These students divvent sound like they're from the North East! The effects of geographical mobility on north eastern university students' linguistic choices.

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Linguistics, 2021

Abstract: This dissertation investigates morphosyntactic and phonological choices made by young adults from the North East, observing whether these are affected by geographical mobility away from the region for university purposes. This study is motivated by previous studies investigating negation, modality and T-to-R in the North East dialect, and an interest in examining these variables from a new perspective. It is also motivated by an interest in examining the effects of geographical mobility for university purposes on different levels of the grammar, and in tackling the topics of age and geographical mobility. Using a combination of corpus-based and questionnaire-based sociolinguistic research methods, it aims to answer the question: 'Does undergoing geographical mobility for university purposes affect young adults' morphosyntactic and phonological choices?'. The main, questionnaire-based study asked sixty, third year university students from the North East to make acceptability judgements of four linguistic variables: negated DO, *must*, *mustn't*, and T-to-R.

Overall, this study found that young adults who had experienced geographical mobility away from the North East for university purposes were more accepting of non-standard and standard morphosyntactic variants than those who had not. Comparatively, young adults who remained within the region to attend university were more accepting of T-to-R. Furthermore, results showed that examining different levels of speakers' grammars, as well as combining indirect and direct acceptability judgement testing methods, was beneficial.

Further research involving a panel-study, a larger and more controlled sample, spoken data collection, the examination of other social predictors, and an investigation into participants' identity and social networks is needed.

Keywords: sociolinguistics, morphosyntax, phonology, geographical mobility, age, North East English, DECTE.

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Acknowledgements:

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Chapter One

Introduction

This dissertation examines the effects of geographical mobility for university purposes on the linguistic choices made by young adults from the North East. The North East is defined as the region of England which covers the counties of Northumberland, Tyne and Wear, and County Durham, as well as the area of North Yorkshire that spans Stockton-on-Tees, Redcar and Cleveland, and Middlesbrough (Pearce, 2009).

The present study uses a small-scale, corpus-based investigation, in combination with a larger-scale, questionnaire-based study. The questionnaire-based study uses data collected from a questionnaire involving sixty, third year university students from the North East.

1.1. Aims

This dissertation's primary aim is to observe whether undergoing geographical mobility away from the North East for university purposes affects the linguistic choices made by young adults. A secondary aim is to observe these effects on different levels of the grammar: the morphosyntactic and the phonological. Another secondary aim is to observe whether these young adults are more likely to react negatively to non-standard variants when tested directly than they are when tested indirectly.

1.2. Linguistic variables

This study investigates the morphosyntactic variables, negated DO, the modal verb MUST, and negative question structures, and a phonological variable: T-to-R. These are defined in Chapter Two.

Negated DO was chosen due its distinctive, localised variants that exist only within the North East dialect. Similarly, negative question structures were chosen due to the 'complex', distinctive system of structuring negative questions which exists in the North East dialect (Beal, 2010:36). Selecting variables which have distinctive, north eastern variants, where possible, is important, because they do not exist in other regions. Consequently, if a participant has undergone geographical mobility away from the North East for university purposes, and they show more acceptance of standard variants than they do of the local, non-standard variants, this could imply deviation from North East negation patterns.

Moreover, this study investigates a modal variable due to the unique, north eastern 'system of modal verbs', which is different from that of Standard English and other regional dialects (Beal, 2008:386). The verb MUST was chosen because in the North East, MUST is only used with an epistemic 'meaning of conclusion', and not with the standard, root, 'obligation meanin[g]' (Beal, 2008:387). Consequently, if participants who have undergone geographical mobility away from the region show more acceptance of the root meaning than they do of the epistemic meaning, this could imply deviation from North East modality norms.

Furthermore, T-to-R was chosen as the phonological variable because it is 'well-attested' in Northern Englishes, particularly in Tyneside English (Buchstaller *et al*., 2013:91). Moreover, T-to-R has been deemed 'pan-northern' (Honeybone, 2006:7). Therefore, if participants who have undergone geographical mobility are less accepting of this variable than those who have not, this could imply that geographical mobility has caused deviation from north eastern phonological trends.

1.3. Motivations

Firstly, this study is motivated by an interest in investigating the North East dialect from a new perspective. The North East dialect was chosen due to its status as a 'distinctive',

regional dialect (Beal, 2010:49), making it an interesting one on which to base this study. The present study brings a new line of interest, in observing the durability of the North East dialect amongst young adults, some of whom have undergone geographic mobility away from the region for university purposes. With this new perspective, this study aims to contribute to the field of research surrounding this already well-researched dialect.

Secondly, this study is motivated by previous studies investigating negation, modality, and T-to-R in the North East dialect, and an interest in investigating these previously researched linguistic variables in a new way.

Thirdly, this study is motivated by Buchstaller *et al*. (2013), a study which investigated the usage of both a morphosyntactic and a phonological variable using questionnaire-based methods. The present study aims to expand on this precedent by further examining different levels of the grammar: the morphosyntactic and the phonological. In examining two levels of speakers' grammars, this study will be able to learn more about speakers' linguistic choices.

Finally, this study is motivated by an interest in tackling important topics in sociolinguistics and observing these in a new way. It is particularly interested in tackling the topic of geographical mobility, one of the lesser-researched social predictors (Beaman, 2020). Moreover, it is interested in tackling the topic of age, observing the linguistic choices made by young adults.

1.4. Structure and overall findings

This dissertation has four main chapters. Chapter Two provides background information regarding the linguistic variables, and the social predictors of geographical mobility and age, and presents the research question and hypotheses. Chapter Three presents the methodology. Chapter Four presents the results of the questionnaire. The final section discusses the results, the overall efficacy of the present study, and makes suggestions for further study.

Overall, this study finds that geographical mobility appears to affect speakers' phonological choices. However, speakers who experienced geographical mobility away from the North East for university purposes were more accepting of both non-standard and standard morphosyntactic variants than those who did not undergo such mobility. Suggestions are

made as to why this is the case, and how this finding could be investigated by a future study. Moreover, differences were observed across different levels of the grammar, and across indirect vs. direct acceptability judgement testing, which supports the use of these methods in sociolinguistic research.

Chapter Two

Background

This chapter provides background information regarding the linguistic variables, and the social predictors of geographical mobility and age. It also presents the research question and hypotheses.

2.1. Morphosyntactic variables

Regarding morphosyntax, this study primarily observes negated DO and MUST[1]. It also briefly investigates negative question structures.

Morphosyntax is the linguistic domain encompassing the grammatical levels which 'underlie the processes of word formation and sentence building' (Davydova, 2013:150).

Whilst there are morphosyntactic similarities across dialects of Northern Englishes, the morphosyntax of the North East dialect demonstrates differences from other dialects (Beal *et al*., 2012).

2.1.1. Negation variables

One area of morphosyntax which is of interest to the present study is negation.

The North East dialect demonstrates a non-standard, 'complex pattern' of negative question structures (Beal, 2010:36). It uses a range of non-standard features, such as multiple negation, and a 'complex system of interrogative tags', to formulate negative questions (Beal & Corrigan, 2005:152). Moreover, the structure of north eastern negative questions depends on whether the speaker seeks information, confirmation of a positive, or confirmation of a negative (Beal, 2010).

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[1] Syntax trees illustrating the variables are provided in section 3.3.4.1.

This system is distinct from that of Standard English. For example, in Tyneside English, a typical negative question structure used to seek information is '[a] negative clause followed by **auxiliary + subject + not**' (Beal & Corrigan, 2005:152). This is illustrated in (1a). Comparatively, when seeking information in Standard English, the 'typical' structure used is 'auxiliary + n't + subject' (Tagliamonte & Smith, 2002:259), illustrated in (1b).

(1)

      a. '*She can't come, can she not?*' (McDonald & Beal, 1987, cited in Beal, 2010:36).

      b. '**Haven't** you got yourself a girlfriend yet?' (Tagliamonte & Smith, 2002:259).

Furthermore, this study's primary negation variable is negated DO. The North East dialect has its own localised variants of negated DO, which are not found in other dialects (Beal *et al.*, 2012). Within the North East, further variation has been identified; Beal *et al.* (2012:63) state that the Tyneside variant is '*divvent/divn't*', illustrated in (2a), whereas the localised Sunderland (Wearside) variant is '*dinnet*', illustrated in (2b).

(2)

      a. 'I divn't know who you are' (DECTE, 2012).

      b. '*I dinnet like him*' (Burbano-Elizondo, 2006:126).

Comparatively, in Standard English, DO is negated using the structure DO + *not* or DO + *n't*, producing the variants *doesn't* and *don't* (*Cambridge Dictionary*, 2021). An example is shown in (3).

(3) 'They don't go to school on Wednesday afternoons' (*Cambridge Dictionary*, 2021).

2.1.2. Modal variables

The other area of morphosyntax which is of interest to this study is modality.

In English, there are two main types of modality. Like Coates (1995), this essay defines these as *epistemic modality* and non-epistemic modality, termed *root*

modality. Epistemic modality expresses 'the probability, possibility or truth of a proposition' (Corrigan, 2000:31).

Non-epistemic modality has previously been termed deontic modality (Nordlinger & Traugott, 1997). However, scholars have suggested that *deontic* is an 'imperfect' term for describing the 'linguistic categories' encountered across languages and in 'language change' (Bybee & Fleischman, 1995:5). Consequently, alternative terms have been coined to describe non-epistemic modality, one of which is *root modality*. Root modality is modality which carries meanings such as 'permission and obligation', and bears some similarities to epistemic modality, in that it can take certain 'possibility and necessity' meanings (Coates, 1995:55).

Despite some overlap across the two definitions, any 'polysemy' is deemed 'unproblematic', and 'the root/epistemic distinction remains distinct' (Coates, 1995:55). This distinction is demonstrated in example (4) below, whereby (4a) and (4b) have root meaning, and (4c) has epistemic meaning (Coates, 1995:55).

(4)

    a. '*You must finish this before dinner*' (Coates, 1995:56).
    b. '*All students must obtain the consent of the Dean*' (Coates, 1995:56).
    c. '*I must have a temperature*' (Coates, 1995:56).

This study examines the modal verb, MUST. MUST can take either non-standard, epistemic meaning or standard, root meaning (Van Hattum, 2012). In Standard English, MUST is used with root meaning, whereas in the North East dialect, it is 'only used' with a 'conclusion' meaning; thus, it takes epistemic meaning (Beal, 2008:387).

Moreover, in Standard English, *mustn't* can only take obligation, root meaning (Beal, 2008). This is because, in Standard English, there is no form which expresses 'negative epistemic necessity' (Van Hattum, 2012:108). However, epistemic *mustn't* does exist in 'some' English dialects (Van Hattum, 2012:108), such as the North East dialect.

Consequently, root *mustn't* is the standard variant, and epistemic *mustn't* is the non-standard variant. The difference between the two variants is highlighted in (5), where (5a) illustrates root *mustn't*, whereas (5b) illustrates epistemic *mustn't* (Corrigan, 2000).

(5)

    a. '*You mustn't get on without a ticket*' (Corrigan, 2000:31)

    b. '*The train mustn't have gone yet as the station is crowded*' (Corrigan, 2000:31)

2.2. Phonological variable

The present investigation also involves a sociophonetic study, which examines variation in participants' acceptance of T-to-R. Sociophonetics is the linguistic domain which combines the studies of sociolinguistics and phonetics (Niedzielski & Preston, 2010).

T-to-R is the non-standard process by which 'underlying /t/' is 'realised as a rhotic' in some regional Englishes (Buchstaller *et al*., 2013:89). This process is illustrated in (6), whereby (6a) shows a sentence before the underlying /t/ in *cat* has undergone T-to-R, and (6b) shows this sentence post-T-to-R:

(6)

    a. 'Give that cat a bowl of milk' (Buchstaller *et al*., 2013:12).

    b. '*Give that carra bowl of milk*' (Buchstaller *et al*., 2013:12).

Previous research shows that T-to-R is conditioned phonologically and lexically (Broadbent, 2008; Buchstaller *et al*., 2013; Clark & Watson, 2011). T-to-R only occurs in specific words, due to word-internal restrictions and 'lexical conditioning in its crosslexical environment' (Buchstaller *et al*., 2013:89). Therefore, T-to-R is not a rule which can be applied 'blindly' to all phonologically similar words (Clark & Watson, 2011:523).

Moreover, Honeybone (2006:7) deems T-to-R a 'pan-northern' variable, suggesting that it is present in all northern English accents. Whilst its presence in every northern accent has yet to be proven with empirical evidence, T-to-R has been documented in selected northern accents, such as West Yorkshire English (see Broadbent, 2008),

Tyneside English (see Buchstaller *et al.*, 2013; Carr, 1991, Docherty *et al.*, 1997; Honeybone, 2006), and Liverpool English (see Clark & Watson, 2011).

Of particular interest are previous studies of T-to-R in the North East dialect. Thus, Tyneside English findings inform the present study.

Buchstaller *et al.* (2013) investigated the presence of T-to-R within two dialects: Hawick Scots and Tyneside English. The results for Tyneside English are summarised below.

Overall, Buchstaller *et al.* (2013:35) found that T-to-R occurred 'robustly in intervocalic position, across a word boundary'. Furthermore, results indicated that T-to-R was more likely to occur in word-final position than it was to occur in word-internal position, and that it was 'least likely' to occur 'across a word-internal morpheme boundary' (Buchstaller *et al.*, 2013:35). Moreover, results showed that T-to-R was more likely to occur when the vowel preceding underlying /t/ was 'short/lax/' than when it was 'long/tense' (Buchstaller *et al.*, 2013:35). More details regarding the study's methodology and its results are provided in sections 3.3.5 and 5.2.2.

2.3. Geographical mobility

This study's primary social predictor is geographical mobility: 'the capacity or facility of individuals to move from one geographic region to another' (*APA Dictionary of Psychology*, 2021).

This study is informed by previous studies of geographical mobility effects on speakers' linguistic choices. Such studies found that dialect contact due to geographical mobility causes speakers to adapt their 'native dialect', by retaining certain aspects of it (Bowie, 2000:1), whilst also 'adopt[ing] the features' of the new community's dialect (Saidi, 2019:1).

One such study is Bowie (2000), which investigated whether adult migrants who had undergone geographical mobility away from their hometown adapted their linguistic usage to accommodate their new speech community. This study involved the observation of two groups of adult speakers (Bowie, 2000). Both groups comprised native speakers of the same local dialect, who grew up in the same town, but one group

had lived there for 'their entire lives', whereas the other 'moved away' from it in adulthood (Bowie, 2000:v). Those who moved away from the town had lived away from it for between two and fourteen years (Bowie, 2000). Bowie (2000:v-vi) found that 'constant exposure' to a new, second dialect led speakers who moved away from their hometown to change their 'linguistic production and perception'.

Another such study is Evans and Iverson's (2007:3814), which examined how geographical mobility for university purposes affected students' phonologies. Evans and Iverson (2007:3814) observed the 'vowel production and perception' of a group of university students from northern England across a period of two years, from starting university to the end of their second year. They found that these speakers, who were at a 'late stage in their language development, early adulthood', demonstrated accent change within this short period (Evans & Iverson, 2007:3814).

Bowie (2000) and Evans and Iverson (2007) have conducted research which is invaluable to the present study. However, these studies only observed phonological variables, whereas the present study studies both morphosyntactic and phonological variables. Consequently, this study aims to further contribute to this interesting and expanding field of study.

2.3.1. Geographical relocation away from the North East

The university students who participated in the present study were from the North East. Scholars acknowledge that the North East is a working-class region; the terms 'Northern' and 'working class' have traditionally been treated as synonymous (Tomaney, 2010:87). Consequently, it can be hypothesised that participants were raised in a working-class, 'traditional' community (Foulkes & Docherty, 2007:54). Such communities have previously demonstrated 'strong, tight-knit' social networks, which are said to 'promote the maintenance of local linguistic features' (Foulkes & Docherty, 2007:54).

Consequently, it is expected that those students who remained in the region to attend university will remain within local, strong, social networks. If this is the case, it is expected that they would retain local linguistic variants (Foulkes & Docherty, 2007:54). Comparatively, those who moved away from the region,

whilst expected to maintain links to their home communities, are distanced from them, and are thus expected to be more predisposed to change.

