: dental plosives and voiceless dental fricatives, in equal proportions at 14%. Overall, in 1961 non-local variants occur only when /θ/ is followed by a vowel, or a consonant other than a coronal.

Figure 4.6.4: Percentage distribution of /θ/ for children in 1961 by individual speakers.

Out of the twenty-three speakers in 1961, twenty children were predominantly local in their pronunciation of the voiceless dental fricative, ranging between about 65% and 85% (see Figure 4.6.4). Fifteen children were categorically local, and of these, seven were categorical in their use of the local voiced alveolar plosive. Speaker 16 showed the widest range of local variants, using all five possible allophones, whereas the others tended to use up to three. Only one speaker used both local and non-local equally (speaker 9), and although eight speakers used some non-local, notably, only two speakers preferred non-local norms for this variable. One of these was categorically non-local (speaker 5), whilst the other (speaker 4) used dental plosives 80% of the time and the voiced alveolar plosive for the remaining 20%. Only one speaker used any fricatives in 1961 (speaker 10); with both the dental plosive and the voiceless dental fricative used equally at 17%.

4.6.1   Summary of /θ/ in 1961

In inner-city Dublin in 1961, local variants were used 85% of the time for /θ/, with half being the voiceless alveolar plosive [t]. Other local variants included glottals, deletion, tapping and voiced alveolar plosives. Around 15% of all variants were non-local. The use of Standard English fricatives was minimal. In all word positions and contexts, local use remained high, reaching categorical use in preceding other consonant, following coronal and in-breath contexts. Use of specific local variants for /θ/ is influenced by preceding and

following contexts. Non-local dental plosives occur only in certain contexts and there is quite a lot of individual variation. Overall, although there is some use of the non-local variants, this variable is predominantly local in 1961.

4.7   /θ/ in 2016 Children
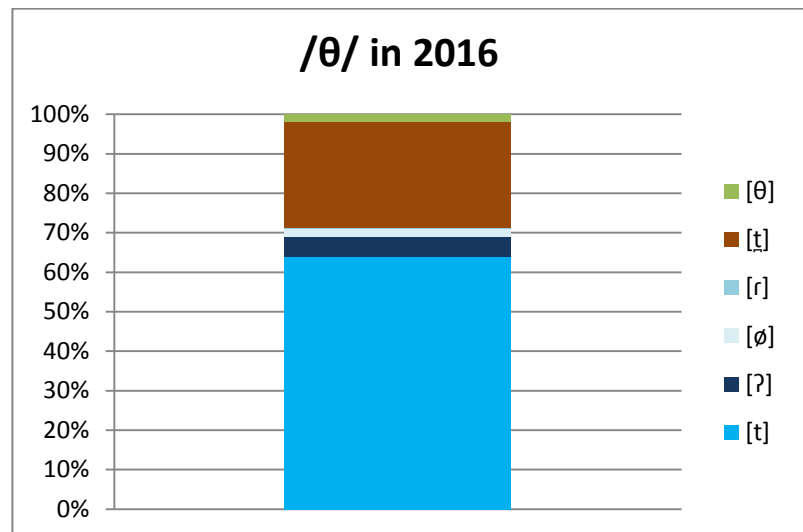
Figure 4.7: Percentage distribution of /θ/ for children in 2016 by variant.

Figure 4.7 shows that in 2016, 70% of all variants used by children for /θ/ are local, with the remaining variants being 30% non-local. The most frequently used local variant is the voiceless alveolar plosive [t], used in just under two thirds of cases, the non-local dental plosive is used in just under a third.

In 2016 both genders participated: twelve girls and five boys, all aged between eight and nine years of age. Figure 4.7.1 shows the different use of the voiceless fricative according to gender.
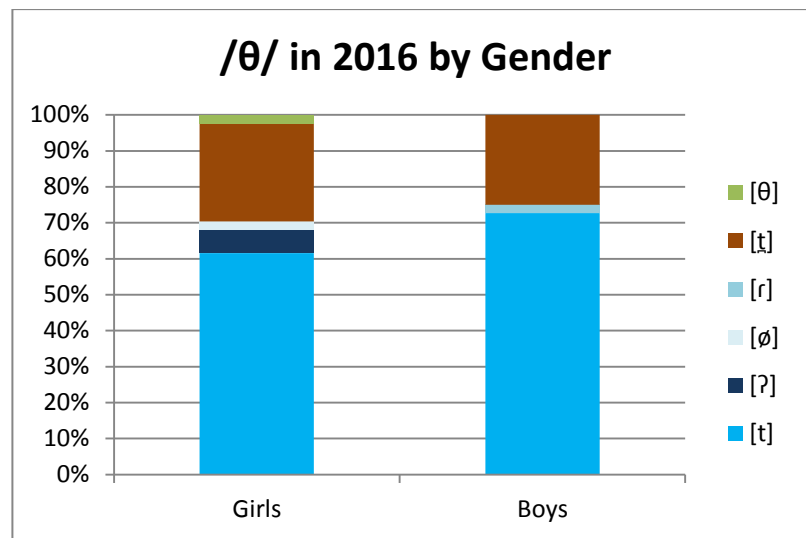
Figure 4.7.1: Percentage distribution of /θ/ for children in 2016 by gender.

Boys use are slightly more local than girls, but the girls use a wider range of variants. While the boys use more voiceless alveolar plosives, they also use some tapping, which the girls do not. The ten percent less use of alveolar plosives by the girls, is occupied by the use of glottal stops, some deletion and some voiceless interdental fricatives; all variables which the boys do not use. The non-local dental plosive is used slightly more by girls.
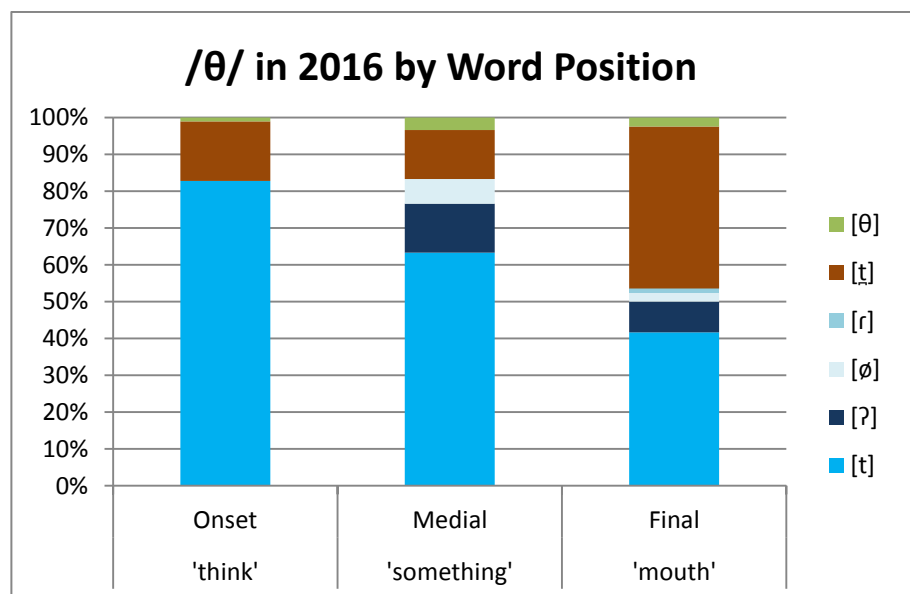
Figure 4.7.2: Percentage distribution of /θ/ for children in 2016 by word position.

In word-initial position, voiceless alveolar plosives are used in more than 80% of cases. With minimal use of the interdental fricative, the non-local dental plosive, at 16%, is the only other variant used in this position. In medial position, the overall use of local variants

is the same as for word-initial, but the frequency of interdental fricatives is now 3%, with glottal stops and some deletion being introduced as well. The main local variant remains the voiceless alveolar plosive. In word-final position, apart from some minimal tapping, the range of local variants remains the same as in medial position, but the amount is less. The decreased use of voiceless alveolar plosives, glottals and deletion has been replaced by a notable increase in the use of non-local variants: 45% dental plosives and some minimal use of dental fricatives. As shown above in Figure 4.7.2, word-final position is the one in which non-local variants are used most, which is almost equal use with local variants.
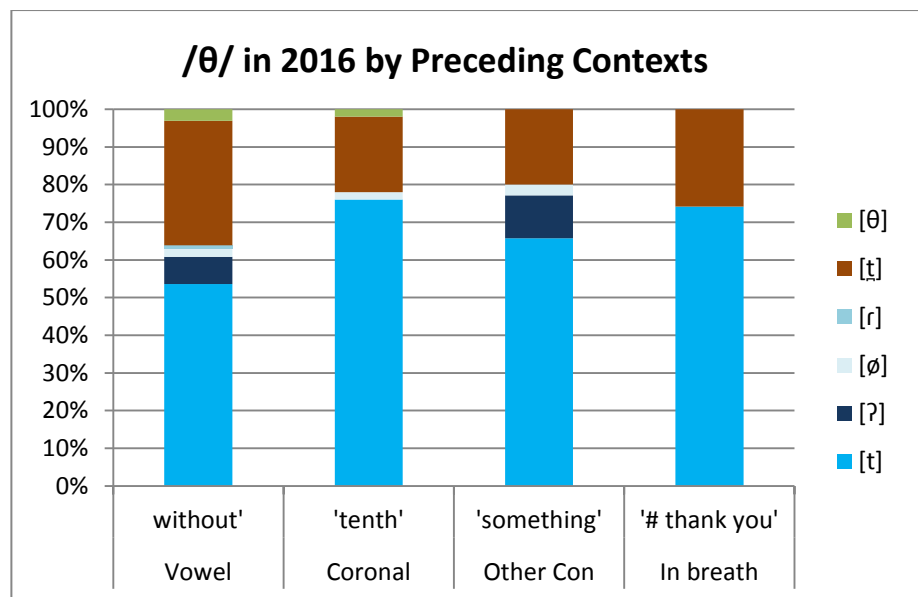
Figure 4.7.3: Percentage distribution of /θ/ for children in 2016 by preceding contexts.

In preceding vowel contexts non-local forms are used more than in any other, reaching about one third of all use, including some fricatives. There is some use of glottal stops and, although minimal, some deletion and tapping as well. In preceding coronal and other consonants contexts, the overall use of local variants is around 80%. This is mostly the voiceless alveolar plosive and some minimal use of deletion. However, in other consonant contexts, *e.g.* 'something', glottals are also used and, unlike coronal contexts, *e.g.* 'tenth', there are no fricatives at all. When in-breaths precede, again the voiceless alveolar plosive is predominant at 75%, with use of the non-local dental plosive at 25%. There is no use of any dental fricatives in this context. Thus, in all contexts local alveolar plosives prevail with some use of non-local dental plosives, mainly when a vowel precedes /θ/. Only in preceding vowel and coronal contexts are there any voiceless interdental fricatives.
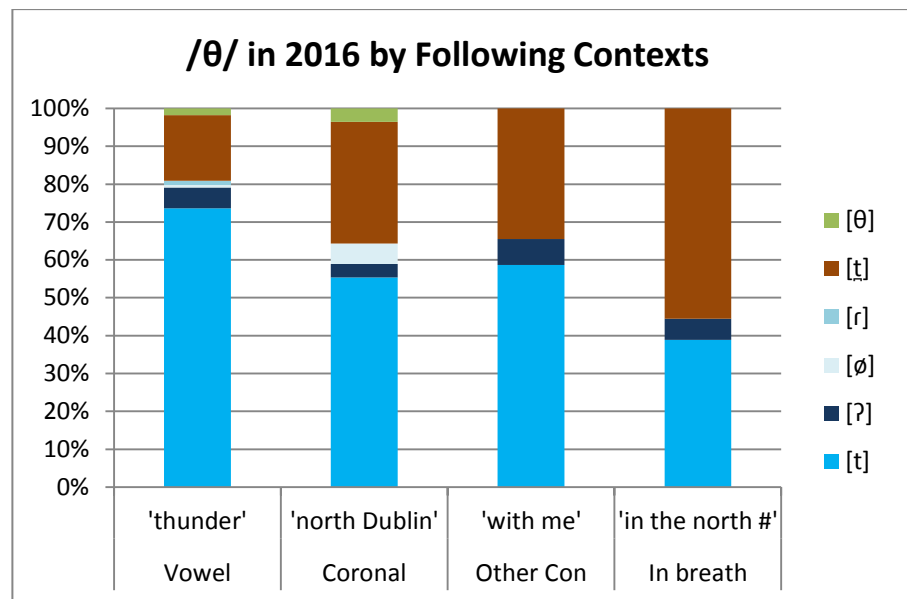
Figure 4.7.4: Percentage distribution of /θ/ for children in 2016 by following contexts.

In Figure 4.7.4 shows that in following contexts, the local variants are used more than the non-local ones, except when an in-breath follows *e.g.* 'in the north #'. In this context the non-local dental plosive is used 55% of the time. The most local variants are found in following vowel contexts *e.g.* 'thunder', when they are used 80% of the time. Most of these are the voiceless alveolar plosive, with glottals and other local variants used minimally. Non-local dental plosives increase in coronal contexts, *e.g.* 'north Dublin', to almost one third of the variation. Also, although still minimal, voiceless dental fricatives increase as well. In this context the local alveolar plosive is used 55% of the time while other local variants remain minimal. In following other consonant contexts, a similar pattern is found, but deletion and fricatives are not used. Dental plosives are found in over a third of cases, glottals remain minimal, with the only other local variant used in this context being the local voiceless alveolar plosive, at almost 60%.
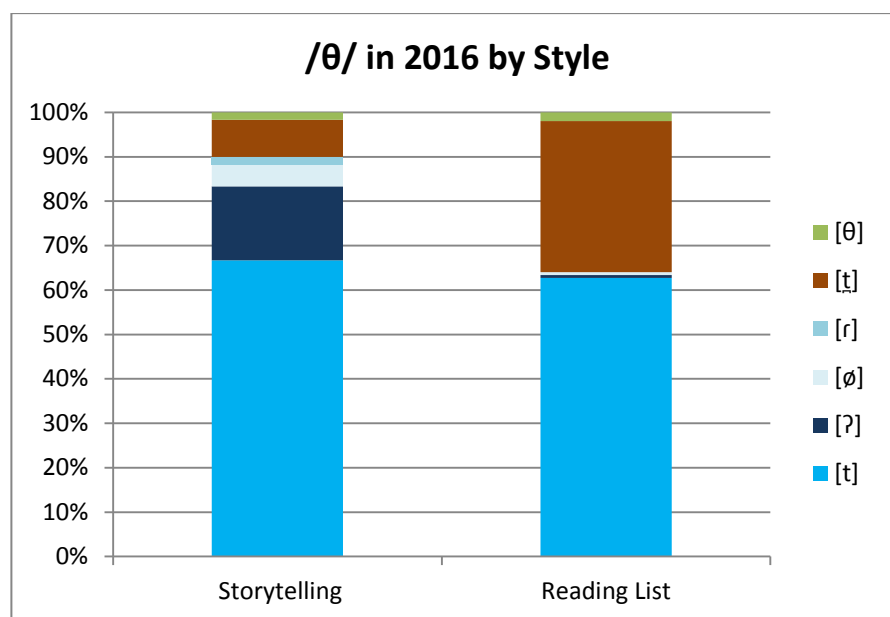
Figure 4.7.5: Percentage distribution of /θ/ for children in 2016 by style.

Figure 4.7.7 shows clear style differences: there is much more use of local forms when storytelling, with only 10% use of non-local variants, whereas when reading wordlists, the use of the non-local variants increases to about 35%. These are mainly dental plosives. Standard English interdental fricatives are minimal. Within local variants, similar amounts of voiceless alveolar plosives and voiceless dental fricatives are used in both styles, so the main difference is the use of glottals, deletion and tapping in storytelling, which are either absent or minimal when reading lists.
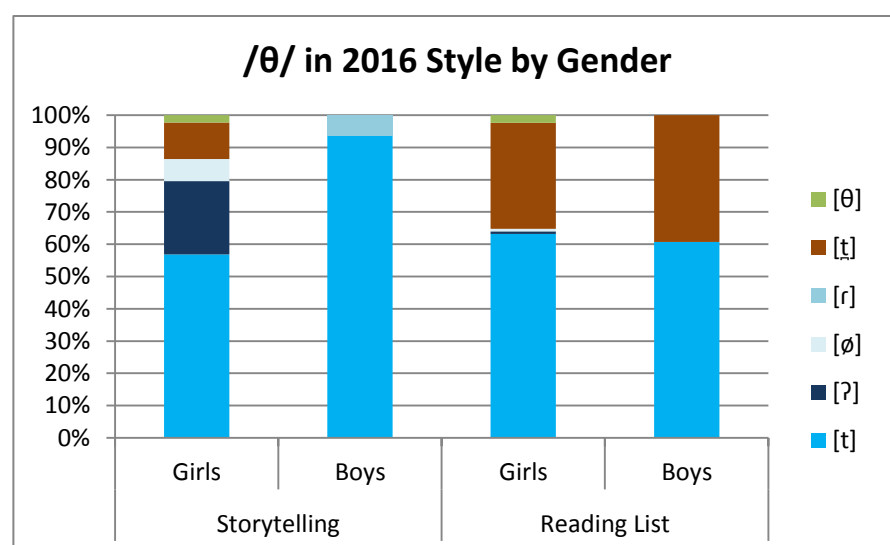
Figure 4.7.6: Percentage distribution of /θ/ for children in 2016 style by gender.

When reading wordlists, girls and boys show similar patterns of use at around 60% local variants, but in storytelling, boys are categorically local (Figure 4.7.8).
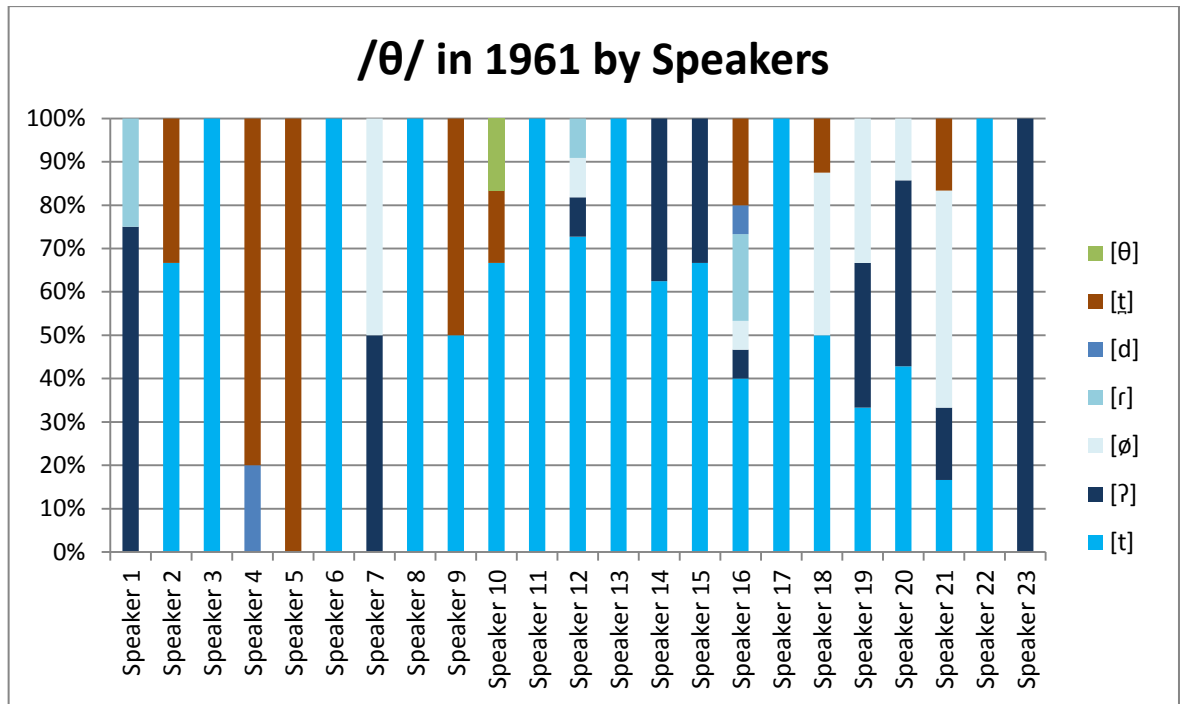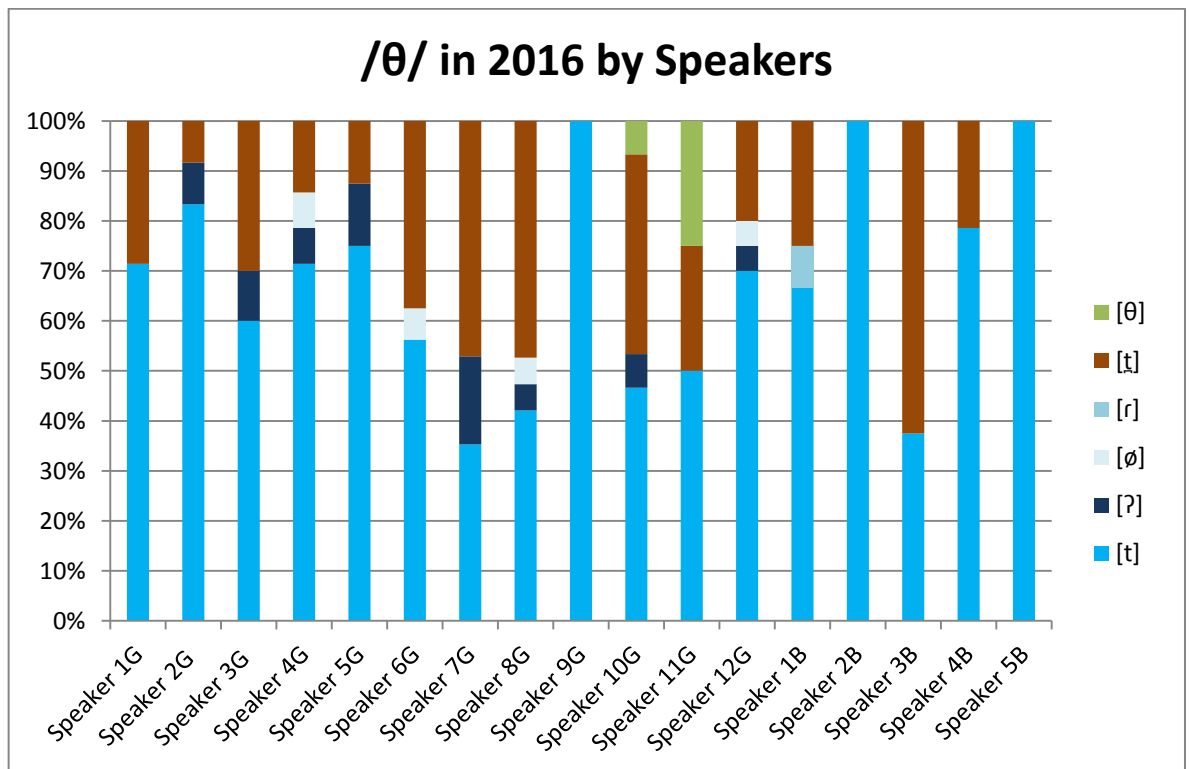

Figure 4.7.7: Percentage distribution of /θ/ for children in 2016 by individual speakers.

Of the seventeen speakers in 2016, twelve of them are predominantly local in their pronunciation of the voiceless dental fricative. Speakers range between categorical use of the alveolar plosive to a minimum use of approximately 50% for all local variants, for some speakers, with some glottaling and slightly less deletion by some girls. Figure 4.7.9 shows only one boy uses tapping (speaker 1B), the others use only alveolar and/or dental plosives. Three speakers categorically use the local voiceless alveolar plosive (speakers 9G, 2B and 5B), but the others use non-local variants ranging between 10% and 60%. Only one speaker uses more non-local than local variants (speaker 3B), and four speakers, all female, use both local and non-local in nearly equal amounts (speakers 7G, 8G, 10G and 11G). Of these speakers, two also use voiceless dental fricatives whereas the others do not (speakers 10G and 11G). Overall, although there is some use of non-local variants by most speakers, the majority use more local variants.

4.7.1   Summary of /θ/ in 2016 Children

In inner-city Dublin children in 2016, the variant which was used most for /θ/ is the voiceless alveolar plosive [t]. Non-local [t̪] is used in about 30% of cases. This non-local dental plosive is mainly in word-final position when /θ/ is after a vowel or when it is followed by an in-breath. The non-local variant is used most when reading wordlists, but boys do not use any non-local dental plosives when storytelling. In 2016, for nearly all individual speakers, the local variants were predominant for this variable.

4.8   **/θ/ Over Real-Time: 1961 to 2016**
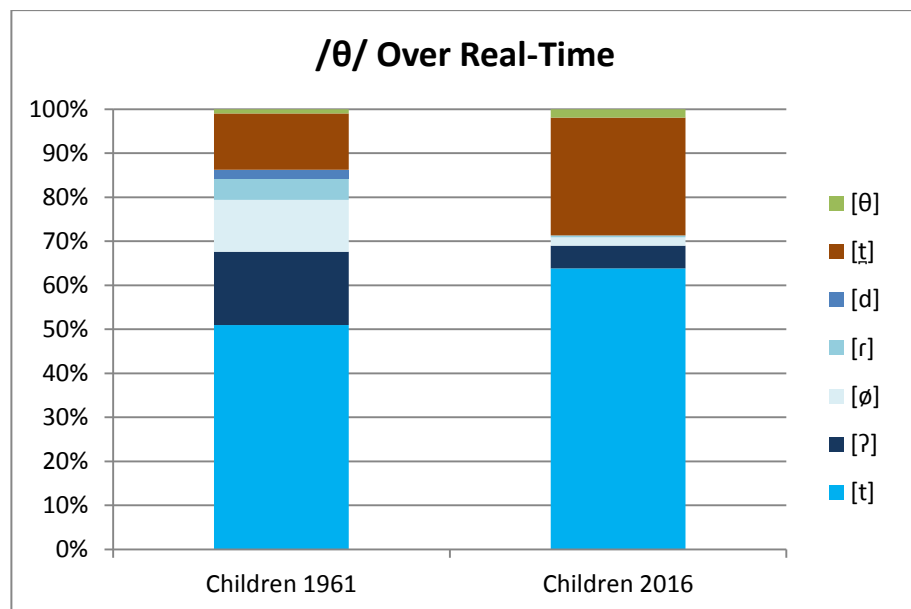
Figure 4.8: Percentage distribution of /θ/ over real-time by variant.

Figure 4.8 shoes that by 2016, although the children have increased the use of the local voiceless alveolar plosive, they have decreased the range and quantity of other local variants. At the same time the use of non-local forms has doubled. Thus, although the speech in 2016 is still predominantly local, non-local forms have increased by 15%.
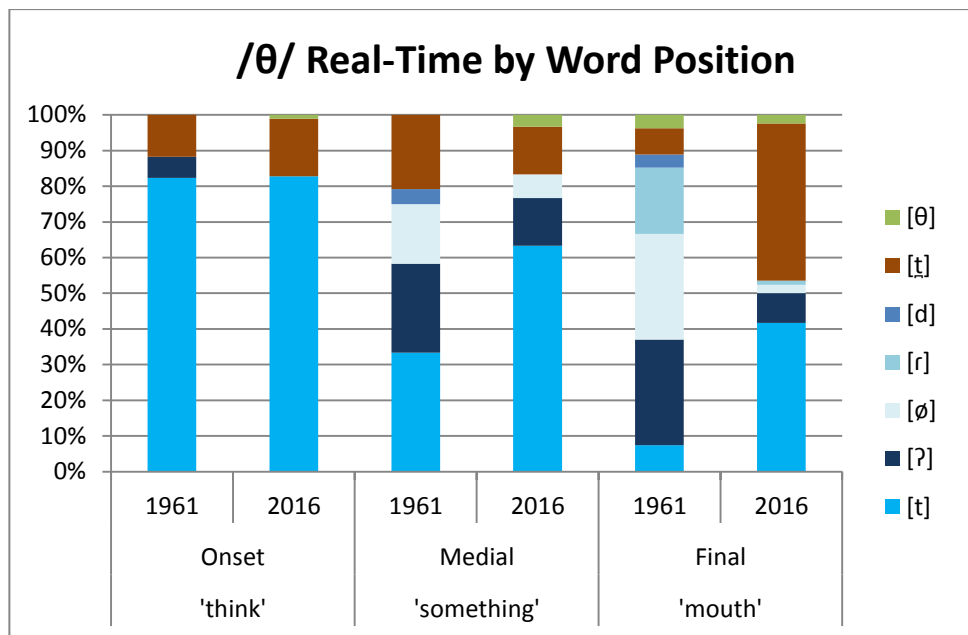
Figure 4.8.1: Percentage distribution of /θ/ over real-time by word position.

In word-onset and medial positions, the use of the local variants appears to be fairly stable at over 80%, although the range of variants has decreased, and the proportions have changed (see Figure 4.8.1). In word-onset, glottals have been replaced by dental plosives and some minimal use of dental fricatives has been introduced.

In word-medial position, voiceless alveolar plosives have increased by 30% while all other local variants; glottals and deletion, have decreased or, as the voiced alveolar plosives, disappeared altogether. Over 3% of Standard English fricatives are now used, which were previously absent.

In word-final position, there is the most noticeable change in the use of both local and non-local variants. Voiceless alveolar plosives have increased by 35%, while all other local variants have noticeably decreased. At the same time there has been a corresponding increase in the non-local forms, which have increased almost 40% since 1961. Therefore, word-final position has noticeably changed over time and is the only position in which local variants no longer prevail.

/θ/ Real-Time by Preceding Contexts

Legend:
- [θ]
- [t̪]
- [d]
- [r]
- [ø]
- [ʔ]
- [t]

X-axis:
1961	2016	1961	2016	1961	2016	1961	2016
without'		'tenth'		'something'		'# thank you'	
Vowel		Coronal		Other Con		In breath	
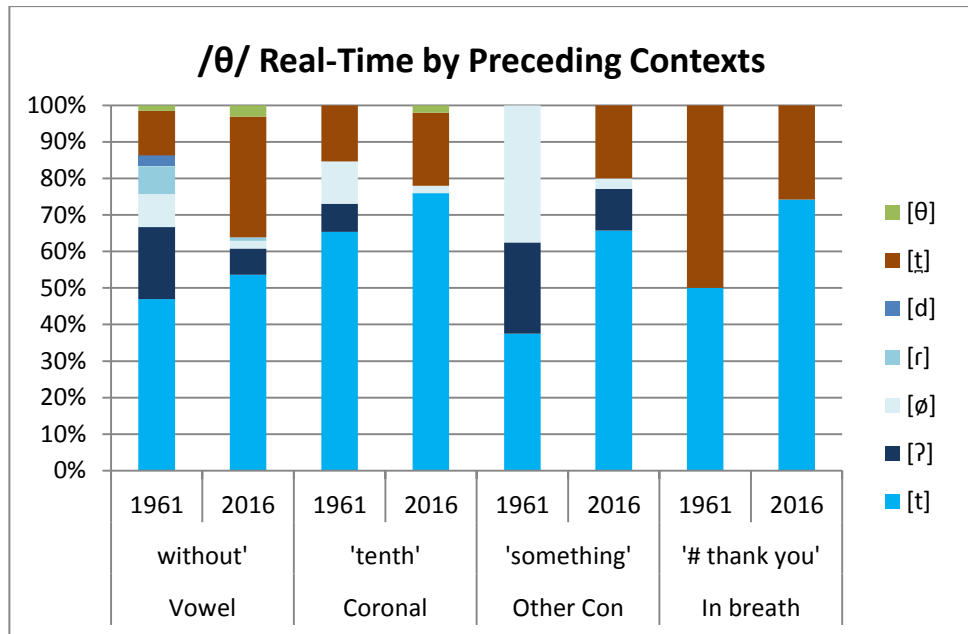
Figure 4.8.2: Percentage distribution of /θ/ over real-time by preceding contexts.

