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# *Glaswasian?*
# A Sociophonetic Analysis of Glasgow-Asian Accent and Identity

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# Abstract

British-Asians have often been stereotyped in the media through their cultural and linguistic practices, and these have been exacerbated by ongoing anti-Islamic international media coverage. Such associations may necessarily impact on the identity of young Pakistani-Muslims living in the West, and by implication, their sociolinguistic choices. However, no systematic study to my knowledge has attempted to uncover the role fine-grained phonetic variation might play in indexing such associations. In addition, Scottish-Pakistanis who are the largest ethnic minority group in Scotland, have been neglected in prior research on ethnic accents of English. With the increasing acknowledgement that ethnic varieties may influence mainstream Englishes as well as contribute to regional and personal identity, Scotland is a prime site for such analysis with its strong sense of national as well as local identity. Moreover, young female identity in the Muslim context is heightened, and can advance the understanding of the role of age, gender and religion in language variation.

This study is a sociophonetic analysis of the Glasgow-Asian accent, specifically examining the speech of British-born adolescent Pakistani girls, aged 16-18. It uses both linguistic ethnographic and variationist methods with auditory and acoustic phonetics to ascertain how social identity and ethnicity are reflected in specific accent features of their spoken English. From long-term fieldwork in a Glasgow high school, results show that distinct Communities of Practice (CofPs) emerge in the girls according to their social practices. The consonantal variable /t/, and six unchecked monophthongal vowels /i, e, a, ɔ, o, ʉ/ were examined revealing fine-grained differences in realisation according to CofP membership. CofP effects were found: for /t/ for Tongue Shape gesture and Centre of Gravity (CoG), and for vowels in interaction effects with adjacent phonetic environment for FLEECE height (F1) and BOOT front-backness (F2). Findings reveal within-ethnic and cross-ethnic differences across the variables. The girls use a system of accent variation in subtle ways to simultaneously denote ethnicity, and personal, regional and social identity. This reflects hybridity at a fine phonetic level, similar to that of 'Brasian' (Harris 2006), but here embodied in the concept of 'Glaswasian'.

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# Acknowledgement

Dedicated to my precious Ammyjee, for always guiding and believing in me; and to my spirited little girl, Noor Imaan, who was truly the light through all of the darkness.

# Author's Declaration

I, FARHANA ALAM, declare that this thesis titled, '*Glaswasian*: A Sociophonetic Analysis of Glasgow-Asian Accent and Identity' and the work presented in it are my own. I confirm that:

- This work was done wholly or mainly while in candidature for a research degree at this University.

- Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated.

- Where I have consulted the published work of others, this is always clearly attributed.

- Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work.

- I have acknowledged all main sources of help.

- Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself.

Signed:
_____

Date:
_____

# Abbreviations

CofP - Community of Practice

LMEM - Linear Mixed Effects Models

MEM - Mixed Effect Model

CoG -Centre of Gravity

StDev - standard deviation

pre - preceding

foll - following

# Part I

# Context, Method and Location

# Chapter 1

# Introduction

## 1.1  Overview

This study is a sociophonetic investigation of multilingual adolescent girls aged, 16-18, from a Pakistani-Muslim background in Glasgow, Scotland. The study analyses phonetic variation in the realisation of /t/ (e.g. *tin, talk*) and in six unchecked vowels /i, e, a, ɔ, o, ʉ/ (e.g. FLEECE, FACE, CAT, COT, GOAT, BOOT) in Glasgow-Asian English advancing knowledge on the relationship between language and identity, with respect to ethnicity, religion, age and gender.

Through a long-term ethnography in a high school, distinct female Communities of Practice (CofP) emerged, which emphasise how a group's shared social practices may relate to linguistic behaviour (Eckert 1989*a*, 2000). These groupings symbolised affiliation to a range of social practices. Auditory and acoustic phonetic analyses of linguistic variables support these social categories, with a stronger social effect found for the stop /t/ compared to vocalic features. Girls showed subtly different articulations of /t/ relating significantly to specific CofPs. For vowel data, there were interaction effects with CofP and linguistic constraints for the vowels FLEECE on the F1 dimension (vowel height) and for BOOT on F2 (front/backness).

Interestingly, through qualitative comparisons with Glasgow Non-Asian stops and vowels, speakers exhibited phonetic features characteristic of Glasgow speech, suggesting a regional, local identity, as well as features that represent a more personal and social orientation towards heritage and ethnicity. The findings show that fine-grained phonetic variation in accent relates both to phonetic context and to social identity, and also that different features may be imbued with different social meaning, carrying variable social weight. This gives rise to the notion of a 'Glaswasian' accent at a fine phonetic level.

This research supports debates in sociolinguistic theory regarding the importance of broad social categories such as ethnicity, age and gender (Labov 1972*b*, 2001), alongside the usefulness of ethnographic methods in uncovering how language exerts social meaning at a more local level (Eckert 2000, 2008*a*). The key theoretical finding is that there is diversity *within ethnic groups*. Ethnicity itself is much like gender, where

people perform or 'do' ethnicity in the same way that people 'do' gender. Individuals are not simply female but certain types of female. Here individuals are not just Pakistani-heritage high school girls, but certain types of Pakistani-heritage high school girls.

The present socio-phonetic study is also unusual because it highlights fine-grained phonetic differences in the 'same' regional and social accent, which correspond to social identities where our notion of an ethnic accent like 'Glaswasian' needs to be considerably more nuanced. Using ethnography to gain access to social information and naturalistic speech, coupled with subsequent fine-grained auditory and acoustic phonetic analysis of this speech, reveals that ethnic minority communities and their accents are complex but structured in subtle layers. This highlights that ethnicity also (like gender) is not just a set of labels which can be easily applied (Eckert & McConnell-Ginet 2003, Mendoza-Denton 2008).

## 1.2 Motivation and Context

Sociolinguistics seeks to establish connections between language and society, with one primary social phenomenon being ethnicity in today's multicultural and multi-ethnic world (e.g. Mendoza-Denton 2008). The role of ethnicity in language has been examined globally illustrating its contributory effect on linguistic variation (e.g. Labov 1972*a*, 2001). Ethnic background can affect an individual's speech in many ways, from language choices to fine-grained phonetic realisations of consonantal and vocalic features (e.g. Wei 1994, Fishman 1989, Rickford & McNair-Knox 1994, Boberg 2004, Fought 2006, Hall-Lew 2009, Hoffman & Walker 2010, Cheshire et al. 2011, Nagy et al. 2014). Sociophonetics is characterised by a focus on examining the fine phonetic detail of speech often elicited in natural settings through strongly empirical, variationist and instrumental methods in order to address a wide range of theoretical questions in related fields such as sociolinguistics, phonetics, phonology and psycholinguistics. Identifying socially structured variation in speech sheds light on how individuals may store, process and produce language.

Often individuals from different ethnic backgrounds have access to another heritage language, as well as the dominant language, which in many western societies is often English. Bilinguals have been shown to cross languages and codes for functional and social purposes (e.g. Rampton 1995). There is also evidence in European societies of language shifts to mainstream or prestige varieties frequently associated with power and social control (e.g. Gal 1979). There is less clarity however regarding bilinguals' language in diasporic ethnic communities, and especially with respect to later generations born in the host country who acquire the majority language at a very early age. Whilst some factors regarding cross-linguistic influence, code-switching, language choice and language shift are still relevant (Romaine 1995, Fishman 1989), further concerns are pertinent for these new generations, who are often subject to much greater processes

of social and cultural assimilation and thereby potentially linguistic integration. Second and third generations from ethnic minorities also have access to a greater pool of linguistic and cultural resources which may be used stylistically for social purposes.

Notably, rather little sociolinguistic work has been conducted on South-Asians predominantly from the Indian sub-continent who comprise a large diaspora in the Western world, and particularly in the UK (though cf the recent volume by Hundt & Sharma 2014). The Indian diaspora is often considered to be a homogeneous community, but is in fact diverse in terms of historical, social, cultural, religious, political, geographical and importantly linguistic backgrounds. Languages spoken include Punjabi, Urdu, Bengali, Hindi, Gujerati, Tamil and Nepali to name a few, as well as their various local and regional dialects. English has also become a major spoken language in South-Asia, where it was once largely a medium of education, literacy and trade in the post-colonial era. Such diversity of heritage languages may impact differently on varieties spoken in the diaspora through language contact (Matras 2009), as well as the language influences from the new places of settlement, such as the UK (e.g. Stuart-Smith & Cortina-Borja 2012, Stuart-Smith 1997, Heselwood & McChrystal 1999, 2000).

Whilst work has been conducted on British South-Asians as a whole group, there are relatively fewer studies describing the linguistic repetoire of Pakistanis, one large diasporic group in the UK, who are predominantly Punjabi and Urdu speakers. This is despite the fact that according to the 2011 Census, Punjabi is the third most commonly spoken language in England and Wales, with Urdu being a close fourth (English and Polish come in at 1st and 2nd respectively).

Much of the Punjabi research focuses on child language acquisition, cross-linguistic language interference, code-switching and phonological processing, and suggests that the minority language of Punjabi may affect the dominant language of English in current generations (cf Agnihotri 1979, 1987, Verma et al. 1992, Stuart-Smith 1997, 1999, Hirson & Sohail 2007). More recent studies have also examined generational differences in accent (Sharma & Sankaran 2011, Sharma 2011, 2014) and comparative phonetic and discoursal work across different ethnic groups (Khan 2006, Kirkham 2013). To date, there have been some phonological studies on Punjabi of different kinds in the UK which include Pakistani speakers, though not much given the size of the community (e.g. Romaine 1995, Rampton 1995, Heselwood & McChrystal 1999, 2000, Reynolds 2002, Khan 2006, Pert & Letts 2003, Kirkham 2013).

In contrast to comparative work across ethnicities, the present research aims to understand linguistic variation *within ethnicity* which is unusual and contributes more broadly to sociolinguistic research; here specifically by investigating patterns of speech in the under-researched group of Scottish-Pakistani Punjabi/Urdu/English bilinguals. In the domain of sociophonetics, it examines language at a fine-grained phonetic level, allowing objective and quantitative ways of analysing speech variation with respect to social information.

British-Asians have often been stereotyped in the media in terms of their cultural

and linguistic practices, such as gendered and patriarchal discourses (e.g. Alexander 2000), and these have been exacerbated recently by ongoing anti-Islamic international media coverage (e.g. Ahmed 2005, Saeed 2007, Esposito & Kalin 2011). This research is especially timely in the current political climate post-9/11, as it shows that one way that young Muslims in the West may express and assert distinctiveness in the face of rising xenophobia is through language. Such negative associations necessarily impact on the identity of young Pakistani-Muslims living in the West, and by implication, likely on their sociolinguistic choices. However, no systematic study to my knowledge has attempted to uncover the role fine-grained phonetic variation might play in indexing such associations.