The students who relocated away from the region moved to the following regions: the East Midlands, the West Midlands, the North West, Yorkshire and the Humber, and the East (Bedfordshire and East Anglia). Geographical mobility to these regions is expected to have linguistic implications.

One reason for this is that north eastern morphosyntax is unique compared with that of other regional Englishes and Standard English. Regarding negated DO, the north eastern variants, *divvent* and *dinnet*, are highly localised, and are not present in other dialects across England (Beal *et al*., 2012). Therefore, we would instead expect to see Standard English variants, *don't* and *doesn't*, used in the other regions.

Regarding MUST, the north eastern modal system is said to be unlike those elsewhere in England (Beal, 2008). Previous research shows that there is a 'North-South' gradient, whereby in the North East, MUST takes epistemic meaning, in the 'middle North', MUST can take epistemic and root meanings, and in the South and Standard English, MUST takes root meaning, where epistemic meaning is forbidden with *mustn't* (Beal, 2008:387). Moreover, the North East is one of the few regions where *mustn't* is used with epistemic, conclusion meaning (Beal, 2010).

T-to-R is said to be a 'pan-northern' variable (Honeybone, 2006:7). Consequently, one could assume its presence in regions north of the North-South dividing line. Therefore, speakers who moved to the North West and Yorkshire and the Humber may also encounter T-to-R in their new speech community. However, the other regions are not expected to exhibit this northern variable (see Honeybone, 2006).

Some of the regions are located above the North-South dividing line, whereas others are located below it. Consequently, there may be a lack of trend amongst students who moved away from the North East for *must* and T-to-R because these variables demonstrate a linguistic North-South divide, therefore they could be found elsewhere in the North. However, due to resource and COVID-19 constraints (see Chapter Five), this possibility could not be avoided.

2.4. Age

Another social predictor relevant to this study is age. Sociolinguists investigate age as a social predictor by examining language change, using two major types of study: apparent-time studies and real-time studies (Tagliamonte & D'Arcy, 2009).

Apparent-time studies are based on the apparent-time hypothesis, which states that speakers do not change their linguistic behaviours after their grammars have stabilised post-adolescence (Chambers, 2013). These studies involve comparing a group of speakers at one point in time, using any observed, 'generational differences' to make assumptions about linguistic trends that may have occurred 'in the (recent) past' (Tagliamonte & D'Arcy, 2009:61).

Real-time studies examine 'ongoing' and recent language change in speech communities by comparing 'language at two points in time' (Le Blanc, 2010:154). They challenge the apparent-time hypothesis by investigating language change which occurs post-adolescence, after the suggested stabilisation of speakers' grammars (Tagliamonte & D'Arcy, 2009:61).

There are two types of real-time study. The first is the panel study, which involves testing the same group of speakers 'at different points in time' (Beaman, 2020:4). The second is the trend study, which involves testing a group of speakers at one point of time, and then testing a new group of different speakers, with very similar demographic characteristics to the first group, at a later point in time (Beaman, 2020). Such real-time studies are used to investigate two types of language change across the lifespan: lifespan change and retrograde change (Beaman, 2020). Lifespan change is language change whereby individuals use language to align themselves with community trends (Beaman, 2020). Comparatively, retrograde change is the type of change whereby individuals make linguistic choices which differentiate them from community trends (Beaman, 2020). Language change can be caused by various internal and external factors, one of which is geographical mobility (Barker, 2016).

The present study observes potential language change across a small part of the lifespan- just over two years. It aims to uncover whether language change occurs at this late stage of speakers' development, post-adolescence (see Evans & Iverson, 2007). If

such change is observed, the study aims to investigate whether the young adults who attend university away from the North East follow home community trends, or whether they demonstrate retrograde change from these home community trends, instead showing lifespan change by adapting their linguistic usage to their new, university community.

Previous studies of specific age groups further inform the present study. Such studies have demonstrated that different age groups tend to use higher quantities of standard or non-standard features. The speakers observed by the present study are final year university students, aged 20-22 years old. Consequently, previous findings regarding speakers of around this age range inform this study.

The participants are young, having only just entered adulthood. Thus, findings regarding slightly younger, adolescent speakers inform the present study. The adolescence life stage is considered 'the time when linguistic change from below is advanced' (Eckert, 2017:163). Previous studies show that young, adolescent speakers use 'high rates' of non-standard features, due to their being 'relatively free of responsibilities' and workplace 'pressures' (Wagner, 2012:375).

Previous studies of linguistic usage in adulthood also inform the present study, as the participants are young adults. Such studies show that adult speakers are 'more conservative' in their linguistic choices than younger speakers, due to workplace pressures to use 'standard language' (Eckert, 2017:164).

These previous findings demonstrate that there are clear trends attributed to these age groups. However, this study's participants present a unique age group. They are young adults, and whilst they are no longer adolescents, they present similarities to adolescents by being free of the workplace 'pressures' which come with adulthood (Wagner, 2012:375). Therefore, they do not fit neatly into either age group. Hence, it will be interesting to observe whether they find standard or non-standard variants more acceptable.

One final aspect of age which is of interest is plasticity. Previous studies show that plasticity declines with age (Sankoff, 2018). However, there is evidence that speakers who experience 'social pressures' such as 'geographical…mobility' can defy this decline in plasticity to accommodate their new speech community (Sankoff, 2018:299). Consequently, the participants who underwent geographical mobility could

demonstrate differences in linguistic behaviour compared to those who did not undergo such mobility.

2.5.   Research question and hypotheses

Informed by the literature, this study aims to answer the question: 'Does undergoing geographical mobility for university purposes affect young adults' morphosyntactic and phonological choices?'

Hypothesis one postulates that there will be a clearer trend for T-to-R than for the morphosyntactic variables; speakers tend to be more consciously aware of their phonological usage, whereas syntactic processes are 'far beyond' their 'level of actual or even potential consciousness' (Chomsky, 1965:8). Hence, they may feel more able to judge the acceptability of T-to-R than they are to judge the acceptability of a syntactic variant.

Hypothesis two states that the young adults who remained within the North East will be more accepting of non-standard, north eastern variants than speakers who moved away from it; the former are expected to remain within north eastern, 'strong, tight-knit' social networks, which are said to 'promote the maintenance of local linguistic features' (Foulkes & Docherty, 2007:55). Consequently, they are expected to favour local variants more than speakers who moved away from the region and distanced themselves from their home networks.

Hypothesis three postulates that the young adults who underwent geographical mobility for university purposes will be more accepting of standard variants; previous studies have shown that adult speakers who moved away from their hometown adapted their native dialect to accommodate their new community (Bowie, 2000; Evans & Iverson, 2007). Thus, these speakers are expected to do the same, deeming more widely understood, standard variants more acceptable than participants who remained in the North East.

Hypothesis four postulates that all participants will be more accepting of non-standard variants when tested indirectly; indirect testing methods are less pressurising than direct methods; thus, participants can 'distance themselves from' non-standard variants, and any associated stigma (Buchstaller *et al*., 2013:95).

Chapter Three

Methodology

The methodology combines corpus- and questionnaire-based research methods, due to the consensus that this combination leads to prosperous data collection, which is especially the case when the data involved is morphosyntactic (Beal *et al*., 2012).

The two methods have individual advantages and disadvantages. Thus, in combining the two, the best possible outcomes may be achieved.

Non-standard, 'regional' morphosyntactic variants may be 'restricted to specific pragmatic contexts'; hence, they can be 'elusive' within spoken data, and thus within corpora (Beal, 2010:27). Consequently, research methods involving the collection of spoken data, such as the sociolinguistic interview, are insufficient methods of collecting socio-syntactic data (Buchstaller & Corrigan, 2011a). This is especially the case when the desired forms are 'stigmatised': participants will be deterred from using them in a formal interview setting (Buchstaller & Corrigan, 2011a:30). Moreover, spoken data 'do not always provide a high enough concentration' of the phenomena under investigation; the researcher cannot control if, and how many times, a participant will use a particular variant in spontaneous speech (Cornips & Poletto, 2005:941).

However, a questionnaire testing acceptability judgements of morphosyntactic variables allows them to be appropriately contextualised however the researcher deems fit, thus any non-standard variant may be tested (Beal, 2010).

Nevertheless, corpus-based research is undoubtedly 'important', and can 'disprove generalisations' made by the researcher (Buchstaller *et al*., 2013:120). Furthermore, corpus-based, morphosyntactic research demonstrates which linguistic variants occur in spontaneous speech (Buchstaller *et al*., 2013).

Consequently, to 'gain a complete picture' of regional morphosyntactic variation, one must combine corpus- and questionnaire-based methodologies (Beal, 2010:29). Therefore, whilst a questionnaire constitutes this dissertation's main study, as the preferable method for eliciting

morphosyntactic data (Cornips & Poletto, 2005), a small-scale, corpus-based study was used to supplement it.

3.1.   The DECTE study

The corpus-based study used DECTE (2012): a 'diachronic corpus' comprising 'text transcriptions and audio files of interviews' conducted with 160 speakers of North East English (Fehringer & Corrigan, 2015:14).

This study involved a sample of 22 DECTE (2012) informants, aged 20-22 years old, in-line with the age range of speakers involved in the questionnaire-based study. This sample comprised 14 female and 8 male informants; speaker sex was controlled for as far as possible, despite a limited number of suitable informants. Moreover, this sample was controlled for education level: all informants had higher education. The informants were native to the North East, and resided within the region; thus, the effects of geographical mobility could not be observed by this aspect of the study. However, the corpus-based study is nonetheless useful in observing the linguistic choices made by north eastern young adults with higher, university-level education.

The fifteen DECTE (2012) transcripts, corresponding to the 22 informants, were searched using AntConc (2019): a 'corpus analysis toolkit' used to extract data from corpus transcripts. AntConc (2019) searches were conducted for each of the non-standard variants: *divvent, divn't, dinnet, must,* and *mustn't.*

Searches for *divvent*, *dinnet*, and *mustn't* returned 0 hits. However, there were 32 hits for *must* and 1 hit for *divn't*. The variable context for these two variants was then circumscribed. This involved excluding:

1. Tokens occurring in the speech of informants who partook in the relevant interview but were not part of this study.
2. Tokens produced by the interviewer.
3. Tokens occurring as 'false starts or performance errors' (Tagliamonte, 2006:93).
4. Tokens occurring in an 'unclear or ambiguous contex[t]' (Tagliamonte, 2006:94).

5. Tokens occurring in 'quoted speech' – it was unclear whether such tokens were 'part of the speaker's or the quoted person's repertoire' (Pichler, 2009:568).

6. Any tokens of root *must*.

The token of *divn't* was excluded: it occurred in a quotation. After the variable context was circumscribed, 16 tokens of epistemic *must* remained.

The raw results were then normalized to ten thousand, using the 'Normalizing Calculator' provided by The Grammar Lab (ND). Table 1 presents the normalized results of this corpus-based study. Table 1 shows that epistemic *must* was present in DECTE (2012) interviews of young adult speakers, aged 20-22, with higher education. This demonstrates that young adults from the North East use this variant to some extent.

Informant	Speaker Sex	Exact Age	Interview Word Count	Raw number of tokens produced	Normalized Value
Y07i005a	Female	21	12,997	7	5.39
Y07i005b	Male	22	12,997	3	2.31
Y07i009a	Male	22	14,376	2	1.39
Y10i013a	Female	21	5,312	1	1.88
Y10i018a	Female	21	7,063	1	1.42
Y10i019b	Female	21	6,426	1	1.56
Y10i021b	Female	20	6,813	1	1.47
			Total	16	15.42

Table 1 The results of the corpus-based study, normalized to ten thousand (data sources: DECTE, 2012; The Grammar Lab, ND).

3.2. The pilot study

Prior to the main, questionnaire-based study, a pilot study was conducted to test the efficacy of the questionnaire[2]. Further information regarding this questionnaire and its

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[2] A copy of the questionnaire used by both the pilot and main studies is provided in Appendix C.

structure is provided in 3.3. The target linguistic variables for this study were *must*, *mustn't*, negative question structures, and negated DO.

Since pilot studies only require a small sample, fast, reliable recruitment was desirable. Thus, the pilot study participants were personal contacts, recruited via social media, and selected based on knowledge of their confirmed status as third year university students from the North East.

The pilot study participant information is presented in Table 2.

	Total number of respondents	N=5
Speaker Sex	**Female**	4
	Male	1
	Total	5
Age	**20**	3
	21	2
	Total	5
Home North East County	**County Durham**	5
	Total	5
University County	**Tyne and Wear**	5
	Total	5
Duration of relocation to university county	**Relocated for two years of university**	1
	Relocated for all three years of university	4
	Total	5

Table 2 Pilot Study Participant Information.

Gaining participants' informed consent is a vital aspect of research (BAAL, 2016). Consequently, before participants were granted access to the questionnaire, they were required to read a participant information sheet[3], and then complete and return a consent form[4], sent via email. These were stored solely for the purposes of proving informed consent.

3.2.1. Pilot study results

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[3] A copy of the participant information sheet used by both the pilot and main studies is provided in Appendix A.
[4] A copy of the consent form used by both the pilot and main studies is provided in Appendix B.

The results of the pilot study sections testing the morphosyntactic variables are shown in Figure 1.

Figure 1 shows that participants demonstrated a clear preference for standard variants of negated DO over the non-standard, *divn't* and *dinnet* variants. When tested both indirectly and directly, participants rated standard variants more highly than they did *divn't* and *dinnet*. When tested indirectly, participants gave a higher average percentage rating to the non-standard variants.

Moreover, Figure 1 shows that the average percentage rating given to standard negative question structures was higher than that given to non-standard structures across both sections. When tested directly, participants gave a significantly higher average percentage rating to non-standard structures. This is an odd finding: speakers tend to rate non-standard variants more highly when tested indirectly (Buchstaller *et al*., 2013). This unexpected finding was further tested by the main questionnaire.

Regarding the modal variables, Figure 1 shows that epistemic *must/mustn't* was preferred over root *must/mustn't* when participants were tested both indirectly and directly. Moreover, the graph demonstrates that participants were more accepting of non-standard, epistemic *must* and *mustn't* when tested indirectly, which is expected (see Buchstaller *et al*., 2013).
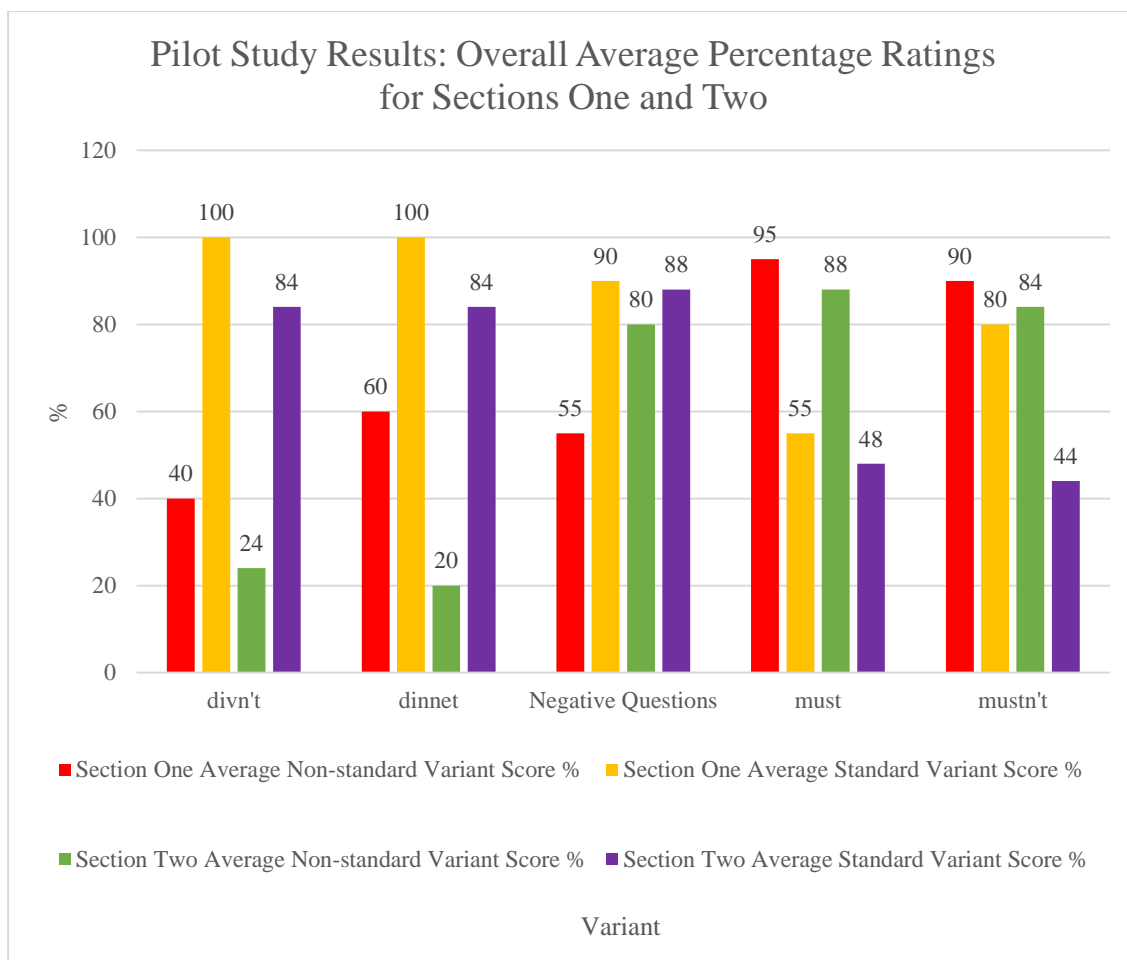
Figure 1 Pilot study results for the morphosyntactic variables.