Figure 4.8.2 shows that in most preceding contexts the same pattern can be seen: the use of voiceless alveolar plosives has increased, while other local variants have reduced in both range and frequency of use. In preceding vowel contexts this has led to an increase of over 20% non-local use, with local forms decreasing from 85% to just under 65%. In coronal contexts, the increase of dental plosives is less noticeable, at about 5%. While the use of glottals has disappeared and deletion has reduced, Standard English dental fricatives have been introduced at just 2%. In 1961 other consonant contexts were categorically local, but this has decreased to 80% use by 2016. Within local variants, a noticeable increase in the use of voiceless alveolar plosives, there has been a reduction in both glottal stops and deletion, with a corresponding increase of 20% non-local use in this context. Preceding in-breath contexts differ; this is the only context in which the non-local dental plosives seem to have decreased, from 50% to 25% use over time. As the non-local form has decreased, there has been a corresponding increase of voiceless alveolar plosives, so that by 2016, this context is, like the others, predominantly local at nearly 75%.
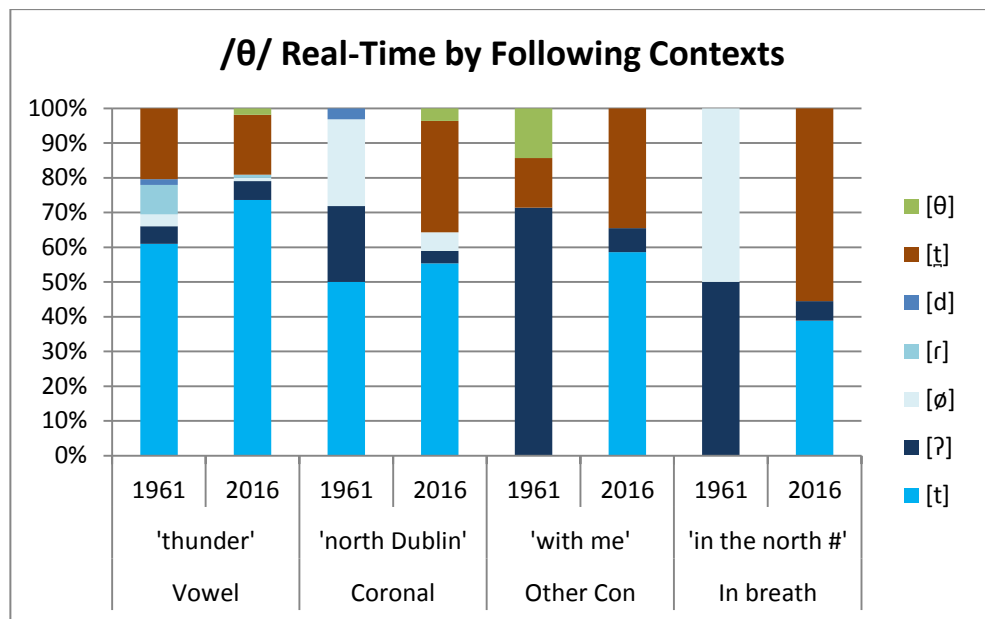
Figure 4.8.3: Percentage distribution of /θ/ over real-time by following contexts.

Similarly, in all following contexts, the use of voiceless alveolar plosives has increased, while in some contexts, the range and frequency of local variants has decreased. When vowels follow *e.g.* 'thunder', the local versus non-local ration has remained stable: voiceless alveolar plosives have increased, while all other local variants have decreased, and although the non-local remains at 20%, by 2016, some dental fricatives have been introduced. It is noticeable that in 1961, following coronal contexts were categorically local, whereas this has reduced to 65% use by 2016. There is a 35% increase in the use of non-local forms in this context with some dental fricatives being introduced as well. In other consonant contexts, the change in variants is also noticeable: where previously glottal stops were the only local variant, at 70%, this has decreased to less than 10% by 2016, with the introduction of the voiceless alveolar plosive as the main local variant. Also, the non-local forms have changed: dental plosives have increased and are now the only non-local variant used, at 35%. Although this difference over time is only about 5%, with a 15% reduction, there has been a complete elimination of interdental fricatives over time in this position *e.g.* 'with me'. Most strikingly, in-breath contexts are no longer categorically local. Where previously glottals and deletion were used equally, glottals have now been reduced to about 5%, deletion is no longer used and has partly been replaced by voiceless alveolar plosives. However, the most noticeable change is in the introduction of 55% non-local use in this context, *e.g.* 'in the north #'. Thus, over time, in following coronal and in-breath contexts, there has been an increase in the use of non-local variants of 35% and 65% respectively.

Because of the number of children involved, all speakers cannot be shown clearly on one graph, therefore they are presented separately as children in 1961 and children in 2016.
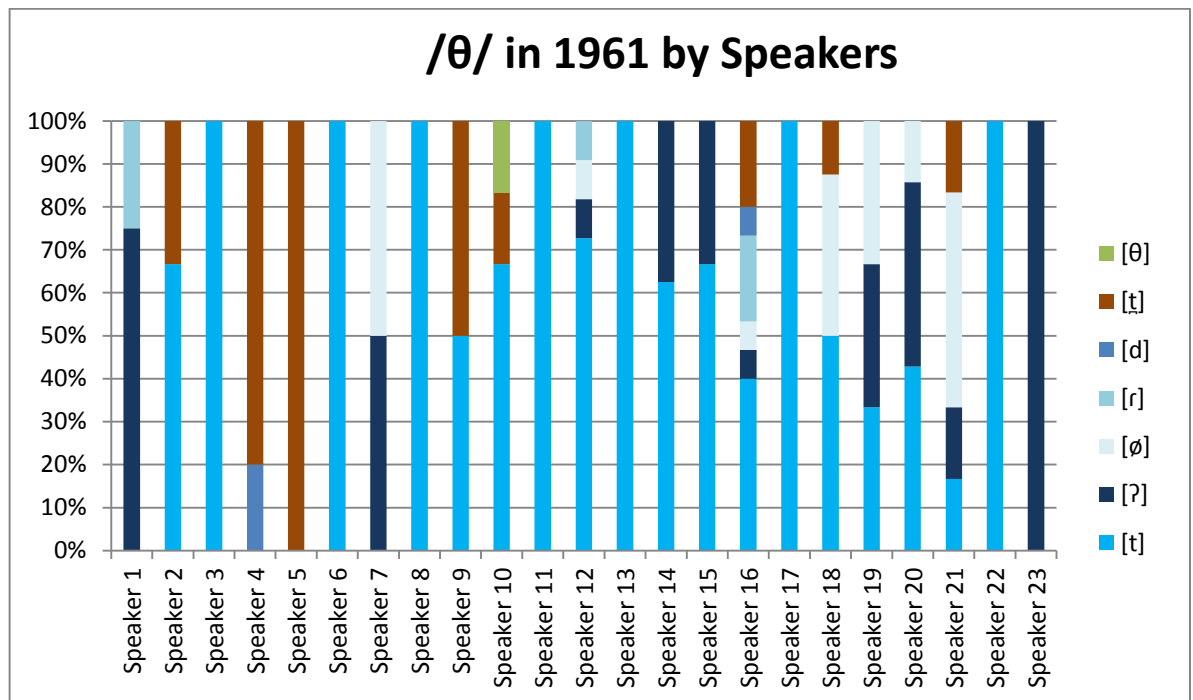
Figure 4.8.5: Percentage distribution of /θ/ over real-time by individual speaker (1961 above – 2016 below)
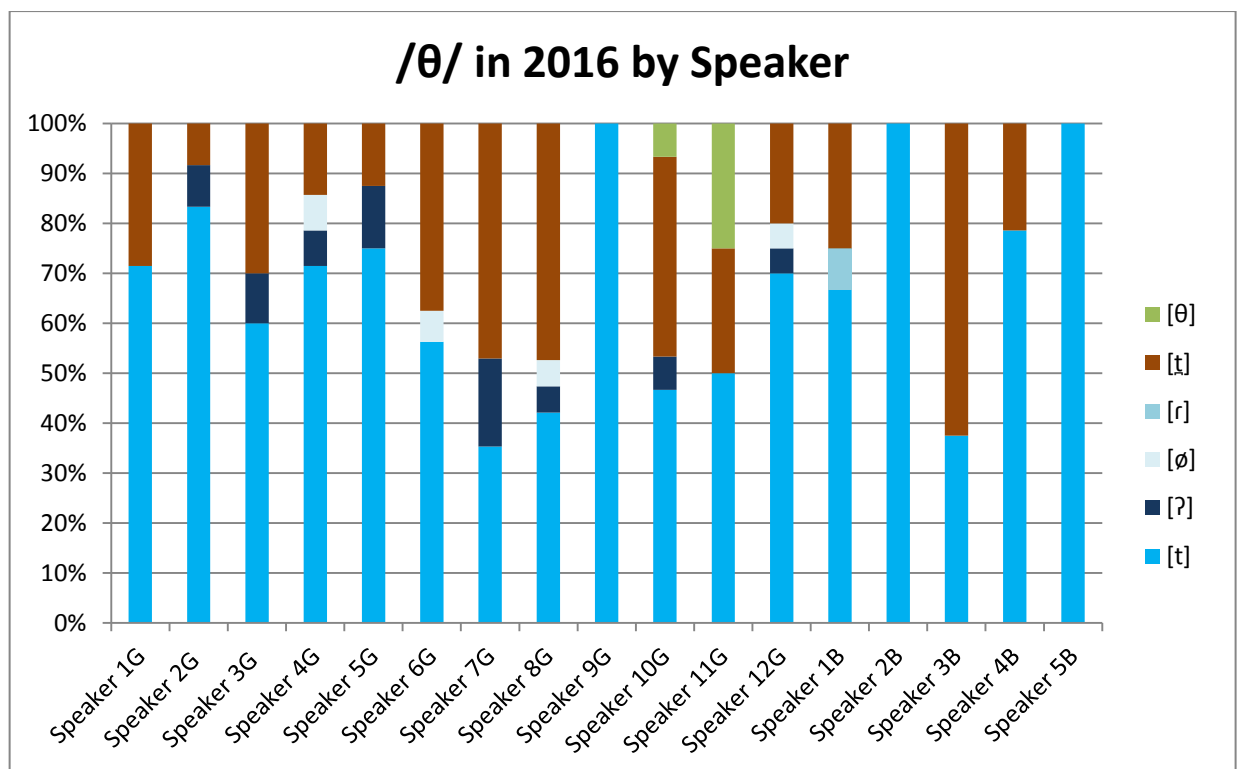
Over time, realisation of this variable has remained relatively stable in that the local forms are still favoured above non-local ones. However, by 2016 there has been change in the number and amount of non-local forms used by individual speakers. A change is seen in that; over fourteen speakers now use some non-local, whereas in 1961 these variants were used by only eight speakers Also, although three speakers are still categorically local in their pronunciation of this variable, in 1961, there were fifteen speakers. Thus, over time there has been a decrease of 45% in the number of categorically local speakers, with a corresponding increase of speakers using non-local variants.

4.8.1   Summary of Comparison of /θ/ Over Real-Time

In inner-city Dublin children in 2016, /θ/ is stable only in the fact that local variants are still used more than non-local ones. While voiceless alveolar plosives have increased, use of all other local variants has decreased, with a corresponding increase by15% in the use of both non-local dental plosives and Standard English dental fricatives.

In onset and word-medial position, the use of local variants has remained stable, but in medial position, the range and frequency of their use has changed. There has been an increase in the voiced alveolar plosive, a decrease in deletion and glottals and complete elimination of voiced alveolar plosives. In word-final position, there has been the most noticeable change with an increase of almost 40% in non-local norms, to near-equal use of both local and non-local forms.

In all preceding contexts use of the local voiceless alveolar plosives has increased, while the other local variants have decreased in frequency. In vowel and coronal contexts, there has been a decrease in range as well. Consequently, the non-local variants have increased in all preceding contexts, except after in-breaths, where voiceless alveolar plosives have increased by 25%. Likewise, in all following contexts, except vowels, where the local variants remain stable at 80%, voiceless alveolar plosives have increased whilst other local variants have decreased in use and range. Thus, non-local variants have increased in following contexts as well.

The pattern changes slightly when looking at style. When looking at storytelling, again the use of voiceless alveolar plosives increases, by nearly 20%, whilst other local variants decrease, or are no longer used. However, glottals are stable, so the overall use of local

variants increases slightly with a corresponding decrease in non-local variants. This results in 90% use of local variants in 2016, compared to 85% use in 1961 in the same style, so over time reading style has become slightly more local.

4.9   /θ/ in 2016   Adult Case Study
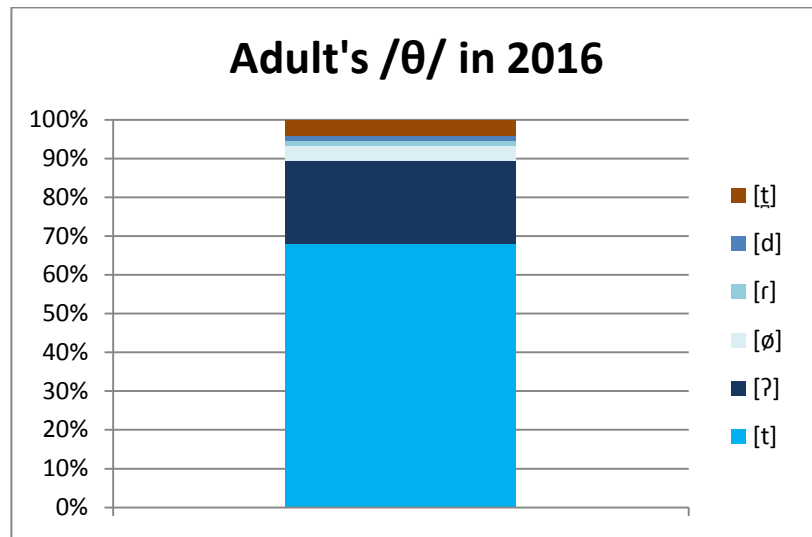
Figure 4.9: Percentage distribution of adult's /θ/ by variant.

Figure 4.9 shows the adult's pronunciation of the voiceless dental fricative is predominantly local with over 95% use of these variants. This variable is articulated as voiceless alveolar plosives in about two-thirds of cases, with glottals used just over 20% of the time. Other local variants, and the non-local voiceless dental fricative are used minimally, *i.e.* less than 5%.
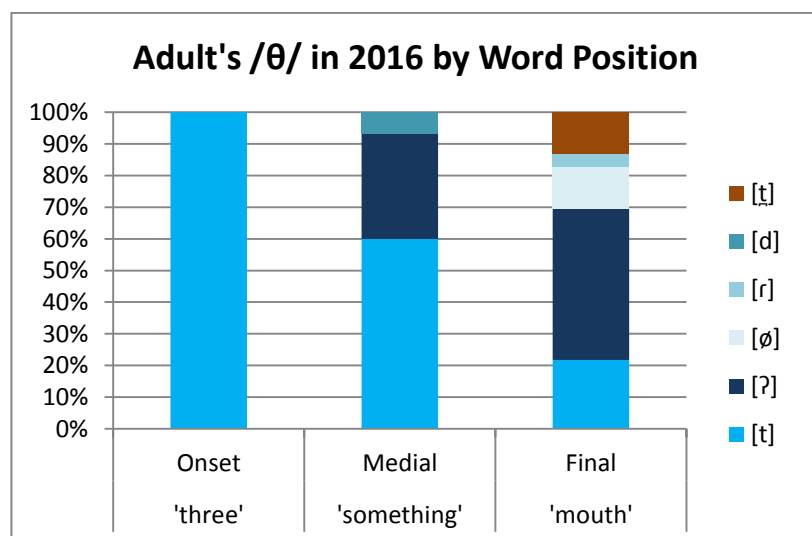
Figure 4.9.1: Percentage distribution of adult's /θ/ by word position.

Figure 4.9.1 shows that both word-onset and word-medial positions are categorically local. The former *e.g.* 'three', is categorically voiceless alveolar plosives, whilst the latter *e.g.* 'something', has over 35% use of glottals and 7% voiced alveolar plosives. Word-final position is the only location for non-local dental plosive. In this position *e.g.* 'mouth', glottals are used more than any other local variant, at nearly 50%. There is also some use of the voiceless alveolar plosive and some deletion, but tapping is minimal at less than 5%.
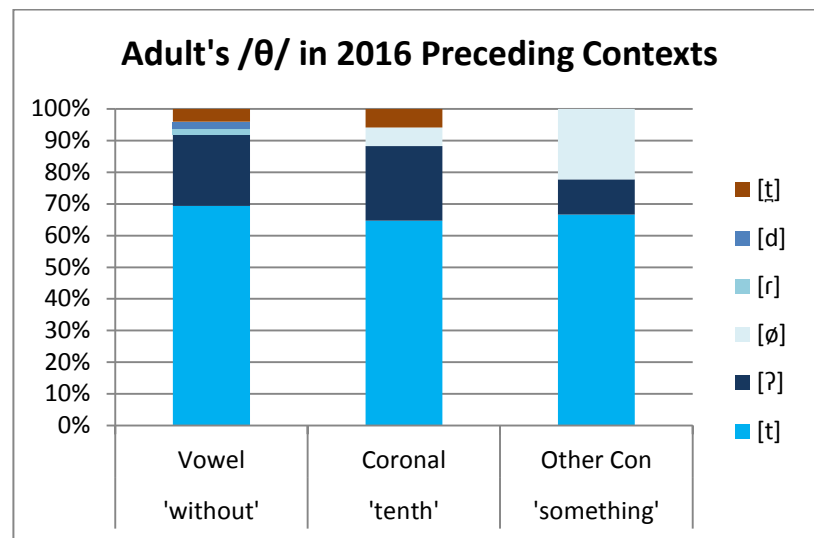
Figure 4.9.2: Percentage distribution of adult's /θ/ by preceding contexts.

Figure 4.9.2 shows that in preceding vowel contexts *e.g.* 'without', there is about 95% use of local variants, with dental plosives being the only non-local form used. Glottals are used just over 20% of the time, but tapping and voiced alveolar plosives are minimal. Preceding coronal contexts *e.g.* 'tenth', show similar use of local variants as preceding vowel contexts; the voiceless alveolar plosive still prevails at 65%. Glottals are used in almost a quarter of cases, with the remaining local variant being deletion, which is used in equal proportions as the non-local dental plosive, at just over 5%. Other consonant contexts *e.g.* 'something', are categorically local with similar levels of voiceless alveolar plosives as the former preceding contexts, but there is less use of glottals and more use of deletion, at about 22%.

Adult's /θ/ in 2016 Following Contexts
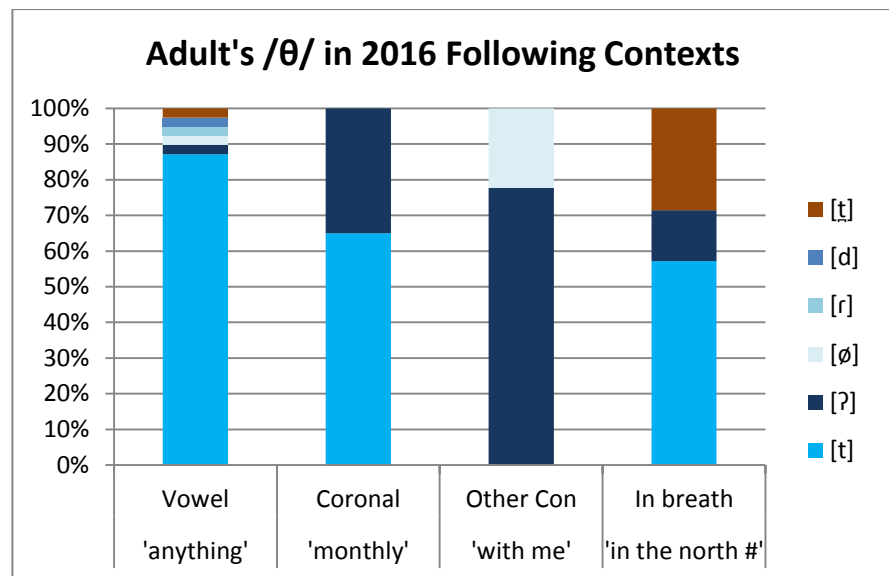
Figure 4.9.3: Percentage distribution of adult's /θ/ by following contexts.

Figure 4.9.3 shows that following coronal and other consonant contexts are categorically local. The former *e.g.* 'monthly', is two-thirds voiceless alveolar plosives and one third glottals stops, whereas the latter *e.g.* 'with me' is nearly 80% glottals with deletion as the only remaining variant used. Following vowel contexts *e.g.* 'anything', are slightly different. Voiceless alveolar plosives are used almost 90% of the time. The only non-local variant is the dental plosive; the remaining variants are all local *i.e.* glottals, deletion, tapping and voiced alveolar plosives. These are all used minimally. The only context in which there is noticeable use of non-local dental plosives is when an in-breath follows *e.g.* 'in the north #'. Here the non-local reaches 30%.

Adult's /θ/ in 2016 by Style
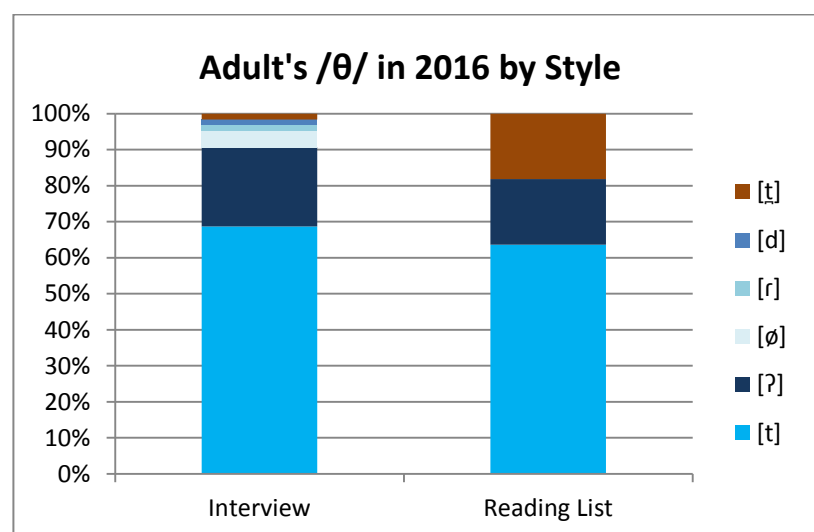
Figure 4.9.4: Percentage distribution of adult's /θ/ by style.

The interview with the adult was mainly spontaneous speech, often recounting stories of past events, so use of variants remains the same as the overall picture: over 95% local. As shown in Figure 4.9.4, the main variant used is the voiceless alveolar plosive, at almost 70%. Glottals are used over 20% of the time and the remaining variants are all used minimally. The non-local dental plosive is used less than 2%. When reading lists however, there is much more use of the non-local variant which has increased to almost 20%. Voiceless alveolar plosives are still the main local variant used at over 60%, with the only other local variant being the glottal stop which has reduced to just below 20%. Deletion, tapping and voiced alveolar plosives are not found in this speaker's reading of lists.

4.10 Quasi-Lifespan Study of /θ/ over Five Decades: 1961 to 2016

Figure 4.10 shows the changes in realisation of /θ/ over the quasi-lifespan study. This speaker was in the class in 1961 although was not one of the children recorded, so it can only be said that her speech now *appears* to be more local than the average 1961 children. However, in the absence of her own specific data from 1961 there is no categorical evidence that she herself was not already more local than her childhood peers.
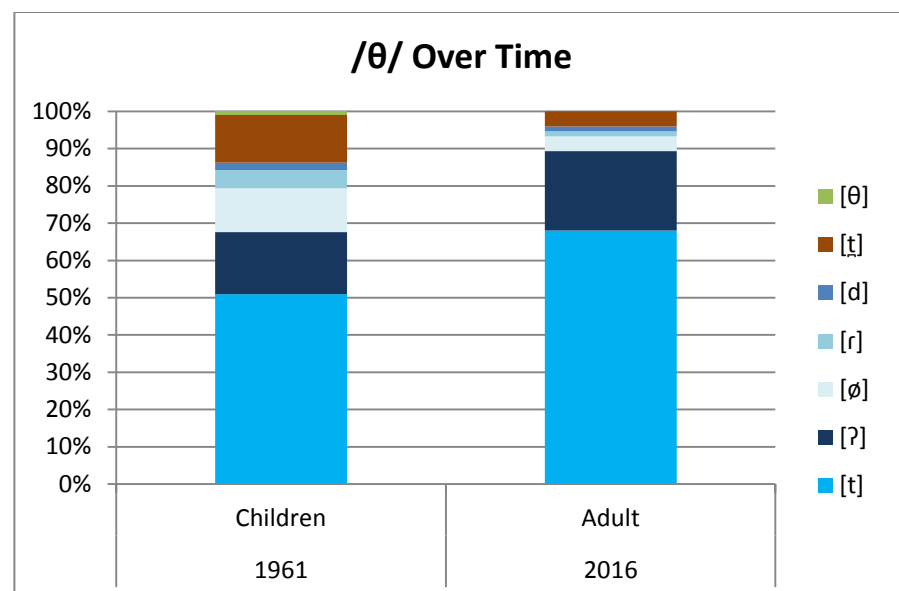
Figure 4.10: Percentage distribution of /θ/ quasi-lifespan by variant.

Over time, the adult's variation for /θ/ appears to have become more local. While voiceless alveolar plosives and glottal stops have increased, other local variants have decreased. Also, the non-local variants have decreased, with voiceless dental fricatives disappearing altogether.

/θ/ Over Time by Word Position
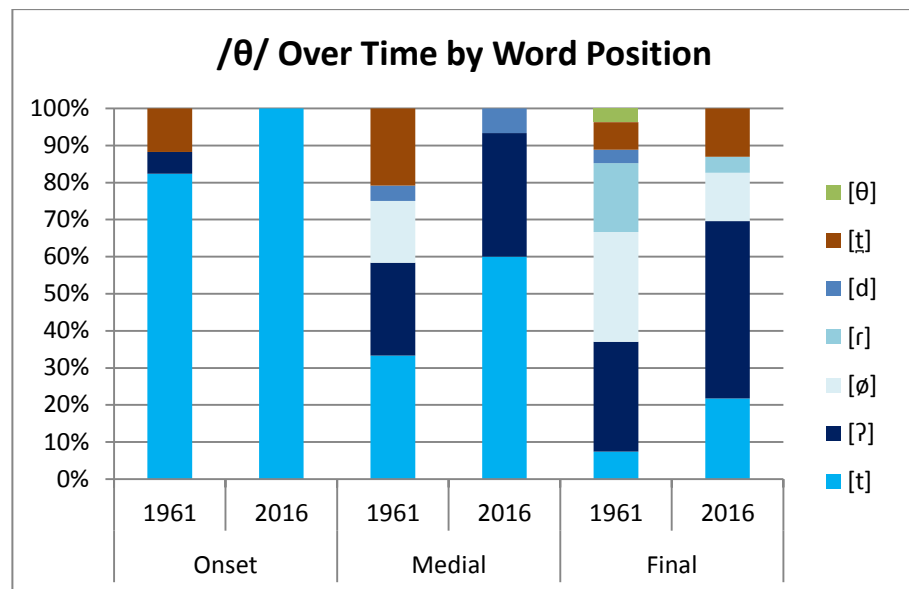
Figure 4.10.1: Percentage distribution of /θ/ quasi-lifespan by word position.

Figure 4.10.1 shows that in both initial and medial positions, the adult's pronunciation of the voiceless dental plosive is categorically local. In word-initial position, the only variant used is the voiceless alveolar plosive, but in word-medial, glottals and, to a lesser extent, voiced alveolar plosives are also used. Thus, in these two word positions the use of the non-local variant which was present in 1961, does not occur.

Word-final position is more stable; although voiceless alveolar plosives and glottals have increased, deletion and tapping have decreased. Voiced alveolar plosives and voiced dental fricatives do not occur. Overall the local versus non-local ratio remains stable.

/θ/ Over Time by Preceding Contexts
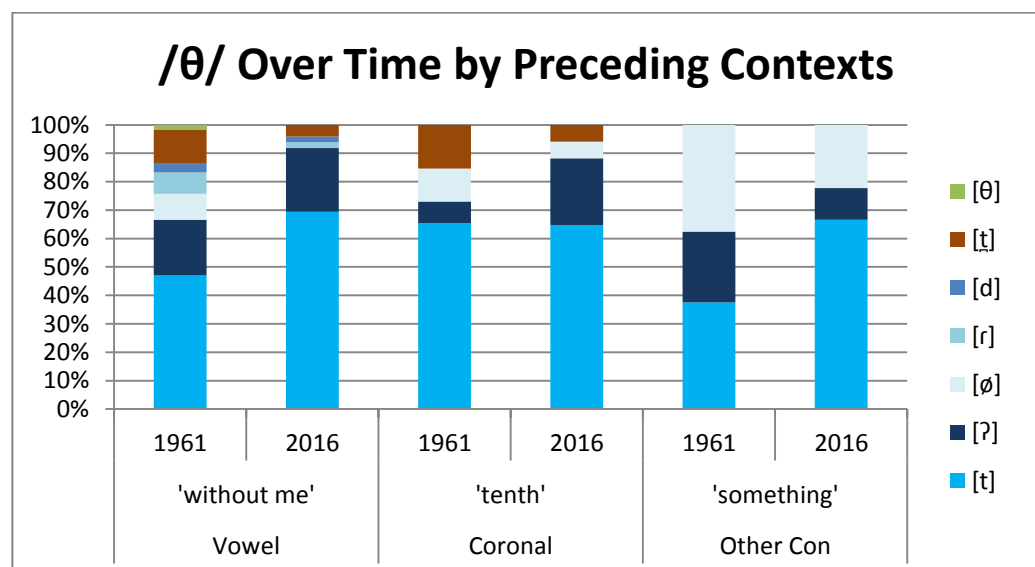
Figure 4.10.2: Percentage distribution of /θ/ quasi-lifespan by preceding contexts.