In this thesis and for this community, ethnicity is closely related to religious identity, a factor often neglected in sociolinguistic research (though cf. e.g. Milroy 1980, Levon 2006). The identities of Muslim youth are not only constructed through 'being adolescent', or 'being Asian/British', but through their religious heritage. These adolescents have meta-awareness that they are different to mainstream British society because they are essentially part of multiple cultures, linguistic backgrounds and religious perspectives (monotheistic and largely secular) (Harris 2006) as well as experiencing the physical and psychological upheaval that comes with puberty. This does not preclude similarities and coherence with respect to other British communities, e.g. South London communities (Cheshire et al. 2011).

The Asian-Muslim youth have a very different social experience and lifestyle to their older generations, who were often the original migrants from the home country. Though many still uphold their cultural and religious heritage, such as traditional marriages and expected Islamic etiquette, a degree of cultural assimilation is evident through inter-ethnic marriages, the Asian club scene, dress codes, drinking, and pre-marital relationships, despite the continued encouragement of conformity to community norms. More significantly for this research, a move towards the dominant language of English is apparent (e.g. Romaine 1995, Reynolds 2002).

In addition, young female identity in the Muslim context from any ethnic and national background is often highlighted in the media as a monolithic entity, despite notable diversity in background and belief systems (e.g. Anwar 1998, Gilliat-Ray 2010). Young Muslim women in the West are faced with complex and constant concerns regarding their daily lives, e.g. from clothing such as wearing of the headscarf, relationships and marriage concerns, to expected and acceptable career choices if any. Individual interpretations of Islamic rulings regarding women are often embedded within cultural, sectarian and personal perspectives on faith and societal norms. For example, within the Muslim community some would take particularly strict views on dressing modestly and covering aspects of their physical form focusing on details such as garment arm length, whereas others would take a more liberal perspective; some strongly feel Muslim women should stay within the confines of the home and family, whereas others would argue that they can and should be allowed education and careers. In this

way, Muslim female identity can be thought of as on a type of continuum. Teenage Pakistani-Muslim girls in particular also have greater familial and community pressures to conform socially, culturally, behaviourally and also linguistically compared to their male counterparts (e.g. Shaw 1988, 1994, 2000) As such, young Muslim women in the UK context may take on different identities according to expected norms, as well as displaying a lack of overall homogeneity.

Furthermore, Scottish-Pakistanis who are the largest ethnic minority group in Scotland, have been relatively neglected in prior research on ethnic accents of English which have tended to focus on ethnic minorities in England from a socio-anthropological as well as a sociolinguistic perspective (e.g. Hewitt 1986, Sebba 1993, Rampton 1995, Harris 2006, Khan 2006, Cheshire et al. 2011). Maan (1992, 2008, 2014) provides historical and sociological information about Asians in Scotland, with the little linguistic work on Pakistanis in Scotland conducted by Verma et al. (1992), Verma & Firth (1995), Alam (2006), Lambert et al. (2007) and Stuart-Smith et al. (2011) in the central urban areas of Edinburgh and Glasgow examining accent variation in younger speakers. The previous studies by Alam and colleagues will be referred to in this thesis for comparison, but also to show the phases of research and organic development of the wider project.

In the earliest Scottish-Pakistani studies, Verma et al. (1992) and Verma & Firth (1995) found assimilation in Punjabi/English bilingual primary school children in Yorkshire and Edinburgh towards the regional accent of their peers but also retention of ethnic accent features (their focus was on educational language policy). In Glasgow, the researcher as part of her Master's project carried out a short ethnography (which was the precursor for the longer ethnography presented for the current study) and auditorily examined two phonetic variables /t, d/ in Pakistani adolescent girls (Alam 2006). The study revealed retracted variants according to engagement with particular social practices. A synopsis of the main findings of Alam (2006) and another small complementary auditory phonetic study of Glasgow Asian versus Glasgow Non-Asian for an Honours dissertation using accent judgement analysis and cross-ethnic comparison are presented in Lambert et al. (2007). This focuses on stereotypical Pakistani accent features such as retroflexion in /t/ and /l/, ejective and prenasalised realisations of stops. Finally Stuart-Smith et al. (2011) presents different analyses of the two small-scale studies. This acoustically examined vocalic variables /e, o/ and the lateral /l/ making cross-ethnic and intra-ethnic comparisons according to social constraints.

With the increasing acknowledgement that ethnic varieties may influence mainstream Englishes (Cheshire et al. 2011) as well as contribute to regional and personal identity, Scotland is a prime site for such analysis with its strong sense of national as well as local identity. This is especially following the Scottish Referendum in 2014, the Glasgow Commonwealth Games in 2014, and the landslide victory for the Scottish National Party (SNP) in the 2015 UK General Election. Glasgow itself has the largest Asian community in Scotland providing a prime test site for linguistic behaviour

and identity. Interestingly, the Scottish-Pakistani community is also demographically smaller, more close-knit and typically more affluent than its English counterparts and this may result in differences in social practices including linguistic behaviour. As shown, there are many complex and competing forces on identity for ethnic minority individuals, so looking at under-represented and under-researched diasporic groups such as Pakistani Muslims in the UK advances knowledge of socio-psychological factors that may impact on linguistic behaviour.

Specifically, this study seeks to make a contribution to understanding the relationship between language and identity in three main ways: 1) within ethnic diversity making a theoretical contribution by examining the dynamics of ethnicity; 2) young female religious, ethnic, cultural and linguistic identity; 3) Scottish minority ethnic identity; combining to provide a holistic view of personal and group ethnic identity.

## 1.3   Overall Research Questions

The overall aim which this study starts to examine is how linguistic variation might map onto social practices, social meaning and identity within a minority ethnic group. Specifically, it examines a subset of young female British Pakistani Muslim Punjabi/Urdu/English bilinguals in Scotland, and analyses their broad social patterns, alongside more subtle fine-grained phonetic features in their spoken accents of English.

This wider study builds in an organic way on previous small-scale sociolinguistic work which revealed systematic relationships between linguistic variation in /t, d/ and vowels /e, o/ with social, cultural and religious practices (Alam 2006, Lambert et al. 2007, Stuart-Smith et al. 2011). These features are often considered salient within and outside the Punjabi/Urdu community in terms of retraction and closer vowel realisations respectively hence motivating their further analysis.

This thesis aims to address the following research questions:

1. What are the social and linguistic patterns of second/third generation Scottish-Asian girls as evidenced through speech and social practices?

2. How is ethnicity reflected in the auditory and acoustic characteristics of accent features? Specifically, how are /t/ and six vowels /i, e, a, ɔ, o, ʉ/ realised across Glasgow-Asian girls of similar age with varying social practices?

3. How are phonetic realisations conditioned by internal and external factors?

More specific research questions pertinent to social identity and the phonetic features will be given in the relevant chapters, namely Chapters 5, 6 and 7.

## 1.4   Structure of the Thesis

This thesis comprises nine chapters which are split into three distinct parts: 1) introduction, theoretical background, community background and method (Chapters 1, 2, 3 and 4); 2) social ethnographic and linguistic/phonetic results of the study (Chapters 5, 6, 7); and 3) the discussion of the findings, future directions and conclusions (Chapters 8 and 9).

**Part I**   Chapter 1 introduces the study, the motivations and the overall research questions. Chapter 2 is the first of two chapters which provide relevant context for the theoretical, sociolinguistic and community background which thematically foreground this study. Specifically, it addresses how sociolinguistics has dealt with and researched identity and ethnicity, discussing the central concepts of: adolescent identity; gender; style and indexicality; Communities of Practice; and linguistic research on ethnic minorites. Chapter 3 explores the British-Asian diaspora, specifically the Pakistani-Muslim community outlining the historical, social, cultural and religious background as well as highlighting issues of integration. Linguistic literature on British-Asian will also be presented, with a focus on Punjabi/Urdu speakers. Chapter 4 presents an account of the general methodology for the entire research, outlining the overall: location of the study; data samples; data collection and data analysis techniques used. More specific methodology for the social data and phonetic variables will be presented in each relevant results chapter (Chapters 5, 6 and 7).

**Part II**   Chapter 5 discusses the ethnographic fieldwork at Riverburn High School in Glasgow illustrating the evolutionary nature and depth of long-term fieldwork. It gives a panoramic view of the social spaces, groups and behaviours and finishes with an account of the female Asian Communities of Practice in the school. Chapter 6 is an account of the stop articulation /t/, looking at previous research on stops before analysis and discussion of this feature in the Glasgow-Asian girls. Chapter 7 focuses on six monophthongal vowels in Scottish-English /i, e, a, ɔ, o, ʉ/. It covers basic vowel phonology, background research on vowels in English, before presenting the findings of this research from a within ethnicity and cross-ethnic perspective.

**Part III**   Chapter 8 provides the general discussion, summarising the ethnographic, consonantal and vocalic results. It explores how the findings compare and contrast with linguistic research on adolescents and ethnic minorities more widely. Chapter 9 is the conclusion, which summarises the findings of the research, theoretical contributions at a specific level (sociolinguistic, sociophonetic, forensic linguistic) and at a wider level (professionals e.g. education, bilingual researchers). Chapter 9 also concludes with future research directions for this dataset and broader work on British-Asian English in general.

# Chapter 2

# Theoretical Background

## 2.1   Overview

This chapter is the first of two chapters which provide the key relevant and thematic context for the theoretical and sociolinguistic background followed by a detailed examination of the Pakistani Muslim community and linguistic work on British-Asian.

Specifically, this chapter addresses how sociolinguists have viewed and researched the social meaning of variation in speech in a general sense, conceptualising this in 'waves' (Eckert 2012). It reviews key topics such as adolescence, gender and other classifications of social groupings such as social networks and Community of Practice (CofP). For clarity, this chapter also separately examines the sociolinguistic literature on ethnicity as an equally important demographic category for identity.

Chapter 3 then examines the particular context of this research - UK South-Asians. It covers the historical and sociological aspects of the British Asian community, with a specific focus on the Pakistani, Muslim, Scottish and female context. It also reviews the sociolinguistic literature on British-Asian to date.

## 2.2   'Waves' in Sociolinguistic Research

The social meaning of linguistic variation has been examined from three main perspectives according to Eckert (2012) and she uses the term 'waves' to loosely categorise groups of theoretical ideas and frameworks that have emerged and overlapped as sociolinguistics has progressed (also cf. Tagliamonte 2015). These three 'waves' might be conceptualised as: 1) the early 'big' picture; 2) the intermediate 'local' picture; and 3) the most current 'stylistic' picture. For this thesis, a general overview of the pertinent background regarding identity will be provided drawing from these waves. Despite themes such as age and adolescence being discussed separately for clarity, they are not discrete and there are many inter-relationships.