The results of the pilot study section testing the T-to-R variable are shown in Figure 2. The graph shows that the overall average rating given to T-to-R varies across the seven /t/ positions. This variation supports further investigation of T-to-R in the main, questionnaire-based study.
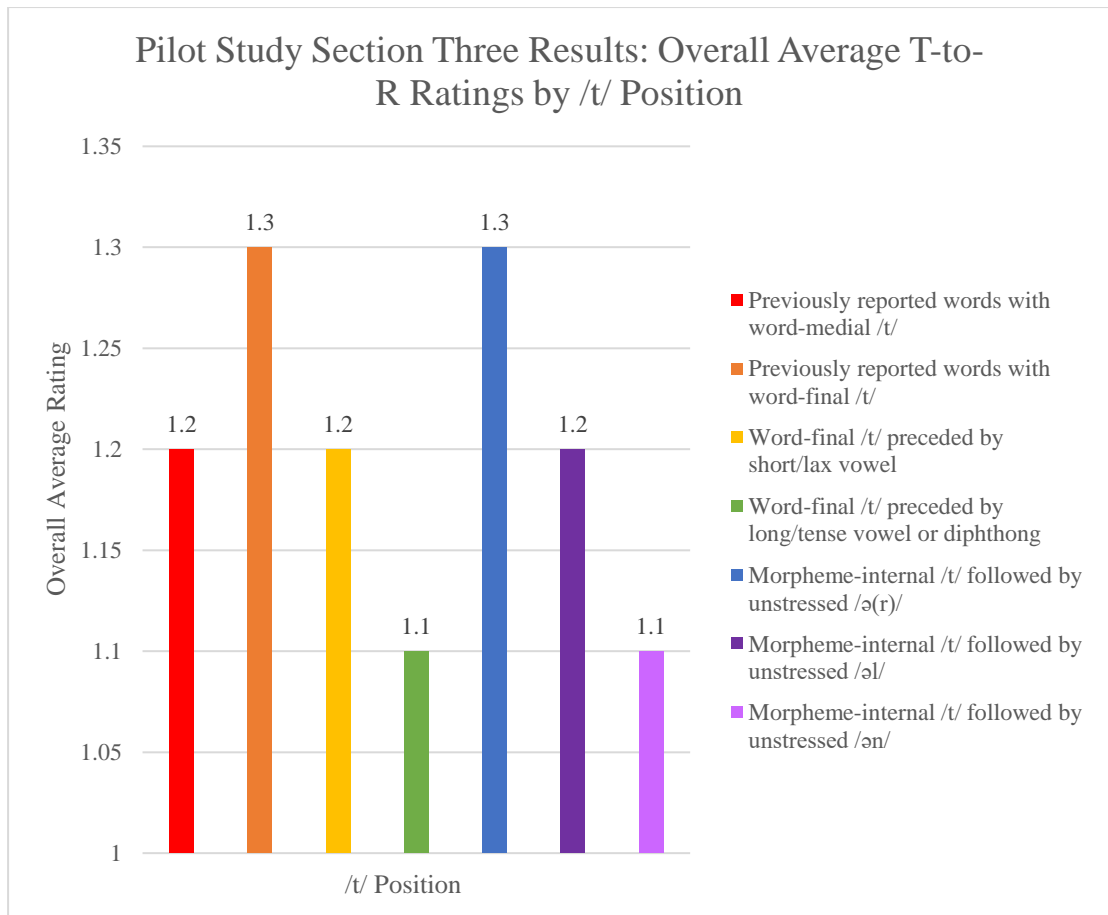
Figure 2 Pilot study results for T-to-R.

Overall, the pilot study yielded interesting results for all the morphosyntactic variables, and the T-to-R variable. Consequently, all variables were tested by the main questionnaire-based study. Moreover, the differing results across sections one and two for each of the variables demonstrate the efficacy of combining direct and indirect testing methods in questionnaire-based studies. Therefore, the questionnaire which was piloted was reused for the main study.

3.3. The questionnaire

This study's primary methodology is a questionnaire-based study. The questionnaire involved acceptability judgement testing of both morphosyntactic variables, and of T-to-R, since phonological variables can also be studied in this way (see Buchstaller *et al*., 2013).

Before the questionnaire is described, it is important to first define acceptability, explaining the distinction between acceptability and grammaticality, and to introduce acceptability judgement testing as a research method.

Scholars often treat acceptability and grammaticality as synonyms; however, they are 'crucially distinct' (Sprouse *et al*., 2013:221). Grammaticality relates to 'competence' (Chomsky, 1965:11). To achieve grammaticality, the speaker's internal, mental grammar subconsciously generates sentences which are grammatical (Schütze, 1996). Comparatively, speakers have 'conscious access' to acceptability, as it is 'a property of sentences'; thus, making an acceptability judgement is a 'conscious' action (Sprouse *et al*., 2013:220). Furthermore, acceptability relates to 'performance' (Chomsky, 1965:11)- the 'static knowledge that guides behaviour' (Schütze, 1996:21). Making an acceptability judgement is a performative action: it involves the speaker actively determining how acceptable they find the sentence in question (Schütze, 1996:26).

The present study tests acceptability, not grammaticality, due to the participants being non-linguists: the 'linguistically naïve subject' can only consciously judge acceptability (Schütze, 1996:26). Acceptability judgement tasks require participants to evaluate a sentence based on '"how good, or acceptable"' it sounds to them (Sprouse et al., 2013:220).

3.3.1. The sample

The main questionnaire aims to observe the effects of geographical mobility for university purposes on the linguistic choices made by young adults from the North East. Consequently, all participants were finalists. This ensured that participants who experienced such mobility have been exposed to their new university community for a substantial period, relevant to the typical length of an undergraduate university degree.

To measure the effects of this geographical mobility, the study required comparable participants. Consequently, participants were split into two groups: 'Group One' and 'Group Two'. Group One comprised students who attend university within the North East. Group Two comprised university students who attend university outside of the North East.

Due to the COVID-19 pandemic spanning the duration of this study, participant recruitment was conducted entirely online, in accordance with government guidelines. Previous studies, such as Linzen and Oseki (2018), have successfully used Facebook to recruit participants online. Hence, Facebook was this study's primary method of participant recruitment.

The initial participants were friends and acquaintances who met the required criteria. The friend-of-a-friend method, whereby 'a community member with whom the researcher shares a common friend' or 'acquaintance' is introduced to the researcher and takes part in the study (Schilling-Estes, 2007:179), was used to recruit the remaining participants, through sharing Facebook posts and by word of mouth.

To ensure informed consent, all participants were required to read the participant information sheet and complete and return the consent form before being allowed access to the main questionnaire.

The overall demographic information for the main questionnaire participants is shown in Table 3.

	Total number of respondents	N=60
Speaker Sex	**Female**	40
	Male	20
	Total	60
Age	**20**	30
	21	27
	22	3
	Total	60
Home North East County	**County Durham**	46
	North Yorkshire	2
	Tyne and Wear	12
	Total	60
University Region	**The North East**	36
	East Midlands	2
	The East	2
	The North West	5
	West Midlands	1
	Yorkshire and the Humber	14
	Total	60

Table 3 Main Questionnaire Overall Participant Information.

Table 4 presents the demographic information for the Group One participants.

	Total number of respondents	N=36
Speaker Sex	**Female**	23
	Male	13
	Total	36
Age	**20**	17
	21	17
	22	2
	Total	36
Home North East County	**County Durham**	27
	North Yorkshire	1
	Tyne and Wear	8
	Total	36
University County	**County Durham**	5
	North Yorkshire	3
	Tyne and Wear	28
	Total	36
Duration of relocation to university county	**Did not relocate for university**	10
	Relocated for one year of university	5
	Relocated for two years of university	2
	Relocated for all three years of university	19
	Total	36

Table 4 Group One Participant Information.

Table 5 shows the demographic information for the Group Two participants.

	Total number of respondents	N=24
Speaker Sex	**Female**	17
	Male	7
	Total	24
Age	**20**	13
	21	10
	22	1
	Total	24
Home North East County	**County Durham**	19
	North Yorkshire	1
	Tyne and Wear	4
	Total	24
University Region	**East Midlands**	2
	The East	2
	The North West	5
	West Midlands	1
	Yorkshire and the Humber	14
	Total	24

Table 5 Group Two Participant Information.

3.3.2. Introducing the questionnaire format

The questionnaire was created using Google Forms – a user-friendly survey-creating software. Google Forms was chosen due to its accessible and uncomplicated nature, ensuring that participants were not distracted by difficulties associated with using or accessing the questionnaire.

As with any ethical research, the relationship between researcher and participants in this study was based on 'trust and openness' (BAAL, 2016:4). Consequently, the questionnaire notified participants of their right to withdraw from the study at any time. It also explained that their data would remain anonymous, and only be used for the purposes of this undergraduate dissertation investigation.

The questionnaire comprised formality questions and three sections testing acceptability judgements of the linguistic variables.

All three test sections began with a practice question to ensure participants' understanding of the task (Buchstaller & Corrigan, 2011a). Each section also asked participants to read each sentence aloud to themselves. This was due to previous findings that participants can 'react prescriptively' when they see 'dialectal forms in the written medium': such variants are often 'restricted to spoken usage (Buchstaller & Corrigan, 2011b:151). Consequently, such variants may appear strange, especially non-standard, or unfamiliar when they are presented on paper. One way of avoiding such reactions is to ask participants to read each sentence aloud, to get a sense of how sentences would sound in spoken conversation (Buchstaller & Corrigan, 2011b).

3.3.3. Formality questions

The participants were asked a series of formality questions, to check that they met the desired criteria, and to allow ease of participant categorisation.

The formality questions were as follows:

1. In order to take part in this study, you must currently attend a UK university. If you currently attend a UK university, please check the box below.
2. In order to take part in this study, you must currently be a third-year university student. If you are currently a third-year university student, please check the box below.
3. Which university do you attend?
4. What is your gender?
5. How old are you?
6. Do you study, or have you ever studied, a degree in English Language?
7. Where in the North East did you mainly grow up?
8. Did you move away to attend university (i.e. did you live out when attending university?)

The first two formality questions ensured that all participants were third year university students who currently attend university in the UK. The third

question was included to gauge whether students attended university within or outside of the North East region.

The fourth and fifth questions were used to control for gender and age, as required by the study of linguistic phenomena (Cornips & Poletto, 2005).

The sixth question was included to ensure that participants were not linguists. Surveying linguist participants would skew the data, making it unreliable; even subconsciously, linguist participants may show 'cognitive biases' towards certain features or variants (Gibson *et al.*, 2013:238).

The seventh question was included to ensure that all participants were from the North East. The eighth question was included to gauge if students who attended university within the North East had lived within the university community or away from it, in case this influenced the results.

3.3.4. Morphosyntactic choices

Sections one and two tested the morphosyntactic variables: negated DO, negative question structures, *must*, and *mustn't*.

Section one involved indirect acceptability judgement testing, whilst section two involved direct acceptability judgement testing. Both testing methods were used due to the advantages of each one, respectively.

Direct acceptability judgement testing asks participants to rate sentences based on whether they would 'personally' use them (Buchstaller & Corrigan, 2011a:33). The advantages of direct testing include the fact that any judgements will be 'psychologically real' for participants, hence they do not have to process the 'abstract' concept of acceptability (Buchstaller & Corrigan, 2011a:33). However, the disadvantage of this method is that directly asking participants to evaluate a non-standard variant can lead to its outright rejection due to stigmatisation, regardless of the participant's actual usage (Schilling, 2013). Thus, direct methods do not always gain an 'accurate reflection' of participants' actual linguistic usage (Buchstaller *et al.*, 2013:93).

Comparatively, indirect acceptability judgment testing asks participants to rate sentences based on how likely 'other people in their locale' would be to use them (Buchstaller & Corrigan, 2011b:155). The advantages of indirect testing include the fact that it is less pressurising than direct methods. By asking participants how likely non-standard variants are to be used in their community, the researcher allows participants to 'distance themselves' from such variants, and from any associated stigma (Buchstaller *et al*., 2013:95). This enables participants to save 'face' (Buchstaller & Corrigan, 2011a:34). However, a disadvantage of indirect acceptability judgement testing is that it does not indicate participants' actual usage.

Combining direct and indirect questionnaire-based research methods in morphosyntactic data collection has been praised within the literature. Whilst both methods have individual flaws, these can be rectified by the other method. Hence, the combination of a direct method, to which a participant may respond negatively to a stigmatised form, and an indirect method, to which the same participant may judge the same form to be acceptable within their community, is useful: it can demonstrate the extent to which 'a particular feature may be stigmatized in a community' (Buchstaller & Corrigan, 2011b:155).

Both sections comprised filler and test sentences. Sociolinguists position 'filler sentences' between test sentences in a randomised order to avoid issues such as 'boredom, frustration and fatigue' which are associated with 'long questionnaire[s]' (Buchstaller & Corrigan, 2011a:39). Moreover, the use of filler sentences prohibits participants from spotting patterns and deciphering which variables are being tested (Buchstaller & Corrigan, 2011b).

Both the filler and test sentences were taken from DECTE (2012), using AntConc (Anthony, 2019) to search the transcripts. This process was successful for all features but *dinnet*. Since *dinnet* and *divn't* are interchangeable variants of negated DO, DECTE (2012) sentences containing *divn't* were adapted to create test sentences for *dinnet*.

Sections one and two each comprised two test sentences per feature- one testing the non-standard, North East variant, the other testing the standard variant. Sections one and two also each comprised four filler sentences.

3.3.4.1. Section one

Section one tested acceptability judgements indirectly, adapting the structure of a questionnaire used by Buchstaller and Corrigan (2011b). Buchstaller and Corrigan (2011b:155) asked participants 'whether they recognise[d] certain constructions as being used by other people in their locale', using the following Likert scale:

1 = 'This type of sentence would never be used here – it seems very odd'

2 = 'This type of sentence is not very common here, but it doesn't seem too odd'

3 = 'I have heard this type of sentence locally but it's not that common'

4 = 'People around here use this type of sentence a lot'

Section One comprised thirteen questions. Each question comprised a short paragraph to provide context for the test/filler sentence, with that sentence at the end of the paragraph. Each test/filler sentence was written in ALL CAPS, to catch participants' attention.

Participants were asked to read each paragraph aloud, before rating the test/filler sentence on a scale of 1-4, based on how likely it is to be used where they are from in the North East- in their hometown or city. The questionnaire surveyed participants who may identify their local community as either their university city, or their North East hometown. This ambiguity was resolved by adapting Buchstaller and Corrigan's (2011b) scale to specify that participants were making judgements based on the variants used in their North East hometown.