Figure 4.10.2 shows that in both preceding vowel and coronal contexts, the adult's use of local variants has increased by 10% with a corresponding decrease of the non-local variants. In the former, the use of voiceless alveolar plosives has increased, glottals have remained relatively stable, but all other local variants have decreased so that the non-local form is now used only 5% of the time, which is less than the children in 1961. This is similar in coronal contexts, but while the voiceless alveolar plosive has remained stable, glottals have increased and deletion and the non-local form have decreased. In both contexts the local variants are now used in about 95% of cases. Other consonant contexts have remained stable in the categorical use of local variants, but the frequency of each variant has changed: the adult uses more voiced alveolar plosives and less glottals and deletion.
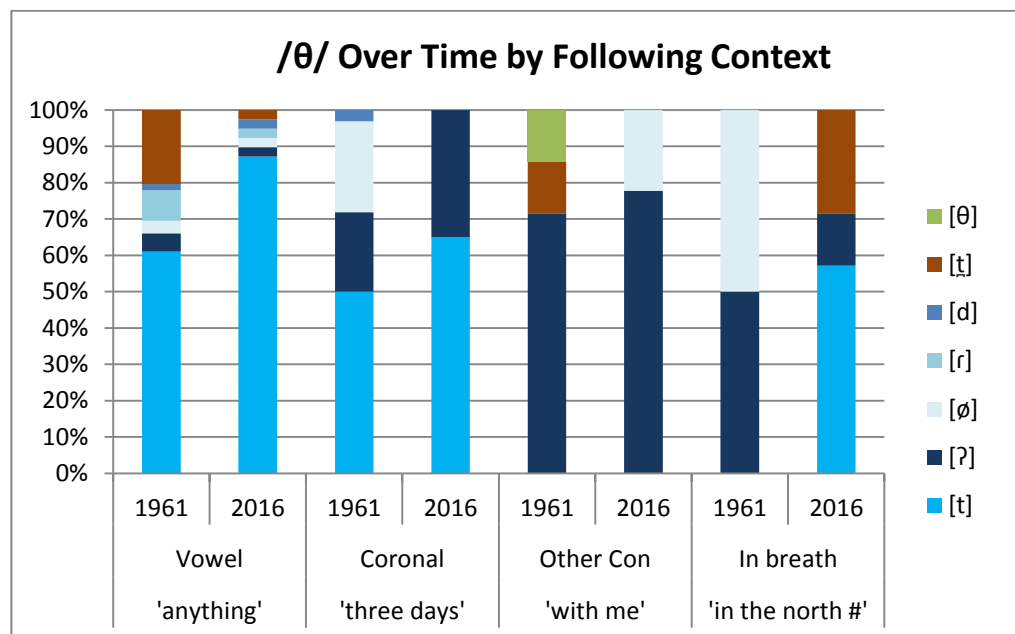
Figure 4.10.3: Percentage distribution of /θ/ quasi-lifespan by following context.

Figure 4.10.3 shows that following vowel contexts have a similar pattern to preceding vowel contexts: the voiceless alveolar plosive has increased while all other local variants, and the non-local dental plosive, have decreased. Now, at less than 5%, there is nearly 20% less use of the non-local in this context since 1961. Coronal contexts remain categorically local, although deletion and voiced alveolar plosives are no longer used, having been replaced by an increased use of voiceless alveolar plosives and glottal stops. In following other consonant contexts, there has been a noticeable change: previously the main local variant was the glottal stop and there was 30% use of both the non-local variants, whereas the adult now, with almost 80% local and the remaining deletion, has become categorically

local. In 1961, following in-breath contexts were categorically local, with equal use of glottals and deletion. However, by 2016, there is now 30% non-local use, with a notable decrease in glottals and introduction of the voiced alveolar plosive.
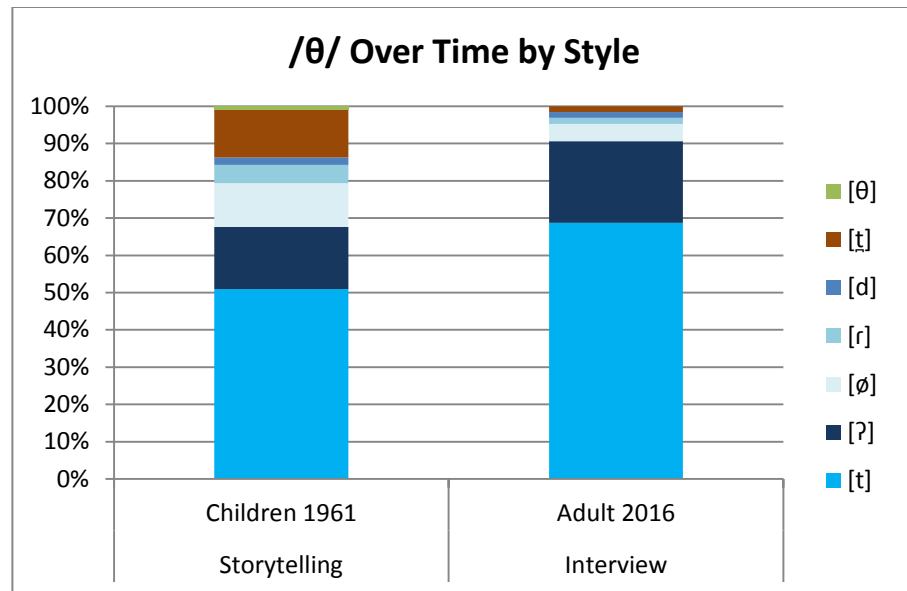
Figure 4.10.4: Percentage distribution of /θ/ quasi-lifespan by style.

Figure 4.10.4 shows that in 1961 the children used approximately 15% of non-local variants during spontaneous speech, but in 2016, in a similar style, the adult has reduced this to less than 2%, with no fricatives at all. Over time, the use of voiceless alveolar plosives and glottals appears to have increased, while all other local variants, although still present, are used less than in this speaker's childhood peers.
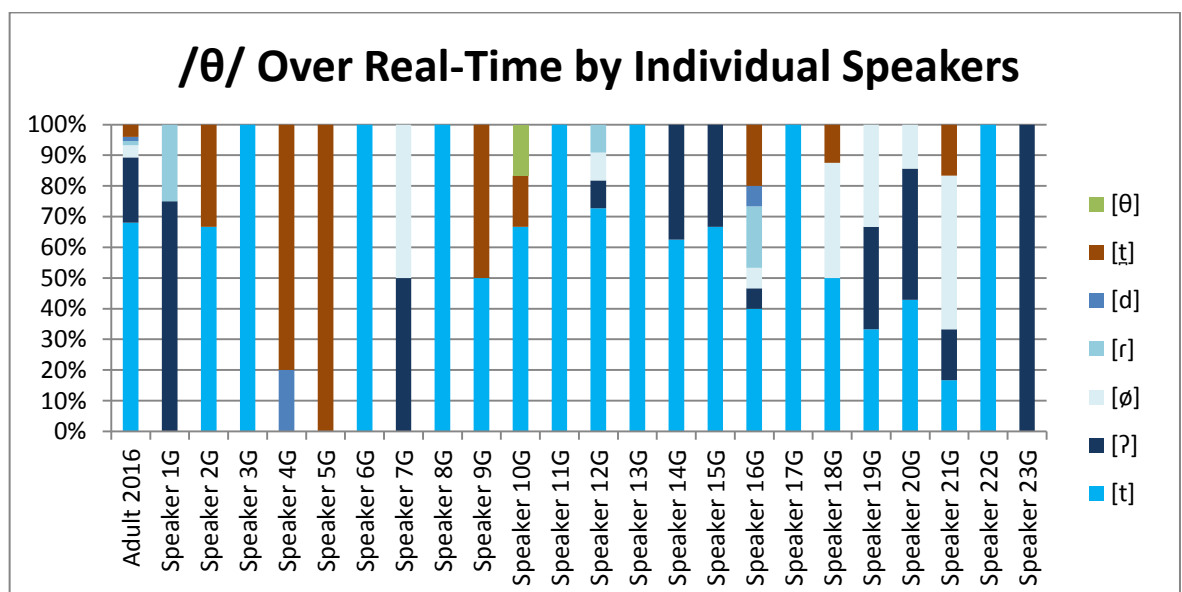
Figure 4.10.5: Percentage distribution of /θ/ quasi-lifespan by individual speaker.

When looking at individual speakers in 1961, Figure 4.10.5 shows that local variants were used noticeable more in the pronunciation of the voiceless dental fricative than non-local forms. Apart from two speakers who favoured the non-local variant [t̪] (speakers 4G and 5G), figures range between 50% and categorical use of local variants. Non-local forms are used by only seven other speakers, ranging between 50% or less. Only one speaker used any dental fricatives for this variable in 1961 (speaker 10G). The adult speaker in 2016, is within these ranges, using non-local forms less than 5%. Although there is no data for this adult speaker's childhood, but given that apart from a few speakers, they are all markedly local in the realisation of this variable, it is likely that this speaker has maintained a predominantly local pronunciation for the voiceless dental fricative throughout her lifespan.

4.10.1 Summary of Quasi-Lifespan Comparison of /θ/

Overall, the adult's use of local variants for /θ/ appears to have increased by 10% throughout her lifespan. The variant most used in 1961 and in 2016 is the local voiceless alveolar plosive. Five speakers in 1961 used no [t] at all, other speakers' realisations of this common allophone ranged between categorical use to just over 15%, compared to the adult's use of nearly 70% in 2016, thus, she is at the higher end of a cline. All other local variants sit at the lower end of a local → non-local cline. Glottals are still within the range used in 1961, while in comparison with her childhood peers, all other local variants seem to have decreased over this speakers' lifespan. Use of the non-local dental plosive in 1961 ranged between categorical use by one speaker, to no use at all by fifteen speakers. In 2016, the adult used this variant just under 5%, therefore, again on the lower end of the cline. No comparison can be made of the voiceless dental fricative as in 1961 because only one speaker used this variant and it was not the adult in this study. Therefore, it can be said that her use of dental fricatives has remained stable over time; in that they are consistently absent from both spontaneous and read speech.

Despite the decrease in some local variants, use of the predominant voiceless alveolar plosive has increased over time, by over 15%. There has been a corresponding decrease of the non-local forms, both dental plosive and fricatives, in all word positions and contexts, except when an in-breath follows. Here, there is a change from categorical use of local variants in 1961 to 30% use of non-local ones in 2016. This is the most noticeable use of

non-local variants by this speaker. Overall, throughout this speaker's lifespan, it looks as if realisations of /θ/ has become increasingly local.

4.11   */t/ in 1961 Children*

Unlike the variables /ð/ and /θ/, for the variable /t/ there is no reference to the Standard English variant. The slit fricative is the non-local variant (brown) and the voiceless alveolar plosive is taken to be standard Irish-English realisations of this variable (green). As previously, blues represent the local variants.
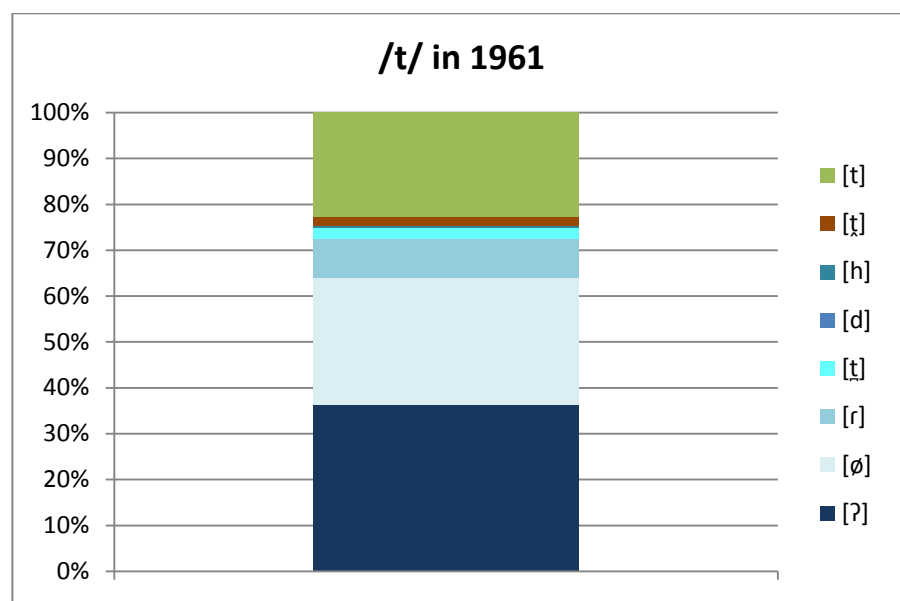
Figure 4.11: Percentage distribution of /t/ for children in 1961 by variant.

Figure 4.11 shows that in 1961, pronunciation of the voiceless alveolar plosive was 75% local, over a range of variants. These were mainly glottals and deletion, although there was some tapping. [d] and [h] were minimal, at less than 1%, so are barely visible on the graph. There was some use of dental plosives, but, like the use of the non-local slit-t, it was minimal. The standard Irish-English [t] was the preferred variant as the non-local form in 1961 at almost 23% use.

/t/ in 1961 by Word Position
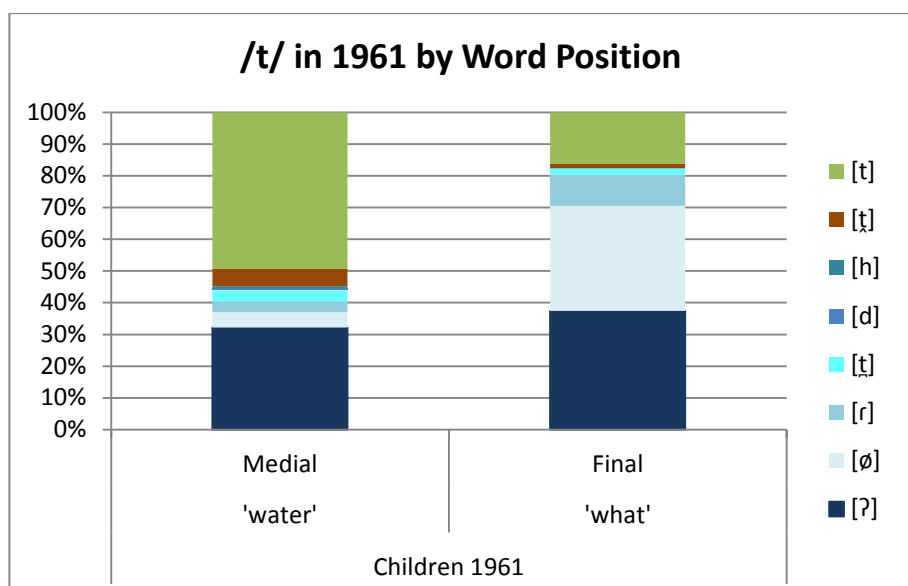
Figure 4.11.1: Percentage distribution of /t/ for children in 1961 by word position.

Figure 4.11.1 shows that in word-medial position, at 55%, articulation of this variable was more non-local than local. The main variant used was the standard Irish-English voiceless alveolar plosive, with dental plosives used in just over 5% of cases. Although there was the full range of six local variants in this position, most were minimal except for glottal stops, which appeared in over 30% of cases. Word-final position was different: over 80% was local, with noticeably more glottals and deletion than the other local variants. Standard and non-local forms were used in only about 18% of cases.

/t/ in 1961 by Preceding Contexts
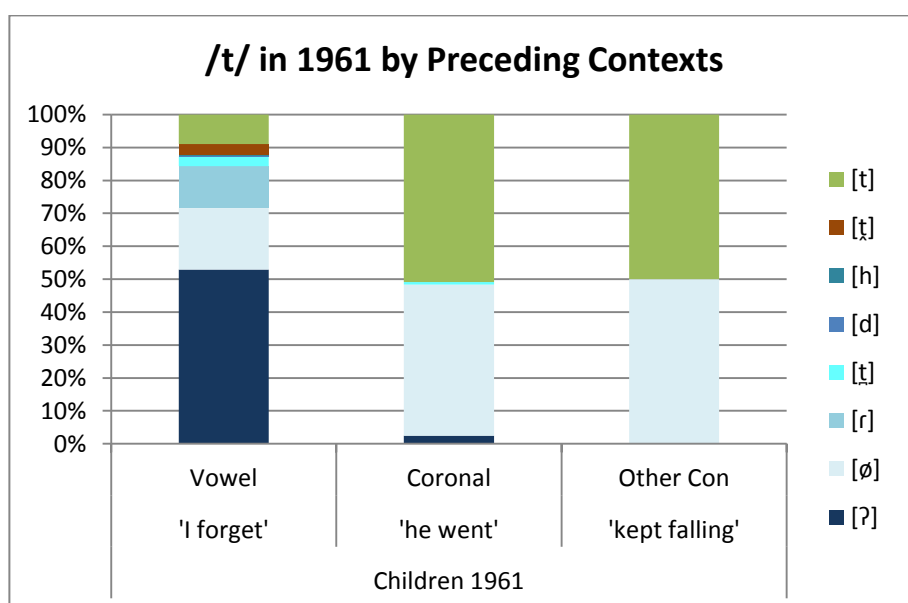
Figure 4.11.2: Percentage distribution of /t/ for children in 1961 by preceding contexts.

Figure 4.11.2 shows that in both preceding coronal and other consonant contexts, the variants were split equally between local and non-local use. Apart from minimal use of dental plosives and glottaling in preceding coronal contexts, the only other variants used in both these contexts were deletion and voiceless alveolar plosives. In preceding vowel contexts, the use of local variants increased noticeably to just under 90%. More than 50% were glottal stops, with other local variants used in the remaining proportion; mostly deletion and tapping. The main standard variant used was the voiceless alveolar plosive, but there was also 3% use of the non-local apico-alveolar fricative.

<figure>

/t/ in 1961 by Following Contexts

Legend: [t], [t̪], [h], [d], [t̠], [r], [ø], [ʔ]

X-axis categories:
Vowel 'got another'
Coronal 'short day'
Other Con 'got wet'
In breath 'an' all that #'

Children 1961

</figure>
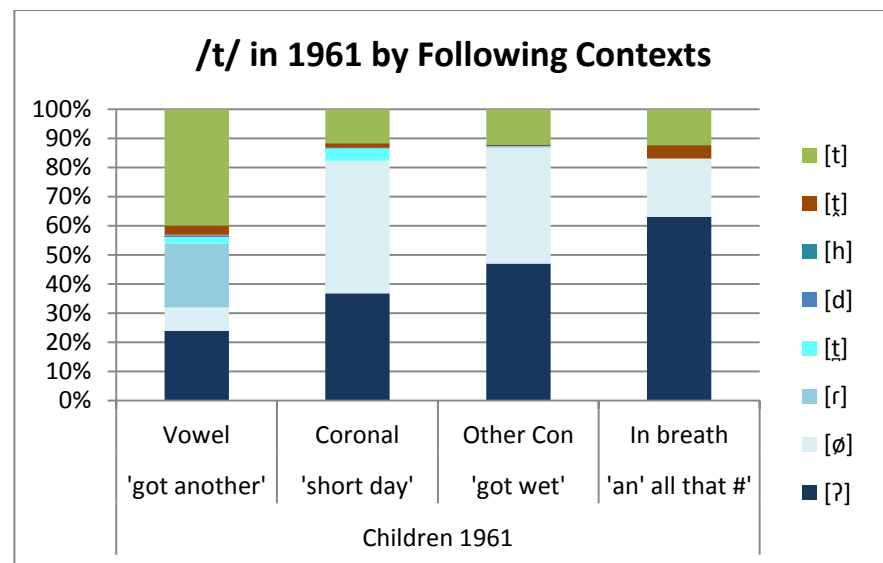
Figure 4.11.3: Percentage distribution of /t/ for children in 1961 by following contexts.

Figure 4.11.3 shows that in preceding vowel contexts there was much more use of the standard Irish-English variant [t] than in any of the other contexts; at just over 40%, this was mainly the alveolar plosive, with just 3% use of the non-local slit fricative. Although there was some deletion, the main local variants in this context were glottals and tapping, used almost equally. Other local variants were minimal. This context shows more variation than the other three, which tend to follow the same overall pattern. In following coronal contexts, use of local variants was over 85%, the main variants being deletion (45%) and glottals (37%). Slightly more dental plosives were found than in following vowel contexts, but the use remained minimal (4%). The standard voiceless alveolar plosive is used about 10% of the time, with minimal use of the pan Irish-English slit fricative [t̠]. In this context there was very similar use to following coronal contexts: over 85% of the variants were local with the main ones being glottals and deletion. Other local variants are barely visible on the chart, but the use of the standard Irish-English alveolar plosive was similar to

following coronals at just over 10%. When an in-breath followed, glottals reached over 60%, which was the highest use across all contexts. Deletion decreased accordingly, and there was also a slight increase, to 5%, in the use of the non-local slit fricative, but the main variant remained consistently the standard Irish-English voiceless alveolar plosive.

Figure 4.11.4: Percentage distribution of /t/ for children in 1961 by individual speakers.

Figure 4.11.4 shows that of the twenty-three speakers, only two children used standard variants more than the local ones (speakers 9 and 10), while one child used local and non-local/standard variants equally (speaker 2). Although everyone used alveolar plosives, ranging between 10% and 55%, less than half also used dental plosives, some as low as 2% and others reaching just over 15%, at most. The main local variants were glottals and deletion, with some tapping and dental plosives. [d] and [h] were used minimally, each by just one speaker. Use of local variants ranged between 45% and nearly 90%.

In 1961 the pronunciation of the voiceless alveolar plosive was three-quarters local with the main variants used being glottal stops and deletion. The remaining quarter was mostly standard Irish-English [t]. However, when looking at word-medial position, more than half was the standard alveolar plosive. The main local variant was the glottal stop, which was used over 30% of the time. Word-final position is over 80% local, mainly with glottals and deletion. The same is true of preceding vowel contexts, and following coronal, other consonant and in-breath contexts, where the use of local variants rises to nearly 90%.

However, in preceding coronal and other consonant contexts, the use of local and standard (deletion and alveolar plosives) is practically equal. The most use of standard variants is when vowels follow, in this case reaching over 40% use, and in this context the main local variants are glottals and tapping. It is surprising how few non-local Irish-English slit-t variants were used by the 1961 speakers.

4.12 /t/ in 2016 Children
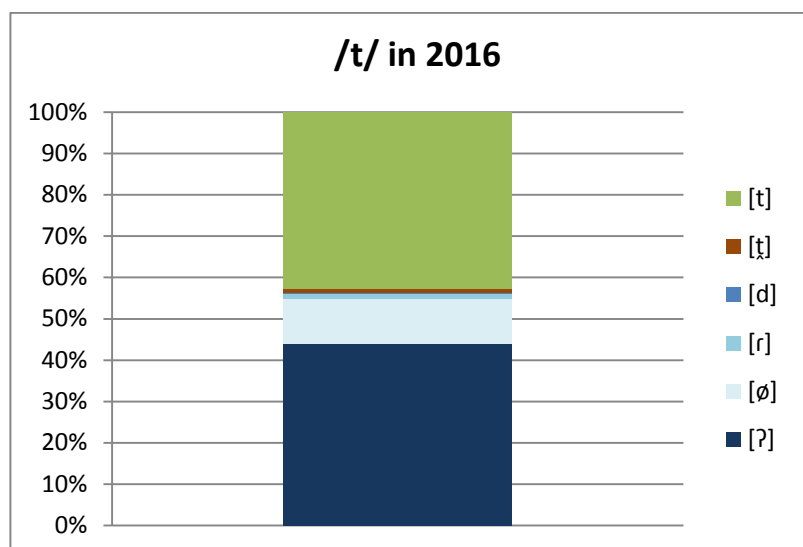
Figure 4.12: Percentage distribution of /t/ for children in 2016 by variant.

Figure 4.12 shows that in 2016 local forms are used slightly more than non-local/standard forms in the realisation of /t/. Glottals and standard Irish-English voiceless alveolar plosives are used almost equally, at 43%. Deletion is used just over 10% of the time, with minimal use of all other variants.
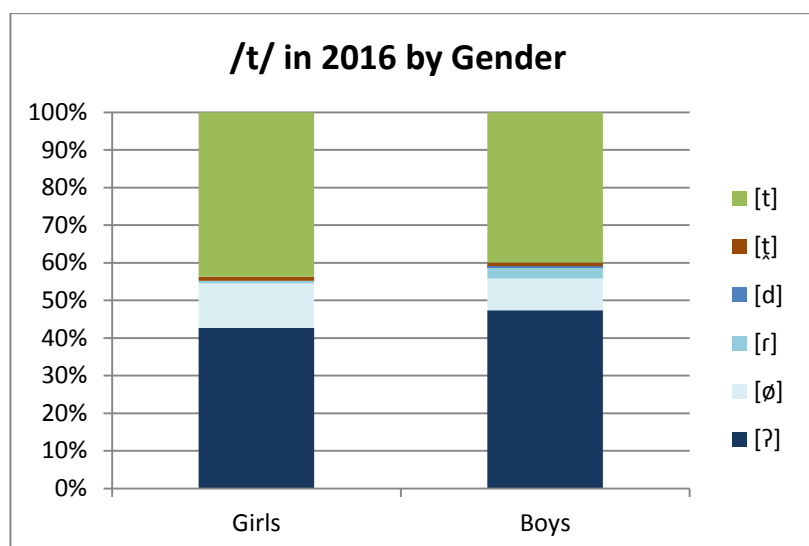
/t/ in 2016 by Gender

Figure 4.12.1: Percentage distribution of /t/ for children in 2016 by gender.

In 2016, there are no noticeable differences between genders in the pronunciation of this variable. Figure 4.12.1 shows that boys use slightly more glottals and tapping, while girls use slightly more deletion and voiceless alveolar plosives. Overall, girls are slightly more non-local/standard, but the local versus non-local difference is less than 5% between genders.

/t/ in 2016 Word Position
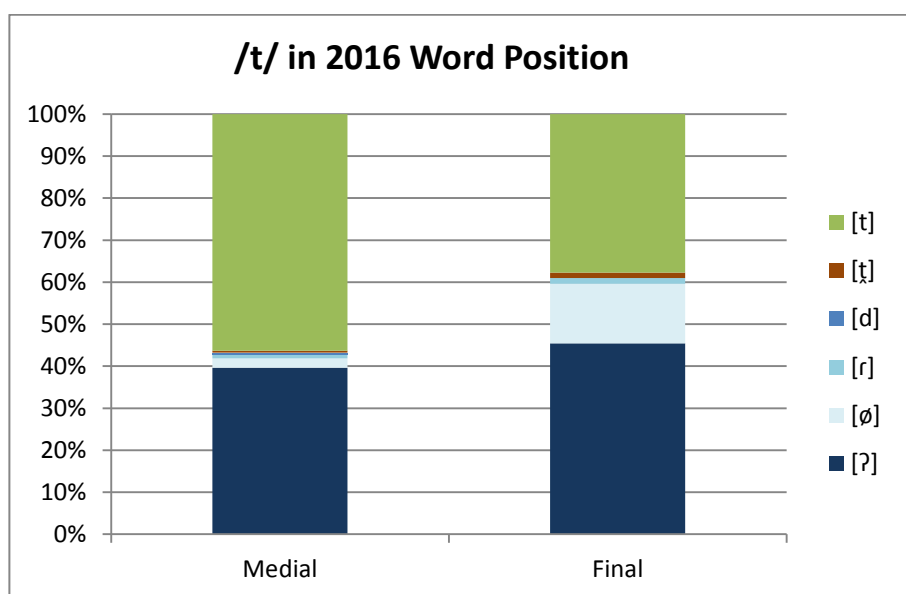
Figure 4.12.2: Percentage distribution of /t/ for children in 2016 by word position.

Figure 4.12.2 shows that in word-medial position, the non-local standard Irish-English [t] predominates at just over 55% *e.g.* 'water' and 'matter', and apart from less than 5% use of other variants, glottal stops are found in the remaining 40%. In word-final position *e.g.* 'what' and 'but', use of local variants increases to 60%: mainly glottals (45%) with some

deletion (about 15%). The main standard variant in this position is the voiceless alveolar plosive. All other variants are used minimally *i.e.* tapping and dental plosives. Surprisingly, use of the non-local Irish-English slit-t is minimal.
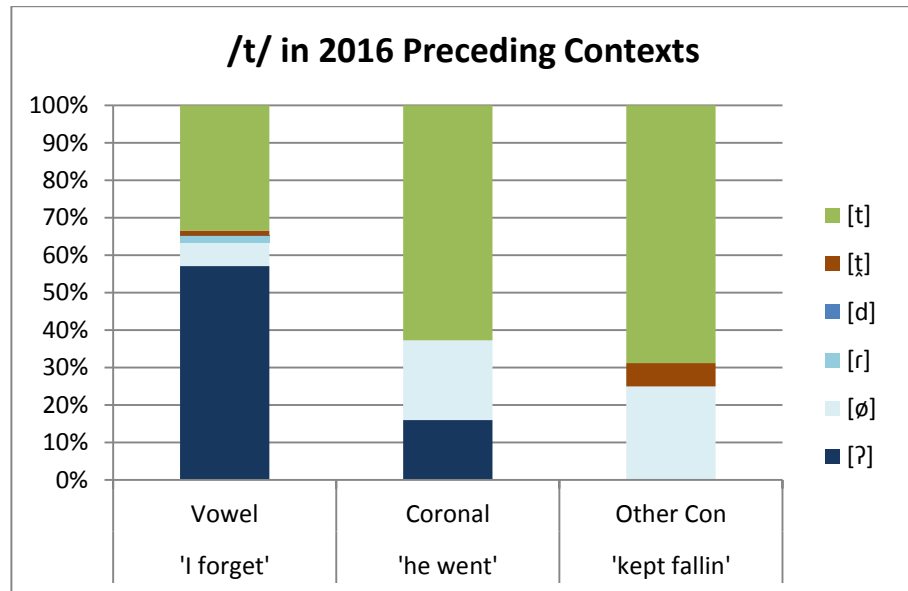
Figure 4.12.3: Percentage distribution of /t/ for children in 2016 by preceding contexts.

Figure 4.12.3 shows that in preceding vowel contexts, glottals are used more than any other local variant, at nearly 60%. There is some use of deletion, but other variants are minimal. The remaining variant when a vowel precedes is the standard [t] *e.g.* 'forget' at nearly 35%. However, in coronal contexts *e.g.* 'went', the standard Irish-English [t] is used more than 60% of the time: a contrast to preceding vowel contexts. Deletion is the main local form (21%) with slightly less glottaling (16%) used as the remaining variant in this context. Also in preceding other consonant contexts *e.g.* 'kept', the standard variant is found substantially more than the local ones, reaching almost 70%. Deletion is the main local variant, but there are some non-local slit fricatives as well (6%).