## 2.2.1 First Wave: The 'Big' Picture

First wave studies generally assume broad correlations between linguistic variation and large-scale social demographic categorisation such as social class, age, sex and ethnicity, beginning with the work of Labov and his contemporaries in the 1960s within the formal beginnings of variationist research (e.g. Labov 1966, 1972*b*, Trudgill 1974). Early variationist research moved away from traditional rural dialectology towards analysing urban vernaculars, and other groups in society in terms of age, gender, ethnicity and locale of speakers, through more innovative methods such as participant observation and sociolinguistic interviews. The emphasis on deriving broad universals and hierarchy in language forms in this type of quantitative survey approach provided a solid and comparative framework for future studies.

Much of the early work examined sound change, finding broad correspondence between social class, style (register) and a series of linguistic variables across urban areas (Labov 1966). Standard or non-standard use of accent features were found to be strongly related to social class and coupled with stylistic differences in language (i.e. register) are often considered symbolic of local or wider connections to societal institutions. Notably, the 'speech community' was important with a shared set of norms; whilst speakers do not all speak in the same way in a speech community, they regard the same features as prestigious and this is reflected in their stylistic variation. In the first wave, class-based notions of language and shifts in style according to domain were considered key.

## 2.2.2 Second Wave: The 'Local' Picture

Second wave work focused on smaller groups for longer periods of time to discover the locally relevant social categories according to place and social practice, often utilising ethnographic methods to analyse local vernacular language (e.g. Labov 1963, Milroy 1980, 1987, Cheshire 1982, Eckert 1989*a*, 2000). Such studies do not impose categories by the researcher and aim to relate social meaning from the micro-local level back to the macro categories. Variables index locally-defined social categories and style is used to affiliate with these categories.

This is exemplified by the first ethnographic study of language variation by Labov (1963) on 'Martha's Vineyard' where he found Islanders who identified with the local fishing culture used more local vernacular non-standard features, i.e. the use of a raised first target in (ay) termed 'Canadian raising', a characteristic feature of Atlantic coast island dialects (e.g. ai> əi). This variant was used much less by the Islanders who ascribed to the mainland-oriented tourist economy and hoped to move away from the island, and was reflected in their use of the more lowered first target characteristic of mainsteam US English. In this way, local identity was represented in vernacular forms which took on symbolic and wider ideological meaning.

### 2.2.3    Third Wave: The 'Stylistic' Picture

Both first and second wave approaches take the speech community as their centre point and typically assess linguistic features in relation to their function as markers of predefined social categories. Third wave work often uses linguistic ethnography which emerged from Dell Hymes 'ethnography of communication' (Gumperz & Hymes 1964). It encouraged linguists to look at language in context at a micro-level as opposed to previous Chomskyan ideas (Chomsky 1972) which removed language from its context and concentrated on larger macro factors. Interestingly around the same time Labov's work also analysed variation systematically in sociolinguistic patterns. Moving away from predefined macro social categories which are still useful, and focusing on the social meaning of underspecified variables in constructing local social identities is elemental to third wave studies.

Local variation and social practices, of which language is one, then act as a force *for* social change rather than simply a reflection *of* existing social forces, giving rise to global sociolinguistic patterns. Two key ways of examining social meaning are through Communities of Practice (CofP) and stylistic variation which capture elements of both the individual and societal role in language variation and change. Importantly, micro groupings of social practices (e.g. CofPs) relate the 'local' to the 'supralocal' (Eckert 2000).

## 2.3    Age and Adolescence

Age has traditionally been viewed as the chronological age of the speaker and analysed as a fixed social demographic category in first wave work (Eckert 2012). Romaine (1984) notes age-grading of language is commonplace, whereby individuals have behavioural patterns that are considered appropriate for various life stages, e.g. younger speakers use more non-standard vernacular features. The critical period of child language acquisition is recognised to occur before the ages of seven; and it is between the ages of five and seven when children acquire simple grammar and lexicon mainly from their primary caregivers (e.g Kerswill & Williams 2000, Foulkes et al. 2005, Smith et al. 2007, 2009).

The beginnings of communicative competence are also acquired during early childhood (Hymes 1972), which embodies basic abilities in aspects such as phonology, grammar and syntax of a given language but additionally understanding what is appropriate in any given context. In the preadolescent period, stylistic and regional differences as well as pragmatic and discoursal choices like turn-taking and politeness strategies are learned through play and increasingly more complex speech acts (Romaine 1984, Foulkes et al. 2005, Smith et al. 2009). Sociolinguistic competence develops in the adolescent years, where influences on children's language branch out from the familial sphere to peer group and school.

Adolescence is considered a key critical period for language development and also identity formation (e.g. Romaine 1984, Chambers 1995, Kerswill 1996, Eckert 2000, Tagliamonte & D'Arcy 2009). It is a specific life stage where new opportunities and new social demands are placed on individuals, marking the transition from childhood to adulthood (Taylor 2001), and from the family sphere to a peer-based social order (Eckert 2000, Eckert & McConnell-Ginet 2003, Eckert 2008*b*). Powerful social forces and physiological changes (Dahl 2004) in adolescence cause separation from elders (though not universally) and increased solidarity with peers catalysing identity work. Eckert (1997) notes that teenagers are largely denied adult roles, and institutionalised in the secondary school - a 'hothouse for social development' (Eckert 2000, p.5). While there is the perception of more freedom, opportunity and responsibility at this life stage, it is also a socially demanding time of psychological and physical upheaval. Stereotypically, teenage angst and rebellion are then often portrayed through style, clothing, social behaviours and speech.

Linguistically children acquire an increased use of vernacular forms until age sixteen, often diverging from the language of their parents (Tagliamonte & D'Arcy 2009). One explanation is that adolescents have not yet developed the superimposed styles of speaking like adults which can obscure the vernacular (Labov 1972*b*). Vernacular youth speech is often stigmatised as slang and 'incorrect English'. Developmental cues as well as social influences from a wide range of global media means young people have a plethora of social and language resources to choose from in identity construction. Moving into the high school from primary school may also mean greater racial and ethnic diversity if the catchment allows, with sufficient numbers to form crowds based on these categories (Eckert & McConnell-Ginet 2003, p.387). This in turn means that important differences in the sociolinguistic patterns of adolescent subgroups derive from a diversity of experiences associated with factors such as gender, ethnicity and religion (e.g. Kern & Selting 2011, Androutsopoulos & Georgakopoulou 2003). Research has also shown that during adolescence, the diffusion of linguistic change occurs rapidly and efficiently along horizontal channels (e.g. within one age group and one cohort), whereas in vertical channels (e.g. across generations or across big social divides) the diffusion of linguistic change is comparatively slow and inefficient, i.e. children will talk like their friends and not their parents (Meyerhoff 2006).

The peer group has been shown to influence language. Individuals create patterns of linguistic behaviour so as to resemble those groups with which they wish to identify and differ from those with whom they do not, and this is particularly seen during adolescence (Milroy 1980, Romaine 1984, Le Page & Tabouret-Keller 1985). Adolescents are often considered innovators in language and are viewed as influential in transmitting linguistic change (c.f Kerswill 1996, Croft 2000, Eckert 2000, Roberts 2002). Labov's 1972*a* study on African-American Black vernaculars captured the importance of the peer group and style in identity construction. The peer group has been shown to confer positive values on the vernacular; it serves as an instrument of group

definition and solidarity; is the locus of anti-school culture (c.f. Cheshire 1982, Eckert 2000); as well as being a marker of a distinct ethnic group. Studies in the USA such as Eckert (2000) and Mendoza-Denton (1997) confirm the central role of the peer group and stylistic factors in ethnic identity construction as well as the important but as yet under-researched notion of intra-ethnic variation. Crucially, individual identity is not constructed in a vacuum. It is co-constructed with group identities that include both parental influences, particularly in early adolescence, and peer-group influences (Romaine 1984, Eckert 2000).

Gendered adolescent identity is also connected to different patterns of socialisation across all cultures. As the heterosexual social order becomes increasingly important with age, boys typically become involved in constructing masculine identities based on physical and athletic toughness, which is reflected in their language, e.g. use of non-standard variants (e.g. Macaulay 1977). In comparison, girls typically become concerned with beauty, clothing, hairstyles and a general development of the self, where their major activities revolve around developing cliques, ganging up on each other, shunning individuals and changing friends (Cheshire 1982, McCormick 2001, Eckert & McConnell-Ginet 2003, Eckert 2008*b*). Girls construct their identities within a context of relationships which are most important (Basit 1997, Taylor 2001). Such generalisations are useful from a developmental and social perspective but they are not always wholly accurate. This is especially with respect to the changing nature of gendered identities in the modern world and an over-simplification of the diversity of experience (e.g. Podesva 2006).

## 2.4 Gender

First wave work took the concept of gender to refer to biological sex and many studies showed that language variation largely correlated with gender (e.g. Labov 2001) - whilst these scholars did not confuse the categories, they coded for the latter. Two main principles emerged regarding the differences between male and female speech: 1) women use the most standard speech forms compared to men; 2) women are also the innovators or leaders in sound change (Labov 1966, Wolfram 1969, Trudgill 1974). Labov (2001) terms this the 'gender paradox' because on one hand, there is an assumption that women lead in the standard variants, whilst simultaneously assuming the opposite, that they also lead in use of the non-standard or new variants. Notably however Labov (2001) asserts that it is not necessarily the same females in both scenarios, suggesting a clear lack of homogeneity in motivations for use.

In stable sociolinguistic variables, women are considered to use the standard variants more than men (e.g. Labov 1966, Milroy 1980, Cheshire 1982). Usually this suggests the incoming variant is at the level of consciousness and positively appraised in the community as a 'change from above' (Labov 2001). For example, Trudgill (1972) in his survey of Norwich English showed that women use more standard velar nasal /ng/

than non-standard /in/ in word-final position e.g. *walking*; and Labov (1966) found that women used more post-vocalic /r/ overall than men in his New York department stores.

Such differences in gendered speech at the level of consciousness have been attributed to a number of factors. Typically men are evaluated on what they do as opposed to women who are judged on how they appear. Consequently, this means women pay more attention to stylistic markers in speech and are more conscious of what is standard and what is not. Women may also use language for both social and economic reasons (Gal 1979) as historically they have been given low societal status. Often they have been a marginalised and marked group in society. The overt prestige and status-enhancing use of standard language features may appeal to women whereby women use language to assert their authority, ambition and status in a way that is not required for men. Eckert (2000) develops this argument saying women generally make greater use of all symbolic resources (whether in speech, dress or make-up) to establish their position in and identification with a social group or opposition to a group. Another explanation for women's greater use of standard varieties has been linked to the characteristic role of women as the main caregivers to children (e.g. Smith et al. 2009). There is a view that women may want to pass on the higher-status variants to their children to improve their prospects.