The scale was as follows:

> **1** = This type of sentence would never be used in my hometown – it seems very odd.
>
> **2** = This type of sentence is not very common in my hometown, but it doesn't seem too odd.
>
> **3** = I have heard this type of sentence around, but it's not that common
>
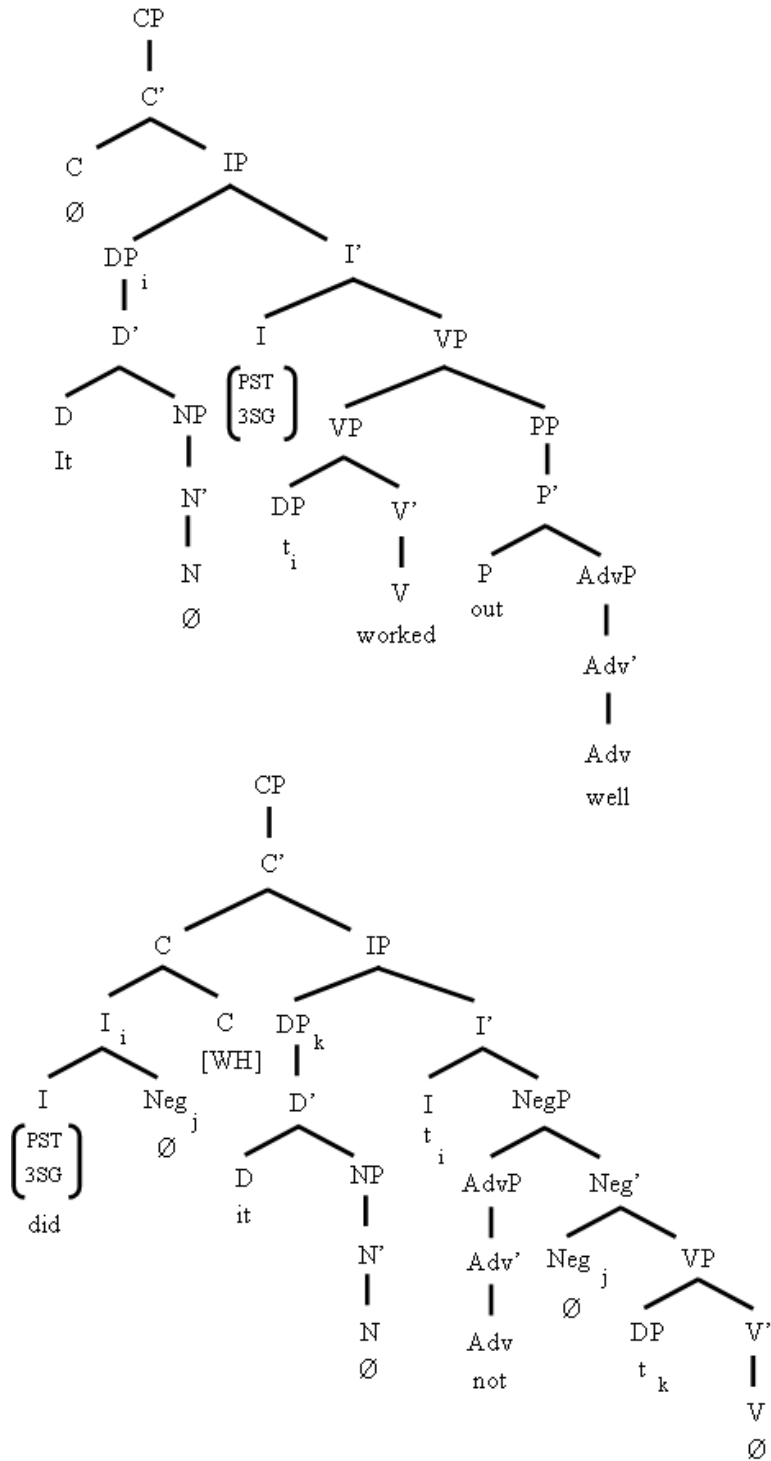> **4** = People in my hometown use this type of sentence a lot.

The negation test sentences, and corresponding syntax trees representing their structures, are listed below:

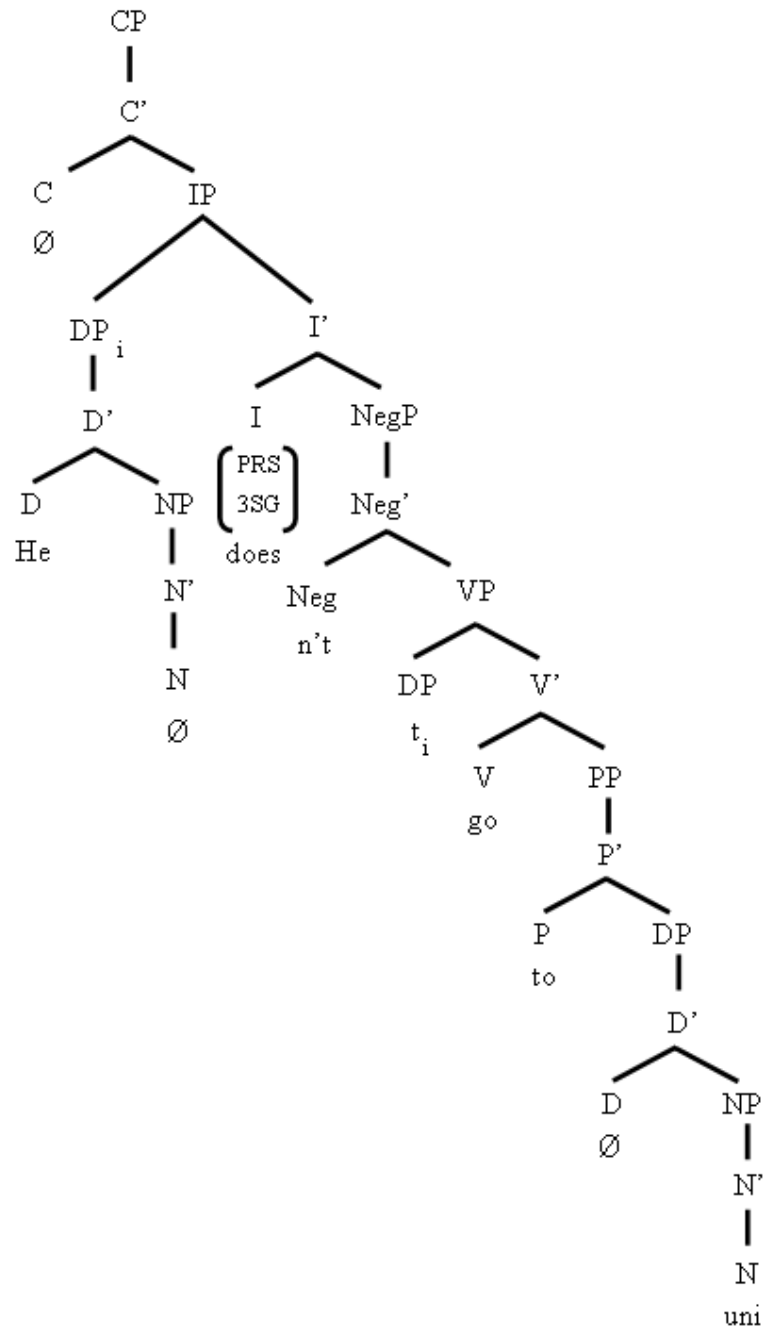**Question One:** 'I dinnet like pop music' (illustrated in Figure 3).
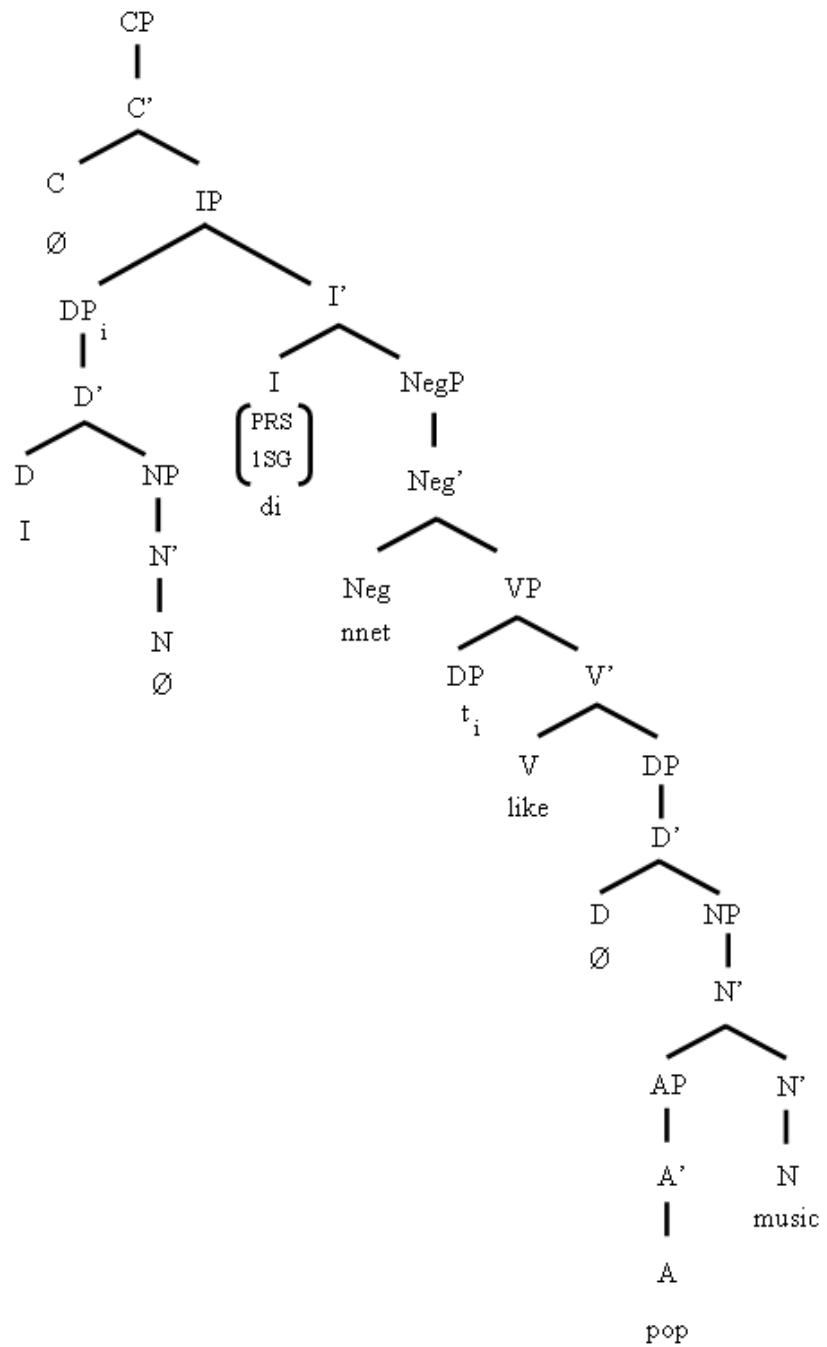
Figure 3 Syntax tree illustrating the sentence 'I dinnet like pop music'.

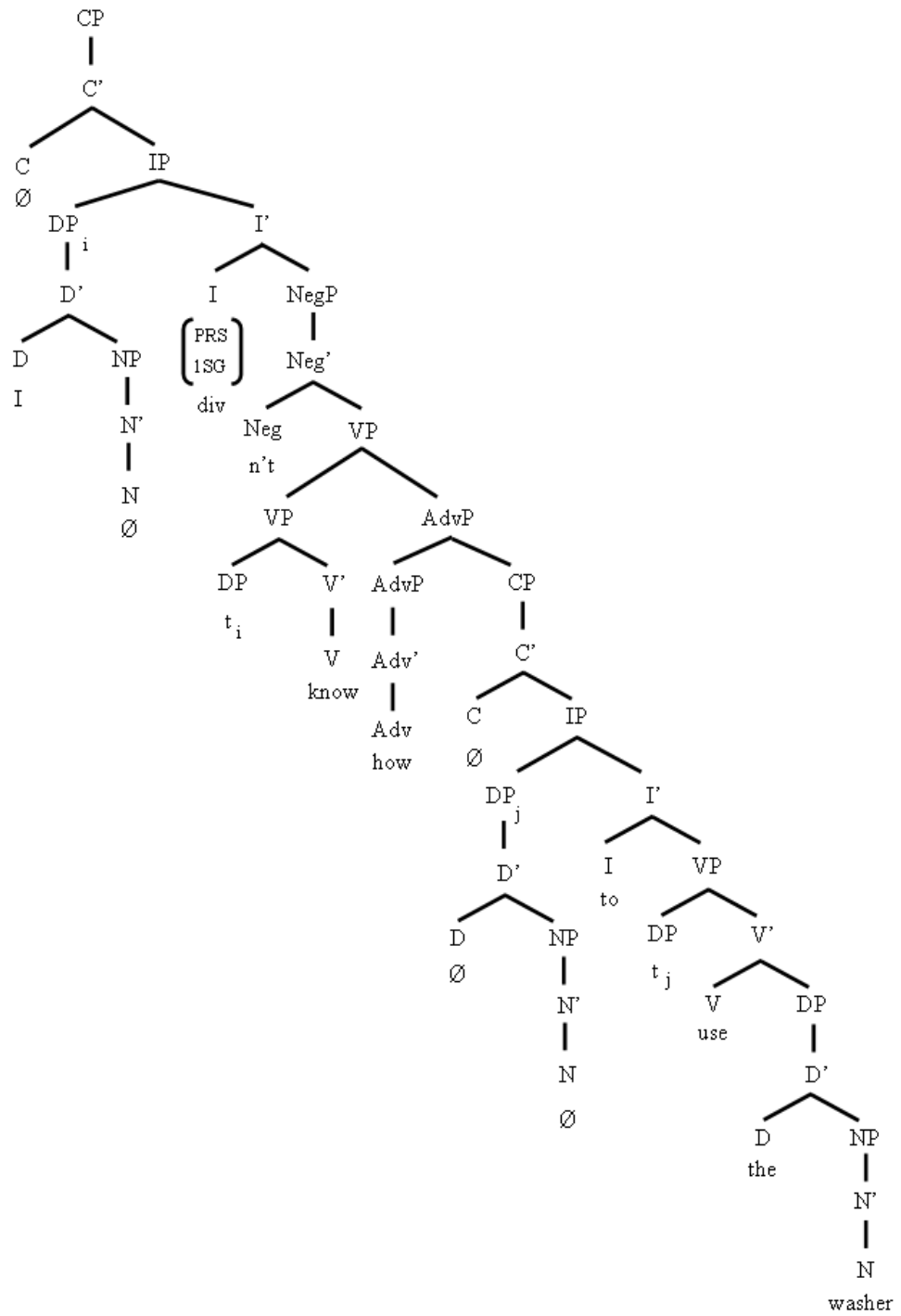**Question Two:** 'It worked out well, did it not?' (illustrated in Figure 4).

Figure 4 Syntax tree illustrating the sentence 'It worked out well, did it not?'.