/t/ in 2016 Following Contexts
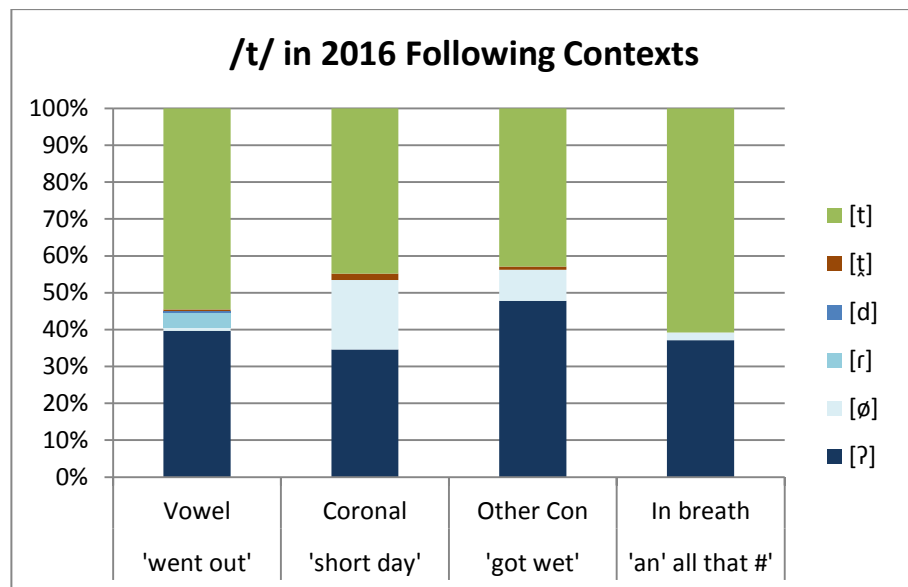
Figure 4.12.4: Percentage distribution of /t/ for children in 2016 by following contexts.

Figure 4.12.5 shows that in following vowel contexts, the standard Irish-English alveolar plosive prevails at 55%. There is some use of tapping in this context only, but with minimal use of all other variants, the main local form is the glottal stop with 40% use. In following coronal contexts local variants are used slightly more than half of the time: glottal stops at just over 30% and deletion at about 20%. Non-local Irish-English [ṯ] is minimal. The remaining variant in this context is the standard Irish-English voiceless alveolar plosive. When other consonants follow, use of the voiceless alveolar plosive is similar to coronals, but this context has the highest use of glottal stops, reaching almost 50%, thus use of deletion decreases to just under 10%. Use of non-local slit fricatives is minimal. The standard alveolar plosive is the main variant at 60% when an in-breath follows. There is minimal use of deletion with glottal stops being the main local form at nearly 40% *e.g.* 'an' all that #'.
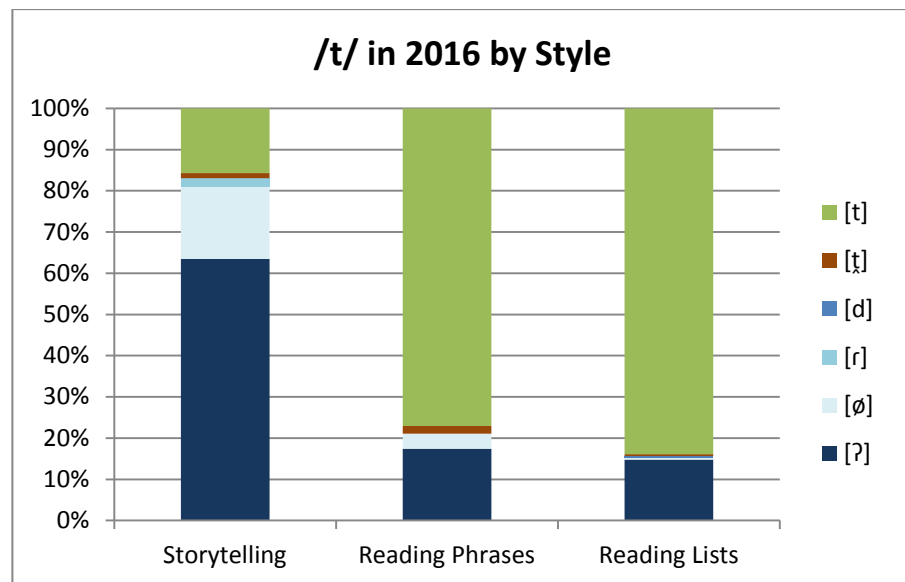
Figure 4.12.5: Percentage distribution of /t/ for children in 2016 by style.

Storytelling provokes the use of local variants which rise to over 80%: mainly glottals and some deletion (see Figure 4.12.7). The other main variant is the standard alveolar plosive, which at 15%, is used just slightly less than deletion. Other variants are minimal. When reading both phrases and wordlists, the use of the standard increases noticeably to nearly 80% for phrases and nearly 85% for wordlists. There is a corresponding decrease in the use of the other local variants, most noticeably, glottals. When reading phrases there is more use of deletion and dental plosives than when reading wordlists, but use is still minimal in both of these styles.
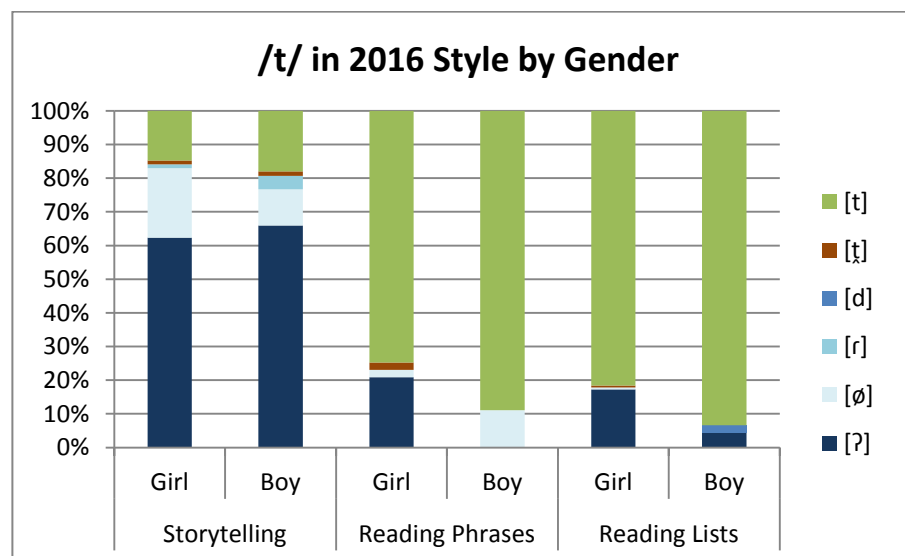
Figure 4.12.6: Percentage distribution of /t/ for children in 2016 style by gender.

Figure 4.12.8 shows that in storytelling, both boys and girls use glottal stops as the main variant; boys slightly more than girls at 66%. Tapping is minimal for both genders, although boys use three times as much as the girls. The non-local slit fricative is minimal but used equally by both genders. However, because the girls use more deletion, overall it is the boys who are slightly more standard than the girls. When reading phrases standard alveolar plosives are the main variant for both boys and girls, but, boys use more standard [t]. Boys show 10% deletion as the only local variant used. Girls also delete, but much less at just 2%, preferring the glottal stop, which is used 20% of the time. Overall, boys are more standard than girls when reading, but girls, are the only ones who use slit fricatives in this style. Reading wordlists is similar to reading phrases with standard alveolar plosives being the main variant, especially for boys. Both genders use glottal stops but girls more so than boys at 17% and 4% respectively. Use of all other variants is minimal.
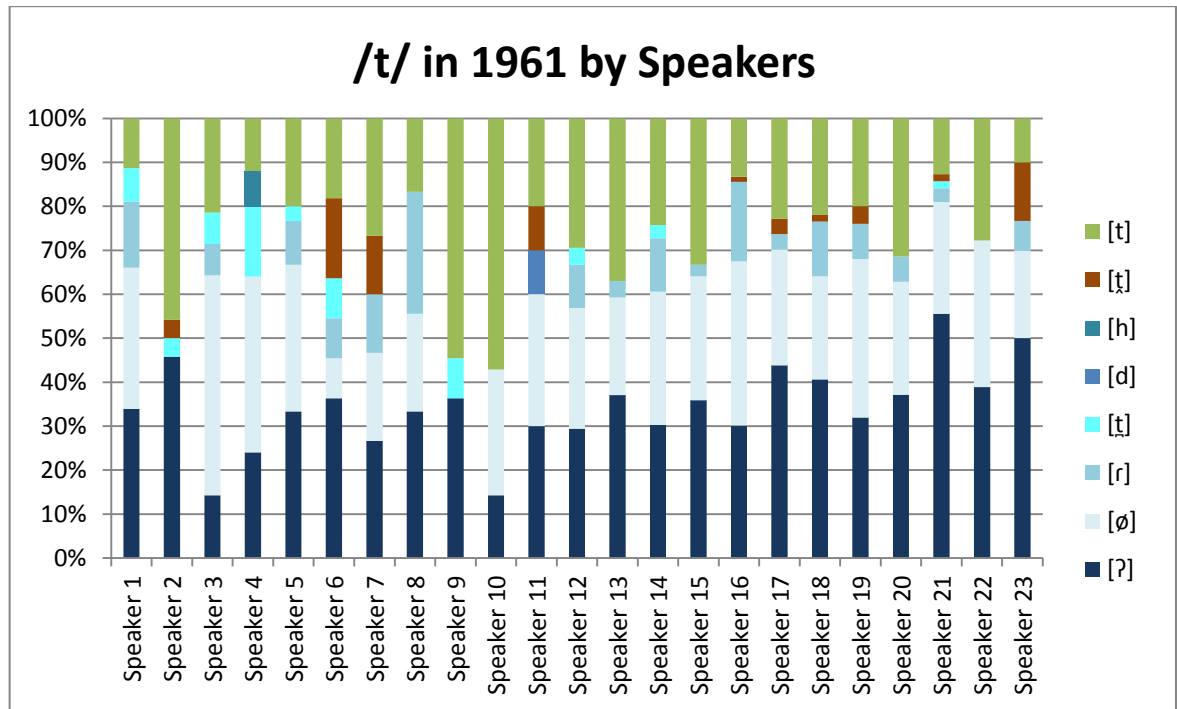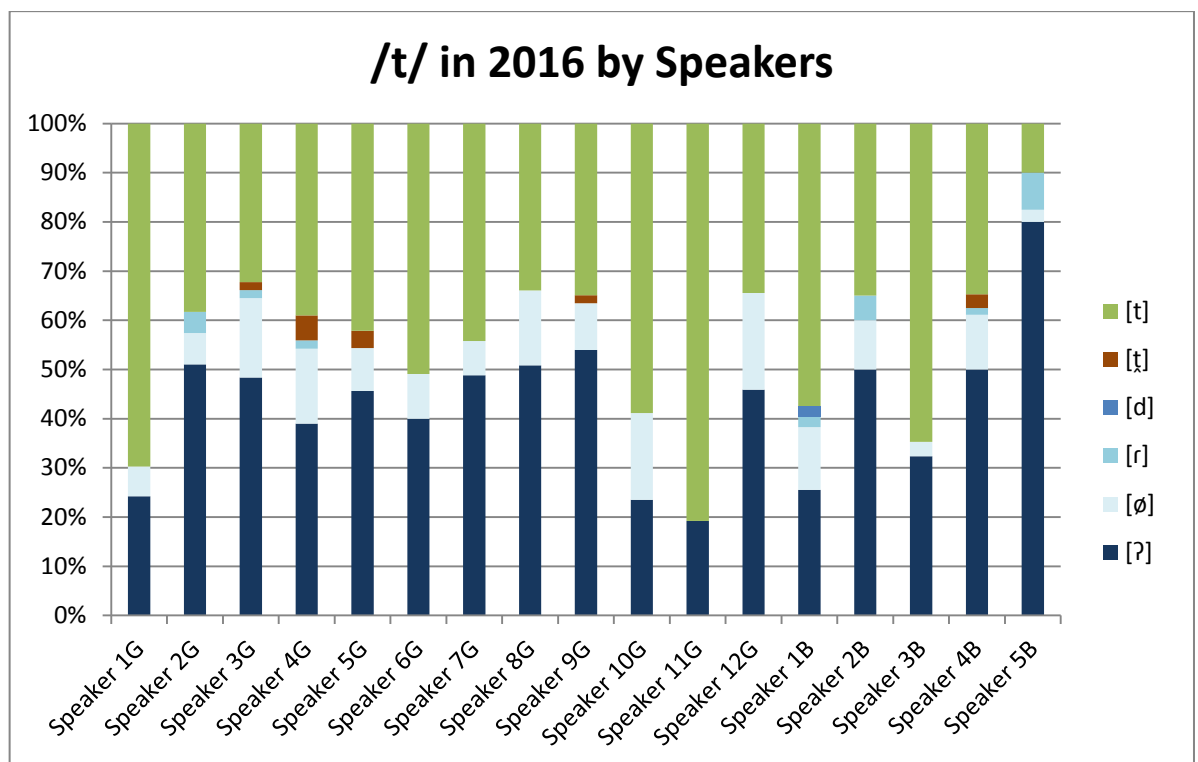

Figure 4.12.7: Percentage distribution of /t/ for children in 2016 by individual speakers.

Figure 4.12.9 shows that every speaker uses the standard [t], with almost one third of individual speakers using it more than local variants. One child (speaker 6G) uses both local and non-local forms equally. The range of standard use is between 80% (speaker 11G) and 10% (speaker 5B) and this speaker has the highest use of glottals at 80%; 30% higher than any other speaker. All other speakers' lowest range of standard/non-local use is

35%, with their use of glottals between 20% and 55%. Deletion is also used by everyone, except the speaker with the highest range of standard use (speaker 11G). Only one child uses voiced alveolar plosives (speaker 1B) but this, like all other local variants except glottals, is minimal.

4.12.1 Summary of /t/ in 2016 Children

Overall, there are slightly more local variants in the pronunciation of this variable, but the two main variants, local glottals and standard voiceless alveolar plosives, are used almost equally, with little difference between genders. There is however, a noticeable difference across styles with 80% use of glottals when storytelling, but when reading there is a complete contrast: the standard voiceless alveolar stop is used about 80% of the time. In word-medial position more than half the variants are standard, whereas in word-final position local variants increase to 60% because both glottals and deletion increase. According to context, it is when vowels precede that local variants prevail, mostly glottals, but in other preceding contexts the standard form is used more often. Following vowel and in-breath contexts are predominantly standard, whereas in coronal and other consonant contexts, with an increase in glottals, and more noticeably, in the use of deletion, the use of local variants increases. There is a corresponding decrease in the standard which is more noticeable in coronal contexts. It is also noticeable that use of the non-local slit fricative is minimal or not at all. There is some individual speaker variation.

4.13   /t/ Over Real-Time: 1961 to 2016
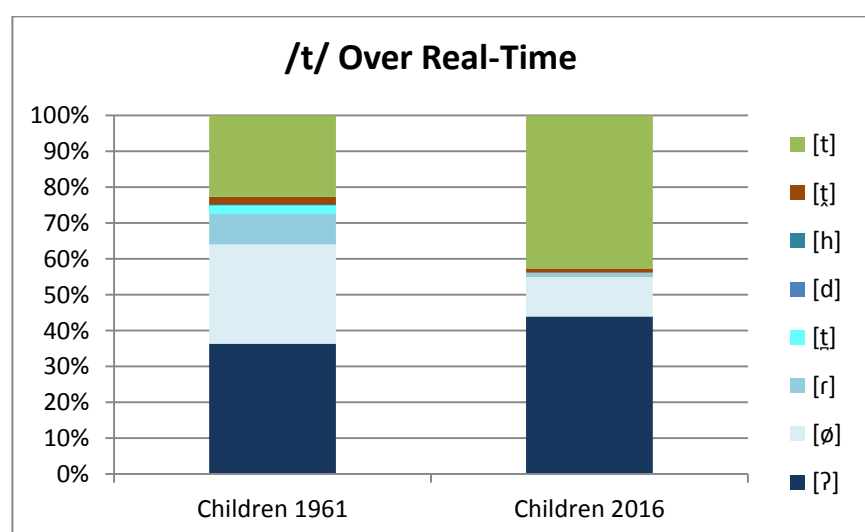
Figure 4.13: Percentage distribution of /t/ over real-time by variant.

Figure 4.13 shows that over time, realisation of /t/ has become more standard, especially with the use of the alveolar plosive. Although the non-local slit-t has decreased, its use remains minimal, whereas the standard alveolar plosive has increased noticeably. At the same time local glottal stops have increased, with an equal decrease in tapping and even greater reduction in the use of deletion with elimination of dental plosives
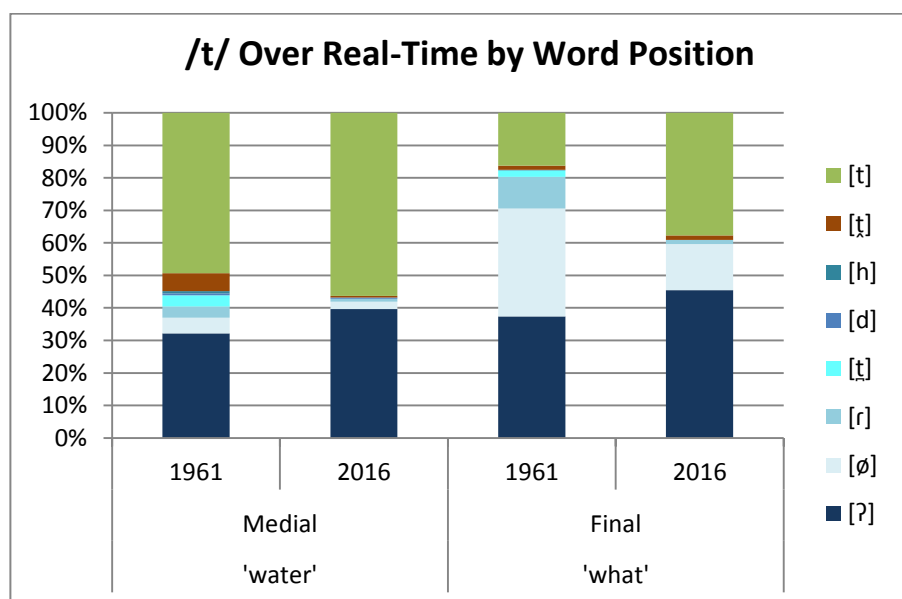
Figure 4.13.1: Percentage distribution of /t/ over real-time by word position.

Word-medial position has remained relatively stable over time in the ratio of local versus non-local variants used, however, as can be seen in figure 4.13.1, proportions have changed. The non-local slit-t used in 1961 has reduced and been replaced by standard alveolar plosives, so the non-local [t] remains the main variant, at over 55%. By 2016, glottals have increased and are now used 40% of time, while all other local variants have decreased. In word-final position, although local variants have decreased by 20%, due to the disappearance of dental plosives and notable reduction in tapping and deletion, they still prevail at 60%, due to an increase in the use of glottal stops. The non-local slit-t, although minimal, has remained stable and standard alveolar plosives have increased.
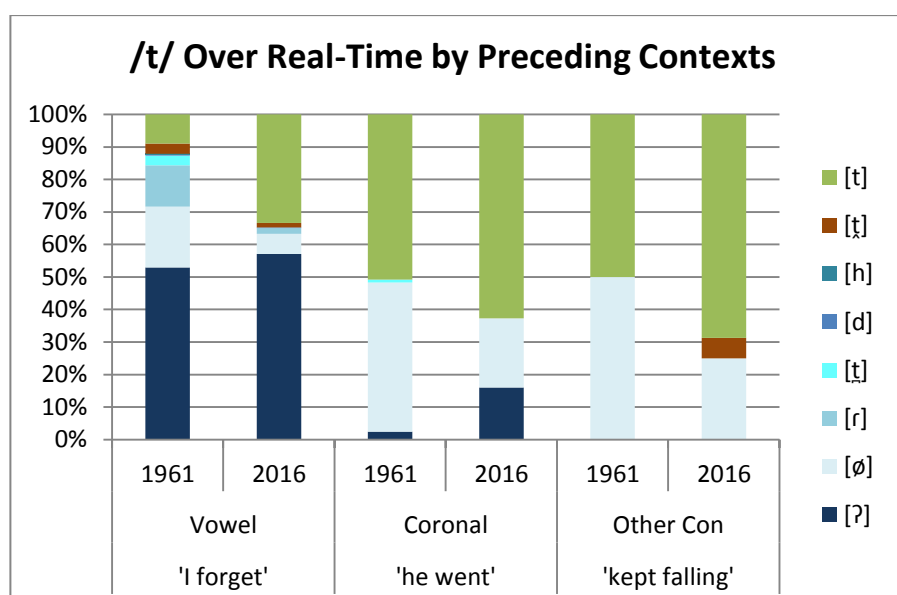
Figure 4.13.2: Percentage distribution of /t/ over real-time by preceding contexts.

Figure 4.13.2 shows that in all preceding contexts use of the standard Irish-English [t] has increased. Alongside this, while glottals have increased, deletion and other local variants have decreased. In preceding vowel contexts glottals have increased and remain the variant most used, at over 55%. While dental plosives and [h] have disappeared altogether, deletion and tapping are still used, although use has decreased. This corresponds with an increase of almost 25% of the standard [t], which is now used over one-third of the time. In preceding coronal contexts glottals have also increased while dental plosives have disappeared and deletion has reduced by 25%. The standard forms used in 1961 have increased by over 10% so are now the main variant used in this position, at over 60%. Likewise in preceding other consonant contexts, the 50% standard [t] used in 1961 has increased by 25%, also the slit fricative has been introduced so, at 75%, the standard and non-local variants now prevail in this position.
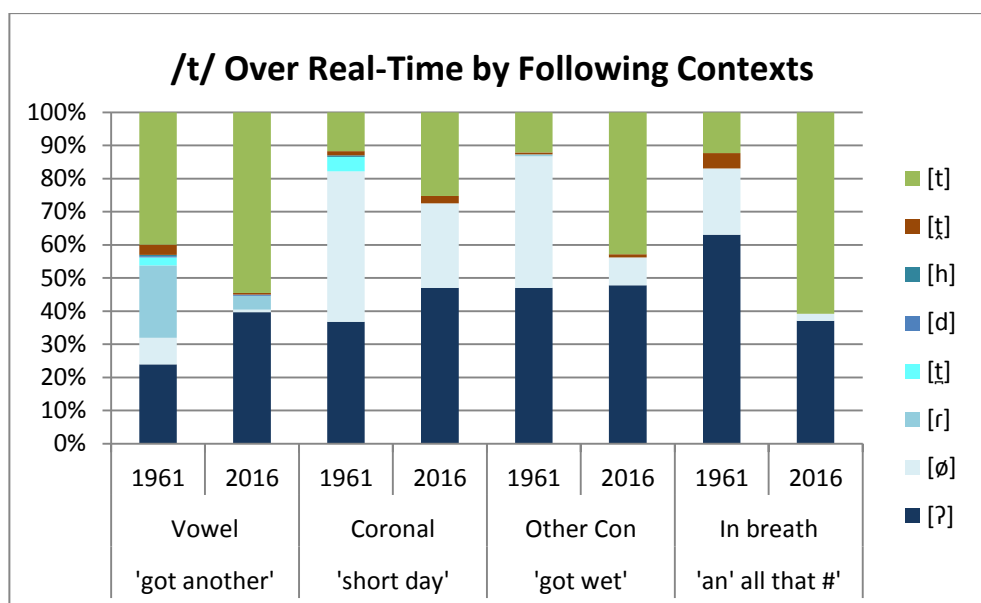
Figure 4.13.3: Percentage distribution of /t/ over real-time by following contexts.

Figure 4.13.3 shows that over time, the use of the standard [t] has increased noticeably in all following contexts so that local variants no longer prevail in every context, especially when a vowel or an in-breath follows. In following vowel contexts, both local glottals and standard alveolar plosives have increased over time, but all other variants have either disappeared or decreased. As a result, where local variants were preferred in 1961, the standard [t] now prevails with 55% overall use. In following coronal contexts, the most noticeable changes are in the reduction of deletion and an increase in the use of glottal stops. Although minimal, dental plosives and [h] have disappeared as well. Slit-t has remained stable over time, but despite the increase of nearly 15% of standard [t], local variants still remain predominant in this context in 2016, at over 70%. In following other consonant contexts, use of glottal stops has remained stable over time, but deletion has decreased notably, by over 30%. This corresponds to an increase in the use of standard [t], so although local variants are used slightly more than the standard, they no longer dominate as the allophone [t] has increased by over 30%. The most noticeable change has been in following in-breath contexts, where the use of standard variant has increased by almost 45%. Slit-t is no longer used and both glottal stops and deletion have decreased. Consequently, in this context, at over 60%, the standard form is used substantially more than in 1961.

Because of the number of children involved, all speakers cannot be shown clearly on one graph, therefore they are presented separately as children in 1961 and children in 2016.
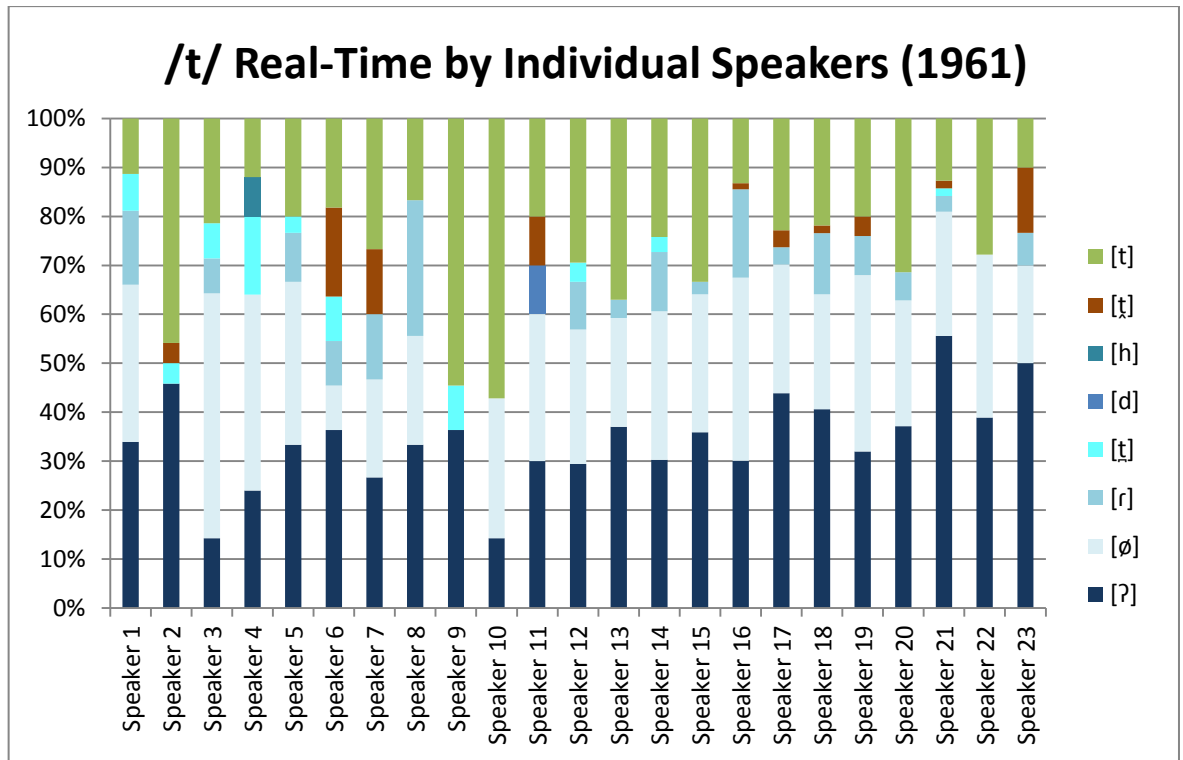
Figure 4.13.4: Percentage distribution of /t/ over real-time by individual speakers
(1961 above – 2016 below).
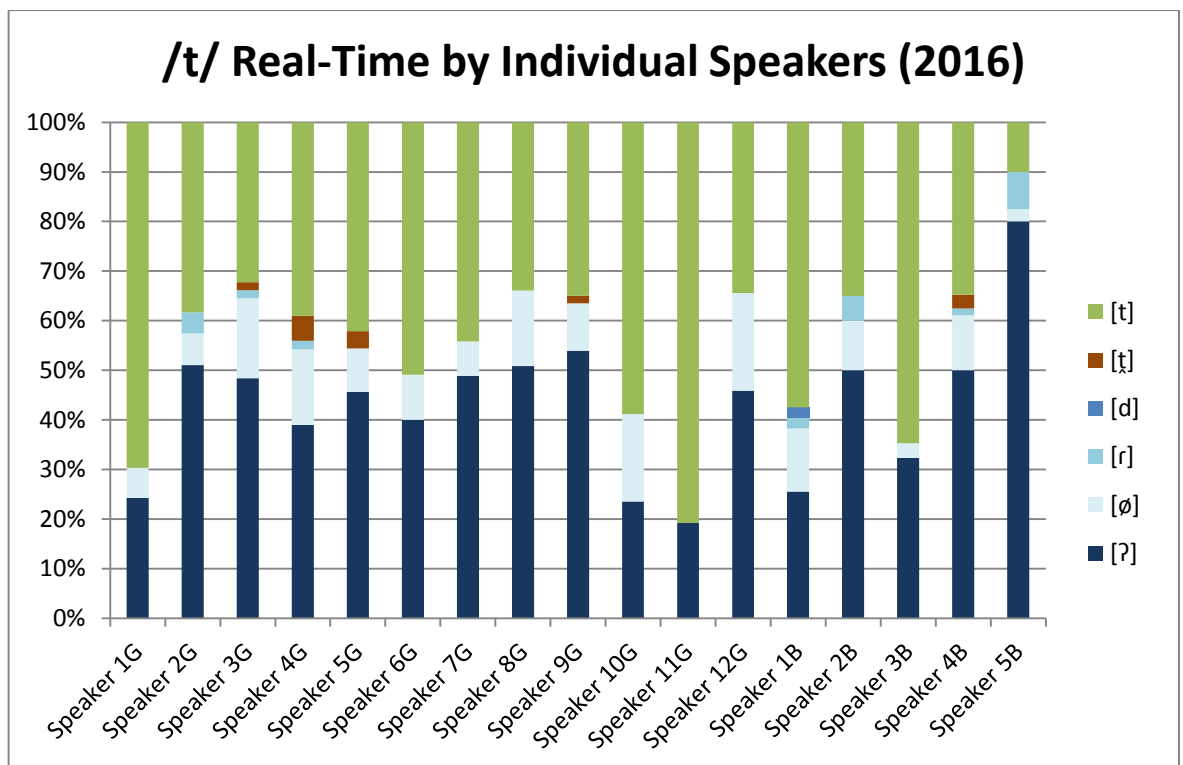
When looking at the frequency and range of use of individual speakers over time, the use
of local variants has decreased, while simultaneously, the use of the standard variant has

increased. In 1961, twenty children used more local than non-local or standard forms, by 2016 this has fallen to eleven. Previously, standard [t] was favoured by just two speakers, whereas by 2016, five speakers used the standard form. For this variable, over time deletion has decreased, while glottals and alveolar plosives have increased. Previously, the use of deletion ranged between 10% and 50%, but by 2016 this range has decreased to between 2% and 20%. All speakers in both years use glottal stops and alveolar plosives, and the frequency of use has broadened over time: in 1961 glottals were used between 15% and 55%, whereas over five decades this has increased to between 20% and 80%. However, despite the use of standard [t] increasing across the board, the use of the slit-t, a non-local Irish-English feature, has decreased over time. In 1961 ten speakers used some slit-t, with maximum use being just under 20%, whereas by 2016 this fell to five speakers, with maximum use reaching only 5%.