In changes in progress from below the level of consciousness, 'changes from below', women tend to use more of the incoming non-standard variant than men, thus leading sound change. For example, Eckert (2000) found in her study on adolescent groups in Detroit, that the central vowel /ʌ/ was backing in the speech of Burnouts (e.g. *bus* sounds like *boss*) and was the most advanced amongst female Burnouts compared with the male Burnouts. In this example, gender combines closely with another social grouping, Community of Practice. While this is not simply a straightforward correlation, it does illustrate the often complex and inter-related role of gender in sound change.

Men's language, on the other hand, is typically more non-standard or vernacular which is associated with masculinity and covert prestige (Trudgill 1972, Milroy 1980). However, some research has also suggested that in some sociolinguistic contexts, it is in fact men who lead women in the use of the standard variants dependent on variables such as level of education. A study by Bakir (1986) analysing the diglossic situation of Arabic in Iraq found that men used more Classical Arabic (i.e. the standard) with women typically using the non-standard colloquial variants. Bakir (1986) indicates that this may be linked to the fact that men have more access to education in the Arab world than women and have more instances to use it, e.g. at work.

It is apparent that there are relationships of language variation and gender/sex, but these are not explanatory so much as links. It is not the case that women do not use non-standard variants because they are female, but for a range of reasons linked to being female in their particular context. Speakers' access to linguistic resources must

also be considered where it is not being male or female that causes a speaker to speak the way they do, but the social roles and the social networks entered into as men and women that generates the gendered distribution (e.g. Milroy 1980, Meyerhoff 2006).

In third wave work, gender is a complex social identity derived like all other social constructs which can be independent of biology (Eckert 1989*b*). Consequently the notion of gender is not as straight-forward as first wave work suggests and does not always correlate easily with social category (c.f. Podesva 2004, 2006, Kiesling 1998, on gay speech). Eckert & McConnell-Ginet (1992) state that gender cannot be analysed in abstraction or universally as one monolithic unit as previous Labovian type work purports, or even experimentally where there is no 'real' natural data. They advocate the need to look at gender in conjunction with its local context in the communities where it happens as gender may be a product of many other interacting factors, e.g. Eckert's burned out Burnout girls discussed earlier. This shows that even within gender, girls can construct themselves differently to other girls as well as within the broader female category. It seems that gender-preferential differences exist rather than gender-exclusive differences.

## 2.5 Social Networks

The idea of using social networks, borrowed from anthropology and sociology, was an important methodological advance in the second wave (e.g. Cheshire 1982, Milroy 1987, Eckert 2000). Social network theory explores how innovations in speech are spread through social structures, taking into account the different socialising habits of individuals and their degree of involvement in the local community (Romaine 2000). Social Network Theory allows an understanding of how the pressures of group membership relate to speakers, as individuals can be strongly influenced by the social groups they belong to, and this is often the reason why they choose to speak in a particular way, e.g. even non-standard forms have a covert prestige in particular social settings.

Social groupings are based on the frequency and quality of members' interactions (Milroy & Milroy 1992). Strong social networks are formed when members of a speech community are connected to each other through dense and multiplex ties and these serve as language maintenance or norm-enforcmement mechanisms. In contrast, weak networks may precipitate cultural and linguistic change as they are more open to external influences due to the marginal status of individuals who can diffuse ideas across many social boundaries.

A seminal study using social networks to explain the meaning of language variation was by Milroy (e.g. Milroy 1980, 1987) who examined three working-class communities in Belfast (Ballymacarratt, Clonard and Hammer) during the Northern Ireland Troubles in the 1970s. Through ethnographic methods, access to the communities through the 'friend of a friend' method and informal participant observation, Milroy uncovered local meanings of variation which differed according to the community's varying so-

cial networks. Results showed that the strength of the social network an individual belonged to correlated with linguistic variation, e.g. individuals belonging to Bally-macarratt's dense network used the most vernacular variants whilst individuals from Hammer's looser network correlated with more consistent adoption of ongoing linguistic changes in Belfast English. Women in general had looser networks than the men; and they had a central role in linguistic change especially those who worked outside the local area (Milroy & Milroy 1985, 1992). They typically used less vernacular features than men but not necessarily more standard variants as previous work on gender has suggested.

For different individuals all networks are not equally important. Even networks with low density and simplex ties can still have a high value for speakers strengthened by a particular loyalty or personal reason. Childhood networks have been espoused as having the greatest impact on speech and linguistic development (Sankoff et al. 1997, Vann 1998) as well as those in teenage and early adult life (Eckert 2000). This reveals that social networks are not all to be understood in simple or straightforward ways.

## 2.6   Style

Within first wave sociolinguistics, Labov (1972b) introduced the concept of style with respect to intra-speaker language variation as opposed to inter-speaker variation. There are many ways of understanding and explaining stylistic variation and all of these elements help in appreciating the whole. For example, people do monitor their speech when performing tasks, *and* they perform and construct their speech *and* they direct it to people: *and* importantly all of these factors can occur together. The difficulty lies in that an analyst can only really focus on one angle at a time.

Labov views style as a structural and system-bound orientation where his *attention to speech* model states that people adapt their language in relation to how conscious they are of their speech and make stylistic shifts according to dialect and register. For instance, individuals use more standard variants in more formal contexts such as read speech and less standard variants in more informal contexts such as conversation. This model emphasises the importance of external factors in stylistic variation and views speech as a reflection of social structure; later approaches take a different focus on speaker agency.

Other style frameworks also allow further understanding of the functional, social and symbolic motivations of stylistic cues giving greater importance to agentive processes (Eckert & Rickford 2001, Coupland 2007). For example, *speech accommodation theory* focuses on convergence or divergence in speech for social acceptability (Giles 1973, Giles & Smith 1979); the *audience design* model focuses on the importance of the addressee/interlocutor's role on the speaker's linguistic behaviour as well as topic and setting (Bell 1984, Rickford & McNair-Knox 1994); and the *social identity* model focusses on the functions of the group and individual in affiliating with certain iden-

tities (Tajfel 1978). Such frameworks foreground the importance of style in the third wave which views stylistic variation not as a reaction to external forces, but as a resource in the active creation of speaker identity and persona construction (Eckert & McConnell-Ginet 2003, Moore 2003, Schilling-Estes 2004*b*).

While early variation theory links style to a speaker's situational adjustments in their use of individual variables; in the third wave it takes on new directions. Here the theoretical constructs of style, stance and indexicality are key inter-related elements which often use more qualitative and discoursal analysis alongside traditional variationist methods (e.g Moore & Podesva 2009, Moore 2012, Podesva 2006). These constructs focus on *speaker design* or speaker agency such as the 'acts of identity' model of Le Page & Tabouret-Keller (1985) where individuals alter their speech stylistically to identify and align with broader categories and ideologies. For example, the use of glottalisation to signal urban youth culture or code-switching to signal ethnic identity. In this way, speakers are actively and stylistically producing social differentiation rather than simply a result of it.

In this approach, style can be defined as a cluster of features and stances comprised of linguistic and stylistic practices. For example, specific language use, hairstyles and make-up might represent a particular female identity. Individuals, and especially adolescents, typically use a persona style in a sustained way to index who they are, but they can perform styles for a range of symbolic purposes to create different personal and interpersonal meanings (c.f. Coupland 2007, Podesva 2004). According to Eckert (2008*a*) the entire process of identity construction is in stylistic practice - the interpretation of and production of styles which take place simultaneously and iteratively.

## 2.6.1 Stance

Closely related to style is stance which might be conceptualised as an individual's position with respect to something (Jaffe 2009). For example, it can be a fleeting or momentary position reflective of a persona or social type, which is usually evaluative, e.g. being 'bitchy'. Individual stances can have different meanings in different social contexts or by different personae or styles.

Drager (2009) used the idea of 'stance' in New Zealand adolescent girls, based on whether they ate lunch or not in the school common room and correlated this with their use of the word 'like' in different speech contexts. The dichotomy of being a common room girl or a non-common room girl was indicative of whether the girls thought they were normal or not. With the results of associated speech perception experiments, Drager (2009) argues that speech production, speech perception and identity construction should be seen as a unified model to fully understand social and linguistic information.

### 2.6.2 Indexicality

In order to model relationships between linguistic forms and social meanings, sociolinguists have drawn on theories from linguistic anthropology such as theories of indexicality (Silverstein 2003, Eckert 2008*a*). Indexicality refers to links. For instance, direct indexicality may be seen in the use of many imperatives in speech to index power; whilst indirect indexicality refers to another related category such as male, as men may culturally be expected to use more imperatives than women (Kiesling 2013). Essentially, individuals do not directly say 'I am x' but signpost it through their linguistic choices. This in turn affects the interlocutor's perception and semiotic alignment. In this way, social indexing is the linking of linguistic variables to social categories which can range from small entities such as a clique of friends to large entities such as regional dialects, gender or ethnic groups (Thomas 2011).

This view on style also proposes that the meaning of linguistic variables is not fixed but comprise a field of possible meanings referred to as an *indexical field*. This signifies a collection of ideologically-linked meanings that can be accessed in situated linguistic use (Eckert 2008*a*). The indexical field is fluid, is context-dependent and each interaction can create and invoke changes in the field based on previous interactions thereby broadening the ideological relationships. Linguistic behaviour can mean different things at different times, can have limited social meaning in certain cases of the same speaker's speech and the same speaker may even use different variation to signify similar social meanings (Kiesling 2013). As a result, ideology becomes embedded in language rather than language simply being a product of ideology. Identity is then constructed through multiple indexicalities.

## 2.7 Communities of Practice (CofP)

### 2.7.1 What is a Community of Practice?

A Community of Practice (CofP) is a concept developed within anthropology and specifically from social learning theory (Wenger 1998). It is a theory of learning that focuses on social participation and begins with the assumption that engagement in social practice is a key process by which individuals know what they know and by which they become who they are, i.e. the generation of social meaning. A community of practice is defined by Eckert & McConnell-Ginet (1992, p.464) as:

> 'an aggregate of people who come together around mutual engagement in an endeavour. Ways of doing things, ways of talking, beliefs, values, power relations - in short, practices - emerge in the course of this mutual endeavour'

In this way, a CofP is defined quite differently than a demographic category and/or social network as it is characterised more strictly by members' negotiated shared be-

haviours which are continually evolving and can encapsulate multiple identities in any given situation.