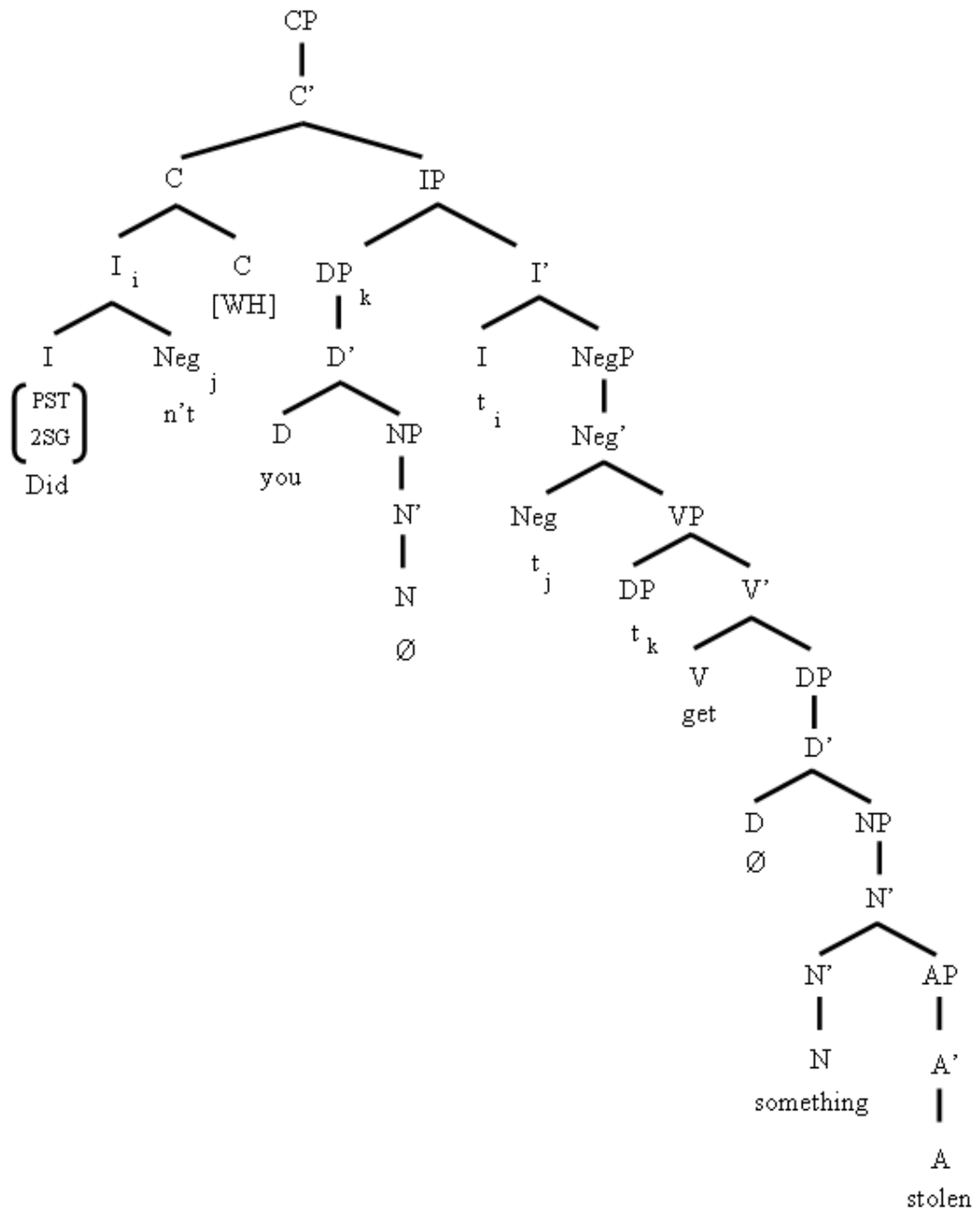**Question Five:** 'He doesn't go to uni' (illustrated in Figure 5).

Figure 5 Syntax tree illustrating the sentence 'He doesn't go to uni'.

Question Eight: 'I divn't know how to use the washer' (illustrated in Figure 6).

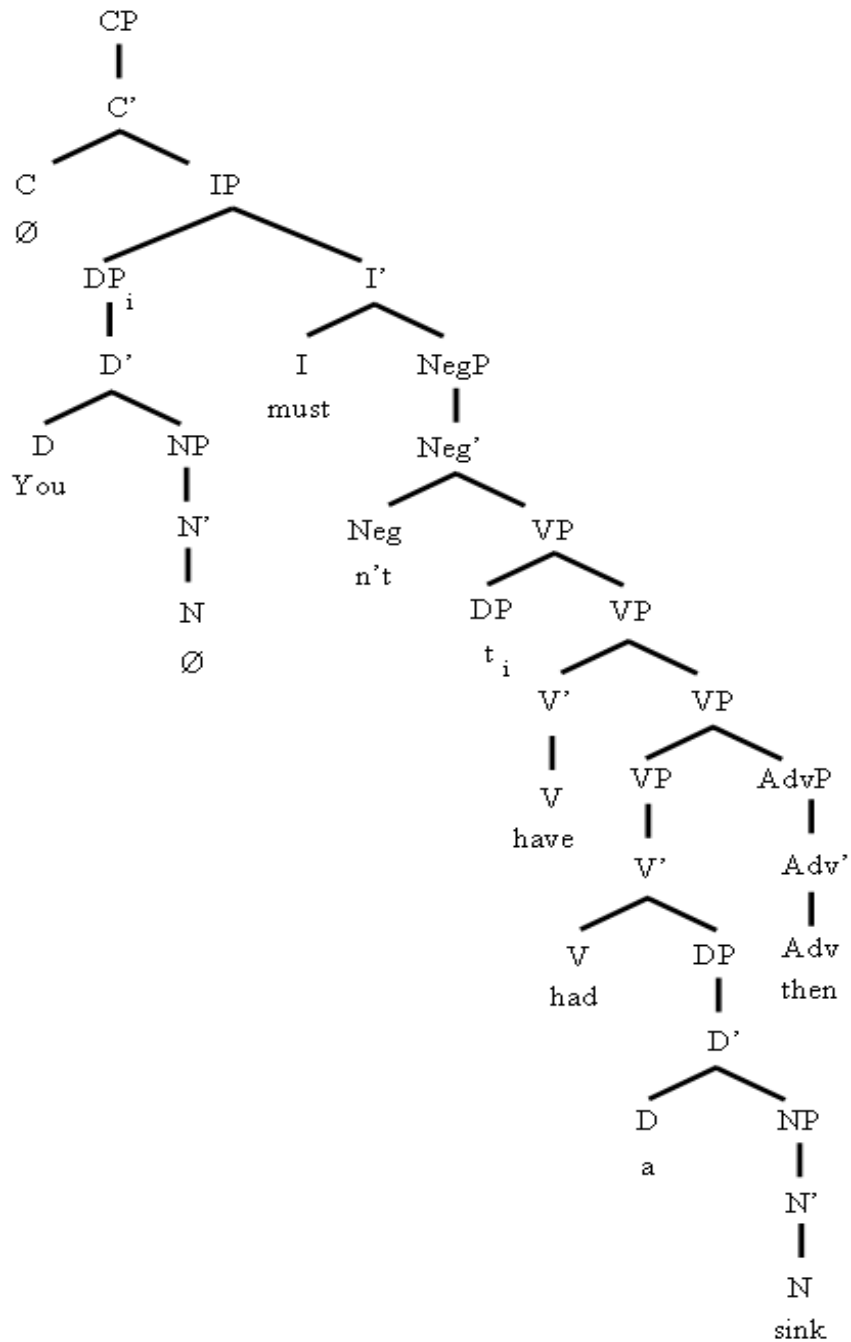**Figure 6** Syntax tree illustrating the sentence 'I divn't know how to use the washer'.

Question Eleven: 'Didn't you get something stolen?' (illustrated in Figure 7).

Figure 7 Syntax tree illustrating the sentence 'Didn't you get something stolen?'.

The modality test sentences, and corresponding syntax trees representing their structures, are listed below:

Question Three: 'You mustn't have had a sink then' (illustrated in Figure 8).

Figure 8 Syntax tree illustrating the sentence 'You mustn't have had a sink then'.

Question Six: 'You mustn't forget your lines!' (illustrated in Figure 9).
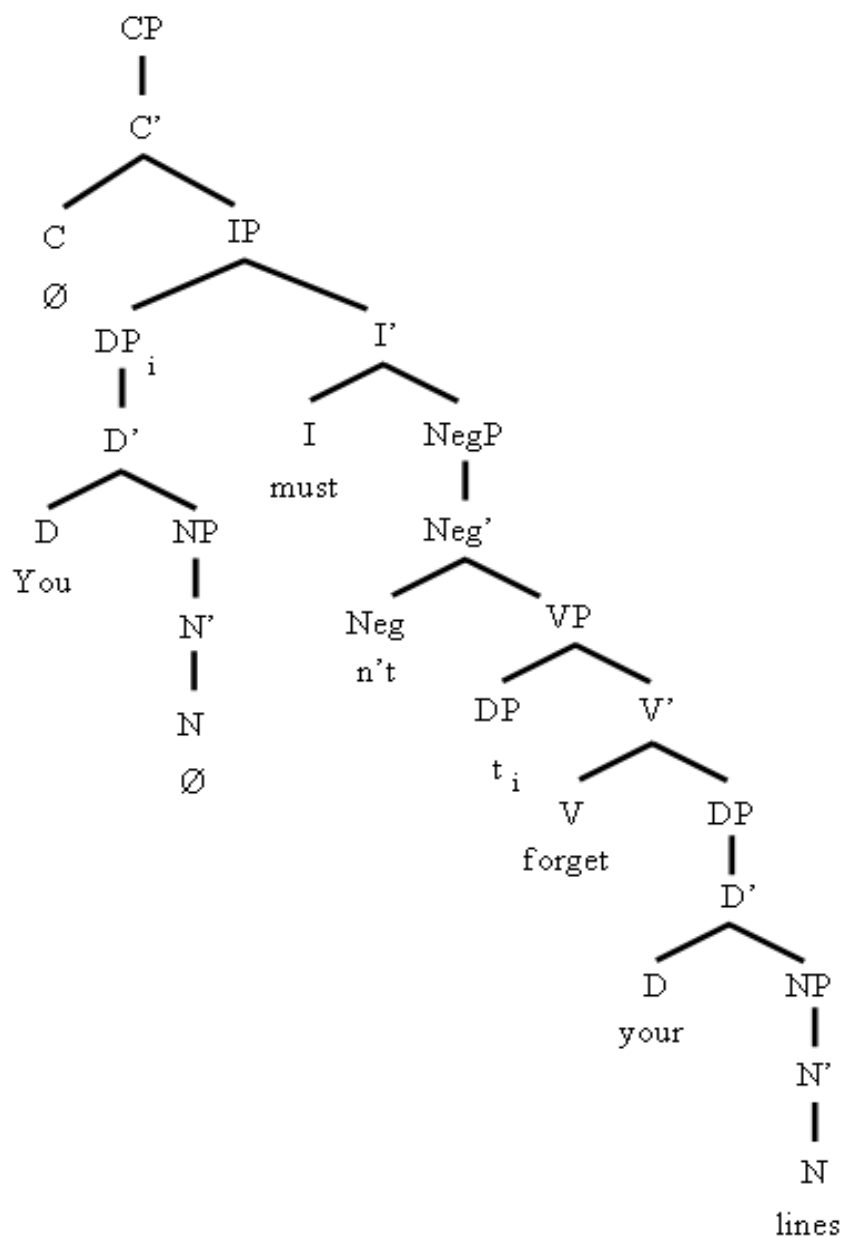
Figure 9 Syntax tree illustrating the sentence 'You mustn't forget your lines'.

Question Nine: 'It must cost a fortune for your whole family to go away!' (illustrated in Figure 10).
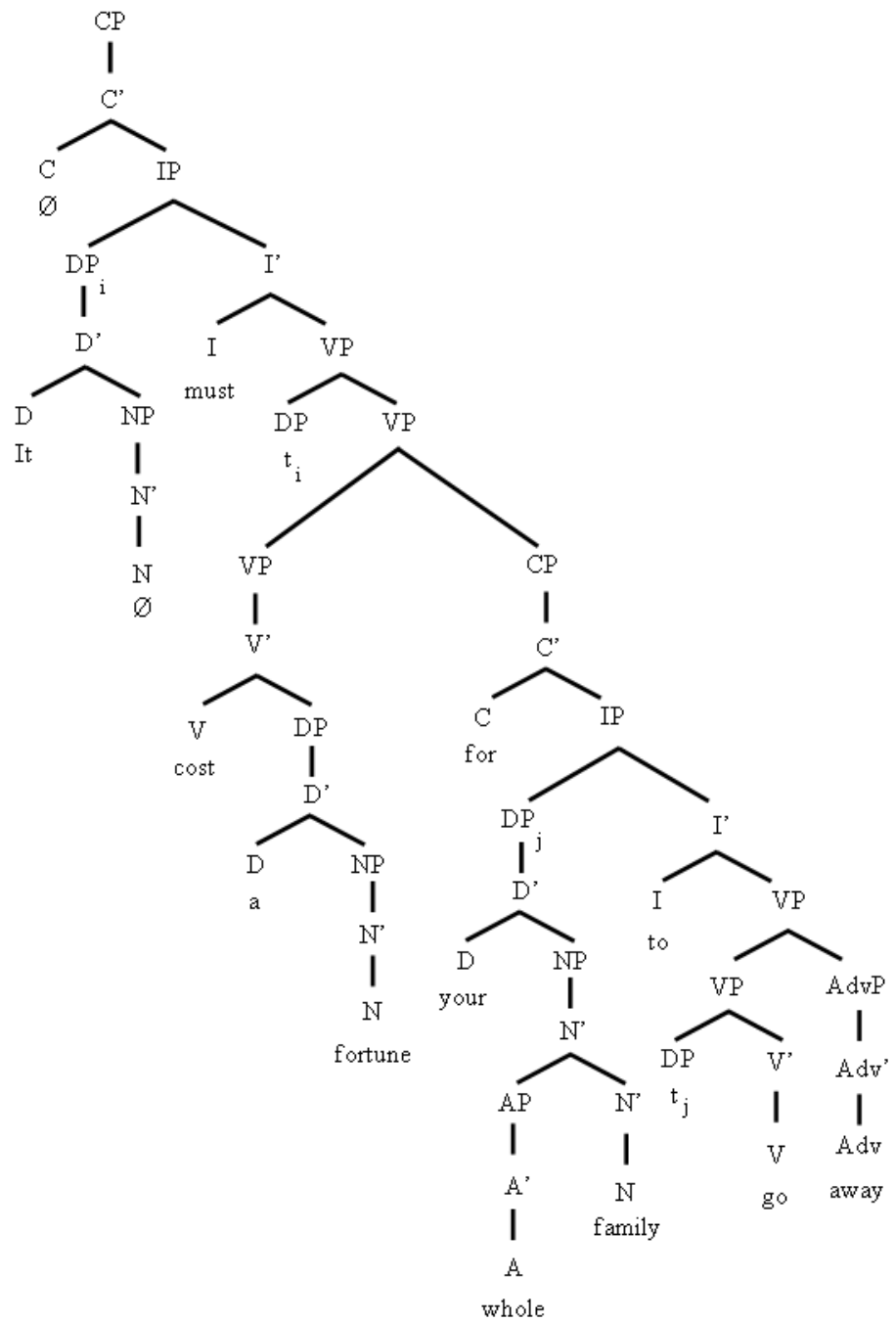
Figure 10 Syntax tree illustrating the sentence 'It must cost a fortune for your whole family to go away!'.

Question Twelve: 'I must tell you the truth' (illustrated in Figure 11).
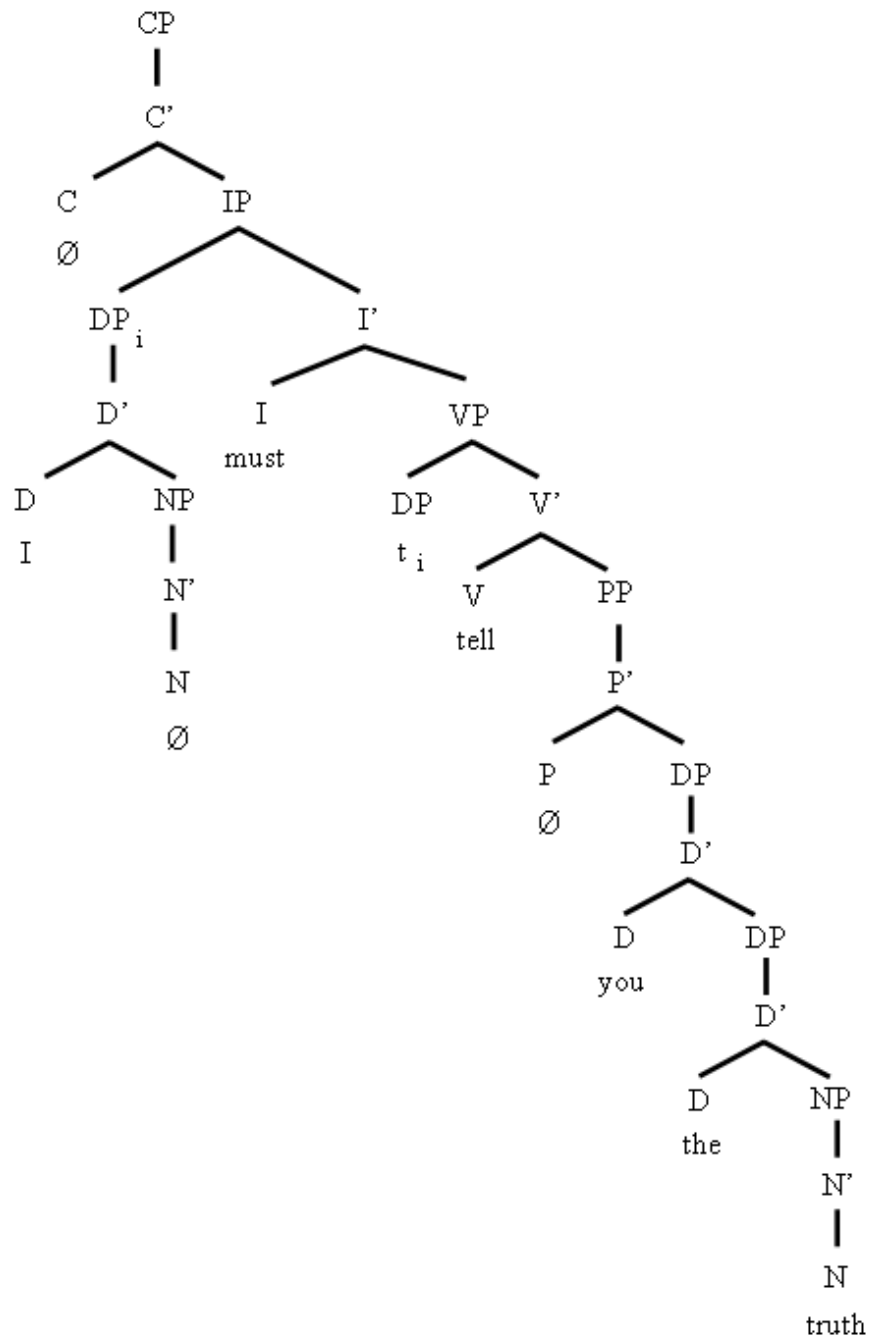
Figure 11 Syntax tree illustrating the sentence 'I must tell you the truth'.