4.13.1 <u>Summary of Comparison of /t/ Over Real-Time</u>

In inner-city Dublin children in 2016, realisation of /t/ has become more standard. Although the non-local slit-t has decreased in use, the standard [t] has increased substantially. With the exception of glottal stops which have increased by just under 10%, other local variants have reduced; deletion has decreased by just under 20% and all other local forms are minimal, or they are no longer used. This pattern is true of word-medial and final positions, although with various changes in the variants used. Word-medial position has remained relatively stable, whereas there has been a noticeable increase in the use of standard [t] in word-final position. Likewise for all preceding contexts: the standard [t] and glottals increased, while other variants decreased to varying degrees. As a result, in preceding vowel contexts, glottals remain the predominant variant, despite an increase in the standard of over 20%. In coronal and other consonant contexts there was equal use of local and standard variants in 1961, but with the increase in standard [t], this has now become the dominant variant in both these contexts. In following contexts the same pattern is seen in vowel and coronal contexts: glottals and voiceless alveolar plosives increase, while all other variants decrease. However, in other consonant contexts, the use of glottals remains stable, but with the noticeable decrease of over 30% in deletion, the standard is now used significantly more in other consonant contexts than in 1961. There is also a noticeable change in following in-breath contexts, where glottals decrease; the only context in which they do so, along with less deletion and no slit-t, the standard [t] has increased by almost 45%, thus making it the variant most used when an in-breath follows. When

looking at individual speakers, certain variants are used by fewer speakers *e.g.* slit-t. [h] is no longer used, and those variants which continue to be used by all speakers *e.g.* [t], [ʔ] and [ø], have changed in range. Similarly, maximum use of glottals has increased by 30%, by some speakers, and maximum use of standard alveolar plosives has increased by 20%, by some speakers.

4.14 /t/ in 2016   Adult Case Study
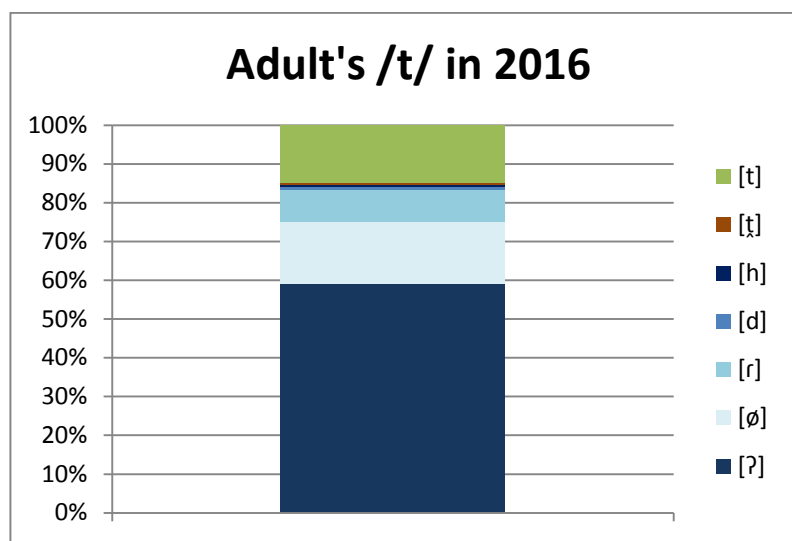
Figure 4.14: Percentage distribution of /t/ for the adult in 2016 by variant.

Figure 4.14 shows that in 2016 the adult's pronunciation of /t/ is predominantly local. About 60% is the glottal stop with some deletion and tapping. Other variants are minimal, so barely visible on the graph, except for 15% use of the standard voiceless alveolar plosive.
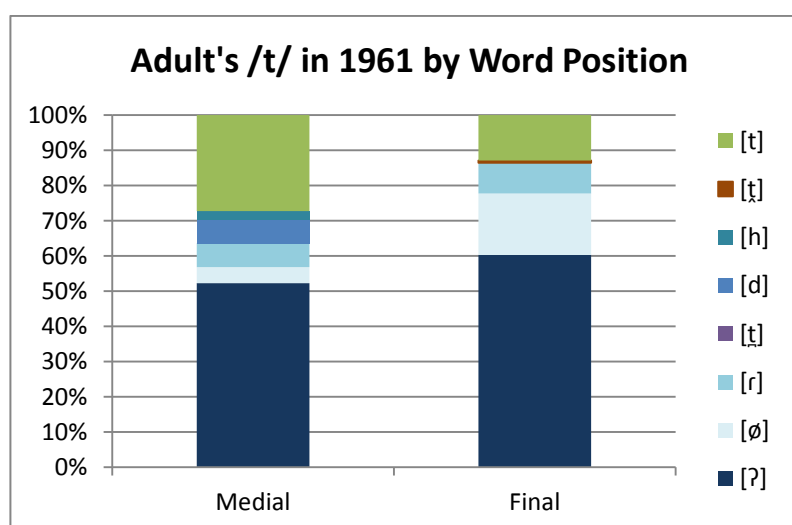
Figure 4.14.1: Percentage distribution of /t/ for the adult in 2016 by word position.

In word-medial position just over a quarter is the standard [t] (see Figure 4.14.1). The remaining variants are all local, with over 50% being glottal stops, so deletion, taps, voiced alveolar plosives and [h] are all used less than 10%. In word-final position, local variants are used in over 75% of cases. Glottal stops are predominant at 60% with some deletion and tapping. Although there is some slit-t, it is minimal, so the standard voiceless alveolar plosive is the main non-local varaint used, at just under 15%.
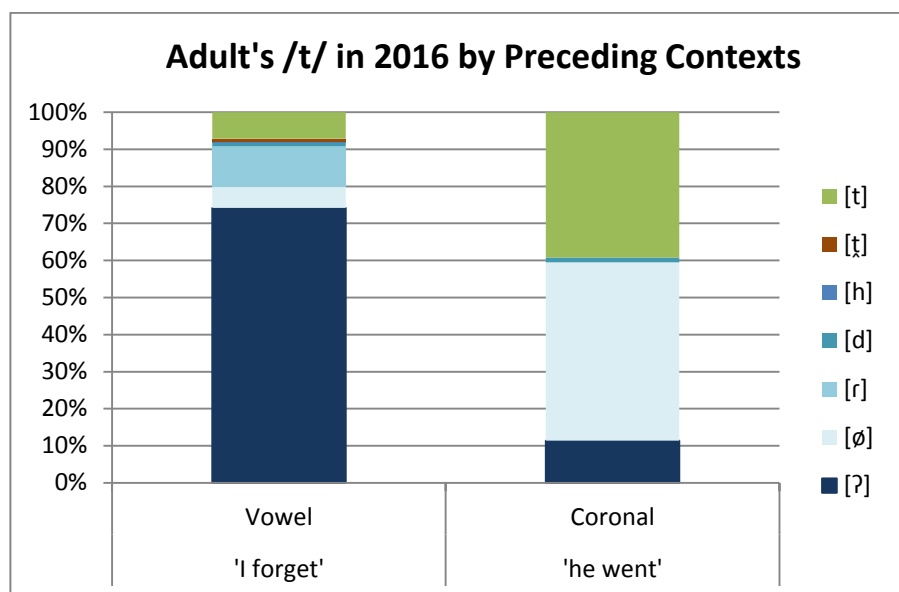
Figure 4.14.2: Percentage distribution of /t/ for the adult in 2016 by preceding contexts.

As can be seen in Figure 4.12.2, in preceding vowel contexts non-local and standard variants are used in less than 10% of cases, with over 90% being local. When a vowel precedes, there is some deletion and tapping, but glottal stops are used about 75% of the time *e.g.* 'I forget'. In preceding coronal contexts, standard [t] is used 40% of the time. The remaining variants are all local: minimal use of [d], just over 10% glottals, but nearly 50% is deletion in this context *e.g.* 'he went'.
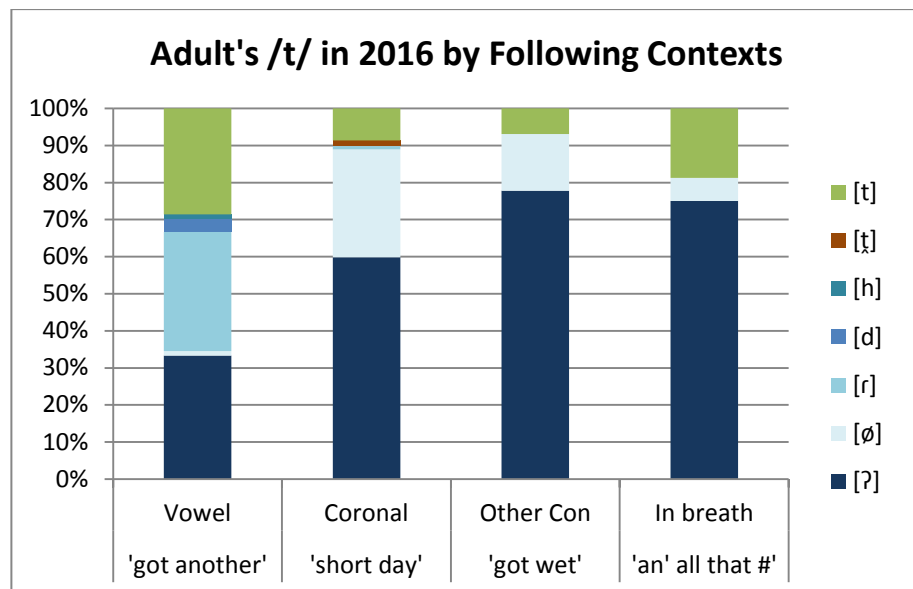
Figure 4.14.3: Percentage distribution of /t/ for the adult in 2016 by following contexts.

Figure 4.14.3 shows that in all following contexts, the use of local variants prevails. When vowels follow *e.g.* 'got another', about 30% is standard. Here, one third is glottaling, one third in tapping and almost a third is the standard voiceless alveolar plosive. Other variants, [ø], [d] and [h] are all used minimally. In following coronal contexts *e.g.* 'short day', only 10% is standard and this includes minimal use of the non-local slit fricative, deletion is used 30% of the time and glottals are used twice as often. In other consonant and in-breath contexts, the use of glottals is similar at around 75%, however in the former there is more use of deletion than voiceless alveolar plosives, whereas in the latter this is reversed, with more use of the standard [t] and less deletion.
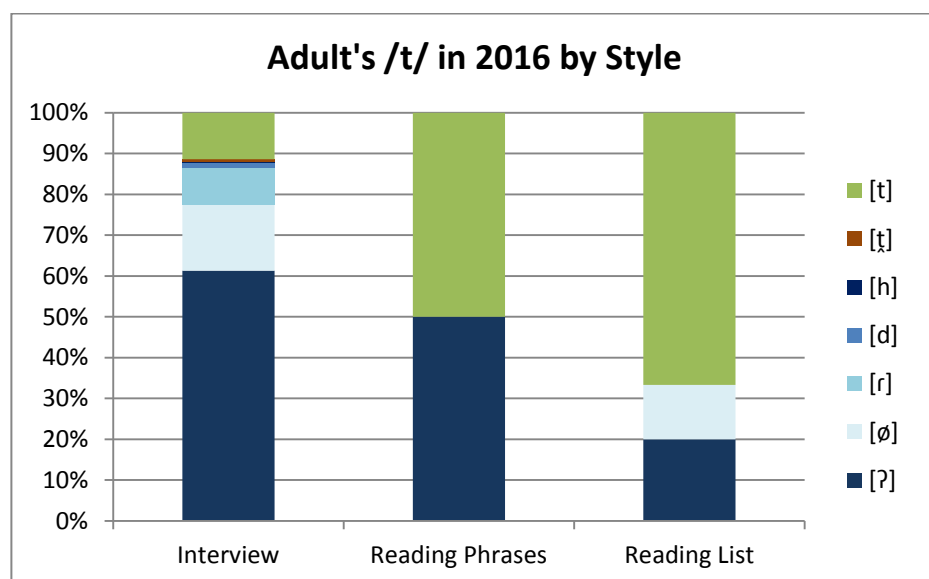
Figure 4.14.4: Percentage distribution of /t/ for the adult in 2016 by style.

Figure 4.14.4 shows that in spontaneous speech (the interview above), the adult uses almost 90% local variants when pronouncing the voiceless alveolar plosive. Over 60% are glottal stops, with some deletion and tapping, while other variants are minimal. The voiceless alveolar plosive is the standard variant which is most used, but at just over 10%. When reading phrases two variants are used equally: glottal stops and alveolar plosives. When reading wordlists, the use of the standard variant [t] increases to just under 70%. Glottal stops are used in 20% of cases and deletion is the only other variant used at 13%.

4.15   Quasi-Lifespan Study of /t/ over Five Decades: 1961 to 2016
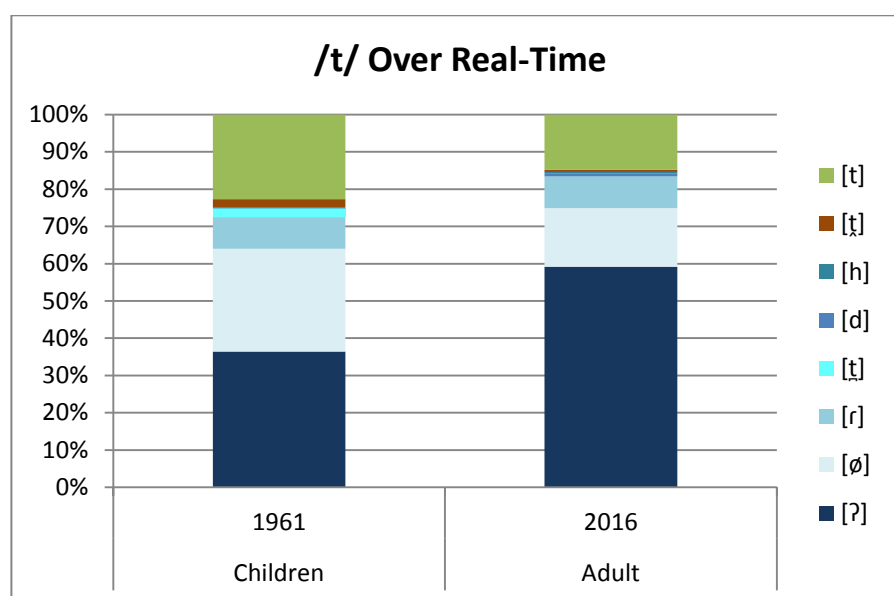
Figure 4.15: Percentage distribution of /t/ quasi-lifespan by variant.

Over her lifespan, this speaker's use of local variants *appears* to have increased when pronouncing the voiceless alveolar plosive. Figure 4.15 shows that with almost 25% more use of glottal stops, there has been a corresponding decrease in non-local and standard use and other local variants, except tapping, which has remained stable. Consequently, in comparison to her childhood peers, she uses less standard Irish-English [t] now than her peers did in 1961.
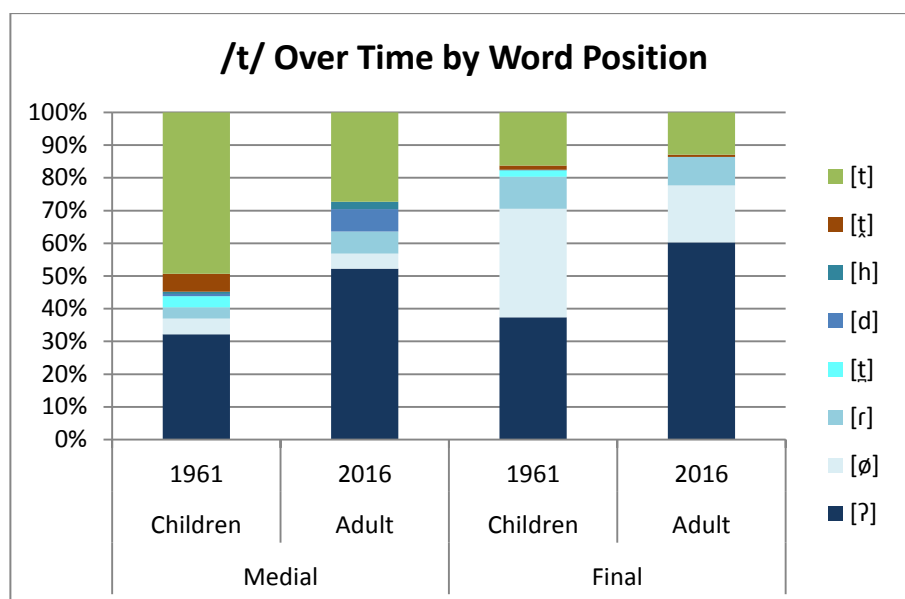
Figure 4.15.1: Percentage distribution of /t/ quasi-lifespan by word position.

In comparison to her childhood peers, in word-medial position, there has been an overall increase of almost 30% use of local variants by 2016 (see Figure 4.15.1). The most noticeable being a 20% increase in the use of glottal stops. All other local variants have increased slightly as well, except dental plosives which have disappeared. The non-local Irish-English slit-t has also disappeared and the standard voiceless alveoalar plosive, which was used 50% of the time in 1961, is now used in just over a quarter of cases. Thus, over time, for this speaker, it may be that non-local use has decreased in word-medial position, with realisations of /t/ becoming apparently more local now than in childhood.

In word-final position the overall use of local versus non-local/standard seems to have remained relatively stable, at about 85% local, with a less than 5% difference over time, but the use of each variant has changed. Glottals are used over 20% more now, while deletion has decreased over 15%, along with other local variants. Thus, in 2016, like word-medial position, in word-final position glottal stops seem to have increased in this speaker's speech so that standard [t] is now used less than her childhood peers in 1961.
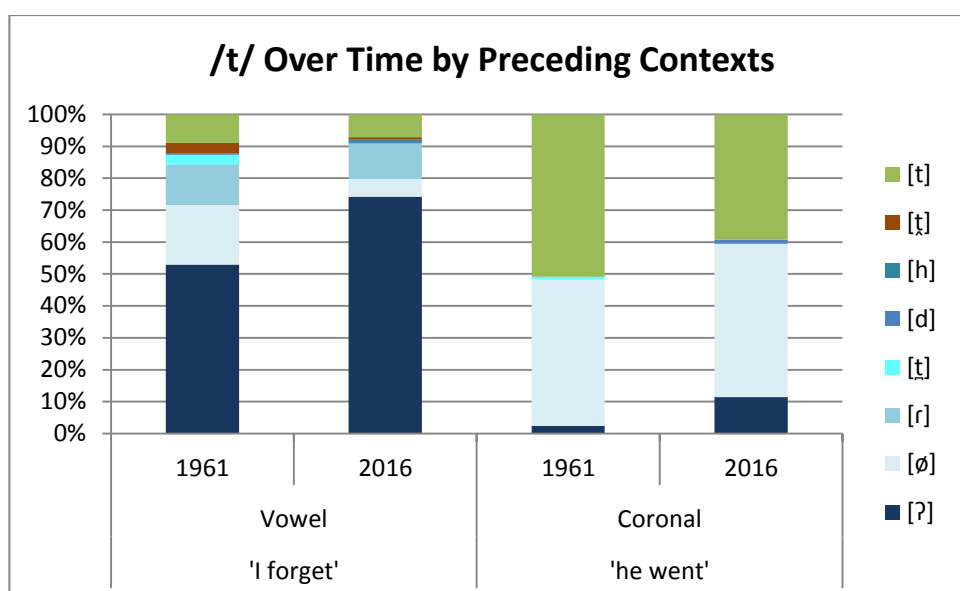
Figure 4.15.2: Percentage distribution of /t/ quasi-lifespan by preceding contexts.

Figure 5.15.2 shows that in preceding vowel contexts *e.g.* 'I forget', glottals have increased 20%, and remain the preferred local variant, while all other local forms have decreased. At the same time, both standard [t] and non-local [ʈ] have decreased as well, so the overall use of local versus non-local has remained relatively stable at about 90% local. Likewise, in preceding coronal contexts *e.g.* 'he went', local variants appear to have increased since childhood, while standard use has decreased. Glottals are nearly 10% more frequent, deletion is more or less stable and, although minimal, the use of dental plosives has been replaced by voiced alveolar plosives. Consequently, standard [t] has decreased over 10% therefore, where non-local and local forms were used equally in 1961, local variants are now used 60% of the time, with deletion remaining the main local variant used. Thus, if Rosie was within the same local → non-local range as her chilhood peers, in preceding contexts, this variable has become more local over time.
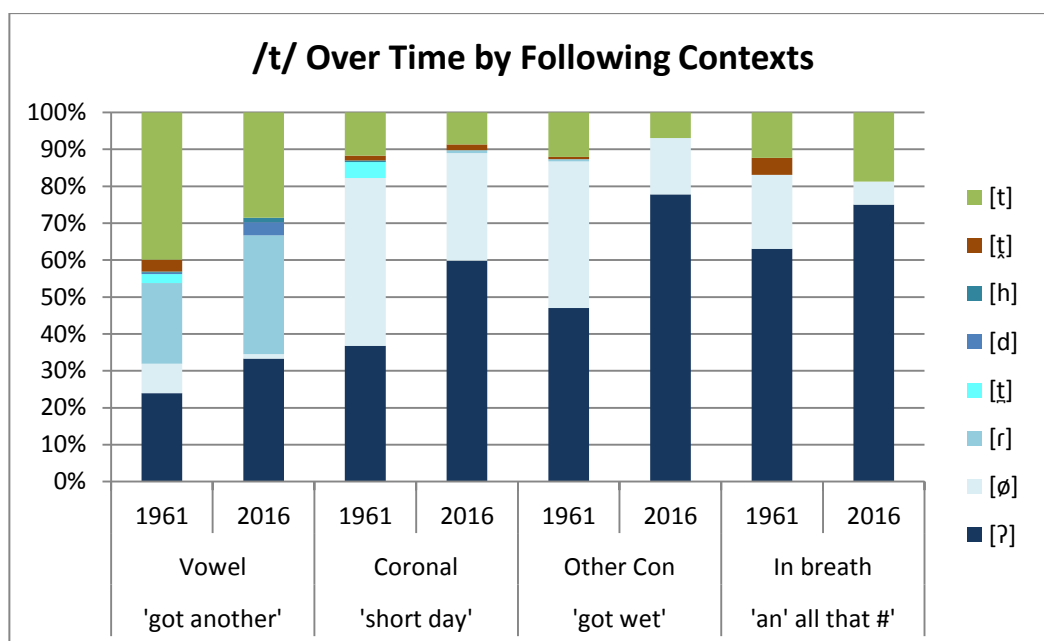
Figure 4.15.3: Percentage distribution of /t/ quasi-lifespan by following contexts.

As can be seen in Figure 4.15.2, in following vowel contexts, both glottal stops and tapping have increased by about 10%. In this context *e.g.* 'got another', although minimal, voiced alveolar plosives and [h] have increased as well. Simultaneously, the use of standard [t] has decreased, and both dental plosives and slit-t have disappeared altogether. Consequently, although this context has more non-local/standard variants than any of the other contexts, by 2016 the overall use of standard variants has decreased by about 15% and is now only 30% in this context. In the other contexts: coronal, other consonants and in-breaths, the same pattern follows: the use of local variants remains predominant, with an increase in the use of glottal stops and a decrease in deletion.

In coronal contexts, dental plosives and [h] are no longer used in 2016, but there is some minimal use of tapping. However, because of the lack of data from Rosie's childhood, it cannot be confirmed whether she used these variants in her childhood. Use was minimal then, so it may well be that she did not use [t̪] or [h] in her realisations of the voiceless alveolar plosive. Likewise, for slit-t. However, in comparison to her childhood peers, standard alveolar plosives have slightly decreased and slit-t has remained stable. Overall, in following coronal contexts *e.g.* 'short day', local variants continue to be used about 90% of the time. In other consonant contexts *e.g.* 'got wet', the increase in glottals is most noticeable, at over 30%. Also the decrease in use of deletion is notable at 25%. Other local variants which were used minimally have disappeared and as a result by 2016, 5% more local pronunciation of this variable is used than in childhood. When an in-breath follows

the use of the slit-t has disappeared, but standard [t] has increased to almost 20%; the only context in which the alvoelar plosive increases. However, local variants remain predominant at just over 80% use.
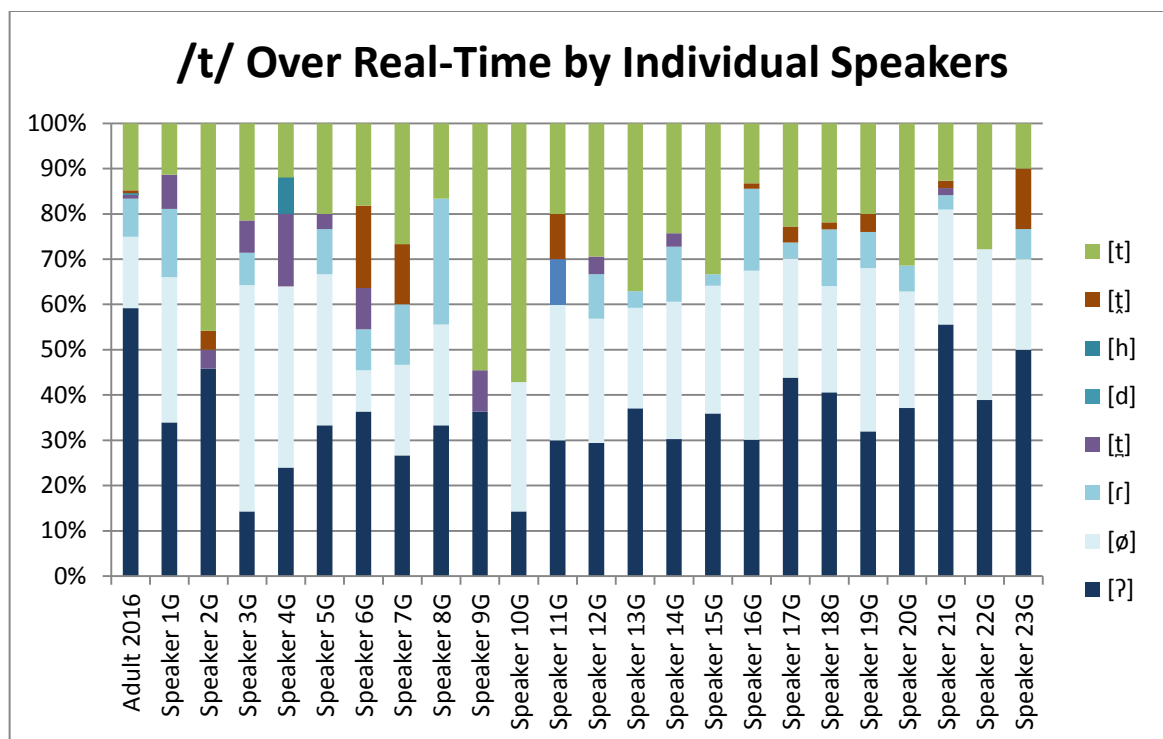
Figure 4.15.4: Percentage distribution of /t/ quasi-lifespan by individual speakers.

When comparing individuals' use of the different variants, Rosie's use of glottal stops is at the higher end of a cline now, than the children's use in 1961. Figure 4.15.5 shows that all speakers use glottals, but in 1961 the range was between 15% and just below 55% use, whereas now, Rosie uses glottals 60% of the time when pronouncing the voiceless alveolar plosive. Other local variants, for this speaker, fall within the range, but at the lower end of the cline because of the frequent use of glottals. Also, the use of the non-local/standard variants, although within the ranges of 1961, both standard Irish-English [t] and non-local [t̠] are used less now than in 1961. Then, the voiceless alveolar plosive was used between nearly 60% and 10% by some speakers, whereas Rosie uses standard alveolar plosives 15% of the time. Similarly, the slit-t was used between 2% and nearly 20%, whereas now uses she uses this variant less than 1%. Overall, where local variants were used between 45% and 90% of the time in 1961, this speaker now uses local variants in 85% of cases, and is at the higher end of a local → non-local cline. Thus, over this quasi-lifespan Rosie seems to have become more local for /t/, than she was in childhood, and is more local now

than her childhood peers were in 1961. What is not clear is whether she was already more local than them in 1961.

4.15.1 <u>Summary of Comparison of Quasi-Lifespan of /t/</u>

Over time Rosie appears to have become more local when pronouncing the voiceless alveolar plosive than she was in her childhood. However, without her data from 1961 this marks only a potential lifespan change. Given that she may have been more local than her peers in 1961, results here are not definitive. However, in comparison with the 1961 children, in every context glottal stops have increased somewhere between 10% and 30%, while other local variants, particularly deletion, have either decreased or remained stable.

In 1961 children, local forms prevailed, except for word-medial position, which had slightly more standard at 55%, and preceding coronal contexts, where local and non-local were used equally. However, by 2016, in all contexts, Rosie's local variants are now used more, with non-local/standard forms being used between less than 10% in following other consonant contexts and 30% in following vowel contexts. Overall, she now uses local forms in 85% of cases, compared to between 45% and 90% of her childhood peers. Thus, whether this shows a lifespan change or is a window into her childhood, she is at the higher end of the local versus non-local cline.

In some contexts *i.e.* word-final position, preceding vowels and following coronals, other consonants and in-breaths, the ratio of local versus non-local has remained relatively stable, with differences over time of about 5%. The potential for change here, as in other contexts, is in the amount each variant is used. The most noticeable difference in the use of standard [t] is in the decrease from 50% use to half that in word-medial positions *e.g.* 'water'.

If it is taken that Rosie probably spoke within the range of her childhood peers, there appear to be changes in the pronunciation of this variable over time. Most notably in the increased use of glottal stops, decreased use of deletion and other local variants, as well as decreased use of the non-local slit-t and standard voiceless alveolar plosive. Consequently, it appears that she may have become more local in the pronunciation of this variable over her lifespan.

5.0   **Discussion**

This study has analysed the realisations of the characteristic local Dublin variables /ð/, /θ/ and /t/ across five decades. Specifically, it has examined the speech of twenty-three girls in 1961 and twelve girls and five boys in 2016, with an average age of eight years. Also, it includes a quasi-lifespan study of the casual speech of one adult over the same period who was a child in the 1961 class, although was not one of the children recorded. The aim of this study was to try to identify whether, given the noticeable demographic changes which have taken place in Dublin over this period, particularly since the 1990s with the economic boom and subsequent immigration, there have been any changes in the pronunciations of local, inner-city speakers. The overall results have provided answers to the initial research questions presented in Chapter 1.2 regarding the potential effect of the sociodemographic changes in Dublin on linguistic variation and change. They have presented an interesting picture of the characteristic variables /ð/, /θ/ and /t/ in twenty-first century, inner-city Dublin speech, providing evidence for both dialect maintenance and dialect levelling.

5.1   Research Question 1

What evidence is there for change in the characteristic, stable, local Dublin variables /ð/ /θ/ and /t/?