Eckert (2000) outlines the three main characteristics of CofPs which set them apart from previous speech communities which are often seen as a more analytical construct. Firstly, *mutual engagement* means that individuals must meet each other and have social engagement, unlike being circumstantially ascribed to a particular social class or in a social network where an individual can know someone indirectly through chance. Secondly, a *shared repertoire* means individuals in a CofP come to share speech styles and social practices such as common accent features or clothing which largely arise from the third quality of having a *jointly negotiated enterprise*. This suggests individuals are not merely in contact but are establishing, agreeing on and negotiating rules for their shared goal or enterprise, e.g. a garage band, an internet chatroom. Such communities may be transient, non-permanent and only come together and exhibit their group norms in particular and intermittent contexts. Importantly, members rather than circumstances facilitate the existence, use and meaning of the CofP, and this is arguably the defining quality of a CofP. In addition, the CofP framework integrates both structure at a group level and agency at the individual level, where the salience and social meaning of shared practices can only be determined through detailed or in-group knowledge.

While the CofP framework acts as a micro-theoretical way of understanding and capturing several macro-global categories like class, ethnicity and gender and allows speaker agency, it is important to note that CofPs are not necessarily formed randomly (Eckert 2000). Individuals may engage in particular CofPs because that is their social context, embodied in factors like class and gender, e.g. working class men tend to be union members more than middle class men.

From a linguistic standpoint, the CofP framework takes language as one of many social practices in which individuals participate, in contrast to investing language with a specific analytic status (Eckert 2000). This provides a richly contextual approach to understanding language and society, because multiple factors can be analysed at the same time. Linguistic variation can also be understood in terms of a speaker's broader social patterns.

## 2.7.2  Eckert (1989, 2000): Jocks and Burnouts

The CofP has often been used to analyse variation in adolescent groups. This is because the CofP is strongly related to learned social behaviour which is a key concern during adolescence. The seminal sociolinguistic study of variation using this framework was that of Eckert who explored the social construction of identities in an American high school. She characterised differential social practices related to social class, attitude to school, dress and language (Eckert 1989*a*, 2000).

Through a long-term ethnographic approach in a Californian high school, Belten High, Eckert (1989*a*, 2000) identified the social structure of the school to be shaped

by two polar self-labelling peer groups which comprised distinct communities of practice. These were the Jocks and the Burnouts. There was also a majority third group called the In-Betweens who existed between the two extremes. Jocks were pro-school, embodying middle class values in the form of sporting achievements, achieving good grades and aspirations for further education. In contrast, Burnouts held anti-school views conveyed in their preoccupation with alcohol, drugs, loud music and old cars. Crucially, Eckert (1989$a$) argues that variation is constituted through social practice, of which language is one, and encourages examination of the way in which social categories are performed and constructed. She illustrated that Jocks and Burnouts embodied ideological values relating to the white social classes and this was born out in their vocalic variation.

Eckert's linguistic focus was on vowel pronunciation and specifically the Northern Cities Chain Shift - a series of innovations in the vowels of the English spoken in the urban centres that surround the American side of the Great Lakes. First described by Labov et al. (1973) and investigated further by Eckert (1989$a$), its linguistic consequence is a new vowel system, characteristic of North American cities like Chicago, Detroit, Cleveland, and Buffalo with some aspects of it detectable farther afield, in cities like Milwaukee. The main features of the Northern Cities Chain shift are: raising and tensing of /ae/; fronting of /ɑ/; lowering of /ɔ/; backing and lowering of /ɛ/; lowering and backing of /ɪ/ and backing of /ʌ/. For example, a more backed realisation of /ʌ/ sounding more like /ɔ/ is common in urban centres, compared to suburban areas and gradually less common in areas further away from the suburbs.

Eckert (2000) showed that Burnouts, especially girls, were at the forefront of the Northern Cities vowel shifts and used language differently to the Jocks.[1] In other words, linguistic innovation at this vernacular level, was associated with symbolic identity work. Burnouts appear to use vowel shift in their accents to make a clear statement about their group identity affiliation and local regional identity. One explanation is that Burnouts anticipated staying in the same local area and working there. This is in contrast to the Jocks who typically moved away for further education and were thus not expected to remain in the same social regional situation. This is similar to findings from Labov (1963) on Martha's Vineyard where the least local vernacular variants were used by the Islanders who wanted to move away or be part of the tourist-based economy. Given that linguistic practices are a type of social practice, they can correlate at an individual level, but also on a much wider scale, e.g. understanding that for Burnouts 'cruising at lunchtime' signals affiliation with the wider urban culture. This exemplifies the inter-relatedness of the individual and the group, as individuals are embedded in society-wide structures and this is reflected in their identity.

Eckert (1998) proposed that females in general use greater symbolic resources to establish membership and status. This is in a different way to males who focus more

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[1]'Use' does not necessarily imply conscious or volitional, rather they use fine phonetic variation at a subconscious level.

on what they do, rather than how they are. Females tend to identify themselves with polarised Jock-Burnout categories and have more extreme linguistic variation compared to males, using linguistic and social variation as a symbolic resource, e.g. the Burnout girls use the most extreme variants, and the Jock girls do too due to marginalisation in the linguistic marketplace as females compared to males.

Interestingly, gender is reflected by girls polarising within girls, where it was the 'burned out Burnout' girls (those with the most extreme social practices) that appeared to lead in sound change. As this does not support previous theories on gendered language where women are expected to use more conservative variants, Eckert (2008*b*) suggests that the extreme Burnout girls are not trying to be 'male' because that would be carried out at the level of style, but are using linguistic variables as a symbolic resource to construct both their overtly female and extreme urban identity with respect to Jocks. Burnout girls actually lead in the use of all three variables studied, (ae)-raising, (ay)-monophthongisation, and (ʌ)-backing. This demonstrates the most local accent of all the groups, male and female, as well as social orientation as a Jock or a Burnout.

Such findings show that adolescents seek to differentiate not only with their adjacent life stages as previous work suggests; but between themselves in particular social contexts for particular social differentiation (Kirkham & Moore 2013). Eckert's work clearly epitomises the intersection and inter-relationships of age, class, gender and location. It also illustrates the value of using the CofP framework over singular social elements in understanding the holistic construction of social identity.

### 2.7.3 Further CofP Studies on Adolescents

Other variation studies in urban western contexts have followed Eckert's methods finding similar results that linguistic variation can carry a high degree of social meaning for speakers, particularly adolescents (Bucholtz 1998, Mendoza-Denton 2008, Moore 2003, 2006, Moore & Podesva 2009, Moore 2010, Drager 2009, Lawson 2009, 2011, 2014). As seen earlier, the role of adolescence as a particular life phase explicitly connected with identity construction is key, as well as within gender differences.

Bucholtz (1999) performed a study on a group of adolescent European American girls in Californian high school, who use the social identity of 'nerd' as an alternative to mainstream gender identities. They placed themselves in opposition to Jocks and Burnouts, and whilst still good students, they valued intellectual achievement rejecting conventional femininity and thus subverting the regular social order. They even self-identified with the term 'nerd' as an alternative to hegenomic femininity. The girls strategically positioned themselves in opposition to the 'cool' girl ideology associated with cuteness, prettiness and sophistication. Nerds tried to be unfashionable and geeky in their practices, e.g. nerds read novels as opposed to magazines as they prized knowledge as symbolic capital. In their discourse they also used the language of puns and used 'uncool' language (i.e. not teenage slang but more formal language). They

also used hyper-articulated /t/ release uncharacteristic of American English. In this way, they used fine-grained aspects of speech as another tool to portray their ideological stance in conjunction with social aspects such as clothing and behaviour, as a sort of linguistic 'punchline'.

Similarly, work by Mendoza-Denton (1997, 2008) on Chicana-English girl gangs in California focusing on two CofPs illustrated the overt appropriation of style in identity construction. Norteñas (or 'Northerners') ascribed to mainstream American culture, whilst Sureñas (or 'Southerners') ascribed more to Latin-Mexican culture. While the two CofPs shared ethnicity, they differentiated themselves through their social practices such as speech, bodily practices and symbolic exchanges. Mendoza-Denton (1997) found stylistic use of various social symbolic practices to correlate with their performance and construction of specific gang identities. These were often connected to wider social processes surrounding nationalism, gender, femininity, power and ethnicity. The gang girls used linguistic variants differently according to the specific Latina style in which they occurred and the same features could have different meanings, e.g. /ɪ/-raising and use of the Th-Pro discourse marker in words like *something*. They also used diverse bodily practices such as make-up, clothing and tattoos to construct specific identities, revealing that cultural as well as linguistic practices were salient.

In the UK, work by Moore (2003) and Lawson (2009) shows linguistic variation being used as a resource in the construction of different social identities in adolescents. Moore's 2003 study on girls in the northern English town of Bolton showed that morphosyntactic and discourse-related variables were used by distinct CofPs to define themselves in relation to other social groups. For example, the Populars and Townies which were the most anti-school CofPs used most non-standard forms like non-standard *were*, negative concord and tag questions. Analogously, Lawson (2009) showed adolescent boys in a large inner city Glasgow high school used specific language practices in one 'Ned' CofP to index broader notions of violence, aggression and masculinity unlike the other CofPs in his study. In this group, the vocalic variables BIT and CAT were more lowered overall and TH-fronting occurred more commonly as a non-standard feature indicative of the Neds' wider affiliation.

## 2.8   Identity

This thesis examines identity in largely urban contexts within a particular framework - speech in society; so it is therefore important to understand how identity might be conceptualised here. As shown, across the historical course of sociolinguistic research, the concept of identity has evolved substantially; shifting from static 'labels' to a growing recognition of the fluid, dynamic negotiation of status.

With this progression in sociolinguistic thought, identity is now considered a fluid term, constructed dynamically in social space through the meanings attached to social practices and people. Broadly it can refer to 'how individuals define, create or think

of themselves in relationships with other individuals or groups' and depends on factors such as solidarity with others by marking difference and similarity or to encapsulate new innovations and identities (Kiesling 2013, pp.449-45). Two edited volumes by Omoniyi (2006) and Llamas & Watt (2010) provide further descriptions of how identity might be conceptualised in relation to language, through exploring individual, group, regional and national identities.

Identities are continually changing and shaped by a range of factors such as social, economic, political, moral, religious, cultural and geographical influences. This is exemplifed by Labov's work on Martha's Vineyard which was a seminal study on language and identity (Labov 1963). More specifically, Kiesling (2013) notes that identities can be influenced by a number of things such as census groups (e.g. sex, race); place (local identity); institutional roles (e.g. like mother, bus driver); and stance or positions to others (more fleeting and temporary in day-to-day interactions). Key is that identity covers many aspects at any given time, e.g. an individual can be female, Asian, Muslim, Scottish, a school pupil, a daughter, a customer and a host of other components all at the same time.