3.3.4.2. Section two

Section two tested acceptability judgements of morphosyntactic variables directly. It comprised thirteen questions, each of which included a test or filler sentence, and a scenario to contextualise it. Participants were asked to read each paragraph aloud, before rating the test/filler sentence on a scale of 1-5, based on how likely they would be to use it themselves. The scale was as follows:

1 = Very unlikely

2 = Unlikely

3 = Neither likely/unlikely

4 = Likely

5 = Very likely

The section two negation test sentences are listed below:

Question One: 'Well divn't ask me for any!'

Question Two: 'Haven't they?'

Question Five: 'It was hilarious, wasn't it?'

Question Six: 'I don't dance'.

Question Nine: 'I dinnet want to come'.

The section two modality test sentences are listed below:

Question Three: 'The lift mustn't be working'.

Question Seven: 'You mustn't do that!'

Question Ten: 'He must have been at work'.

Question Thirteen: 'You must go and see it!'

To analyse the questionnaire responses for sections one and two, overall average ratings given for each question were calculated for each participant group. As each section had a different Likert scale, each average was then converted to a percentage of the highest possible rating for that question's section, to ensure comparable results.

3.3.5. Phonological choices

Section three tested acceptability judgements of the phonological variable, T-to-R. This section was based on a questionnaire used by Buchstaller *et al*. (2013) to test T-to-R.

Like Buchstaller *et al*. (2013:94), this section involved direct testing, because it is the participants' own 'phonological system[s]' that are of interest; thus, questioning participants about what they think others would prefer regarding T-to-R would be nonsensical.

As in Buchstaller *et al.*'s (2013) questionnaire, the task was briefly explained at the beginning of the section, alongside a short, simplified definition of T-to-R, including examples showing a sentence where T-to-R has previously been identified, and one where it would not normally occur.

Like Buchstaller *et al.*'s (2013) questionnaire, each question presented participants with a word spelled with a 't', and an example of how this word could be pronounced with an 'r' instead of a 't'. In the present study, participants were asked to read the word and corresponding question aloud, and then rate the word on a scale of 1-3, based on how likely they would be to pronounce this word with an 'r'. The scale was identical to the one used by Buchstaller *et al*. (2013:96), and was as follows:

1 = 'I would never pronounce this word with an *r*'.

2 = 'I can sometimes pronounce this word with an *r*, but I wouldn't do it very often'.

3 = 'It would be normal for me to pronounce this word with an *r*'.

The section three test words and sentences were taken directly from Buchstaller *et al.*'s (2013) questionnaire. Since this is a smaller-scale study, fourteen questions were selected, where seven categories of /t/ positions were each tested twice. Buchstaller *et al.* (2013:112) defined six categories, corresponding to six /t/ positions, which were as follows:

1) Words which have been 'previous[ly] reported' to undergo T-to-R.
2) Words with 'word-final /t/ preceded by a short/lax vowel'.
3) Words with 'word-final /t/ preceded by a long/tense vowel or diphthong'.
4) Words with 'morpheme-internal /t/ followed by unstressed /ə(r)/'.
5) Words with 'morpheme-internal /t/ followed by unstressed /əl/'.
6) Words with 'morpheme-internal /t/ followed by unstressed /ən/'.

Section three took categories two-six from the study. However, category one was further divided into previously reported instances of T-to-R word-medially, and previously reported instances of T-to-R word-finally, to ensure that all questions observed differences in acceptability judgements based on /t/ position.

The questions testing previous instances of T-to-R occurring word-medially tested *better* and *putting*. The questions testing previous instances of T-to-R occurring word-finally tested *but* and *hit*. The category two questions tested *cut* and *cat*. The category three questions tested *caught* and *doubt*. The category four questions tested *water* and *letter*. The category five questions tested *beautiful* and *bottle*. The category six questions tested *kitten* and *cotton*.

To analyse the questionnaire responses for section three, overall average ratings given for each /t/ position were calculated for each participant group.

Chapter Four

Results

This chapter presents the results of the main questionnaire-based study. The results for negative question structures are not presented: these were unclear and contributed little to the present investigation.

4.1. Morphosyntactic variables

Figure 12 presents the results for negated DO.

Figure 12 shows that both groups gave higher average percentage ratings to the standard variant than they did to the non-standard variants. Moreover, overall, all participants gave higher average percentage ratings to both the standard variant and the non-standard variants when tested indirectly than they did when tested directly.

When tested indirectly, Figure 12 shows that Group Two gave a higher average percentage rating to both non-standard variants than Group One did. For *divn't*, the rating given by Group Two was 8.25% higher, and for *dinnet*, it was 6.25% higher.

When tested directly, Figure 12 shows that Group One speakers gave a 0.8% higher average percentage rating to *divn't* than Group Two speakers did. However, Group Two gave a 4.6% higher average percentage rating to *dinnet* than Group One did.

Regarding standard variants of negated DO, when tested directly and indirectly, Group Two speakers were more accepting of standard forms than Group One speakers were – by 2% in section one, and 3.6% in section two.
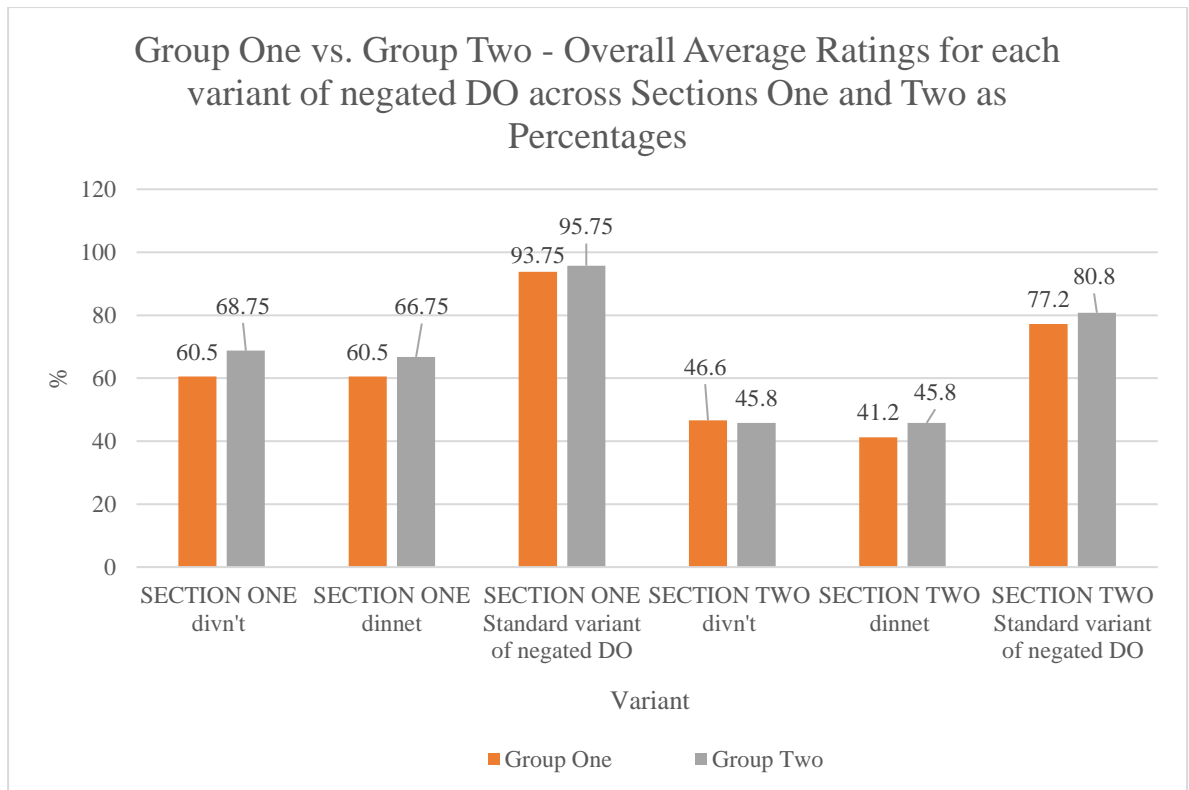
Figure 12 Main questionnaire results for negated DO.

Figure 13 presents the results for the modal variables.

Regarding *must*, across both sections, Group Two was more accepting of the epistemic variant than Group One- by 6% for section one, and 0.8% for section two. For root *must*, across both sections, Group Two was more accepting of this variant than Group One- by 9% for section one, and 4.2% for section two.

Regarding *mustn't*, for section one, Group Two was more accepting of the epistemic variant than Group One- by 9.75%. However, for section two, Group One was more accepting of this variant- by 1.4%. Comparatively, for root *mustn't*, Group Two was more accepting of this variant than Group One across both sections- by 1% for section one, and 13.8% for section two.
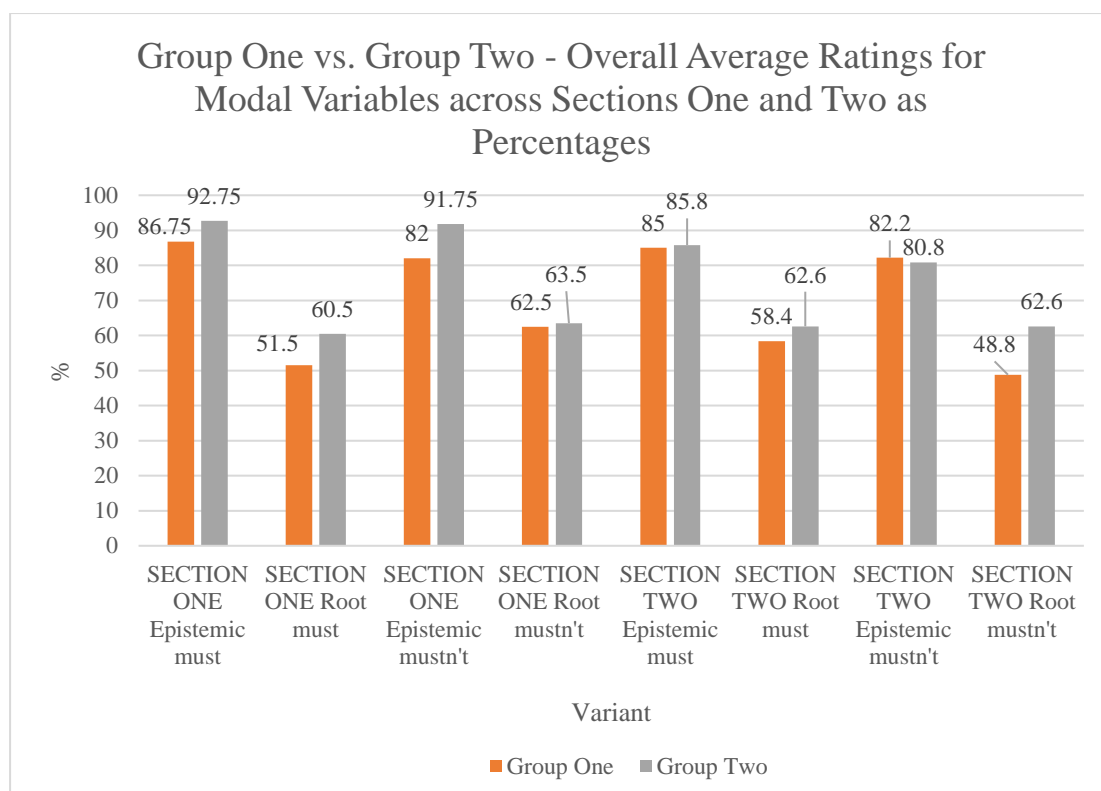
Figure 13 Main questionnaire results for the modal variables.

4.2. T-to-R

Figure 14 presents the results for T-to-R. The graph shows that, across all /t/ positions, Group One gave higher overall average ratings for T-to-R than Group Two did.

Figure 14 shows that all participants were most accepting of T-to-R when the word was a previously reported instance of T-to-R. The hierarchy of /t/ positions from highest rated to lowest rated varies slightly across the two groups.

For Group One, the order of /t/ positions from highest average rating to lowest average rating was:

1. Previously reported words with word-medial /t/ **- 1.86**.

2. Previously reported words with word-final /t/ **- 1.66**.

3. Morpheme-internal /t/ followed by unstressed /ə(r)/ **- 1.44**.

4. Word-final /t/ preceded by short/lax vowel – **1.42**.

5. Word-final /t/ preceded by long/tense vowel or diphthong – **1.29**.

6. Morpheme-internal /t/ followed by unstressed /əl/ **- 1.21**.

7. Morpheme-internal /t/ followed by unstressed /ən/ **- 1.15**.

For Group Two, the order was:

1. Previously reported words with word-final /t/ **- 1.65**.

2. Previously reported words with word-medial /t/ **- 1.59**.

3. Morpheme-internal /t/ followed by unstressed /ə(r)/ **- 1.38**.

4. Word-final /t/ preceded by short/lax vowel **- 1.31**.

5. Morpheme-internal /t/ followed by unstressed /əl/ **- 1.17**.

6. Word-final /t/ preceded by long/tense vowel or diphthong **– 1.11**.

7. Morpheme-internal /t/ followed by unstressed /ən/ **- 1.06**.
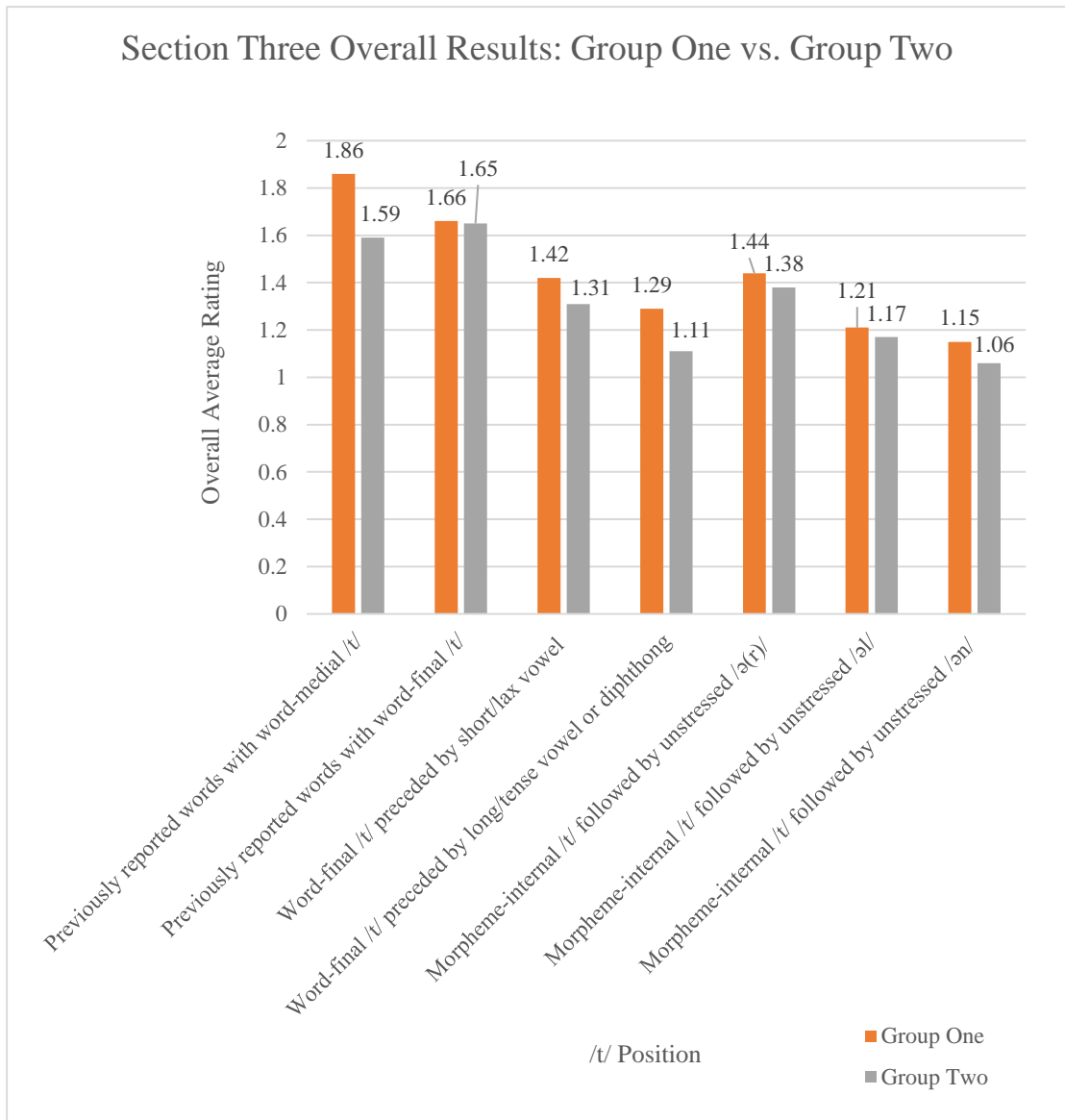
Figure 14 Main questionnaire results for T-to-R.

Chapter Five

Discussion

This chapter discusses the results of the small-scale, corpus-based study, and the results of the main questionnaire. It states whether the hypotheses are supported or falsified by the results, and discusses the limitations of the present study, suggesting how it could be improved upon in further research.

5.1. Discussion of corpus-based study results

The small-scale, DECTE (2012) study was somewhat unsuccessful; there were a small number of suitable informants, which limited the study and its results.

The study elicited no tokens of epistemic *mustn't*, *divvent/divn't*, or *dinnet*. However, it did elicit tokens of epistemic *must*. After circumscribing the variable context and normalizing the raw results to ten thousand, the results showed 15.42 tokens of epistemic *must*.

These results are limited. Consequently, it cannot be assumed that the non-occurrence of the non-*must*, non-standard variants means that informants do not use them. However, the results imply that north eastern young adults with higher education use epistemic *must*.

5.2. Discussion of main questionnaire results

5.2.1. Morphosyntactic variables

The main, questionnaire-based study yielded interesting results for three morphosyntactic variables: negated DO, *must*, and *mustn't*.

For negated DO, all participants were more accepting of standard variants than they were of non-standard variants. Across both sections, Group Two speakers were more accepting of standard variants than Group One speakers. This result

supports hypothesis three: young adults who underwent geographical mobility for university purposes were more accepting of standard variants than those who remained within the region.

Moreover, Group Two speakers were more accepting of non-standard variants across both sections than Group One speakers. However, there was a slight discrepancy whereby, when tested directly, Group One gave a 0.8% higher average rating to *divn't* than Group Two. Despite this, the overall trend shows that young adults who underwent geographical mobility away from the North East were more accepting of non-standard variants of negated DO. These results are unexpected and falsify hypothesis two: young adults who attended university within the North East were not more accepting of non-standard, local variants than those who studied at a university away from it.

Regarding the modal variables, when tested both indirectly and directly, all participants preferred epistemic variants to root variants. This clear preference for non-standard variants of MUST implies that they are favoured amongst these young, north eastern adults, regardless of geographical mobility. These overall findings support claims in the literature that MUST 'only' takes epistemic, 'conclusion' meaning in the North East dialect (Beal, 2008:387). Moreover, they also support claims in the literature that the North East is one of the few regions where *mustn't* is used with epistemic, conclusion meaning (Beal, 2010).

Across sections one and two, Group Two gave higher average percentage ratings to root *must* and *mustn't* than Group One. This result supports hypothesis three.

For section one, Group Two speakers were more accepting of epistemic *must* and *mustn't* than Group One by significant percentages – 6% for *must*, and 9.75% for *mustn't*. These results demonstrate that, when tested indirectly, Group Two speakers were more accepting of the non-standard, modal variants.

However, for section two, Group Two speakers gave epistemic *must* a 0.8% higher average rating than Group One. Comparatively, Group One speakers gave epistemic *mustn't* a 1.4% higher average rating than Group Two. The fact that Group One were more accepting of epistemic *mustn't* than Group Two

when tested directly challenges the overall trend that Group Two speakers were more accepting of non-standard variants. However, the difference between the groups for this variant in section two is small. Consequently, it is not justifiable to suggest that this overall trend is disproven.

Consequently, overall, this study finds that Group Two speakers were more accepting of non-standard, morphosyntactic variants than Group One were. Therefore, hypothesis two is falsified by the results for this aspect of the research. Further research is required to solidify this trend on a larger scale, due to small discrepancies within the data and the limitations of the present study.

The fact that the Group Two participants were more accepting of non-standard, morphosyntactic variants, overall, than Group One participants is not an expected finding.

One explanation for this could be the suggestion from Evans and Iverson (2007) that all university communities are similar, no matter their location. This is justified by the fact that students often attend a university located outside of the area 'in which they have been raised', hence all university students encounter 'a wide variety of accents' (Evans & Iverson, 2007:3814). Moreover, to this melting pot of speakers, all university students will interact with speakers of Standard English (Evans & Iverson, 2007). Consequently, it is suggested that no matter which university students attend, they will adapt their accent 'from regional to educated', conforming to 'their new university community' (Evans & Iverson, 2007:3815).

This explanation could justify why, despite differences across groups and sections one and two, the overall findings as to whether participants are more accepting of standard or non-standard variants for each variable show the same trends. However, these differences and the overall trend cannot be ignored. Consequently, a further study exploring this topic on a larger scale would be useful in investigating whether geographical mobility is causing any inter-group differences, or whether they result from another social factor's interference, which this study did not investigate due to time constraints.

Regarding the results for indirect vs. direct testing methods, the following conclusion can be drawn. Regarding negated DO and *must*, participants rated

the non-standard variants more highly when tested indirectly than when tested directly. For epistemic *mustn't*, Group Two rated this variant more highly when tested indirectly than they did when tested directly. Group One rated epistemic *mustn't* 0.2% more highly when tested directly. However, this is an insignificant difference when the overall distribution of results is observed, and it shows that both groups rated this variant almost identically. Consequently, hypothesis four is supported by the results; participants were more accepting of non-standard variants when tested indirectly.

5.2.2. T-to-R

These T-to-R results showed that, across all seven /t/ positions, Group One speakers rated test sentences more highly on average than Group Two speakers. This clear trend supports hypothesis two. Moreover, it also supports hypothesis one; whilst the results for the morphosyntactic variables also demonstrated a trend, this was less clear, due to challenges from slight discrepancies in the results. Comparatively, the trend for T-to-R is clear and unchallenged by any of the results.

Furthermore, section three of the questionnaire was strongly based on Buchstaller *et al*.'s (2013) questionnaire-based investigation of T-to-R in Tyneside English. Consequently, it is interesting to compare results from the two.

The average T-to-R rating for each /t/ position amongst Buchstaller *et al*.'s (2013) participants is presented in Figure 15. The graph shows that the average rating given to each /t/ position from highest to lowest by Buchstaller *et al*.'s (2013) participants was:

1. Words with /t/ which had been previously reported to undergo T-to-R.
2. Word-final /t/ preceded by short/lax vowel.
3. Morpheme-internal /t/ followed by unstressed /ə(r)/.
4. Word-final /t/ preceded by long/tense vowel or diphthong.
5. Morpheme-internal /t/ followed by unstressed /əl/.
6. Morpheme-internal /t/ followed by unstressed /ən/.
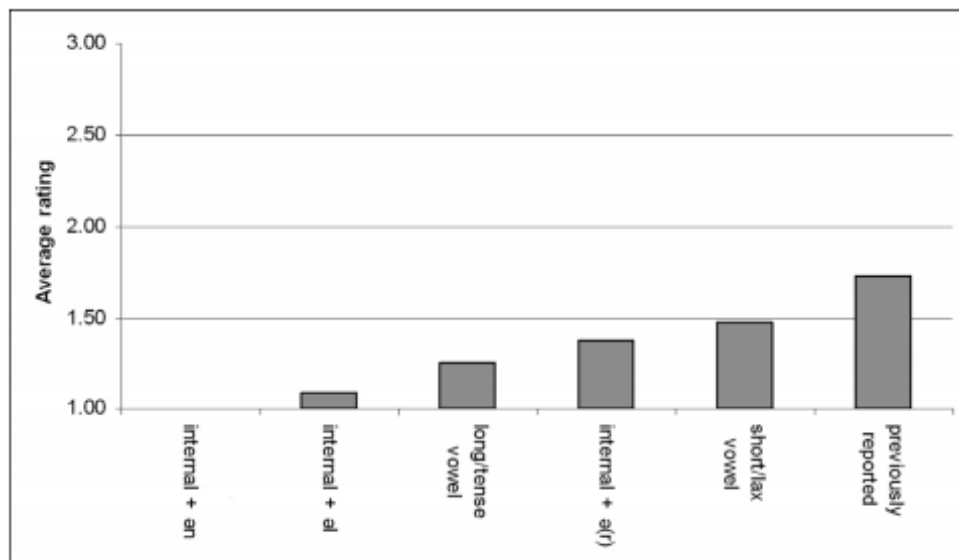
Figure 15 Results of Buchstaller *et al.*'s (2013) study, showing the average rating given to each of the /t/ positions by its participants (source: Buchstaller *et al*., 2013:112).

The Group One results are very similar to those of Buchstaller *et al*. (2013), the orders; the only difference was that morpheme-internal /t/ followed by unstressed /ə(r)/ and word-final /t/ preceded by short/lax vowel were in the reverse order across the two hierarchies. Comparatively, Group Two participants deviate from the order found by Buchstaller *et al*. (2013) more than Group One: aside from the highest rated and lowest rated /t/ positions, the other /t/ positions are in a different order completely.

The fact that the results for Group One are almost identical to those of Buchstaller *et al*. (2013) implies that those students showed a similar trend to previous findings. This implies that they have retained this northern, regional, non-standard feature. The fact that Group Two deviate more from the trend found by Buchstaller *et al*. (2013) implies that geographical mobility has led these speakers to respond differently to T-to-R. These findings suggest that young adults who remained in the North East to attend university demonstrated alignment with community trends, whilst those who moved away demonstrate some retrograde change away from this previously attested trend.

However, both groups demonstrate the same highest and lowest rated /t/ positions as found by Buchstaller *et al*. (2013), illustrating that all participants maintain similar awareness of which /t/ positions are most and least acceptable. Moreover, the present study observed a wider variety of North East local dialects than Buchstaller *et al*. (2013), which could have affected the hierarchy of /t/ positions. Further research testing the findings of both studies would be useful in drawing more justifiable, clear conclusions.

5.3. Limitations and suggestions for further research

This investigation has been useful in observing the effects of geographical mobility for university purposes on linguistic choices made by young adults from the North East. However, there were limitations to this study.

One limitation is that this study did not investigate the impact of identity upon speakers' linguistic choices. Previous studies have demonstrated that an individual's identity can affect their linguistic usage, whereby stronger regional identity leads to conformity with community trends, and weaker identity leads to retrograde change (see Beaman 2020). A further study would benefit from enquiring about participants' regional identity within the questionnaire, to evaluate the implications of strong vs. weak north eastern identity on speakers' acceptance of North East linguistic variables and variants.

Another limitation of this study is that it did not investigate speakers' social networks. Previous studies of language change and variation have found that, speakers with strong social networks retain 'local linguistic features', whereas speakers with weaker networks are more open to 'linguistic change' (Foulkes & Docherty, 2007:54). Despite this study's hypothesis that speakers from the North East would have strong social networks, due to the region's 'traditional', 'working-class' image (Foulkes & Docherty, 2007:54), the questionnaire did not elicit any information about speakers' own networks. Consequently, this study cannot truly comment on speakers' social networks. Therefore, a further investigation involving a questionnaire which elicits information about speakers' social networks would be useful. This could indicate whether speakers who have stronger social networks are more or less likely to retain local variants than

those who have weaker networks and would be useful in further investigating the present study's results.

Another limitation is that, due to low numbers of available participants, this study could not account for the fact that speakers from different North East areas view localised variants in different ways. This study recruited participants from three counties: North Yorkshire, County Durham, and Tyne and Wear. This could have been problematic when identifying trends amongst the two speaker groups, as each of those areas have different, local dialects, with different, local variants (Beal *et al.*, 2012). One known example of this regards negated DO; in Tyneside, the local variant is '*divvent/divn't*', in Wearside, it is '*dinnet*', and thus far, '[n]o examples' of either variant 'have been found in data from Teesside' (Beal *et al.*, 2012:64). Whilst overall trends were identified, it would still have been interesting to observe the results across specific, north eastern areas. Consequently, a further study which separates participants by hometown would be useful.

Moreover, this study's questionnaire sample did not comprise equal numbers of participants across the two groups. An ideal participant sample would have had such an equal speaker sample to ensure comparable results. However, due to resource and COVID-19 constraints, greater numbers of Group Two participants could not be recruited. A further, post-pandemic study with a more balanced sample would be useful in further testing the present study's results.

Another limitation is that the questionnaire methodology did not control for the region in which Group Two participants attended university, again due to limited numbers of Group Two participants. A further study whose speaker sample is controlled whereby there are substantial numbers of Group Two participants attending university in each of the non-North East regions of England would be useful in further testing the hypotheses. Such a study would also be useful in order to examine whether the region to which students move has an effect on their linguistic choices, whereby students may adopt localised features of their university regions, or if all university speech communities are indeed similar (see Evans & Iverson, 2007).

Furthermore, despite testing a phonological variable, this study did not collect spoken data, due to COVID-19 constraints, which prohibited face-to-face sociolinguistic interviews. Collecting spoken data alongside the questionnaire would have been useful

when observing the prevalence of T-to-R in participants' spoken language. Consequently, a further investigation involving both presenting participants with a questionnaire, which is particularly favourable for the collection of morphosyntactic data (Buchstaller *et al*., 2013), and conducting sociolinguistic interviews, which are useful for eliciting phonological data, would be useful in further investigating the present study's results.

Moreover, due to ethical constraints, this study cannot prove that participants used standard or non-standard variants prior to attending university. Consequently, it cannot truly determine if a change within their linguistic behaviours has occurred due to geographical mobility, or if they have defied declining plasticity by adapting such behaviours post-adolescence (Sankoff, 2018). Therefore, to further examine the conclusions suggested from the analysis of the questionnaire results, a real-time panel study would be useful. Such a study should test and re-test a larger group of university students from the North East (see Evans and Iverson (2007) for a similar study). Tests could be conducted before participants attend university, at regular intervals during their time at university, and after they have finished university. This would give an indication as to what the speakers' individual trajectories look like, and if any changes in their linguistic behaviours have taken place.