In order to best answer this question the variables have been discussed separately in sections 5.1a to 5.1c below.

5.1a   **What evidence is there for change in the characteristic Dublin variable /ð/?**

In this community in inner-city Dublin in 2016, the variable /ð/ is stable only in that the local alveolar plosive [d] is still the preferred variant. Although there are differences in proportions of use according to position in the word and phonological context, over time there has been a noticeable decrease in the use of this local form with a corresponding increase of 12% in the use of the non-local dental plosive [d̪] and 3% increase in the use of the standard interdental voiced fricative [ð].

5.1a.1   Real-Time Study

According to the literature (Joyce, 1910; Wells, 1982; Bertz, 1987; Ó'Baoill, 1997; Ó hÚrdail, 1997; Hickey, 1999, 2004, 2005, 2007; Kallen, 2013; Lonergan, 2013) the local voiced alveolar plosive [d] is the preferred variant when realising /ð/ in vernacular Dublin speech, *e.g.* /ðeɪ/ as [deɪ]. This is also true for the speakers in this study with use of the alveolar plosive being maintained in 60% of cases. However, these results show that over time there has been a reduction in the frequency of use. The main local alveolar plosive [d] has decreased by 15% with a corresponding increase in both non-local Irish-English dental plosive [d̪] and standard interdental voiced fricative [ð]. This standard fricative is used less than 5%, but this is still an increase over time from 4% of all speakers in 1961 to 47% of all speakers in 2016. This confirms the views stated in the literature that this interdental fricative is found in Irish-English, but is rare (Ó hÚrdail, 1997; Hickey, 2005, Kallen, 2013), although use of fricatives instead of plosives is increasing, particularly amongst younger speakers (Hickey, 2005; Peters, 2012; Bessell *et al.* 2014).

These changes are conditioned by linguistic factors, position in the word and phonological context. In word medial position the local alveolar plosive is maintained; in fact, it increases by about 5%. This corresponds to a decrease in the use of the non-local Irish-English dental plosive, although interestingly, the standard fricative increases to 10% in word medial position, but much less so in word onset.

There are also changes in the frequency of use of each variant according to preceding phonological context. In both preceding vowel and coronal contexts *e.g.* 'so the' and 'and the', the local [d] variant has decreased with corresponding increases in the non-local dental form, particularly in preceding vowels contexts where the standard interdental fricative, which was barely visible in 1961, has increased to 10% by 2016.

When looking at individual speakers in 1961, 13% were categorically local, although all of the others show some use of the non-local Irish-English dental plosive as well. This ranges between 5% and 40% for all speakers except one. Interestingly, this individual is also more non-local than all her peers, with only a quarter of her voiced fricatives using the local variant [d]. The remaining three-quarters are non-local, with about 5% of that being the standard fricative. There is no information on who this child is, but given that change is often initiated by young, female speakers from the upper working-class (Trudgill, 1974, Labov, 1994, 2001), it is not unreasonable to think that perhaps this child's mother was more socially aware than others and aimed at social mobility. Consequently, it is possible that she was encouraged to adopt more standard forms which, inevitable carry social

meaning. This speaker could be seen as an innovator of change, thus explaining the higher levels of the non-local [d̪] with some standard [ð]. Her peers may be considered followers, using to varying degrees, some non-local dental plosives while maintaining strong ties with the local form, with just 13% of speakers resisting change, showing stronger ties to the close-knit community.

In 2016, every speaker has some use of non-local Irish-English dental plosives, and for some it is their preferred variant. Also, 47% use some standard fricatives, so this indicates a definite move away from the local form. However, when looking at individual speakers, the two most local speakers have only 10% or less use of [d̪] and [ð], and this is only when they are reading wordlists; when their attention is focussed on the pronunciation (Labov, 1994). Outwith this context, these speakers have maintained the local alveolar variant [d]. It is worth noting though, that one of these children has a Nigerian father whose accent maintains many alveolar plosives which is likely, to a certain extent, to influence the child as well. This parental influence is also seen in several other speakers' use of the standard fricative. Despite all participants being born and brought up in Dublin, those who have one non-Irish parent have higher levels of [ð], ranging from between almost 10% to 20% use. Furthermore, the highest use of the standard fricative is by a child with a Spanish father, and the most non-local speaker, with 70% non-local realisations of /ð/, has an English mother. This is in accordance with Hewlett et al. (in Foulkes and Docherty, 2005:422) who found Scottish features in the speech of children with at least one Scottish parent. Similarly, Aniansson found significantly stronger local features in the speech of local Swedish children when compared to the speech of immigrants' children (in Kerswill & Williams, 2000:69). Thus, whilst the local variant is being maintained as the preferred variant by 59% of the children, 35% favour the non-local dental plosive and 6% use both non-local/standard and local variants equally.

Identity is a feasible explanation for this. It can be multifaceted, on an individual, a community and a national level. Indeed, some of the children had just come from a history lesson in which they had learned about the 1916 rising and wanted to sing for me the song they had just learned in Irish. Another child is closely related to the footballer Robbie Brady, the goal-scoring player in Euro 2016 who had recently won the match for Ireland. Thus, feelings of patriotism were high. This was true of both native and non-native children because, although only Irish-born children were included in this study, the whole speech community cannot be ignored when considering linguistic variation and change. Community change is inextricably linked to individual change (Hickey, 2003), which in

this case also includes seven excluded, non-native children who are still a well-integrated part of the class-community. Linguistically, all the children with one or both parents from outside Ireland will have family input from the Standard English variety, whether as natives themselves or as foreign-language learners, as this variety is often taken as the model in EFL classrooms. Given the children's age, it is not surprising that the parents' variety has some influence on their children's speech. Smith *et al.* (2007) found that with age, when children begin to widen their social networks, they began to adopt a higher number of local forms and align their speech with that of their peers (Kerswill, 2010:236). Consequently, as these children are constructing their individual identities, they are not consciously following prestige forms, but are combining a strong local and national identity with input from teachers, some of whom use the new supraregionalised accent, non-native peers and targeted literacy programmes. As was suggested by Williams and Kerswill (1999:162), input may also continue at home through the increase in national and international television stations, given that many Irish television presenters are advanced pronunciation speakers and standard pronunciations of this fricative are commonly heard on British and satellite stations. Therefore, with strong non-local input in school and to varying degrees, some input at home as well, these probably all contribute in some way to levelling (Milroy, 2002) with the introduction of the Standard English voiced alveolar fricative in Dublin-English.

One hypothesis is that the results in 2016 could be considered as a second wave of linguistic change, after the individual who was predominantly non-local in 1961 and who actuated the first wave of change (Hickey, 2011:541). The other 1961 children propagated this by gradually replacing local features with non-local variants. Over time, this has spread, resulting in levelling by 2016, in which the boys are adopting the non-local dental plosive from the first wave[5], whilst the girls do in fact lead with a higher frequency of the standard fricative than the boys, whilst simultaneously leading in the maintenance of the local alveolar plosive as a strong index of local identity.

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5. I would like to thank Dr Nicola Bessell for her thoughts on this hypothesis.

5.1a.2 /ð/ in 2016

Gender differences

Generally, it is thought that young women are the leaders of language change and that they use more prestige forms than men (Trudgill, 1986; Milroy, 1992:86; Labov, 2001:321; Hickey, 1999), but in these children, the results show that it is the boys who may be leading the change towards the non-local Irish-English dental plosive, by about 20% more than the girls. Thus, while the girls maintain a preference for the local alveolar plosive in their realisation of this variable, the boys use this local variant less than 50% of the time. This might be because two of the five boys have one parent who is non-native; the child with the highest use of the non-local dental plosive has an English mother. Surprisingly, this child has no use of the standard interdental fricative, but he also did not want to read, so this may explain why he has none of the more careful pronunciation of fricatives expected from this style (Labov, 1972 in Tagliamonte, 2012:27). The second boy has the highest use of the standard fricative at 20%, but he has a Spanish father who has probably influenced the acquisition of this variant (Hewlett *et al*. in Foulkes and Docherty, 2005:422). The girls on the other hand, are leading the change with increased use of the standard fricative. Although it is still minimal, at 3%, it is double the boys' use, whilst simultaneously, these girls are maintaining dominant use of the local alveolar plosive. As noted by Stuart-Smith *et al.* (2007:224) class-based language ideologies and social networks may be interacting in opposition, creating resistance against complete non-localisation of this characteristic local Dublin alveolar plosive.

5.1a.3 Style for /ð/ in 2016

When looking at style, it is expected that reading phrases and word lists will elicit the most formal or careful realisations (Labov, 2006:60). However, other literature contradicts this view; both Stuart-Smith *et al.* (2007:252) in Glasgow and Milroy (1985:373) in Belfast found young inner-city speakers overtly increasing characteristic local variants when reading wordlists in their construction of local identity. Likewise, Smith and Durham (2012:28) found different constraints afforded to insider and outsider interviewers. This appears to be what is happening in this 2016 data, with both genders increasing their use of the local alveolar plosive [d] to equally high levels (80%) when reading both phrases and lists. However, the more careful style of reading lists also includes over 10% standard fricatives, which is expected as more attention is paid to each word (Labov, 1972). Thus,

there are two influences here; on one hand the children are adapting to the prescriptivism expected in school, sometimes even self-correcting as they read, whilst on the other hand, they are clearly maintaining their identities as local speakers. In spontaneous speech, the level of the non-local Irish-English dental plosive rises to almost 50% use, so it appears that there is some levelling in spontaneous speech, but there is also strong maintenance of the local alveolar plosive which indexes the /ð/ variable as a marker of local identity.

5.1a.4 <u>Quasi-lifespan Study</u>

The term 'quasi' is used here because although Rosie, the speaker in this lifespan study, was in the class recorded in 1961, she was not one of the children recorded, so what follows may be indicative of change over time and is not a reflection of her specific lifespan change. There is a range of individual linguistic variation within the speech of her school peers and in the absence of data from her own speech in 1961, considerations have been made with her situated in the middle of that range.

It appears that Rosie's realisation of the voiced interdental fricative has become more local over time. This speaker now uses the local alveolar plosive 90% of the time and this is confined to word-initial, preceding coronal, other consonant and in-breath contexts. In both preceding and following vowel contexts and word-medial positions, realisations of this variable are categorically local. Likewise, when reading phrases and word lists she is categorically local. There is no use of any fricatives and the 10% non-local dental plosives are only in spontaneous speech. Thus, when comparing this speaker with her childhood peers, on a local → non-local continuum, she is at the higher end of the scale. Also, when comparing her realisations of /ð/ to the 2016 children she shows equal use of the local variant [d] with the two most local girls. Thus, as with the children in 2016, realisations of this variable seem to be strongly tied to identity and social networks.

This speaker was aware of the purpose of the interview and was therefore likely to want to establish her identity firmly as a local speaker. The content of the interview was strongly reminiscent of happy, childhood memories about family and school, her teacher Mrs. Cunningham, followed by her work experiences, her own family and changes to the local area – much of it in direct speech, which is characteristic of storytelling in vernacular Irish. Below is a brief example.

> So the Principle then asked me would I like a job and I said eh 'Oh, I'll let –
> leave it with me'. So I went home and I told me Ma. I said 'She's just asked
> me did I want a job.' And she said, 'What did you – I hope you told her
> yeah'. I said 'No, I told her to leave it with me for the weekend.' 'Nip over
> there' she said 'And tell her you'll start on Monday'. And ehm, I did, yeah.
> So I was thirty years here, four years ago.

The whole interview was interspersed with 'you know what I mean', [dʒnəʊwərəmɪːn], a typical discourse marker in Dublin vernacular. Although this speaker worked for thirty years as a classroom assistant, there is no evidence to suggest that she was either more or less local when actively participating in the linguistic market (Eckert, 2000). It may be that she adopted a more formal register when working with the children, where use of standard language reflects one's occupation (Labov, 1990 in Eckert, 2000:21), whereas now that she has retired, is returning to her strong local identity and local social networks, where being part of the close-knit community has its advantages in understanding the local ideologies. Whatever her motives for maintaining this high level of the local alveolar plosive, it is clear that this speaker strongly identifies herself within the community and through her linguistic choices was conveying this to the interviewer, who linguistically was clearly an outsider (Smith and Durham, 2012).

5.1b   What evidence is there for change in the characteristic Dublin variables /θ/?

In the speech of these inner-city children in 2016, /θ/ is stable only in the fact that local variants are still used more than non-local ones. Like its voiced counterpart, range and frequency of use differ according to position in the word and context. Overall, whilst the non-local voiceless dental plosive has increased, so too has the local voiceless alveolar plosive increased, with a corresponding decrease in or elimination of all other local variants. This is most noticeable in word-final position where the increase leads to near-equal use of both local and non-local forms, whereas in word-initial and medial positions the proportions of local versus non-local have remained more or less stable.

5.1b.1   Real-Time Study

In vernacular Dublin speech, the local voiceless alveolar plosive [t] is the preferred variant when realising the interdental fricative /θ/ *e.g.* [trɪ] for three (Joyce, 1910; Wells, 1982;

Bertz, 1987; Ó'Baoill, 1997; Ó hÚrdail, 1997; Hickey, 1999, 2004, 2005, 2007; Kallen, 2013; Lonergan, 2013). To a non-native, non-local [t̪] and local [t] may sound like homophones, but for non-local speakers there is a clear difference (*ibid*), although the same cannot be said for non-local speakers listening to local speakers, so *three* and *tree* can indeed sound the same. Consequently, the alveolar plosive [t] as a realisation of the voiceless interdental fricative is highly stigmatised in standard Irish-English. The results of this study show that [t] has been maintained as the main variant in local Dublin-English; in fact, over time its use has increased. This correlates with a reduction in the overall use of all other local variants for /θ/, most noticeably glottal stops and deletion. In non-local Irish-English speech, glottal stops and deletion are stigmatised, so this reduction can be expected in dialect levelling because they are found only in inner-city local speech, notably in Dublin (Hickey, 2005). At the same time, both the non-local dental plosive and standard fricative have doubled in use, so the overall picture in 2016 is 70% local and 30% non-local, which includes the 2% use of the fricative [θ]. This is a 15% increase of the non-local variants across five decades.

Like its voiced counterpart, change of the fricative /θ/ is conditioned by position in the word and linguistic context. Increased use of the non-local Irish-English and Standard English variants is most noticeable in word-final position; they are also used in all preceding and following contexts. Previously, preceding other consonant contexts and following coronals and in-breath contexts were categorically local. In word onset [t] as a variant of /θ/ has remained stable, but in all other word positions and contexts, the pattern of change is the same: the use of the voiceless alveolar plosive has increased, whilst glottals, deletion and all other local variants have decreased. The most noticeable changes are preceding other consonant contexts and following coronal and in-breath contexts, where categorical use of the local variants has been replaced by non-local and standard forms, ranging between 20% to over 65% use. Interestingly, preceding in-breath context is different in that the change is towards the local alveolar plosive, not the non-local Irish-English dental [t̪].

In 1961, 65% of individual speakers were categorically local in their pronunciation of /θ/. This was mainly using alveolar plosives, but not always, as one speaker had categorical use of glottal stops whilst others used no plosives, preferring glottal stops and deletion. This is unexpected as glottals and deletion are found in intervocalic or word final positions (Hickey, 2005:41), not in word onset. However, preceding or following phonemes were

considered when coding [ʔ] and [ø], which explains why these variants are found in word onset position in this study.

Just under a third of all 1961 speakers used the non-local variant as well. Three speakers stand out here: one used the non-local variant 80% of the time, another surprisingly, had categorical use of this dental plosive, and one even used the Standard English fricative; nearly 20% of the time. None of these three speakers is the same child who was leading in the use of the non-local variant in realisations of the voiced fricative, so if the theory of an initial wave of non-localisation beginning in the 1960s is carried forward, this means that 13% of speakers in the 1961 class showed preference for the non-local variant when realising interdental fricatives.

By 2016, the percentage of categorically local speakers has reduced to just 18%, which is a significant reduction of 47%. The voiceless alveolar plosive has been maintained as the preferred local variant, but the reduction of all other local variants to minimal use is noticeable. Thus, 82% of speakers now use some non-local [t̪] and 12% now use some standard fricatives [θ] which is a notable change towards the use of non-local variants whilst still maintaining strong use of local forms. This appears to be a case of dialect levelling (Williams and Kerswill, 1999:149; Milroy, 2002:7;).

5.1b.2   /θ/ in 2016   Gender differences

Although both genders favour the use of the local alveolar plosive when realising the voiceless fricative /θ/, the boys use the local variant [t] 10% more than the girls, thus confirming previous observation that boys tend to use nonstandard local variants more than girls (Trudgill, 2000:72; Eckert, 2012:90; Foulkes *et al.* 2013:708). There is also some minimal use of other local variants, so the overall difference between girls' and boys' use reduces to just 5%. Previous research (Wells, 1982; Hickey, 2005) shows that glottal stops for /θ/ are mainly found in the speech of young, inner-city men, so it is interesting to note that in this study, the boys do not use any glottal stops; it is the girls who use this variant, and that is less than 10%. These differing results may show an age difference, given that previous research referred to adults, whereas this study focuses on children.

Lonergan (2013:325) does note that in word-final position, women tend to use more glottal stops than men, which is consistent with the findings in this research. In this study, girls also use glottal stops in word-medial position, which differs from Lonergan who found that in post-tonic and intervocalic positions girls favoured the use of unlenited [t]. Another

possible explanation could be that the new pronunciations are spreading to the young inner-city speakers who are choosing to reduce or avoid this stigmatised variant, which is absent in non-local speech (Hickey, 2005:42), preferring instead, the voiceless alveolar plosive as an indicator of local identity because speakers are unaware of its salience in this speech community. The fact that all other local variants are absent or used minimally may support this theory.

Interestingly, it is only the girls who use any standard fricatives, and that is only 5% or less. This differs from its voiced counterpart where both genders use some fricatives.

5.1b.3   Style for /θ/ in 2016

In this study, the girls have a wider range of local variants [t], [ʔ] and [ø] compared to the boys who have no glottals or deletion but do have some tapping. The boys are categorically local when storytelling, mainly using alveolar plosives, but there is some use of tapping. This is not unexpected as both Wells, (1982) and Byrne (1996, in Kallen, 2013:52) found tapping to be more common in young men's speech and, despite its previous stigma, it is spreading to the new non-local pronunciation of Irish-English (Hickey, 2007:323; Lonergan, 2013:325). Taps are found in intervocalic positions, which is also true for these children. However, in these results, it also shows in word-final position because it is linked to the following word *e.g.* when talking about a sweet the child said, 'he put it in his mouth and ate it', with 'mouth and' as [maʊɾand]. Given that these boys use [t] in over 90% of cases, it is likely that over time, the use of tapping is reducing in favour of the local unlenited variant, which is similar to Lonergan's findings for the slit-t (2013). However, more research on this specific variable is needed to establish whether this is the case or not for [ɾ].

When looking at spontaneous speech style in 2016, it is notable that the boys are categorically local whereas the girls use over 10% non-local Irish-English [t̪] and about 3% standard fricatives. As expected, both genders increase their use of non-local dental plosives to almost 40% when reading, which is a notable increase compared to their spontaneous speech. This difference can be attributed to a range of factors; as well as the influence of levelling and identity construction previously mentioned, current education programmes must also play a part. The teachers are young, middle-class professionals who come from Dublin and further afield, who have grown up in the post Celtic Tiger years and thus, are speakers of the new supraregional Irish-English pronunciations. They are of the

generation which has grown up, probably unaware of the origins of dissociation from which their dialect has developed. As teachers, throughout each day they are providing constant input for the children of these new Dublin-English features. This is particularly true in the targeted literacy programmes which have been introduced to improve reading and writing skills (personal communication with the Acting Principal). When reading, the children showed an awareness of what is considered correct by sometimes self-correcting a spontaneous [t] realisation for [t̪] or [θ], particularly with the wordlists. Interestingly, the use of [t] does not change across styles, the difference is in the reduction of the other local variants, which indexes [t] as an identity marker of local speech, given its salience in the speech community. This is confirmed in the literature, regardless of the fact that this variable is changing over time.

5.1b.4   Quasi-lifespan Study for /θ/

Like its voiced counterpart, realisations of /θ/ for Rosie are on the high end of a local → non-local cline. Without specific data from her childhood it cannot be said that she has changed linguistically because in 1961, many of her peers categorically used the local variants, mainly [t] and [ʔ] with some minimal use of other local variants. This has been maintained in this speaker's speech. Like her peers, the local voiceless alveolar plosive is the preferred variant for /θ/ at 70%, with 20% use of glottal stops and the remaining 10% is minimal use of other local variants. The non-local [t̪] is used just 5% of the time. This dental plosive is used only in word-final position when vowels or coronals precede, or in following contexts when there are vowels or in-breaths. However, its use is minimal (5% or less) except in word-final position and when an in-breath follows. This is mainly from the reading lists where more attention was given to the pronunciations, but nevertheless, given the high level of local realisations elsewhere, it is noticeable that 30% of word-final fricatives are non-local dental plosives before an in-breath. In all other word positions and contexts this speaker is categorically local. In word onset, there is categorical use of the alveolar plosive [t] as a variant of /θ/. In fact, this study shows almost 90% use of intervocalic realisation to be [t], whereas regardless of what precedes, usage is consistently at about 70%. This remains consistently high except in word-final position and following other consonant contexts, where glottal stops are favoured 50% and 80% respectively. This confirms Lonergan's findings that in word-final position, working-class inner-city Dublin women use glottal stops more than men (2013:325) and that alveolar plosives are often preferred to glottalling or tapping (*ibid*). It is interesting to note that when the following

consonant is a coronal, the preferred variant is the alveolar plosive, with 35% use of glottal stops, whereas in post-tonic position, when another consonant follows, use of the glottal stop increases to almost 80%.

Similar to some of her childhood peers, in adulthood, Rosie's almost categorical use of local variants during spontaneous speech undoubtedly indexes a strong local identity. This may have been maintained throughout her lifetime but given that she worked as a classroom assistant for over thirty years, in what is often a prescriptive environment, it is possible that her speech was less local during her most productive years, in order to satisfy the needs of her linguistic market (Bourdieu, 1991, cited in Wardhaugh, 2008:205). Identity can be multifaceted as speakers need to navigate their own self-identity as well as the needs of their occupation. It is linked to group affiliation and the values within that group, but when those ties are weakened or even broken through retirement, speakers no longer need to maintain the close-knit social networks or linguistic values of that environment, unless they identify with them, so can return to or mark their affiliation to their particular local social group. This speaker may have reduced the use of non-local forms whilst simultaneously increasing her use of the local variants as 'working-class solidarity markers' (Wardhaugh, 2006:203). Whether her speech has maintained this strong local identity throughout her lifespan, or whether it has been reclaimed after a career in primary education, it is clear that there is a link between the individual, the linguistic choices made, and the society in which the speaker identifies. In the same way that some of the speakers in Kerswill and Williams' research in Reading and Milton Keynes (1999) favoured non-standard variants to make strong statements 'against posh people' (p.56), this speaker appears to relate strongly to her working-class community where she has lived all her life, and from her conversations, clearly has strong linguistic ideologies which mark her identity as an inner-city Dubliner.

5.1c.   What evidence is there for change in the characteristic Dublin variables /t/?

In the inner-city Dublin children of this study in 2016, realisation of /t/ has become noticeably more standard. Standard [t] is used 40% of the time and surprisingly, the characteristic slit-fricative [t̞] has decreased. With the exception of glottal stops, use of all local variants has decreased, although depending on position in the word and context there are differences in the proportions of use.

5.1c.1   <u>Real-Time Study</u>

The variable /t/ has many lenited forms which are realised depending on context and social class (Wells, 1982:430). Hickey (2005:39) places the range of lenition on a scale from the most standard, non-local variants to those most local, thus associated with inner-city Dublin speech. The sequence is usually [t – t̞ – h – ɹ – ʔ – ø] (*ibid*, p.39, p.42) in which the non-local forms are the voiceless alveolar plosive [t] and the apico-alveolar fricative or slit-t [t̞] and, although rare, [h] is also found because it is not stigmatised in certain words e.g. Saturday as [sæhədəi] (Hickey, 2005:39; Wells, 1982:430). In this study postvocalic /r/ was absent so it has been replaced by [ɾ] because tapping was used by boys in intervocalic positions. In Irish-English, glottals and deletion are unlikely to spread to the non-local variety (Hickey, 2005:42) because they are stigmatised. Therefore, the increased use in glottal stops supports previous findings that this variant is confined to local Dublin speech (Wells, 1982; Hickey, 2005, 2007; Lonergan, 2013), particularly intervocalically, where despite the 25% increase in the use of [t], the glottal stop is still the preferred variant.

The standard alveolar plosive is the preferred non-local variant showing an increase in all word positions and contexts, although possibly a narrower transcription may have shown a wider range of [t] allophones. This increase could be attributed to the speakers accommodating to the 'community outsider' (Smith and Holmes-Elliott, 2016:16), consequently producing higher levels of the standard alveolar plosive, reducing all other local variants except glottal stops. Another possible explanation is that because in post-tonic and intervocalic positions, young local speakers use unlenited [t] more than tapping or glottal stops (Lonergan, 2013:325) the increase in the non-local variant is due to dialect levelling, with the increase in glottal stops marking the strong local identity, in a similar way to the increase in the local variants for both the voiced and voiceless interdental fricatives.

One hypothesis before beginning this study was that slit fricatives would have increased over time, given that previous research describes use of the slit-fricative as 'conspicuous' (Wells, 1982:429), 'widespread' (Hickey, 1986:13) and 'salient' (Kallen, 2009:62). However, it is relevant to note that these descriptions refer to the Irish-English variety in general and not specifically to Dublin-English. In this study, use of the slit fricative is minimal, with the local variants beyond the apico-alveolar fricative being more characteristic of inner-city Dublin speech, as shown in Hickey's sequence (2005:39). Lonergan found [t̞] to be more common in word-final position than post-tonic or

intervocalic positions in local speech (2013:327), which is confirmed here for all positions with the only increase (to about 5%) in preceding other consonant contexts. When looking at individual speakers the use of this variant has decreased over time by over 10%, so for these inner-city Dublin speakers it cannot be said that this variant is prominent.

Thus, over time the 20% increase in use of the standard British-English alveolar plosive [t], with a corresponding decrease in all local variants, except glottal stops, is believed to be partly the result of levelling from contact and increased input from other sources *e.g.* teachers, non-native peers and literacy programmes, as was the case for the interdental fricatives. In an attempt to avoid the stigmatised local variants, inner-city speakers can hypercorrect (Lonergan, 2013:325) and consequently have higher instances of the alveolar plosive than expected in this variety. At the same time, glottal stops have increased and so have been maintained as a salient marker of local identity.

Individually, it is clear that over time there is a 20% increase in the number of speakers who favour the use of standard [t]. Those who favoured this variant in 1961 are not the same speakers who favoured the use of other non-local or standard variants of the voiced and voiceless fricatives, therefore in the apparent initial wave of non-localisation, 22% of individual speakers in 1961 favoured different non-local variants. Through levelling and interaction with weaker social networks, there has been a shift towards increased use of non-local forms whilst maintaining local variants to index affiliation with their social group as well as local area.

5.1c.2 /t/ in 2016 Gender differences

When looking at gender differences in the 2016 data, the overall picture appears to be almost equal use of local and non-local variants (Figure 4.12.1), however when split by context there are some gender differences ranging between 5% and 15%. As the literature suggests, the boys' use of local variants exceeds the girls' (Trudgill, 2000:72), except in preceding coronal contexts and in following coronal contexts where there is equal use of this variant. In all other contexts, the girls lead in the use of the standard variant. This may be because girls tend to be more aware of prestigious forms than boys (Milroy, 1992:104), although in most contexts there is significant, equal or near-equal use of glottal stops by both genders in the realisation of /t/. This differs from Lonergan (2013:325) who found that women use more glottal stops than men in word-final position, but in this study, that is only true for preceding coronal contexts. Here, the widest range of variants is found only in

vowel contexts, with minimal use of other local variants except glottal stops, and to a certain extent deletion. This is not unexpected though because young inner-city speakers can vary realisations in post-tonic and intervocalic positions (*ibid*). Glottal stops index inner-city identity and are not stigmatised in this community. This explains their high frequency use by both genders, despite the increase in the use of the standard [t], as the girls lead in the diffusion of the standard alveolar plosive.

5.1c.3   Style for /t/ in 2016

When looking at the realisations of /t/ over time there is only about 5% increase in the use of local variants, with a corresponding decrease in the use of the standard variant [t]. Although with higher proportions, this follows the previously mentioned pattern: an increase in glottal stops with a decrease in deletion and all other local variants. However, the use of the standard alveolar plosive differs: it decreases when storytelling, therefore the previously mentioned increase in the use of [t] is seen only when reading phrases and word lists. In these styles the difference is significant as it increases from 30% when storytelling to approximately 80% when reading. Previous research has shown similar results when reading, whereby local variants are reduced noticeably (Bell, 1984:156), or speakers radically style shift (Milroy and Milroy, 1977). The noticeable decrease in the use of glottal stops when reading can be expected as more attention is paid to this careful style of speech (Labov, 1972:208). Furthermore, as the glottal stop is stigmatised in non-local Irish-English, the prescriptive literacy programmes running in the school will discourage use of this variant, at least when reading. Interestingly, it is the boys who reduce [ʔ] more than the girls. However, from the children's perspective, standard [t] is 'easier to correct' than the standard fricatives. The children's stylistic variation can be seen partly as a response to external stimuli *i.e.* the prescriptive input in school and levelling of all local variants. But also, by increasing their use of glottal stops in spontaneous speech, and to a lesser extent when reading, they are still maintaining their strong social and cultural identities, regardless of whether in school they are expected to 'talk nice and that' (Reid, 1978:169) or whether the glottal stop is stigmatised in the non-local form.

5.1c.4   Quasi-lifespan Study for /t/

Without relevant data confirming this specific speaker's speech in childhood, these results are only indicative of a lifespan change. In comparison with her childhood peers, there is a

higher proportion of local variants used now than in 1961. This is mainly in the increased use of glottal stops, which is the preferred variant in all positions and contexts. There are two exceptions: preceding coronals where deletion is the main variant *e.g.* 'went in' [wenøIn] and following vowel contexts where tapping and glottals are used equally. When comparing individual speakers, on a local → non-local continuum, this speaker is at the higher end of the scale with use of glottals, and deletion is towards the lower end compared to her peers. Only 22% of speakers used the standard [t] less than this speaker does now, and this is minimal at 5% or less. Whether Rosie was more local than her peers or not, cannot be confirmed, but such high levels of local use could index strong local ties and affiliation with the local community. Her spontaneous speech was highly reminiscent of past times, remembering fondly of people, places and experiences; all of which the interviewer was clearly an outsider. This area is where she has lived all her life so her social networks are long-standing, close knit groups. Furthermore, given the school context, where the children's realisations of [t] increased to accommodate to the community outsider *i.e.* a teacher-like figure, in the adult's speech there also seems to be some correlation between language and place (Montgomery and Moore, 2017:9). In order to index her affiliation with the local community, there is dissociation from the 'community outsider' (Smith and Holmes-Elliott, 2016:16) so for Rosie, social class and identity seem to play an important role in the linguistic choices made for /t/.