However, some aspects of identity become more salient than others in speech acts, due to speaker agency and situational factors whereby individuals can choose to perform and highlight particular identities in different contexts (cf. Tajfel 1978, Bell 1984). This element of speaker agency puts the individual at the centre of linguistic choices rather than pre-determined choices imposed on them due to a certain identity.[2]

In the case of ethnic groups, diasporic communities and bilinguals as in this thesis, they are subject to even more identity choices. This is due to multiple heritages and diverse transcultural elements which are always present; as well as the broader generic demographic, situational and individual factors. Importantly language variation is often socially emblematic.

## 2.9 Ethnicity

### 2.9.1 What is ethnicity?

In this thesis, ethnicity, identity and language are closely linked. While ethnicity is addressed separately, this does not suggest it is any more or less important than other components of identity like age or gender which all work simultaneously in identity construction. The ethnic minority population is increasing in a number of countries, including the USA and the UK, making it an important area for linguistic research.

Today, ethnicity itself is largely viewed as meaning 'other' to dominant and privileged groups in society (Fought 2013) even though every person has an ethnicity, including the White majority in European and American contexts. However, the term

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[2]Terms like 'choice' do not equate to conscious volition and are less sophisticated ways of describing 'agency'.

has become synonymous with visible ethnicity through socio-political and socio-cultural factors relating to power in western contexts.

However, there is little agreement regarding how to conceptualise ethnicity, as some argue it is an objective set of categories, such as origins of birth, upbringing, race, nationality, religion, language, dress; whilst others view it as a more subjective, metaphysical category which may cut across social categories to signify specific allegiance (Banks 1996). Ethnic affiliation is not straightforward and is difficult to separate from historical background, region, social class and other socio-cultural variables (Wolfram 2007). For example, Irish English speakers may have strong associations with a specific cultural background, region, religion and political situation compared to say Irish Americans.

Moreover, ethnicity is defined as much by one's own sense of self as by others perceptions. In this way ethnicity is not necessarily an enduring quality belonging to an individual but is constantly constructed and defined through social interaction where an individual is not what one *is*, but what one *does* (Fought 2013). Banks suggests that an individual's sense of his or her own ethnicity may be in continual flux and adopts recent theorising in sociolinguistics which asserts that ethnic identity, like other identities, is constituted in discourse, e.g. the choice of language chosen or orientation to one's own identity in talk as well as how one is positioned by others. This in essence inculcates a sense of one's own ethnolinguistic identity.

There are a number of linguistic resources used by ethnic groups for identity purposes which may also interact with each other. Fought (2013) outlines the main linguistic repetoires which include:

- a heritage language, e.g. Punjabi for British Asians

- a heritage dialect, e.g. a Lahore dialect for British Pakistanis

- a 'borrowed' variety, e.g. Black English Vernacular (BEV) by British Asians

- a 'mixed' variety, e.g. code-switching by British Asians

- suprasegmental features, e.g. syllable timing in Asian English

- specific discourse features and/or language norms, e.g. emphatic use of tone for humour in Punjabi

Interestingly, Fought (2013) notes that different components of the language system, such as grammar and phonology, might function in different ways in the construction of ethnic identity. Linguistic contact between different ethnic groups also raises interesting questions surrounding dialect convergence, divergence and other related phenomena such as substrate influences in bilingual situations. These factors are linked to an individual's own construction of ethnic identity and the ideological contexts in which they are viewed, both from the speaker to the hearer.

Interlocutor effects can also strongly influence linguistic choices of the speaker. For example a study on style-shifting by Rickford & McNair-Knox (1994) demonstrated significant addressee effects on the African American speaker, 'Foxy Boston', when being interviewed by an African-American and a European-American woman. As might be expected Foxy used comparatively more AAVE features in her speech with the African-American interviewer. However, direct correlations based on ethnicity alone should be made with caution as the gender of the interviewer, how well Foxy knew the speaker as well as differences in intraethnic and interethnic discourse may have been influential, emphasising the need to examine ethnicity in context with other factors and not in isolation.

Many of the major sociolinguistic studies have predominantly highlighted how White European and American English-speaking individuals define themselves through their use of language and how ethnic varieties affect mainstream Englishes (though c.f. Labov 1972a). Influences on the minority language from the majority language have largely been absent from linguistic research, especially phonological features, whilst the role of lexical transfer has been documented, e.g. regular code-switching to English by British Asians. Moreover, Fought (2013) notes that little has been done on internally motivated sounds changes in minority ethnic communities, which is surprising given the integral role that sound changes in progress have played in sociolinguistic theory.

## 2.9.2   Early Work: African American English (AAVE)

Members of ethnic groups can construct an ethnic identity through social practices such as language, as they are exposed to a potentially wider range of linguistic resources. Sociolinguistic research beginning in the North-American context has shown that a range of phonological, grammatical and lexical features may signal ethnic identity giving rise to the later idea of 'ethnolects' (e.g. Wolfram 1969, Labov 1966, 1972a, Poplack 1980, Rickford 1999, Cutler 1999, Mendoza-Denton 2008, Bucholtz 2004, Eckert 2008b). Much of this research has studied two main ethnic groups, African-American and Chicana-Spanish speakers in the US context, although more current work has expanded to other groups.

The most noted research on ethnic varieties of English began with Labov (1972a) on African-American Vernacular English (AAVE) in his study of street gangs in Harlem, New York. This initially began as a project to ascertain educational reasons for the poor literacy rates of this community where Labov found clear differences between Black and White speech patterns. Systematic analysis of this variation was conducted showing distinct markers of Black ethnicity in the form of non-standard linguistic features such as copula deletion, consonant cluster reduction and negative concord amongst others. Social network analysis revealed that AAVE non-standard forms were used most by core gang members whilst the boys on the fringe of the gang network (the 'Lames') used the least and were most affected by the norms of the standard. A key outcome of this work sought to improve the status of the speech of the Black community as a legitimate

and valuable language form and dispel its symbolic devaluation caused by socially and historically rooted institutionalised racism. It showed that linguistic subordination of visibly ethnic groups and the problems of standard language ideology may increase feelings of group solidarity (Lippi-Green 1997) where negative associations can lead to oppositional positions, socially and linguistically.

### 2.9.3 British Black English

Despite the important role of ethnic minorities in the UK particularly in the post-war period, little work has focused on minority ethnic accent features. Much of what has been done has centred on the UK's largest ethnic groups - Black and South-Asian - in largely urban contexts (e.g. Hewitt 1986, Sebba 1993, Rampton 1995, Khan 2006, Harris 2006, Pichler 2006, Cheshire et al. 2011, Stuart-Smith et al. 2011, Sharma & Sankaran 2011, Kirkham 2013, Kirkham & Wormald 2015). Many of the earlier studies are mainly from a discourse analytic, educational and socio-cultural perspective looking at ethnic youth subcultures in the UK, though latterly more specific variationist work has arisen. Here a general review of work on ethnic varieties including Black English will be presented and specifically South-Asian UK studies will be analysed separately in Chapter 3.

Historically, language and ethnicity sociolinguistic work in the UK has focused on the Black Afro-Caribbean community. The study of Black British English began in the 1980s and its development as a distinct variety was traced as a result of post-war migration to the UK from the Caribbean. Immigrants of African descent typically spoke English-based West Indian Creoles which they originally brought to the UK, and Jamaican in particular became the most commonly used Creole variety in Britain. Though English and Creoles are lexically related, they differ markedly in their structure (Sutcliffe 1982, 1984).

When an ethnic group adopts the dominant language of the society they move into, they can lose an important symbol of their ethnicity which is language. Ethnic groups may respond to this situation by using the majority language in a way which signals their ethnic identity and British Black English especially amongst youth is a prime example. Even when the original language such as Jamaican Creole has been lost to younger British-born generations, they may still exploit some of its forms and patterning to create their own brand of dialect, marking out their ethnolinguistic identity. British Afro-Caribbeans display a strong ethnic separation often marked by a deliberate choice and development of forms with Caribbean origins, especially amongst youth culture, e.g. Rastafarian culture and language.

The earliest notable work on inter-ethnic language use in the UK began with Hewitt (1986, 1992) who explored the youth culture of Black and White adolescents through the framework of linguistic ethnography. He examined the linguistic repertoires of Black and White adolescents in South London by examining their social life in playgrounds, streets and youth clubs. Hewitt (1986) illustrated that the use of Creole and

Black British English, was linked to the wider political struggle against race oppression, locally, nationally and internationally, having parallels with North American AAVE. Gilroy (1987) also provides evidence by outlining the cultural and political map of Britain at the time, detailing the cultural history of ethnic relations in Britain from 1970s to mid 1980s focusing on dominant mass media discourses, municipal anti-racist campaigns, anti-racist popular movements and expressive youth culture.

Importantly, Hewitt (1986) presents an ethnographic description of the ways in which *White* adolescents developed English-based Caribbean Creole in their interactions with White and Black peers (cf. Rampton 1995). Creole occupies a symbolic role in the political struggle against race oppression and thus its use by Whites is considered sensitive. However, Hewitt demonstrated that White youth actually used it quite extensively and that its use (within the context of close inter-racial friendship groups) was deemed acceptable to young people of Caribbean descent.

## 2.9.4 Language Crossing

Prior to Hewitt (1986), there was no detailed sociolinguistic work on inter-ethnic language crossing, though sociological studies had examined youth culture in schools linked to ethnicity. There was also no sociolinguistic work on South-Asian youth before Rampton (1995) as previous studies had always focussed on the Black/White dichotomy. For this reason, Rampton's work was important as one of the first linguistic studies on British Asians and also as it revealed that ethnic minority speakers used language in stereotypically unexpected and diverse ways in order to signal their identity.

Importantly, Rampton (1995) introduced the notion of *language crossing* which he defines as the use of language varieties associated with social or ethnic groups that the speaker does not normally belong to, e.g. the use of Punjabi by people of Anglo and Afro-Caribbean descent. Language crossing has been seen to function at a number of levels. Rampton (1995) suggests crossing breaks down racial barriers and helps unite communities and cultures. It can be understood in terms of a political and social protest; as a form of anti-language, anti-establishment and in-group solidarity relating to wider issues surrounding racism and marginalisation. This is especially for visible ethnic groups such as Afro-Caribbeans who have exerted a powerful social and linguistic influence on British adolescents. Crossing may also be viewed as a type of code-switching to express something metaphorical about the interactional environment as well as an expression of convergence.

Rampton's idea arose from two periods of ethnographic fieldwork in the mid-late 1980s which revealed the role of language crossing in youth social identity (Rampton 1995). He researched adolescent friendship groups, aged 11-16, in the South Midlands of England which comprised of Anglos, Afro Caribbeans, Indians and Pakistanis. Through analysis of recordings of speech in youth clubs and school playgrounds, Rampton connected language, ethnic relations, youth culture and the experience of social change.