Chapter Six

Conclusion

To conclude, hypothesis one is supported: the results for T-to-R demonstrated a clearer trend than those for the morphosyntactic variables. Hypothesis two is supported by the results for T-to-R: Group One speakers were more accepting of this non-standard, linguistic variable than Group Two speakers were. However, it is falsified by the results for the morphosyntactic variables: Group Two speakers were more accepting of non-standard variants than Group One speakers were. These contrasting findings demonstrate differences across different levels of participants' grammars, providing an interesting foundation for further study. Hypothesis three is supported: Group Two speakers were more accepting of standard morphosyntactic variants than Group One were. The present study did not observe a clear, standard phonological feature. A further study would benefit from doing so, to further test hypothesis three. The fourth hypothesis is supported: overall, participants were more accepting of non-standard variants when tested indirectly.

A further study accounting for the changes suggested above would be useful in further investigating the present study's topic and findings.

References

Anthony, L. 2019. *Laurence Anthony's AntConc*. Last accessed 15 March 2021, from: https://www.laurenceanthony.net/software/antconc/.

APA Dictionary of Psychology. 2021. Last accessed 7 April 2021, from: https://dictionary.apa.org/geographical-mobility.

Bailey, G., Wikle, T., Tillery, J. and Sand, L. 1991. 'The apparent time construct'. *Language Variation and Change* 3(3): 241-264.

Barker, H. 2016. 'Does Geographic Relocation Induce the Loss of Features from a Single Speaker's Native Dialect?'. *Lifespans and Styles* 2(1): 27-34.

Beal, J. C. 2008. 'English dialects in the north of England: morphology and syntax'. In B. Kortmann and C. Upton (eds) *Varieties of English I: The British Isles*. Berlin: Mouton de Gruyter. 373-403.

Beal, J. C. 2010. 'Dialect Variation in England: Morphology and Syntax'. *An Introduction to Regional Englishes: Dialect Variation in England*. Edinburgh: Edinburgh University Press. 25-52.

Beal, J. C., Burbano-Elizondo, L. and Llamas, C. 2012. 'Morphosyntax'. *Urban North-Eastern English: Tyneside to Teesside*. Edinburgh: Edinburgh University Press. 50-69.

Beal, J. C. and Corrigan, K. P. 2005. 'No, nay, never: Negation in Tyneside English'. In Y. Iyeiri (ed.) *Aspects of English Negation*. Amsterdam: John Benjamins. 139-158.

Beaman, K. V. 2020. 'Identity and mobility in linguistic change across the lifespan: The case of Swabian German'. In A. Ziegler, S. Edler, N. Kleczkowski and G. Oberdorfer (eds) *Urban Matters. Current Approaches of International Sociolinguistic Research (Studies in Language Variation)*. Amsterdam: John Benjamins.

Bowie, D. 2000. 'The Effect of Geographic Mobility on the Retention of a Local Dialect'. Doctoral dissertation, University of Pennsylvania.

British Association for Applied Linguistics (BAAL). 2016. 'Recommendations on Good Practice in Applied Linguistics'. Last accessed 11 February 2021, from: https://www.baal.org.uk/wp-content/uploads/2016/10/goodpractice_full_2016.pdf.

Broadbent, J. M. 2008. 't-to-r in West Yorkshire English'. *English Language and Linguistics* 12(1): 141-168.

Buchstaller, I. and Corrigan, K. P. 2011a. 'How to make intuitions succeed: Testing methods for analysing syntactic microvariation'. In W. Maguire and A. McMahon (eds) *Analysing Variation in English*. Cambridge: Cambridge University Press. 30-48.

Buchstaller, I. and Corrigan, K. P. 2011b. 'Judge not lest ye be judged: Exploring methods for the collection of socio-syntactic data'. In: F. Gregersen, J. Parrott and P. Quist (eds) *Language Variation–European Perspectives III [Proceedings of ICLaVE 5]*. Amsterdam: Benjamins. 149-172.

Buchstaller, I. and Corrigan, K. P. 2015. 'Morphosyntactic features of Northern English'. In R. Hickey (ed.) *Researching Northern English*. Amsterdam: John Benjamins. 71-98.

Buchstaller, I., Corrigan, K., Holmberg, A., Honeybone, P. and Maguire, W. 2013. 'T-to-R and the Northern Subject Rule: Questionnaire-based spatial, social and structural linguistics'. *English Language and Linguistics* 7(1): 85-128.

Burbano-Elizondo, L. 2006. 'Regional variation and identity in Sunderland'. In T. Omoniyi and G. White (eds) *The Sociolinguistics of Identity*. London: Bloomsbury Publishing. 113-128.

Bybee, J. L. and Fleischman, S. (eds). 1995. *Modality in Grammar and Discourse* (Vol. 32). Amsterdam: John Benjamins Publishing.

Cambridge Dictionary. 2021. 'Negation'. Last accessed 7 April 2021, from: https://dictionary.cambridge.org/grammar/british-grammar/negation_2.

Carr, P. 1991. 'Lexical properties of postlexical rules: postlexical derived environment and the Elsewhere Condition'. *Lingua* 85: 255-268.

Chambers, J. K. 2013. 'Patterns of Variation including Change'. In J. K. Chambers and N. Schilling (eds) *The Handbook of Language Variation and Change*. John Wiley and Sons. 297-324.

Chomsky, N. 1965. *Aspects of the Theory of Syntax*. Cambridge, MA: M.I.T. Press.

Clark, L. and Watson, K. 2011. 'Testing claims of a usage-based phonology with Liverpool English t-to-r'. *English Language and Linguistics* 15(3): 523-547.

Coates, J. 1995. 'The expression of root and epistemic possibility in English'. In J. L. Bybee and S. Fleischman (eds) *Modality in Grammar and Discourse*. Amsterdam: John Benjamins Publishing. 55-66.

Cornips, L. E. A. and Poletto, C. 2005. 'On standardising syntactic elicitation techniques (part 1)'. *Lingua* 115(7): 939-957.

Corrigan, K. P. 2000. '"What Bees to Be Maun Be": Aspects of deontic and epistemic modality in a northern dialect of Irish English'. *English World-Wide* 21(1): 25-62.

Corrigan, K. P., Buchstaller, I., Mearns, A. and Moisl, H. 2012. *The Diachronic Electronic Corpus of Tyneside English.* Newcastle University. Last accessed 15 March 2021, from: https://research.ncl.ac.uk/decte.

Davydova, J. 2013. 'Morphosyntactic Analysis in Sociolinguistics'. In J. Holmes and K. Hazen *Research Methods in Sociolinguistics: A Practical Guide*. John Wiley and Sons. 149-162.

Docherty, G., Foulkes, P., Milroy, J., Milroy, L. and Walshaw, D. 1997. 'Descriptive adequacy in phonology: a variationist perspective'. *Journal of Linguistics* 33: 275-310.

Eckert, P. 2017. 'Age as a sociolinguistic variable'. *The Handbook of Sociolinguistics*. Oxford, UK: Blackwell Publishing. 151-167.

Evans, B. G. and Iverson, P. 2007. 'Plasticity in vowel perception and production: A study of accent change in young adults'. *The Journal of the Acoustical Society of America* 121(6): 3814-3826.

Fehringer, C. and Corrigan, K. P. 2015. 'The Geordie accent has a bit of a bad reputation": internal and external constraints on stative possession in the Tyneside English of the 21st century'. *English Today* 31(2): 38-50.

Foulkes, P. and Docherty, G. 2007. 'Phonological variation in England'. In D. Britain (ed.) *Language in the British Isles*. Cambridge: Cambridge University Press. 52-74.

Gibson, E., Piantadosi, S. T., and Fedorenko, E. 2013. 'Quantitative methods in syntax/semantics research: A response to Sprouse and Almeida (2013)'. *Language and Cognitive Processes* 28(3): 229-240.

Honeybone, P. 2006. 'Why everyone should be interested in Northern English 't-> r''. Presented at: Workshop on Northern Englishes, Lancaster University, March.

Le Blanc, C. L. 2010. 'Tracing a morphosyntactic change in Quebec French: the non-standard conditional in si-clauses'. *Journal of French Language Studies* 20(2): 151-169.

Linzen, T. and Oseki, Y. 2018. 'The reliability of acceptability judgements across languages'. *Glossa: A Journal of General Linguistics* 3(1): 1-25.

McDonald, C. and Beal, J. C. 1987. 'Modal verbs in Tyneside English'. *Journal of Atlantic Provinces Linguistic Association* 9: 43-55.

Niedzielski, N. and Preston, D. R. 2010. 'Introduction: Sociophonetics Studies of Language Variety Production and Perception'. In D. R. Preston and N. Niedzielski (eds) *A Reader in Sociophonetics*. Berlin, New York: De Gruyter Mouton. 1-14.

Nordlinger, R. and Traugott, E. 1997. 'Scope and the development of epistemic modality: Evidence from ought to'. *English Language and Linguistics* 1(2): 295-317.

Pearce, M. 2009. 'A perceptual dialect map of North East England'. *Journal of English Linguistics* 37(2): 162-192.

Pichler, H. 2009. 'The functional and social reality of discourse variants in a northern English dialect: I DON'T KNOW and I DON'T THINK compared'. *Intercultural Pragmatics* 6(4): 561-596.

Saidi, S. A. 2019. 'A Sociolinguistic Study of Dialect Contact and Change in Omani Arabic'. Unpublished PhD thesis, Newcastle University.

Sankoff, G. 2018. 'Language Change Across the Lifespan'. *Annual Review of Linguistics*. 4:1: 297-316.

Schilling, N. 2013. 'Data-collection methods'. In N. Schilling (ed.) *Sociolinguistic Fieldwork* (Key Topics in Sociolinguistics). Cambridge: Cambridge University Press. 66-133.

Schilling-Estes, N. 2007. 'Sociolinguistic fieldwork'. In R. Bayley and L. Ceil (eds) *Sociolinguistic Variation: Theories, Methods, and Applications*. Cambridge: Cambridge University Press. 165-189.

Schütze, C.T. 2016. *The empirical base of linguistics: Grammaticality judgments and linguistic methodology*. Chicago: University of Chicago Press.

Sprouse, J., Schütze, C. T. and Almeida, D. 2013. 'A comparison of informal and formal acceptability judgments using a random sample from Linguistic Inquiry 2001–2010'. *Lingua*. 134: 219-248.

Tagliamonte, S. A. 2006. *Analysing Sociolinguistic Variation*. Cambridge: Cambridge University Press.

Tagliamonte, S. A. and Smith, J. 2002. '"Either it isn't or it's not": NEG/AUX contraction in British dialects'. *English World-Wide* 23(2): 251-281.

Tagliamonte, S. A. and D'Arcy, A. 2009. 'Peaks beyond phonology: Adolescence, incrementation, and language change'. *Language* 85(1): 58-108.

The Grammar Lab. ND. 'Normalizing Word Counts'. Last accessed 16 March, from: http://www.thegrammarlab.com/?p=160.

Tomaney, J. 2010. 'Contemporary Britain and its regions'. In M. Higgins, C. Smith, and J. Storey (eds) *The Cambridge Companion to Modern British Culture*. Cambridge: Cambridge University Press. 79-95.

Van Hattum, M. 2012. 'Irish English modal verbs from the fourteenth to the twentieth centuries'. Unpublished PhD thesis, The University of Manchester.

Wagner, S. E. 2012. 'Age grading in sociolinguistic theory'. *Language and Linguistics Compass* 6(6): 371-382.

Appendix A: Participant Information Sheet

Please find below a copy of the participant information sheet sent to this study's pilot study and main, questionnaire-based study's participants.

School of English Literature, Language and Linguistics
Percy Building
Newcastle University
Newcastle upon Tyne
NE1 7RU, United Kingdom

Participant Information Sheet

Project	Linguistic Choices Made by University Students from the North East
Researcher	MY NAME

You have been invited to participate in the project named above. Please take a few moments to read the details provided below, before deciding whether or not you wish to take part.

The project
This project explores the linguistic choices made by university students from the North East.

Your participation
Participation in this project is entirely voluntary. If you choose to take part, you will:
- be asked to complete a questionnaire, which will take approximately twenty minutes. This questionnaire will ask you to rate different sentences based on your own linguistic choices, as well as those made by people in your North East hometown/city.
- be asked to provide some information about yourself, including your email address, age and gender, etc [see *Confidentiality*, below]

You naturally have the right to refuse to answer any questions you are asked.

Your right to withdraw
You have the right to withdraw your consent and participation by notifying the researcher, at any time, including before, during and after completion of the questionnaire. If you withdraw, your data will not be included in the study. After the submission of the project, your data will become part of a small database which will be analysed as part of a final year Linguistics dissertation project. You have the right to ask for your data to be deleted from this database at any time, even after the completion of the study, by contacting the nominated data controller who is named below.

Confidentiality
Within normal legal constraints, your data will be treated as absolutely confidential. In other words, whenever your data is used in any context [see *Use of the data* below] it will be

anonymized: you will be referred to only in a coded manner, e.g. using a pseudonym and/or the demographic information you have provided (age, gender, etc). Your real name/email address will never be used, and any other information that identifies you will be anonymized or deleted.

Use of the data

In disseminating the results of this project, your <u>anonymized</u> data may be analysed, referenced, or described within the aforementioned dissertation. In all such uses of the data, the principles and procedures of confidentiality described above [see *Confidentiality*] will be followed.

Risks and benefits

There are no anticipated risks or drawbacks involved in participating, apart from the inconvenience of the time that it will take [see *Your participation*, above]. The benefits of taking part might not be immediately apparent. However, researchers typically have to rely on volunteers in order to study aspects of human behaviour, including language, so through your participation you are making a valuable contribution to this project. Moreover, the student interviewer will learn important skills (like understanding the dynamics of communication) when completing this task; skills that they can transfer either to further studies or to other walks of life.

Contacts

If you have any questions or concerns about participating in this project, please do not hesitate to contact me or my supervisor:

- Researcher: MY NAME – MY EMAIL ADDRESS
- Supervisor: Professor Karen Corrigan — k.p.corrigan@ncl.ac.uk

Thank you very much for considering participating in this project. If you have decided to take part, please now complete and sign the **Consent Form**. *If you are willing to participate, but do not wish to consent to all of the points mentioned above, you will be able to indicate this on the Consent Form.*

Appendix B: Consent Form

Please find below a copy of the consent form sent to this study's pilot study and main, questionnaire-based study's participants.

School of English Literature, Language and Linguistics

Percy Building, Newcastle University

Newcastle upon Tyne, NE1 7RU, United Kingdom

Participant Consent Form

Project	Linguistic Choices Made by University Students from the North East
Researcher	MY NAME

In addition to this form, you will be given a ***Participant Information Sheet*** outlining the purpose of the project and describing what your participation will involve. If you have any questions arising from this, please ask the researcher before you decide whether to take part. If having read the Information Sheet and discussed the project with the researcher you are still happy to participate, please complete and sign the form below.

In participating in the project named above, I [the 'participant'] confirm that **I acknowledge, agree and understand the following:**	Please enter 'Y' or tick (✓) to acknowledge
Information about the project I have read the ***Information Sheet*** and been given the opportunity to ask questions about the project.	
Age I am 18 years old or older	
Voluntary participation My participation is voluntary, and I can withdraw, without needing to provide an explanation or reason, at any time before work on the project is completed.	
Confidentiality Within normal legal constraints, my data will be treated as confidential. Whenever my data is used in any context [see *Use of the data* below] it will be anonymized: I will be referred to only in a coded manner, e.g. using a pseudonym and/or the demographic information I have provided (age, gender, etc). My real name and email address will never be used, and any other information that identifies me will be anonymized or deleted.	
Use of the data As part of the archive mentioned above, my anonymized data [see *Confidentiality* above] may be analysed, referenced, or described within the aforementioned dissertation. In all such uses of the data, the principles and procedures of confidentiality described above [see Confidentiality] will be followed.	

Participant	Name
Researcher	Name MY NAME
Date	

Thank you for your participation and for making this research project possible.

Appendix C: Questionnaire

Please find below a link to the questionnaire used by this study. When this questionnaire was distributed to participants, all questions were mandatory. However, for ease of access, such requirements have been removed.

https://docs.google.com/forms/d/e/1FAIpQLSefQlKyH--fXTkpqByrt6OJ5PnpVH2Q3BQ_LCF28Qmc4Oz9qA/viewform?usp=sf_link.