5.2   Research Question 2

If there are changes, in which direction are these changes?

The three graphs below, in Figures 5.1 to 5.3, bring together in summary the children's realisations of the variables examined: /ð/, /θ/ and /t/ to show the changes for all three variables over real-time. These changes are in a shift towards increased used of non-local variants whilst still maintaining strong use of the local forms. The status of the variables is shown through colour coding: blues represent local variants, brown, the non-local Irish-English variants and green, the standard British-English variants.
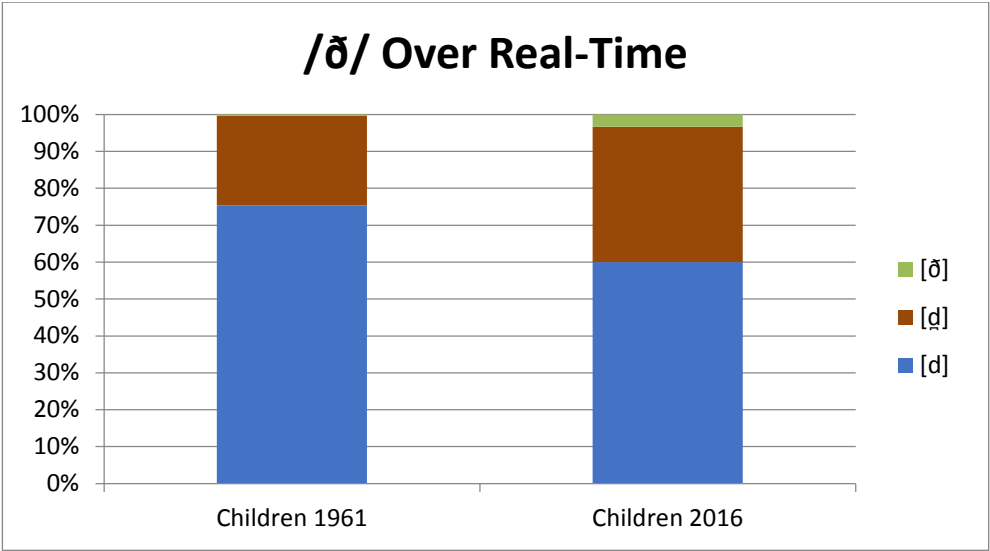
Figure 5.1: Percentage distribution of /ð/ over real-time by variant.
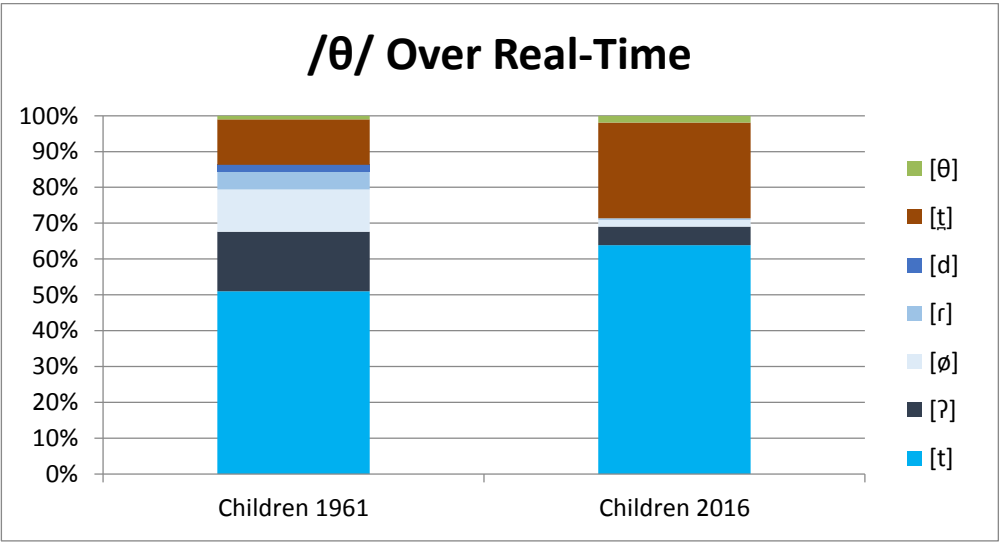
Figure 5.2: Percentage distribution of /θ/ over real-time by variant.
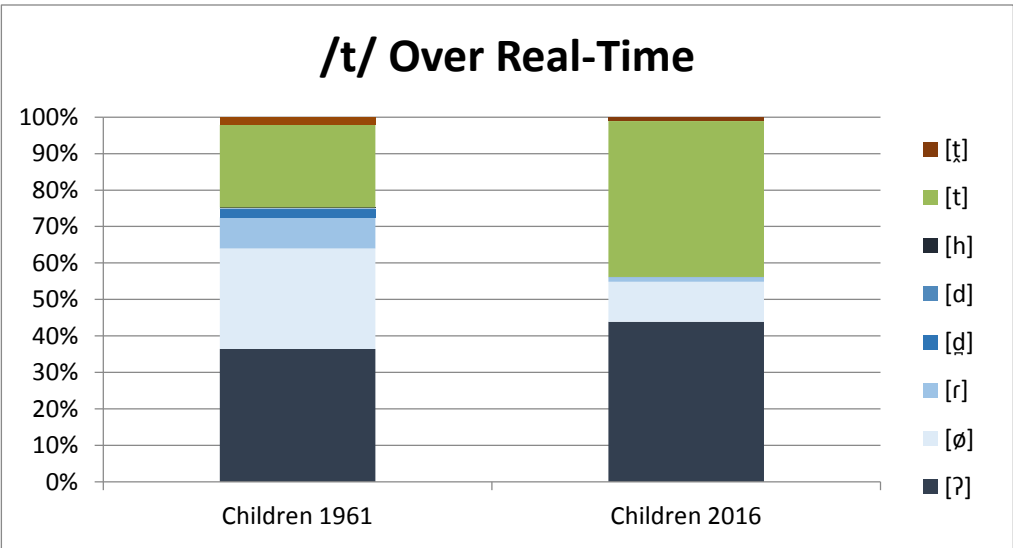
Figure 5.3: Percentage distribution of /t/ over real-time by variant.

The children's shift towards the non-local variants (brown, green) whilst still maintaining strong use of local variants is likely connected to how they construct their identities within their social networks. It is difficult to say exactly what the influential factors are in the levelling of local variants. As social networks broaden, input from multiple sources increases, because affiliation with one network does not exclude contact with other groups (Milroy and Milroy, 1985:365). However, a combination of factors is more likely to have been influential in this inner-city sound change.

5.3   Research Question 3

To what extent do these changes reflect the sociodemographic changes of this area of Dublin?

Prior to the economic boom of the 1990s, Ireland was known as a country of emigration (Glynn *et al.* 2015), but with changes to certain internal policies and European assistance, the economy, and the city, began to develop (Howley and Clifford, 2009). This led to increased job opportunities, relative wealth and population growth, particularly in Dublin, the capital. The resulting boom led to in-migration, not only from native Irish, but many other EU nationals were able to enter and work freely in Ireland. Hickey has reported widely on the Dublin Vowel Shift (1999, 2004, 2005, 2007) which began at this time as a form of dissociation from the local Dublin vernacular. The new incomers, who had weak social networks were dissociating from the strong, close-knit communities of the inner city, as 'motivated participants' (Hickey, 2005:61). Given that middle-class, Dublin-English is generally considered to be a national standard Irish variety (Hickey, 2007:26), the new pronunciations spread across the county and have since been adopted by 'detached participants' *i.e.* those who are following the shift but do not have the same dissociating motivation as the speakers in Dublin (*op. cit*. p.61).

Currently, 11.6% of the population of Ireland is non-Irish (2016 Census) which introduces a range of foreign languages and other varieties of English to the country, mostly to Dublin or other main cities, for employment. There has been some research on how immigrants are integrating into Irish society (Nestor *et al.* 2012; Migge, 2012; Diskin, 2013) and on the Irish diaspora in Newfoundland (Clarke, 2017) and in Argentina (Amador-Moreno, 2012), but to date, there appears to be no research on whether, or to what extent, this demographic change has affected the pronunciation of the inner-city Dublin people. This dissertation attempts to begin to address this void.

The speakers of this study are situated in north-east, inner-city Dublin; a traditionally working-class area which was chosen as one of the deprived areas for redevelopment in the late 1990s (O'Connor, 2008:6). This gave them a brand-new, purpose-built school near the original old school building, which became famous in the 1980s when the 1961 *Give Up Yer Aul Sins* recordings were first found. The 2016 children who participated in this research attend the same school and are of a similar or the same age, but over time the inner-city population has changed significantly. The same levels of poverty are not found; every family now has a television whereas in the 1960s very few had television; nowadays the children travel abroad on holiday, whereas then, none of the children had ever travelled outside Ireland. Furthermore, all the children in the 1960s were local, whereas now there is an array of nationalities within the school, and some of the teachers are in-migrants themselves; from other counties in Ireland (as reported in the interview with the quasi-lifespan participant). Finally, specific literacy programmes have been established to enhance the educational outcomes (personal communication with the Acting Principal) so when considering linguistic variation and change, it seems logical to question whether these changes have also affected the speech of the local people.

The results of this research show that the variables /ð/, /θ/ and /t/, which are thought to be stable in Dublin-English (Hickey, 2005, Corrigan *et al.* 2012), appear to have shifted over time towards increased use of non-local Irish-English [d̪] and [t̪] and Standard English /t/ variants. Both of these patterns are consistent with the sociodemographic changes in this area. It is believed that contact with the non-local in-migrants in this school have in some way contributed to these changes whilst simultaneously, the local speakers are maintaining a strong identity with their local linguistic culture. Some changes are conditioned by position in the word, and some in 2016 are conditioned by gender. At the same time, there has been a reduction in the use of local variants, especially for /θ/ as well as for /t/ but an increase in [ʔ]. Thus, it appears that there is some evidence of levelling and some dialect maintenance in the Dublin-English variety spoken in this inner-city school.

5.3.1   Sociodemographic changes in the area

Although this inner-city area is and has been a working-class community, the economic boom of the 1990s has seen Ireland become more confident in general, as a nation. The previously 'fishing and farming' nation became home to the top IT and pharmaceutical companies in Europe (IDA website). This led to the population becoming more confident and socially aware of Ireland, particularly Dublin, as a wealthy, cosmopolitan, diverse

nation. They no longer had to migrate for work, but the contrary; Dublin could offer jobs to other nations and consequently the Irish identity was strengthened, not only at home but also internationally. This new identity was also reflected in the language, and the subsequent linguistic changes have been well-documented (Hickey, 2004, 2005, 2007), such as the Dublin vowel shift, as those who wished to avoid the stigmatised forms dissociated from the local vernacular. This new or advanced Dublin-English has since spread across the country and is now seen as the mainstream supraregional form, which has been adopted by those outside the city who are unaware of its origins, seeing it just as the 'trendy' forms of the capital.

With the in-migration to local inner-city Dublin, many foreigners have moved to live and work in this area. Despite Irish society being strongly class-based, non-natives tend to consider education as the marker of class and social mobility, and so encourage their children to do well at school, far more than some Irish parents (personal communication with the Acting Principal). Although foreign pupils are a minority, this has been a positive change for the school in terms of integration and motivation. Furthermore, the teaching staff, who were the youth of the 1990s, are now in their early to mid-thirties and are the generation of the teachers of the children in this study. In-migration may also lead to the increase in Standard English variants, and possibly Irish-English non-local variants too.

5.3.2   Input from teachers

It is likely that daily contact with these non-local teachers has also played some part in the levelling of this dialect over time, likely affecting /ð/ and /θ/ with shifts to non-local Irish-English plosives. This may be covertly through their own advanced pronunciations or overtly through the prescriptivism of the literacy programmes. This was evident in the reading tasks when there was a marked difference between the use of [ʔ] in the different styles. Also, some children self-corrected local variants for standard forms, thus highlighting a linguistic awareness of context and 'correctness' with accommodation towards expected norms.

5.3.3   Peer influence and levelling

Despite the weakening of social networks within the wider community, the school community is still seen as a tight-knit group in which friendship groups are formed and peer influences become important (Labov, 2001; Kerswill, 1996). Daily contact with non-native peers within the class has also likely contributed to the levelling of many local variants. This does not mean that all local forms are lost, but as the evidence shows, whilst all variables have more non-local realisations than in the past, certain local features are maintained – and even increase in certain contexts *e.g.* [t] as a realisation of /θ/ and glottal stops as allophones of /t/, whilst others are reduced or are eliminated over time. However, throughout this levelling process these speakers have maintained a distinctly local linguistic identity. Strong, identifiable local features are salient *e.g.* [ʔ], [t] and [ø] and, not being stigmatised in this inner-city community, index a distinct social identity.

At the same time, there is a 'competing force' (Milroy, 2002) to accommodate to the more non-local speakers in the social networks *i.e.* peers, including the well-integrated, non-native peers who may introduce their pronunciations across the friendship groups *e.g.* the standard fricatives of the child with a Spanish father or the alveolar plosives of the child with a Nigerian father. Thus, features are introduced or reinforced, regardless of whether they are prestigious or not (Stuart-Smith *et al.*, 2007:247), through contact with innovators, as was seen with this initial wave of non-localisation from some of the speakers who were potentially leading change in 1961. This may be to gain status within the social network, but regardless of whether the features are local or non-local, it is the indexical meaning attributed to them which is important (*ibid*). The linguistic consequence of levelling is that non-local variants have increased for all variables, whilst although some local features have been reduced or eliminated, other more salient variants have been maintained as markers of local identity.

The adult in the quasi-lifespan case study is different. Below are the graphs for Rosie comparing her to her peers from 1961, for each variable /ð/, /θ/ and /t/.

Figure 5.4: Percentage distribution of /ð/ over real-time by variant.

Figure 5.5: Percentage distribution of /θ/ over real-time by variant.

Figure 5.6: Percentage distribution of /t/ over real-time by variant.

The evidence here shows how Rosie has, in contrast to the children, apparently decreased her use of non-local variants in relation to her childhood peers, whilst simultaneously increasing her use of local variants. It is interesting to note that it is the main local variant for each variable which has increased, *i.e.* [d], [t] and [ʔ]; the other local variants, like the children's, have decreased. Having no definitive evidence from her childhood, it can only be surmised that she was within the range shown by her peers. If this is taken as true, Rosie's speech now is more local than in the past. Similar motives to the children's *i.e.* identity and social networks, are feasible explanations. From the interview it is clear that Rosie is part of a strong, close-knit social network, and is proud of her Dublin roots. The school is already well-known for the *Give Up Yer Aul Sins* recordings, and the children have more recently written and performed their own rap song which is available online, along with other clips about the school, past and present. This participant was also a classroom assistant in Rutland Street National School, so her connection with the school and local area goes back decades. Now that she has retired it seems that she is reclaiming her identity as a local speaker. This may be particularly so, as she was aware of the researcher being a non-local and furthermore, from the University of Glasgow, researching Dublin-English. For these reasons it is believed that she is aligning her speech to construct her identity and index the social meanings and ideologies of what it means to be an inner-city Dubliner today.

5.4   Summary

To summarise, it can be said that there is some levelling in the speech of these young inner-city Dublin speakers. The children have increased their use of non-local variants whilst maintaining, and sometimes increasing their use of local features. Conversely, when compared to her childhood peers, Rosie has increased her use of the main local variants for each variable, but has decreased both other local variants and the non-local forms. The adult appears to be making a strong statement about her inner-city identity, which has been reinforced since she has withdrawn from employment and spends more time within her local community where she has a tight-knit social network. The children, on the other hand, who can be leaders of sound change (Kerswill and Williams, 2000), are balancing a dichotomy of loyalty to their local community, which is clearly a proud part of their identity, with absorbing what is innovative in the pronunciations heard within their widening social networks, particularly in school.

6.0   **Conclusion**

6.1   <u>Aims, research questions and methodology</u>

The aim of this study was to identify whether there have been any changes in the pronunciations of inner-city Dublin-English, given the sociodemographic changes of the capital, and regeneration of the inner-city working-class areas, which have occurred since the economic boom of the 1990s. Specifically, the characteristic variables /ð/, /θ/ and /t/ were examined to identify whether there were any phonological changes and if so, whether there was any evidence of dialect levelling. Thus, three research questions were addressed:

- What evidence is there for change in the characteristic, stable, local Dublin

  variables /ð/ /θ/ and /t/?

- If there are changes, in which direction are these changes?

- To what extent do these changes reflect the sociodemographic changes of this area

  of Dublin?

To answer these questions two sets of data were analysed. The first set of data was taken from recordings of *Give Up Yer Aul Sins*, a collection of Bible stories recounted by school children in 1961. The second set of data is recordings, made by myself, of children in the same school in 2016, as well as one adult who was in the 1961 class, although was not one of the children recorded. These provide the basis for a real-time trend study of inner-city sound change and a quasi-lifespan study of potential changes throughout this adult's (Rosie's) life, comparing her speech to that of her childhood peers. In total, the speech of forty children, aged eight to nine years, and Rosie's speech was used for comparison. These characteristic local variables were previously thought to be phonologically stable in Dublin-English (Corrigan *et al.*, 2012:23), with realisations constrained by social factors such as social class and education. Having identified that there is evidence of a shift towards increased use of non-local variants in this community, considerations were given to the possible social significance of these variations in local Dublin-English.

6.2   Summary of the results

The literature reports that there are many allophones for these variables, with distinct variants for both local and non-local Irish-English realisations. The local tends to have higher frequency use of alveolar plosives for interdental fricatives, whereas dental plosives are more frequent in non-local speech, with some Standard English fricatives in more formal styles (Hickey, 2005:73). More recent research in Cork (Bessell and Mulhall, 2014) and Galway (Peters, 2012) has found fricatives in the spontaneous speech of some young speakers. Realisations of /t/ are more varied and range from the Standard English [t] to complete deletion. Hickey places this on a cline from non-local to local [t] [t̪] [ɹ] [h] [ʔ] [ø] (2005:44). The variables in this study showed similar results, but what is interesting is the frequency of use of each variant and how these have changed over time. In this study no tokens of [ɹ] were found, but in this position of lenition, there were some instances of tapping.

6.2.1   Summary for the variable /ð/

Over real-time this variable has seen a 15% increase in the use of the non-local Irish-English dental plosive [d̪] with a corresponding decrease in the frequency of the local alveolar plosive [d]. There has also been an increase in the use of Standard English fricatives, which, at less than 5%, is still minimal, but it is a shift towards non-local forms. Despite this increase in the non-local forms, over-time the children maintain their local identity within the community with 60% use of the local variant.

Rosie shows a different pattern: her use of the local voiced alveolar plosive increases over time by 15%, with a corresponding decrease in the non-local variant, and there is no use of any fricatives.

6.2.2   Summary for the variable /θ/

Like /ð/, the use of local variants of this variable has decreased over time by 15% with a corresponding increase in the use of non-local Irish-English forms. Interestingly, the main local variant for /θ/ has actually increased by over 10%, but it is in the reduction and/or elimination of other local variants, which allows for the non-local increase. Again, local affiliation is indexed through linguistic choices with 70% of the variants used being local.

Like its voiced counterpart, the adult's realisations of this variable differ from the children's. Again, her speech increases in the use of local variants. Alveolar plosives and glottals increase whilst the other local variants decrease, but unlike the children, none is eliminated.

6.2.3   Summary for the variable /t/

There has also been a 15% increase in the use of the non-local variable for /t/. But here it is the Standard English alveolar plosive [t] with a corresponding decrease in the local forms. Like the voiceless fricative, the main local variant, the glottal stop, has increased, although just by 5%. This variable shows the highest use of non-local, Standard English realisations at over 40%, but contrary to the original hypothesis, there is very little use of the non-local Irish-English slit fricative, and over time this variant has decreased. As with the fricatives, the local forms still prevail.

In Rosie's realisations of /t/, the local variants prevail at 85%, which is a 10% increase compared to her childhood peers. This corresponds to a decrease in the use of the non-local [t] and slit fricative. Use of the glottal stop increases whilst all other local variants decrease or are eliminated.

6.3   Implications of the results

This study has identified that the socioeconomic changes which have occurred in Dublin over the past few decades have affected the demography, and as a consequence, likely the language too. Close-knit social networks have been weakened by in-migrants, but given that the children in this study are second-generation migrants, they are well-integrated and have formed a strong close-knit community, at least within the school. Some of the children who were not recorded had noticeable non-native accents and to a certain extent, there will have been some accommodation initially, but this does not continue long-term (Trudgill, 2004 cited in Kerswill, 2010:235). Children are thought not to make linguistic choices according to overt prestige but tend to align themselves linguistically with their peers (Kerswill, 2010:236). To different extents they are influenced by their parents who have learned English as a foreign language, thus, are more than likely to follow Standard English rules of pronunciation more than the Irish-English model, at least on arrival. The contact and these influencing factors all contribute to the reduction of local features which

can be seen in these results. The local-Irish children of the school have consequently shifted towards the non-local forms whilst still maintaining strong use of the local variants. Thus, social networks and identity seem to be closely linked to the linguistic choices made, and index affiliation to a particular group, more than a particular place (Johnstone *et al.*, 2006:92; Stuart-Smith, 2007:247), regardless of whether the choices are prestigious or stigmatised.

In the 1961 data, some individuals showed higher levels of non-local variant use than others for different variables. This resulted in up to 30% of the children in that class showing preference for non-local allophones. These children could be seen as leading the process of levelling in an initial wave, with the 2016 children continuing its propagation in a second wave. It remains to be seen whether the changes observed will become permanent features of inner-city Dublin-English or whether the local variants will continue to prevail as they grow up and become more aware of the social meaning of their linguistic choices. This awareness is highest throughout adolescence, but it does continue throughout life as speakers continue to construct multi-faceted identities according to context and interlocutors (Foulkes and Docherty 2005:432). This is seen in the speech of Rosie who seems to have become more local over time in comparison to her childhood peers and especially when talking to a university outsider. This study has provided evidence for an increase in non-local variants and corresponding reduction of local variants within this school, but further research is necessary to identify the extent of it in the wider community.

6.4   Limitations and future research

With respect to this research, there are some limitations. The results shown provide evidence for one small speech community; to determine whether the shift in Dublin English towards increased use of non-local variants is widespread across the city, a much broader investigation is necessary. At present, this study presents only descriptive results. Informed statistical analysis will allow confirmation of the key patterns. At times it was difficult to code accurately when relying solely on auditory analysis. Certain sounds were ambiguous so identifying similar sounds in adjacent contexts was difficult, *e.g.* glottals, deletion or simply a delayed plosive, in for example, 'with this' or 'the minute that'. In this case, a decision had to be made. With an acoustic analysis, other features like voice onset time could be identified for example for /t/ and more detailed results could be gathered. Finally, given the lack of third wave sociolinguistic studies in Ireland, future research

could include more detailed evidence for the social significance of the variations identified for this variety of Dublin-English.

There is much research which remains to be done on Dublin-English generally, and the recordings for this study still offers much scope. An apparent time study of the 2016 children and the adult in 2016 has yet to begin and it would be interesting to repeat this research in another inner-city school to see whether the same levelling is found. Also, the adult participant in this study is still in contact with one of the children on the original 1961 recordings: it would be a rare and valuable contribution to research on sound change in Dublin if it were possible to perform a real-time panel study with this speaker. Future studies would benefit from a wider sample of boys so that more accurate information can be gathered on gender differences at this age. With only five boys in this set of data, there may be too few to establish any significant gender-related variations. Also, a more detailed questionnaire on social networks might show correlations between linguistic variation and specific groups. In hindsight, a narrower transcription with more detailed coding, *e.g.* including affricates, would also have been beneficial.

6.5   Overall conclusions

In conclusion, even in this small sample, local Dublin has proved itself to be a multi-faceted speech community in which personal, local and national identities and social networks all work together to construct ideologies which likely influence the linguistic choices made. It is hoped that in identifying that in over five decades there has been some levelling in the speech of these inner-city children, this dissertation contributes in some way to developing knowledge and understanding of inner-city Dublin-English and more generally to studies of real-time language change.

Appendix A

Map of the British Isles

Map of Ireland

Appendix B: Participant Question Form

University
of Glasgow

<u>Please complete this form about yourself</u>

- **Where were you and your parents born?**

  Mother: _____

  Father: _____

  Yourself: _____

- **Where have you have lived, and for how long?**

  _____

  _____

  _____

  _____

- **How long have you lived in Dublin, and in which part?**

  _____

  _____

  _____

Thank you. ☺

Appendix C: Children's tasks

There are 2 tasks for you:

1. Choose one of the favourites below!

2. Some words to read! ☺

A favourite game
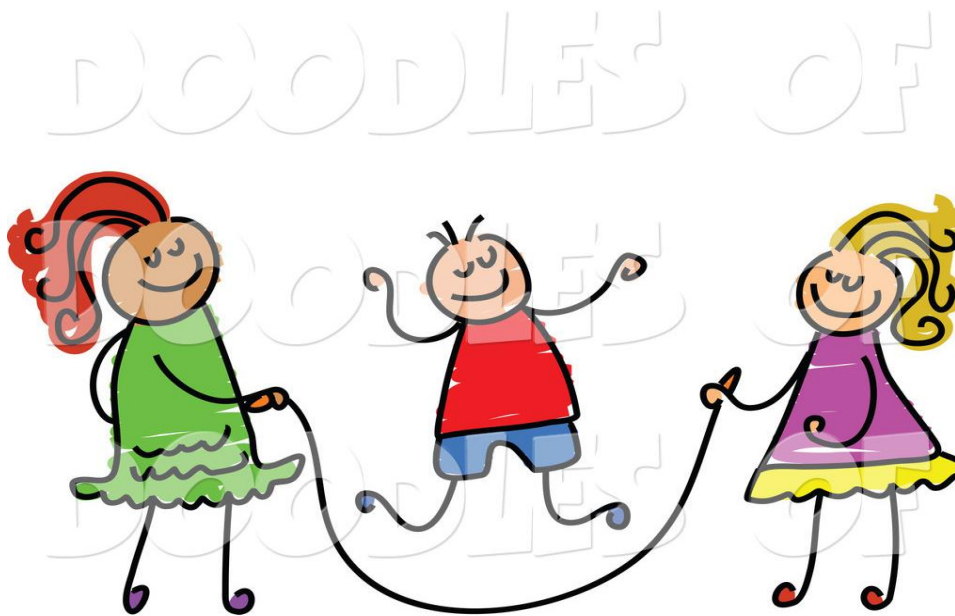
A favourite TV programme

Your favourite book

The best day of your life! ☺
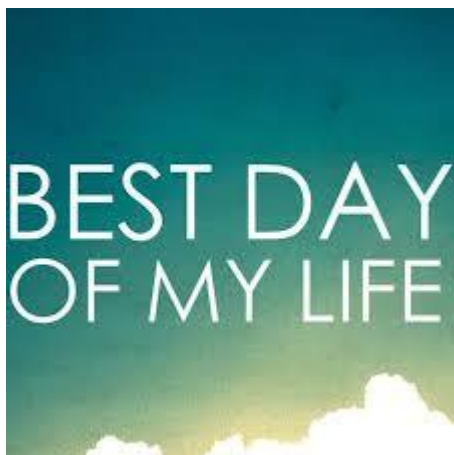
Your favourite Bible Story

Appendix D: word lists

KIT	FLEECE	NEAR
DRESS	FACE	SQUARE
TRAP	PALM	START
LOT	THOUGHT	NORTH
STRUT	GOAT	FORCE
FOOT	GOOSE	CURE
BATH	PRICE	HAPPY
CLOTH	CHOICE	LETTER
NURSE	MOUTH	COMMA

COME HERE	THINK	GETTING
I WANT YOU TO	IMPORTANT	TIRED
AND HE WENT	ANYTHING	SPEARS
AND THAT MEANT	ANOTHER	WALKING
WITH	MOTHER	THING
THIS MEANS	THAT FELLOW	BRAG
BOAST	SCHOOL	ROUND
CHANGED HIS MIND	TERRIBLE	SMART
WE'LL LET YOU GO	EVERYBODY	MIRACLE
FAVOURITE	DIRTY	SAINT
GORGEOUS	NECKLACE	SOUND
THUNDER	LIGHTENING	LADDER
DUG	SHOCKING	PURSES
WATER	DAUGHTER	TIME
PLEASE	HUGE	THREE
DON'T GIVE UP	MOON	WOULD

Appendix E: Case Study Questions for Adult Participant

University
of Glasgow

- What do you remember about your school days?

- What are the biggest changes in the school since you were here as a child?

- How do you feel coming back to work in the school in which you grew up?

- What does your job as a classroom assistant entail?

- Are you still in contact with anyone from your school days?

- Is there a particular teacher, friend or event which you remember? Why?

- Do you remember any of those, so well-known, Bible stories? Which was your favourite and could you retell it to me now?

Thank you for your participation.

Appendix F: Colour codes

	/t/	E.g.	Colour Code	/ð/	E.g.	Colour Code	/θ/	E.g.	Colour Code
Local	[ʔ]	/wɒʔr/	■ (dark navy)		n/a		[ʔ]	/bəʊʔ/	■ (dark navy)
	[d]	/bɛdr/	■ (medium blue)	[d]	/den/	■ (medium blue)	[d]	/wɪdaʊt̪/	■ (medium blue)
	[ɾ]	/gɛɾəp/	■ (light blue)		n/a		[ɾ]	/wɪɾɪm/	■ (light blue)
	[ø]	/wa:ø/	■ (very light blue)		n/a		[ø]	/wɪømi/	■ (very light blue)
	[h]	/sahrdɛi/	■ (teal)		n/a			n/a	
		n/a			n/a		[t]	/tri/	■ (bright blue)
	[t̪]	/wɒt̪r/	■ (cyan)		n/a			n/a	
Non-local/ Standard IE **Standard English**	[t̪]	/ʌat̪/	■ (brown)	[d̪]	/d̪ɪs/	■ (brown)	[t̪]	/maʊt̪/	■ (brown)
	[t]	/wɑnt/	■ (green)	[ð]	/brɪð/	■ (green)	[θ]	/θaŋks/	■ (green)

Bibliography

Alam, F. and Bramwell E., (2014), From Speech to Naming in a Scottish Pakistani Community: The Interplay between Language, Ethnicity and Identity in Lawson, R., *Sociolinguistics in Scotland*, Palgrave MacMillan, p.220-240.

Amador-Moreno, C., (2012), The Irish in Argentina: Irish English transported in Migge, B., and Ní Chiosán, M., (eds.) (2012), *New Perspectives in Irish English*, Varieties of English Around the World, Volume G44, John Benjamins Publishing Company.

Bailey, G. *et al.,* (1991), The apparent time construct in *Language Variation and Change,* Cambridge University Press, pp.241-264.

Barron, A., and Schneider, K., (2005) in Kallen, J., (2013), *Irish English Volume 2: The Republic of Ireland*, Dialects of English, volume 9, De Gruyter Mouton.