He noted the use of Punjabi by people of Anglo and Afro-Caribbean descent, the use of Creole by Anglos and Punjabis, and the use of stylised Indian English by all three. Stylised Asian English was often used to present a mock grown up identity/persona, mimicry, defiance as well as difference. However, even though crossing encouraged multiracial communities, it still abided by rules and boundaries, e.g. Creole forms by Anglos were avoided in the presence of Black peers. These acts of crossing were linked to covert prestige of certain linguistic forms and high levels of mixing between different ethnic groups and mainly same sex groups where the dynamics of gendered adolescent identities were also very different.

Rampton's research was timely because not only was it a period of change in sociolinguistic thinking, but it was a time when Asian culture was beginning to thrive through the popularity of Asian musical styles like bhangra originating in the Indian Punjab. Consequently 'being Asian' in the UK was viewed more positively than in previous times though this is less so with the current political climate with its tense relationship with the Muslim world in general.

Similarly, other studies such as Cutler (1999) and Bucholtz (2011) in the US have also revealed the use of language crossing. Specifically they have focused on ethnic style largely with reference to the construction of *White* identities. Ethnic meaning is then woven into talk, subtly, progressively and interactionally through linguistic crossing in 'acts of identity' (Le Page & Tabouret-Keller 1985).

Cutler (1999) examined ethnic styling by a young white middle-class boy in New York named Mike who crossed into a black and hip hop personal identity through incorporating AAVE phonological, prosodic and lexical features in his speech, as well as aspects of personal style such as dress, walk and attitude. This adoption of Black linguistic features which are viewed as indexical of coolness and toughness, is irrespective of the fact that he usually had no direct contact with black culture, perhaps only engaging with it through media forms such as gangster rap music. Because Mike's grammatical features did not align with AAVE, suggesting an incomplete acquisition and embodiment of that ethnic group, his social practices could be viewed as simply a *performance* of 'being black'.

Bucholtz (2011) also investigated how white teenagers used language to display identities based on race and youth culture in a Californian high school. The teenagers' use of symbolic practices such as social labelling and use of slang, AAVE and Valley Girl speech was used to position themselves in the school's racialized social order and negotiate their own ethno-racial classification. Such studies show that the adoption of black stylistic features is a type of linguistic crossing which allows young white people to share symbolically in a generalised urban youth identity.

Whilst studies like Rampton (1995) have limitations as they examine micro aspects of language with little perceived scope for comparative analysis, they provide useful insights into the natural daily interactional discourse of young people in a way that survey methods cannot. The focus on diverse intersecting communities, especially the

South-Asian UK speech community by Rampton, was also an important step fore-grounding subsequent work in this area such as Harris (2006) as well as research on multicultural urban varieties, which will be examined next.

### 2.9.5   Regional Linguistic Variation

As noted, there may be many cross-ethnic linguistic differences and language cross-ing. However research has also suggested that ethnic minority speakers also use local and regional speech features, thereby sharing aspects of their linguistic repetoire with non-ethnic minority speakers (Labov 1963, Poplack 1978, Fought 2003, Schilling-Estes 2004a, Lambert et al. 2007, Hall-Lew 2009, Cheshire et al. 2011, Hoffman & Walker 2010, Kirkham 2013, Nagy et al. 2014).

Regional similarities in vowel quality have been found in ethnic minority speakers in American contexts. The early work on Martha's Vineyard mentioned ethnic as well as social differentiation in Islanders' vowel qualities, revealing that the Native-American and Portugese speakers were participating in the centralisation of (aw) and (ay) in the same way as the European group (Labov 1963). Work by Poplack (1978) also found European-American phonological influences on Puerto-Rican children in Philadelphia where they were participating in several regional vowel shifts, and Fought's 2003 study on Mexican-American speakers in Los Angeles confirms such findings. Further evi-dence comes from a social constructionist approach to identity in unfolding talk by Schilling-Estes (2004a) who compared the speech of a Lumbee Native American and African American speaker in Robeson Country in heart of the American South. Whilst expected distinctions in speech were made along ethnic and regional lines, they also shared some features such as monophthongisation of (ay), though such convergences occurred less often overall in the course of the interview.

Such findings are further supported by work in areas where ethnic communities comprise a large proportion of the population. For example, Hall-Lew's 2009 study of Chinese Americans in the San Francisco Bay area showed the same apparent time vowel changes occurring in both the Chinese and European American groups. Asian speakers were even leading some sound changes in English and might be explained because they comprised the majority community in San Francisco. More recent work in Canadian contexts by Hoffman & Walker (2010) and Nagy et al. (2014) on Toronto English supports the view of shared linguistic repetories. Toronto is another ethnically diverse city, and they found little evidence for ethnic differentiation in speech, especially for younger generations who express weaker ethnic minority orientation scores compared to older speakers. This implies that attitudes to ethnic orientation may be a precursor to linguistic assimilation or divergence (c.f. Khan 2006) emphasising the agentive nature of linguistic behaviour.

In contrast, some research has also highlighted that speakers in non-visible minority ethnic communities may retain ethnic speech features, rejecting local patterns. Boberg (2004) examined speakers in Montreal which is an extremely diverse ethnic area with

large numbers of 'White' ethnic minorities, e.g. Jewish, Italian and Irish settlers. He found that speaker ethnicity considerably affected vowel realisation suggesting this unusual result may be related to the minority status of English coupled with the social and residential segregation of ethnic groups in distinct neighbourhoods. This in turn limits their exposure to speakers of Standard Canadian English thereby inhibiting assimilation.

### 2.9.6   Multicultural Urban Varieties

In recent years, there has been a growing interest in urban ethnic varieties of English in the UK and Europe, though notably often from the perspective of their impact on mainstream English. This has led to the increasing use of terms like *ethnolect*, *multiethnolect* and *Multicultural English*. Individuals may draw on various ethnic accent features in conjunction with their own native features to generate linguistic identities that may cross ethnic boundaries with a particular focus on youth styles.

In Europe, there is an ever growing number of people from ethnic minority backgrounds and, according to the 2011 UK Census, with as much as 14% of the total population in England and Wales classified in this way. Similarly in recent years, work on urban accents in different European countries has begun on different ethnic minorities such as Morroccan and Turkish immigrants in the Netherlands, Germany, Finland and Denmark (Kern & Selting 2011, Androutsopoulos & Georgakopoulou 2003, Quist 2000, Huls et al. 2003, Moller & Quist 2003, Maegaard & Quist 2009).

Urban vernaculars in Europe have been strongly influenced by immigrant communities as well as local communities where the rapidly changing global culture has meant a much greater mixing of people from different ethnic backgrounds, and consequently their linguistic repertoires. Research in European contexts largely initiated work on ethnolects, for example from the LANCHART Project which is a corpus of spoken Danish (e.g. Quist 2000, Maegaard 2007). This project aims to develop and empirically test a new theory of language change in the small multilingual country of Denmark. Moller & Quist (2003) discuss Danish studies linked to a cultural identity perspective revealing that adolescents are more creative in linguistic choices for constructing group and identity affiliations, and particularly bilingual youth.

A key study on bilingual youth is that by Quist (2000) who conducted a study of youth language in Copenhagen based on self recorded conversations, talk during board games and retrospective interviews. Subjects were native speakers of Danish, Turkish, Berber, Serbian, Kurdish, Urdu and Palestinian Arabic and they were recorded in 3 milieus: boys club, girls club and a bilingual high school. Quist found that adolescent speech was characterised by a new variety of Danish comparable to Rinkeby Swedish based on: 1) syntactic, morphological and phonological simplifications; 2) loanwords that spread beyond the native speakers of donor languages; 3) consistent, contextually conditioned shifting between the new variety and the standard variety; and 4) the interviewees' perception of a special kind of Danish they call 'det sprog', 'the lan-

guage'. Whilst this new variety can be termed a social dialect, Quist argues that the terms 'dialect' and 'sociolect' are inadequate, instead proposing the notion of a 'multiethnolect'. Such a concept can be referenced to any minority ethnic varieties as new mixed varieties do emerge in the course of dialect contact.

Two key compilations of work are especially relevant with respect to the heterogeniety of different ethnic groups' social and linguistic practices: 1) Androutsopoulos & Georgakopoulou (2003) on discourse construction of youth identity (including ethnic minority youth) in Europe who highlight that not all adolescents are a homogeneous group due to different social, economic and cultural backgrounds; and 2) Kern & Selting (2011) on metropolitan European ethnic styles of speaking who outline several studies from different perspectives, different sociolinguistic settings and different language contact situations. These volumes provide a good starting point for ethnic minority work in the European context, but cannot be covered in depth here.

### 2.9.7 Multicultural British English

An important difference exists between European and British contexts, as many of the UK ethnic communities are largely well-established and are often economic migrants originating from the colonial territories; whilst in Europe there are much newer immigrant communities emigrating from different areas of the world. As a result, British minorities are perhaps more linguistically integrated than their European counterparts, though some recent research has in fact suggested the opposite, e.g. a project by Cheshire et al (2015) comparing multicultural London English and multicultural Paris French. Recent sociolinguistic work on multicultural varieties of English has examined established communities such as Afro-Caribbeans and South-Asians in large urban contexts such as London and Birmingham (e.g. Sebba 1993, Khan 2006, Fox et al. 2011, Cheshire et al. 2011).

Conurbations like London are often considered melting pots of different people, and importantly then sites of linguistic change. London itself, the capital of the UK, has been seen as a locus of economic opportunity for incomers resulting in the settlement of various immigrant communities from across the world. Key ethnic minorities are Black African, Black Carribean, Pakistani, Indian, Bangladeshi, Chinese as well as an increasing Mixed Race community.

A recent project on 'Multicultural London English' (MLE) seeks to address the impact of a wide range of ethnic accent features on inner-city London English (Cheshire et al. 2011, Fox et al. 2011). The project explores the implications of language contact throughout the lifespan, as well as the implications for the permanent influence of MLE on British English. Through quantitative and qualitative analysis of the recordings of speakers aged 4-40, the project has expanded knowledge regarding how linguistic innovations may diffuse out from a central area such as London to neighbouring areas, and how this may affect ongoing language variation.

Heightened language and dialect contact has been found to cause a number of

changes in London English. Cheshire et al. (2011) report a number of findings regarding phonetic/phonological, grammatical, suprasegmental, morphosyntactic and discoursal linguistic levels, particularly catalysed by Afro-Caribbean speakers. For example, GOOSE-fronting and monophthongisation of the PRICE, MOUTH, FACE and GOAT vowels have been noted.