Bauman, R., (1974), Verbal Art in Performance in *American Anthropologist*, October 2009:290.

Bell, A., (1984), Language Style as Audience Design in *Language in Society* 13/2, Cambridge University Press, pp.145-204.

Bertz, S., (1987), Variation in Dublin English, Teanga 7: 35-53.

Bessell, N., and Mulhall, E., (2014), What's in an Accent? Perceptions of Young Adult Listeners in Cork and Kilkenny in JCSLS Vol. 21 (2014) IASLT Trinity College Dublin/University College Cork, pp.63-86.

Bliss, A., (1972) in Hickey, R., (2005a), Irish English in the context of previous research in Barron, A., and Schneider, K.P., *The Pragmatics of Irish English*, De Gruyter Mouton, p.19.

Bliss, A., (1972a) in Amador-Moreno, C., (2010), *An Introduction to Irish English*, Equinox Publishing Ltd. p.20.

Bourdieu, P., (1991), in Wardhaugh, R., (2008), (fifth edition) *An Introduction to Sociolinguistics*, Blackwell Publishing, p.205.

Britain, D., (2009), Supralocal Regional Dialect Levelling in Llamas, C., and Watt, D., (2009), *Language and Identities*, Edinburgh University Press.

Byrne, A., (1996) in Kallen, J., (2013), *Irish English, Volume 2: The Republic of Ireland*, *Dialect of English Volume 9,* De Gruyter Mouton, p.52.

Campbell-Kibler, K., (2006) Listener Perceptions of Sociolinguistic Variables: The Case of (ing), PhD Thesis Stanford University.

Cedergren, H., (1969/1987), in Kerswill, P., (2010), Sociolinguistic approaches to language change: phonology, White Rose Research Online, p.2.

Chambers, J., (2004), *Sociolinguistic Theory*, Blackwell Publishing.

Chevrot, P. *et al.* (2013), The acquisition of sociolinguistic variation: looking back and thinking ahead in *Linguistics* 51:2, De Gruyter, pp.255-284.

Clancy, B. and Vaughan, E., (2012) "It's lunacy now": A corpus-based pragmatic analysis of the use of 'now' in contemporary Irish English in Migge, B., and Ní Chiosán M., (eds.) *New Perspectives in Irish English*, John Benjamins Publishing Company, pp.224-245.

Clancy, B., (2015), in Hickey, R., (2016), (ed.) *Sociolinguistics in Ireland*, Palgrave MacMillan, p.7.

Clarke, S., (2017), Local vs. Supralocal: Language and Identity in Newfoundland in Montgomery, C. and Moore, E., *Language and a Sense of Place*, Cambridge University Press.

Clery, A., (1921), Accents: Dublin and Otherwise in *Studies: An Irish Quarterly Review*, Vol.10, No.40, Dec. 1921, pp.545-552.

Corrigan, K., (1993) and (2000) in Hickey, R., (2007), *Irish English: History and present-day forms*, Cambridge University Press p.94.

Corrigan, K., (1993) in Hickey, R., (2007a), Southern Irish English in Britain, D., (2007), *Language in the British Isles*, Cambridge University Press, p.147.

Corrigan, K., (1999), Language contact and language shift in County Armagh *Ulster Folklife* 39, pp.15-28.

Corrigan, K., (2003), in Kallen, J., (2013), *Irish English Volume 2: The Republic of Ireland*, Dialects of English, volume 9, De Gruyter Mouton.

Corrigan, K., (2007), Parametric Variation within a Socially Realistic Linguistics: Syntactic Variation and Change *in South Armagh English*, Blackwell Publishers.

Corrigan, K., (2010), *Irish English Volume 1: Northern Ireland*, Dialects of English, Edinburgh University Press.

Corrigan, K. *et al.* (2012) Is Dublin English 'Alive Alive Oh'? in Migge, B., and Ní Chiosán, M., (eds.) (2012), *New Perspectives in Irish English*, Varieties of English Around the World, Volume G44, John Benjamins Publishing Company, pp.1-28.

Darmody, M. *et al.* (2011), (eds.) *The Changing Faces of Ireland*, Rotterdam, Sense Publishers, p.xiii.

Diskin, C., (2013), Integration and Identity: Acquisition of Irish English by Polish and Chinese Migrants in Dublin, Ireland in Roberts, N. and Childs, C., (eds.), (2013) *Newcastle Working Papers in Linguistics* 19:1, Selected Papers from Sociolinguistics Summer School 4.

Dolan, T., ([1998] 2004), in Kallen, J., (1994), *Irish English Volume 2: The Republic of Ireland*, Dialects of English, volume 9, De Gruyter Mouton.

Eckert, P., (1988), Adolescent social structure and the spread of linguistic change in *Language in Society* 17/2, Cambridge University Press, pp.183-207.

Eckert, P., (1989), The whole woman: Sex and gender differences in variation in *Language Variation and Change 1*, Cambridge University Press, pp.245-267.

Eckert, P., (1997), Age as a sociolinguistic variable in Coulmas, F., (2000) (ed.) *The Handbook of Sociolinguistics*, Blackwell Publishers Ltd., pp.151-167.

Eckert, P., (2000), in Roberts, J. (1999) *Child Language Variation*, Blackwell Publishing, p.333-348.

Eckert, P., (2000a), *Linguistic Variation as Social Practice*, Blackwell Publishing, p.137.

Eckert, P., (2005), Variation, convention, and social meaning. Paper presented at the Annual Meeting of the Linguistic Society of America, Oakland, CA, 07.01.05.

Eckert, P., (2008), Variation and the indexical field, in *Journal of Sociolinguistics*, 12:4, pp.453-476.

Eckert, P., (2012), Three Waves of Variation Study: The Emergence of Meaning in the Study of Sociolinguistic Variation, *Annual Review of Anthropology*, pp.87-100.

Eckert, P., (2016), Third Wave Variationism in *Oxford Handbook Online*, DOI:10.1093/oxfordhb/9780199935345.013.27.

Eckert, P. and McConnell-Ginet, S., (1992), Communities of practice: Where language, gender, and power all live, in Hall, K. *et al.* (eds.), *Locating Power*, Proceedings of the 1992 Berkeley Women and Language Conference, p.96.

Eckert, P. and Wenger, E., (2005), What is the role of power in sociolinguistic variation? In *Journal of Sociolinguistics* 9/4, Blackwell Publishing, pp.582-589.

Edwards, J., (1977) in Lonergan, J., (2013), PhD thesis: *An Acoustic and Perceptual Study of Dublin English*, University College Dublin.

Field, A. *et al.* (2012), *Discovering Statistics Using R*. Sage publications.

Filppula, M., (1990), Substratum, superstratum, and the universals in the genesis of Hiberno-English in Kallen, J., (2013), *Irish English, Volume 2: The Republic of Ireland*, De Gruyter Mouton p.238.

Filppula, M., (1999), *The Grammar of Irish English: Language in Hibernian Style*, Routledge.

Filppula, M., (2012), Exploring grammatical differences between Irish and British English in Migge, B., and Ní Chiosán, M., (eds.) *New Perspectives in Irish English*, John Benjamins Publishing Company, pp.85-99.

Foulkes, P. & Hay, J., (2015). The Emergence of Sociophonetic Structure in *The Handbook of Language Emergence*, first edition, John Wiley & Sons Inc, p.297.

Foulkes, P. and Docherty G., (2006), The social life of phonetics and phonology in *Journal of Phonetics* 34, Elsevier Ltd. pp.409-438.

Foulkes, P. and Doherty, G., (Eds.) (1999) *Urban Voices. Accent Studies in the British Isles*, London, Arnold, p.12.

Foulkes, P. *et al.*, (2005), Phonological Variation in Child-Directed Speech, *Linguistic Society of America*, 81(1), pp.177-206.

Foulkes, *et al.* (2013), Sociophonetics, in Hardcastle, W. *et al.* (2013) (eds.) (second edition), *The Handbook of Phonetic Sciences*, Wiley-Blackwell.

Foulkes, P., (2010), Exploring social-indexical knowledge: A long past but a short history in *Journal of Laboratory Phonology* 1/1, Walter de Gruyter, pp.5-39.

Glynn I., *et al.* (2015), *The ~Re-Emergence of Emigration from Ireland: New Trends in an Old Story*, Migration Policy Institute, Ireland.

Hall, P., in Howley, P. and Clifford, B., (2009), The transformation of inner Dublin: exploring new residential populations within the inner city in *Irish Geography* 42:2, Routledge, pp.225-243.

Harris, J., (1984), English in the North of Ireland in Trudgill, P., (ed.) *Language in the British Isles*, Cambridge University Press, p.115-134.

Harris, J., (1993) in Migge, B., and Ní Chiosán, M., (2012), (eds.) *New Perspectives in Irish English*, John Benjamins Publishing Company, p.XI.

Hewlett, N. *et al.* (1999) in Foulkes, P. and Docherty G., (2006), The social life of phonetics and phonology in *Journal of Phonetics* 34, Elsevier Ltd. pp.409-438.

Hickey, R. (1999) Dublin English: current changes and their motivation in Foulkes, P. & Docherty, G. (eds.) *Urban Voices*, London, Routledge, pp.268/9.

Hickey, R., (1986), Length and frontness with low vowels in Irish English in *Studia Linguistica* 32:2, pp.143-156.

Hickey, R., (1995) & (1997) in Hickey, R., (2007a), Southern Irish English in Britain, D., (2007), *Language in the British Isles*, Cambridge University Press, p.147.

Hickey, R., (1997), (ed), *Focus on Ireland*, Varieties of English Around the World, Volume G21, John Benjamins Publishing Company.

Hickey, R., (1999), Dublin English: current changes and their motivation in Foulkes, P. and Doherty, G. (eds.) (1999) *Urban Voices. Accent Studies in the British Isles*, London, Arnold. pp.265-281.

Hickey, R., (2000), Dissociation as a form of language change in *European Journal of English Studies* 4:3 pp.303-315.

Hickey, R., (2002), Historical input and regional differentiation in *Festschrift for Manfred Görlach on his 65th birthday*, Heidelberg, pp.1-16.

Hickey, R., (2003), (ed.) *Motives for Language Change*, Cambridge University Press.

Hickey, R., (2003a), How and why supraregional varieties arise, in Dossena, M. and Jones, C., (eds.) (2003) *Insights into Late Modern English*, Frankfurt: Peter Lange, pp.351-373.

Hickey, R., (2003b), What's cool in Irish English? Linguistic change in contemporary Ireland in Tristram, H., (ed.) *Celtic Englishes III*, Heidelberg: Winter (2003), pp.357-373.

Hickey, R., (2004), The phonology of Irish English in Kortmann, B. *et al.* (eds.) (2004) *Handbook of varieties of English. Volume 1: Phonology*, Mouton de Gruyter, pp.68-97.

Hickey, R., (2004a), *A Sound Atlas of Irish English*, Walter de Gruyter, Berlin.

Hickey, R., (2005) *Dublin English: Evolution and change*, Varieties of English Around the World, Volume G35, John Benjamins Publishing Company.

Hickey, R., (2005a), Irish English in the context of previous research in Barron, A. and Schneider, K.P. (2005) (eds.), *The Pragmatics of Irish English*, De Gruyter Mouton, pp.17-44.

Hickey, R., (2007), *Irish English: History and present-day forms*, Cambridge University Press.

Hickey, R., (2007a), Southern Irish English in Britain, D., (2007), *Language in the British Isles*, Cambridge University Press, pp.135-151.

Hickey, R., (2007b), Dartspeak and Estuary English in Smith, U. *et al.*, (2007), (eds.) *Tracing English through time: explorations in language variation*, Vienna: Braumuller, pp.179-190.

Hickey, R., (2011), Supraregionalisation and Dissociation in Chambers, J. and Schilling, N., (2013), *The Handbook of Language Variation and Change*, (second edition), John Wiley & Sons, pp.537-554.

Hickey, R., (2012), Assessing the role of contact in the history of English in Nevalainen, T. & Traugott, E., (eds), 2012), *The Oxford Handbook of The History of English*, Oxford University Press, pp.485-496.

Hickey, R., (2012a) in O'Sullivan, J., (2013), Advanced Dublin English in Irish radio advertising in (2013), World in World Englishes, 32:3 pp.358-376.

Hickey, R., (2016), (ed.), *Sociolinguistics in Ireland*, Palgrave MacMillan.

Hogan, J., (1927), The English Language in Ireland, The Educational Company of Ireland, pp.62-77.

Howley, P. *et al.*, (2009) in Hall, P., in Howley, P. and Clifford, B., (2009), The transformation of inner Dublin: exploring new residential populations within the inner city in *Irish Geography* 42:2, Routledge.

Johnstone *et al*, (2006) in Montgomery, C. and Moore, E., *Language and a Sense of Place*, Cambridge University Press, p.235.

Kallen, J. and Devitt, S., (1993), in Kallen, J., (2013), *Irish English, Volume 2: The Republic of Ireland*, *Dialect of English Volume 9,* De Gruyter Mouton.

Kallen, J., (1997) (ed.), *Focus on Ireland,* Varieties of English Around the World, Volume G21, John Benjamins Publishing Company.

Kallen, J., (2009), Internal and external factors in phonological convergence: the case of English /t/ lenition, in Auer, P. *et al.* (2005), (eds.), *Dialect Change: Convergence and Divergence in European Languages*, Cambridge University Press, p.66.

Kallen, J., (2012), The English Language in Ireland: An Introduction in *International Journal of Language, Translation and Intercultural Communication* 1:1, pp.25-41.

Kallen, J. and Kirk, J., (2012), in Hickey, R., (2016), Language and Society in Contemporary Ireland, in *Sociolinguistics in Ireland*, Palgrave MacMillan, p.7.

Kallen, J., (2013), *Irish English, Volume 2: The Republic of Ireland*, *Dialect of English Volume 9,* De Gruyter Mouton.

Kerswill, P. (2010), Contact and New Varieties in Hickey, R., (ed) *The Handbook of Language Contact*, Wiley-Blackwell, Oxford, pp.230-251.

Kerswill, P. and Williams, A., (2000), Creating a new town koine: Children and language change in Milton Keynes in *Language in Society* 29, pp.65-115.

Kerswill, P., (1996), Children, adolescents, and language change in *Language Variation and Change* 8, Cambridge University Press.

Kerswill, P., (2004), Koineization and Accommodation, in Chambers, J., *et al.* (2005), (eds.), *The Handbook of Language Variation and Change,* Oxford, Blackwell.

Kerswill, P., (2002), Models of linguistic change and diffusion: new evidence from dialect levelling in British English, *Reading Working Papers in Linguistics 6*, PP.187-216.

Kerswill, P., (2003), Dialect Levelling and geographical diffusion in British English in Britian, D and Chesire, J., (2003) (eds.) *Social Dialectology.* Amsterdam, Benjamins, pp.223-243.

Kerswill, P., and Williams, A., (1999) Mobility versus Social Class in Dialect Levelling: Evidence from New and Old Towns in England in *Cuadernos de Filologia Inglesa* 8, pp.47-57.

Kingsmore, R., (1995) in Mathisen, A., (1999), Sandwell, West Midlands: ambiguous perspectives on gender patterns and models of change in Foulkes, P. and Doherty, G. (Eds.) (2014) *Urban Voices*. *Accent Studies in the British Isles*, London, Routledge, p.114.

Labov, W., (1963) The Social Motivation of a Sound Change, <i>WORD</i>, Routledge, pp.273-309. Downloaded from http://dx.doi.org/10.1080/00437956.1963.11659799 22.01.16.

Labov, W., (1966), The Social Stratification of (r) in New York City Department Stores, in Labov, W., (2006) *The Social Stratification of English in New York City*, (2nd edition), Cambridge University Press, pp.40-57.

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

Labov, W., (1994), *Principles of Linguistic Change, Volume 1: Internal Factors*, Wiley-Blackwell, Oxford.

Labov, W., (2001) *Principles of Linguistic Change*, Volume 2: *Social* Factors, Wiley-Blackwell, Oxford.

Labov, W., (2006) *The Social Stratification of English in New York City*, (2nd edition), Cambridge University Press.

Lass, R., (1990), Early mainland residues in southern Hiberno-English, *Irish University Review*, 20:1, pp.137-148.

Leith, D., (2003), *A Social History of English*, Routledge, New York, p.169.

Lonergan, J., (2013), PhD thesis: *An Acoustic and Perceptual Study of Dublin English*, University College Dublin.

Lunny, A., (1981) in Lonergan, J., (2013), PhD thesis: *An Acoustic and Perceptual Study of Dublin English*, University College Dublin.

Lynch, A., (2014) in O'Dwyer, F., (2015), Unpublished PhD thesis, chapter 3, Language in Ireland and Dublin Transfer.

Mathisen, A., (1999), Sandwell, West Midlands: ambiguous perspectives on gender patterns and models of change in Foulkes, P. and Doherty, G. (Eds.) (2014) *Urban Voices. Accent Studies in the British Isles*, London, Routledge, pp.107-123.

McCafferty, K. (1999), (London)Derry: between Ulster and local speech – class, ethnicity and language change in Foulkes, P. and Doherty, G. (Eds.) (2014) *Urban Voices. Accent Studies in the British Isles*, London, Routledge, pp.246-264.

McCafferty, K., and Amador-Moreno, C., (2017) in Migge, B. and Ní Chiosán, M., (eds.) (2012), *New Perspectives in Irish English*, Varieties of English Around the World, Volume G44, John Benjamins Publishing Company, pp.265-287.

McDermott, P., (2011), in Hickey, R., (2016), (ed.) *Sociolinguistics in Ireland*, Palgrave MacMillan, p.7.

McManus, R., (2002) in Lonergan, J., (2013), PhD thesis: *An Acoustic and Perceptual Study of Dublin English*, University College Dublin, p.90.

Meyerhoff, M., (2011), (second edition), *Introducing Sociolinguistics*, Routledge.

Migge, B., (2012) Irish English and Recent Immigrants to Ireland in Migge, B., and Ní Chiosán, M., (eds.) (2012), *New Perspectives in Irish English*, Varieties of English Around the World, Volume G44, John Benjamins Publishing Company, pp.311-326.

Migge, B., (2016), Linguistic Variation, Integration & Identity Construction in Contexts of Migration: An Assessment of Current Approaches. Trinity College Dublin, *Working Papers in Linguistics*, Vol. 1:1, (2016). Proceedings of the 6th Sociolinguistics Summer School 4-7th August 2015, Dublin.

Migge, B., and Ní Chiosán, M., (eds.) (2012), *New Perspectives in Irish English*, Varieties of English Around the World, Volume G44, John Benjamins Publishing Company.

Milroy, J. and Milroy, L., (1985), Linguistic change, social network and speaker innovation, Journal of *Linguistics* 21, (1985), pp.339-384.

Milroy, J., (1992), *Linguistic Variation and Change*, Blackwell Publishing.

Milroy, L. (1987), *Language and Social Networks*, (2nd edition), Basil Blackwell Ltd.

Milroy, L. and Milroy, J., (1977) in Bell, A., (1984), Language Style as Audience Design in *Language in Society* 13/2, Cambridge University Press, p.156.

Milroy, L., (2002), Introduction: Mobility, contact and language change – Working with contemporary speech communities, *Journal of Sociolinguistics*, 6:1, (2002), pp.3-15.

Montgomery, C. and Moore, E., (2017), (eds.) Introduction, 'Place' in Studies of Language Variation and Change in Montgomery, C. and Moore, E., *Language and a Sense of Place*, Cambridge University Press, p.9.

Moore, R., (2011), "If I Actually Talked Like That, I'd Pull a Gun on Myself": Accent, Avoidance, and Moral Panic in Irish English in *Anthropological Quarterly*, 84:1, The George Washington University Institute for Ethnographic Research, Winter (2011), pp.41-64.

Nestor, N. *et al*, (2012), Discourse 'like' and social identity – a case study of Poles in Ireland in Migge, B., and Ní Chiosán, M., (eds.) (2012), *New Perspectives in Irish English*, Varieties of English Around the World, Volume G44, John Benjamins Publishing Company, pp.327-353.

Ó Baoill, D., (1990) Language Contact in Ireland: The Irish Phonological Substratum in Irish English in Edmondson, F. *et al.* (eds), *Development and Diversity: Language Variation Across Time and Space.* Dallas: Summer Institute of Linguistics and University of Texas at Arlington, pp.147-172.

Ó hÚrdail, R., (1997) Confusion of Dentality and Alveolarity in Dialects of Hiberno-English in Kallen, J., (1997) *Focus on Ireland*, John Benjamins Publishing Company, pp.133-151.

O'Connor, J., (2008), The Changing Face of Dublin's Inner City: A Study Commissioned by the Dublin Inner City Partnership.

O'Donnell, R., (1998), Ireland's Economic Transformation: Industrial Policy, European Integration and Social Partnership in the Archive of European Integration, Paper 2. Available online at: http://aei.pitt.edu/27/ Accessed 9.2.17

O'Dwyer, F., (2015), A sociophonetic analysis of PRICE in a Dublin suburb, University College Dublin, LVC2015 poster.

O'Dwyer, F., (2015), Unpublished PhD thesis, chapter 3, Language in Ireland and Dublin Transfer.

O'Dwyer, F., (2016), Attribute mining and stance-taking in a Dublin sports club in Bochorishviti, I. *et al.* (eds.) *Proceedings of the 6th Sociolinguistic Summer School*, 4th-7th August 2016, Working Papers in Linguistics Vol. 1, Trinity College Dublin, pp.103-115.

O'Sullivan, J., (2013), Advanced Dublin English in Irish radio advertising in *World Englishes*, 32:3, John Wiley and Sons Ltd., pp358-376.

Ogden, R., (2012), *An Introduction to English Phonetics*, Edinburgh University Press.

Ozanne-Rivierrre, F., (1994) in Sankoff, G., (2001) Linguistic Outcomes of Language Contact in Trudgill, P. *et al.* (eds.) *Handbook of Sociolingusitics*, Basil Blackwell, Oxford, pp.638-668.

Pandeli, H. *et al.* (1997), Problems of phonetic transcription: The case of the Hiberno-English slit-t in *Journal of the International Phonetic Association* 27, pp.65-75.

Pardy, A., (1987), in Kallen, J., (2013), *Irish English, Volume 2: The Republic of Ireland*, *Dialect of English Volume 9,* De Gruyter Mouton.

Peters, A., (2012), Linguistic Change in Galway City English: A Variationist Sociolinguistic Study of (th) and (dh) in Migge, B., and Ní Chiosán, M., (eds.) *New Perspectives in Irish English*, John Benjamins Publishing Company, pp.29-45.

Pritchard, R., (2004), Protestants and the Irish Language: Historical Heritage and Current Attitudes in Northern Ireland in *Journal of Multilingual and Multicultural Development*, (2004), Vol.25.

Reid, E., (1978) cited in Mayor, B., (2007), English in the repertoire in Mercer, N. *et al.* (eds.) *Learning English*, Routledge/The Open University, p.61.

Rieder, M., (2013) in O'Dwyer, F., (2015), Unpublished PhD thesis, chapter 3, Language in Ireland and Dublin Transfer.

Roberts, J., (1994) Acquisition of Variable Rules: (-t,d) Deletion and (ing) Production in Preschool Children, PhD thesis, University of Pennsylvania.

Sankoff, G. (2005), Cross-sectional and longitudinal studies in sociolinguistics in Bayley, R. *et al. (eds.) (2013) The Oxford Handbook of Sociolinguistics*, Oxford University Press, pp.261-279.

Sankoff, G. and Blondeau, H., (2007), Language Change Across the Lifespan: /r/ in Montreal French, *Language* 83, pp.560-588.

Sankoff, G., (2004), Adolescents, young adults and the critical period: two case studies from "Seven Up" in Fought, C., (ed.) *Sociolinguistic Variation*, Oxford University Press, pp.121-139.

Sankoff, G., (2005), Cross-Sectional and Longitudinal Studies in Sociolinguistics in Dittmar, N., *et al.* in *Handbook of Sociolinguistics*, Oxford, Blackwell.

Sankoff, G., (2006), Age: apparent time and real time in *Elsevier Encyclopedia of Language and Linguistics*, Second edition, Article number: LAL1: 01479.

Sankoff, G., *et al*, (1997), Variation in the use of discourse markers in a language contact situation in *Language Variation and Change* 9, pp.191-218.

Sell, K., (2009), Current Vowel Changes in Irish English; Analysing Galwegian English in *Linguistic Insights Studies in Language and Communication* 103, pp.183-204.

Sell, K., (2012), [ˈfiləm] and [ˈfarəm]? Sociolinguistic findings on schwa epenthesis in Galway English in Migge, B., and Ní Chiosán, M., (eds.) *New Perspectives in Irish English*, John Benjamins Publishing Company, pp.47-65.

Share, B., ([1997] 2008) in Kallen, J., (1994), *Irish English Volume 2: The Republic of Ireland*, Dialects of English, volume 9, De Gruyter Mouton.

Sheridan, E., (2001) in Lonergan, J., (2013), PhD thesis: *An Acoustic and Perceptual Study of Dublin English*, University College Dublin, p.83.

Shields, K., (2016), Translation and Society in Ireland, 1900-Present in Hickey, R., (2016), (ed.) *Sociolinguistics in Ireland*, Palgrave MacMillan, pp. 344-364.

Smith, J. and Durham, M., (2012), Bidialectalism or Dialect Death? Explaining Generational Change in the Shetland Islands, Scotland in *American Speech*, March 2012, pp.1-36.

Smith, J. and Holmes-Elliott, S. (2017), the unstoppable glottal: tracking rapid change in an iconic British variable, in *English Language and Linguistics*, Cambridge University Press, pp.1-33.

Smith, J. *et al*, (2007), "Mam, my trousers is fa'in doon!": Community, caregiver, and child in the acquisition of variation in a Scottish dialect in *Language Variation and Change 19*, Cambridge University Press, pp.63-99.

Stuart-Smith J. *et al.*, (2007), 'Talkin' Jockney'? Variation and change in Glaswegian accent in *Journal of Sociolinguistics* 11:2, Blackwell Publishing Ltd., pp.221-260.

Stuart-Smith, J. and Haddican, B. (2009), Sociolinguistics in the British Isles in Ball, M.J. (ed.) *Routledge Handbook of Sociolinguistics Around the World*, Routledge, Abingdon, UK.

Stuart-Smith, J., (1999) Glasgow: accent and voice quality in *Urban Voices. Accent Studies in the British Isles*, London, Arnold, p.204.

Stuart-Smith, J., (2007), Empirical evidence for gendered speech production: /s/ in Glaswegian in Foulkes, P., (2010), Exploring social-indexical knowledge: A long past but a short history in *Journal of Laboratory Phonology* 1:1, Walter de Gruyter, p.13.

Stuart-Smith, J., *et al.* (2017) Changing Sounds in a Changing City, An Acoustic Phonetic Investigation of Real-Time Change over a Century of Glaswegian in Montgomery, C., and Moore, E., (2017) *Language and a Sense of Place*, Cambridge University Press.

Sullivan, J., (2012), The why of Belfast rises in Migge, B., and Ní Chiosán, M., (eds.) *New Perspectives in Irish English*, John Benjamins Publishing Company, pp.67-83.

Tagliamonte, S., (2012), *Variationist Sociolinguistics, Change, Observation, Interpretation*, Wiley-Blackwell, England.

Trudgill, P., (1968/1983) in Sankoff, G., (2006), Age: apparent time and real time in *Elsevier Encyclopedia of Language and Linguistics*, Second edition, Article number: LAL1: 01479.

Trudgill, P., (1974) in Nardy *et al.*, (2013), The acquisition of sociolinguistic variation: looking back and thinking ahead, *Linguistics*, De Gruyter, 51:2.

Trudgill, P., (1986), *Dialects and Contact*, Oxford, Basil Blackwell Ltd.

Trudgill, P., (1999), Norwich: endogenous and exogenous linguistic change in Foulkes, P. and Doherty, G. (Eds.) (2014) *Urban Voices. Accent Studies in the British Isles*, London, Routledge, pp.124-140.

Trudgill, P., (2000), (4th edition), *Sociolinguistics: An Introduction to Language and Society*, Penguin Books, p.73.

Turell, T., (2003), Apparent and real time in studies of linguistic change and variation in *Revista de Sociolinguistica*, Autumn pp.51-60.

Trudgill, P., (2004), in Kerswill, P. (2010), Contact and New Varieties in Hickey, R., (ed) *The Handbook of Language Contact*, Wiley-Blackwell, Oxford, pp.230-251.

Vaughan, E. and Clancy, B., (2015), Sociolinguistic Information and Irish English Corpora in Hickey, R., (2016), (ed.) *Sociolinguistics in Ireland*, Palgrave MacMillan, pp.365-388.

Wardhaugh, R., (2008), (fifth edition) *An Introduction to Sociolinguistics*, Blackwell Publishing.

Waters, (1997) in Hickey, R., (2005) *Dublin English: Evolution and Change*, p. 47, Benjamins Publishing Company.

Weinreich *et al.*, (1968) cited in Hickey, R., (2011), Supraregionalisation and Dissociation in Chambers, J. and Schilling, N., (2013), *The Handbook of Language Variation and Change*, (second edition), John Wiley & Sons, pp.537-554.

Wells, J., (1982), *Accents of English 2: The British Isles*, Cambridge University Press, pp.417-452.

Williams, A. and Kerswill, P. (1999) Dialect levelling: change and continuity in Milton Keynes, Reading and Hull in Foulkes, P. and Doherty, G. (Eds.) (1999) *Urban Voices. Accent Studies in the British Isles*, London, Arnold.

Online resources

Awesome Stories: accessed 1.5.16
http://www.awesomestories.com/asset/view/Hilarious-Story-about-St.-Patrick

Brown Bag Films: accessed 13.1.17   http://www.brownbagfilms.com/about

Central Statistics Office (2016) Census of Ireland: https://www.cso.ie/en/census/

Census 2011: http://gaeilge2013.ie/en/about/irish-language/facts-figures/

http://census.cso.ie/sapmap2011/Results.aspx?Geog_Type=CTY&Geog_Code=02&CTY=02#T2_220   accessed 9.2.17

European Union website. https://europa.eu/european-union/index_en

Hickey, R., Homepage: https://www.uni-due.de/~lan300/HICKEY.htm

Hickey, R., IPA font, X_PhonArial: https://www.uni-due.de/ELE

Hickey, R., Irish English Resource Centre: https://www.uni-due.de/IERC/

Hickey, R., Variation and Change in Dublin English: https://www.uni-due.de/VCDE/

Industrial Development Authority (IDA): https://www.idaireland.com

https://www.irishtimes.com/news/time-to-train-the-voice-1.128069
Article dated 24.01.98. Accessed 06.07.18.

Joyce, P., (1910), *English As We Speak It In Ireland.*
http://www.gutenberg.org/files/34251/34251-h/34251-h.htm

Statute of Kilkenny (1366) in Hull, E., (1931) *A History of Ireland and her People*. Available online at http://www.libraryireland.com/HullHistory/Contents.php accessed 9.2.17

Stuart-Smith, J. *et al.* http://soundsofthecity.arts.gla.ac.uk/outputs.html