However MLE is still considered an ethnically neutral way of speaking for young people in inner London, whilst still containing many 'ethnic' features. Anglo speakers also use this variety due to factors like exposure at school and in the work domain, so it is not simply a variety used by ethnic minorities. This inner-city variety is in contrast to the more dialect levelled varieties in outer London and the south-east in general (Kerswill 1996, Torgersen & Kerswill 2001, Khan 2003) and may reflect the smaller number of ethnic minority residents living there. Moreover, MLE is not a uniform variety spoken the same way by all speakers and distinguishing it from other forms of ethnically marked English such as Bangladeshi is difficult.

Despite MLE being classified as ethnically neutral with 'ethnic' features, Eckert (2008*b*) and Drummond (2014) argue that researchers may be imposing ethnicity onto language features, rather than understanding them for what they are. They suggests that such features may in fact be indexical of something else, e.g. an urban youth identity. The emphasis on a racial and cultural heritage is problematic as it might even be alien to the speakers themselves. For instance, ethnic minority individuals may not speak the community language, may never have visited their country of origin or have extended family structures, and may spend much of their time at school away from their parents. In this way, they become subject to greater British cultural norms as opposed to 'ethnic' norms leading a shift to a more 'non-ethnic' style of living.

Importantly, only England has been the focus for studies on multicultural communities within the UK, with scarce work on Scottish ethnic minorities (though cf. Verma 1995). Scottish communities may diverge linguistically from their English counterparts as they are demographically much smaller (e.g. much fewer people of Afro Caribbean and South Asian descent) and consequently may have key differences in social practices, including language.

## 2.10 Summary

This thesis focuses on adolescent, female speech in a particular social and ethnic context. This means that many facets of identity are co-present at any given time and these may be expressed through language. Language varieties can be different across ethnic groups but this does not impede the use of mixed linguistic forms and the appropriation of regional and local language features. These features can be used to mark greater socio-indexical fields and especially for youth, often signalling group solidarity and allegiance to one's perceived 'authentic' identity (Eckert 2003, Coupland 2010). The co-presence of such factors deconstructs and destabilises the essential nature of

factors like gender and ethnicity, which are currently viewed more organically and dynamically than in the past.

# Chapter 3

# British-Asians: Context and Language

## 3.1 Overview

This study explores social and linguistic practices in second and third generation Scottish Pakistani Muslim adolescents and this chapter positions them within the broader British Asian context and language. The Indic diaspora is one of the major displaced communities spread across the world, making it interesting due to sheer number, but also because South Asians come from a variety of backgrounds, despite originating from the same geographical area (Hundt & Sharma 2014). Unlike general perceptions especially in the UK, they are not a homogeneous group of people because the communities themselves are very diverse. And while South-Asian or Indian Englishes may share some similar phonetic characteristics, they are sociolinguistically very different in terms of cultural and religious backgrounds, e.g. Pakistani Muslims are very different to Indian Sikhs.

This chapter provides a sociological and linguistic background to the South Asian community in the UK. It charts South Asians in general in terms of historical and sociological context, followed by a review of linguistic work on British Asian English, finishing with a brief discussion of the Scottish context.

## 3.2 The British South Asian Community

### 3.2.1 Introduction

Using the term 'South Asian' in the UK context suggests unity, a common social structure, shared moral or religious principles and a sense of shared ancestry, usually with reference to place or certain biological characteristics (Shaw 2000). Whilst this is true to a certain degree, such as the shared and mainly conservative, patriarchal and communal social structures, the South Asian community is very diverse in terms of national, regional, linguistic, religious, cultural, caste and class origins. For example,

at a national level, there are Pakistanis, Indians and Bangladeshis (Robinson 1990, Ballard 1994, Baumann 1996, Peach 2005); at a religious level there are Muslims, Sikhs, Hindus; at a social class level there are many castes; and at a linguistic level there are many languages and dialects such as Urdu, Punjabi, Hindi and Bengali. The communities are also very different in terms of skills, knowledge, experience and aspirations, e.g. the difference between Indian Sikhs and Pakistani Muslims. Due to these sociological and racial differences (visible ethnicity) with British society, these communities have integrated in differing degrees through the degree of commitment to their own respective traditions and heritage whilst living in the UK.

According to the 2011 UK Census the resident population of the UK was just over 63 million with approximately 13% from an ethnic minority (Office for National Statistics 2011). Of this, South Asians of Indian, Pakistani and Bangladeshi origin as well as those who reported being Asian/Asian British comprise almost half of the ethnic minority in the UK making it one of the most sizeable communities in the country. While Indians are the largest of the South Asian groups in the UK overall, Pakistanis are the largest group in Scotland and they are typically Muslim.

In England and Wales with a population of approximately 56 million, the Muslim population of England and Wales from all backgrounds has nearly doubled standing at 2.7 million in 2011, compared to approximately 1.5 million in 2001. Such growth has been linked to more children and fewer elderly people in the Muslim community. In Scotland with its much smaller total population of only around 5.3 million, Islam is also the second largest faith group with 77,000 Muslims residing in Scotland mainly of Pakistani origin (National Records of Scotland 2011).

Nonetheless, Muslims are still a small minority of the overall UK population. Interestingly however, polls over the last twenty years such as Ipsos Mori (Field 2007) have suggested that native Britons are much more likely to overstate the proportion of Muslims by as much as a factor of four. This striking result illustrates heightened awareness of Muslims by Britons, which may be linked to the prevalent narratives of 'terror' in the national and international media. It may also be linked to generally high rates on deprivation indexes and economic disadvantage faced by Muslims, particularly in England and Wales.

Islam is a pan-ethnic world religion considered to be the fastest growing faith in the world according to official statistics. But Muslims across the globe are not a homogeneous community, as is the case with Pakistani Muslims in the UK (Baumann 1996). Differences arise based on factors like sectarian divisions and the languages spoken, such as Punjabi, Urdu, Mirpuri/Kashmiri. Due to this complexity, it is difficult to ascertain whether it is really religion or culture that they share.

### 3.2.2 Historical and Sociological Background

The South Asian presence in the United Kingdom began as early as the 7th century but the population expanded rapidly in the 20th century. This was largely due to

economic migration to the British Isles from the Indian sub-continent in the 1950s and 1960s (Maan 1992, 2008). The two main reasons that influenced this migration were colonial ties at a time where there was great need for workers in industry in the post-war years and the newly gained independence of India and Pakistan in 1947. The latter caused widespread communal turmoil, violence, poverty and high unemployment in the new countries with segregation on the grounds of religion provoking hatred between Muslims, Sikhs and Hindus. Poor living conditions in the newly formed countries, where many were forced to migrate internally leaving their homes and land, catalysed migration abroad in the hope of better prospects.

Original migrants were young men who hoped to return once their services were no longer required or when their material interests were satisfied (Robinson 1986, Pavlinic 2001). However, this did not occur and is referred to as the 'myth of return' (Anwar 1979, Baumann 1996). As a result, the families and dependents of earlier migrants also began to arrive by the 1950s and 1960s due to the active in-migration policy of the part of the UK. Through a process of chain migration, where one migrant would help provide accommodation and support for new migrants until they were settled and working, a South Asian community was formed (Maan 1992). Geographically, South Asians tended to concentrate in a small number of urban industrial areas, e.g. London, Birmingham, the West Midlands, Greater Manchester and West Yorkshire. Some South Asians initially settled in less populous parts of the UK such as Scotland, but much of the Scottish South Asian population was a result of secondary migration north for economic reasons (Maan 1992).

The initial young male migrants had a difficult and slow integration into British society. The jobs taken were low-paid in areas such as textiles and transport and generally offered unsocial hours, e.g. nightshifts, in short, the jobs that the indigenous populations did not want (Shaw 1988, Robinson 1990, Barz & Siegel 1998, Edwards 2000). Typically, they also lived in crowded housing, where it was not uncommon for 25-30 men to be residing in a two bedroom house. In this way, they saved money on rent, where they could pay rent and lodgings for £2 and save as much as £10 per week (Shaw 2000) which was substantial at the time. These factors facilitated minimal integration into British society, and helped to maintain and strengthen cultural boundaries and faith (Shaw 2000, Robinson 1986). Negative initial reactions from the host community meant migrants faced racial disadvantage and regular discrimination (Anwar 1990, Robinson 1986, Wardak 2000). Colonial stereotypes were also widespread where migrants were considered inferior and looked upon as 'peasants' (Robinson 1990).

Gradually over time, migrants began to integrate as they gained confidence about living in their new society, and began to enjoy the greater personal autonomy in Britain compared to countries like Pakistan. Britain became a country of contradictions, e.g. higher living standards, free health care, good education; but the local moral values were not desired, e.g. no 'izzat' (honour) (especially of women) and poor standards of personal hygiene (Ballard 1994).

# 3.3   The British Pakistani Muslim Community

There are over 1.1 million Pakistani Muslims living in the UK comprising well over half of the total Pakistani community in Europe (Office for National Statistics 2011). The main settlement areas are in and around London, Yorkshire and the Humber, the West Midlands and the North-West of England with a much smaller number in Scotland mainly residing in the Central Belt (Shaw 2000).

## 3.3.1   Origins

According to Shaw (2000), the two main regions of origin are the northern parts of Pakistan bordering Azad Kashmir (disputed territory between India and Pakistan) e.g. Mirpur and Peshawar; and the Pakistani Punjab area e.g. Lahore, Faisalabad. The northern settlers i.e. Kashmiris or Mirpuris, are the largest Pakistani group and live mainly in the West Midlands and the north of England in cities like Bradford and Birmingham, speaking Northern Hindko (also known as Mirpuri or Kashmiri), Pashto or Urdu (Office for National Statistics 2011). The Punjabi settlers have dense pockets in the Yorkshire area but are generally more widespread, with communities in Greater London, Newcastle, Wales and Scotland (Office for National Statistics 2011). Their main languages are Punjabi and Urdu. The northern and Punjabi groups tend to be very different in their cultural practices, with internal tensions between the groups apparent and partly linked to nationalism.

## 3.3.2   Heterogeneity

Pakistani Muslims also have diverse regional, caste, sectarian and religious identities as well as belonging to more than one distinctive linguistic group (Shaw 2000). Moreover, even within such classifications there are intra-group differences. Identity also appears to be context-dependent in the UK, where Pakistanis may speak of a 'Muslim' community when building a mosque; a 'Pakistani' community to state differences with other groups like Indians; and talk of the 'original' community that came to Britain symbolising the collective shared history (Shaw 2000). Due to such distinctions, the term Pakistani Muslim community is a shorthand label for a complex sociological and demographic set of communities.

## 3.3.3   Sectarianism

The sectarian and ideological divisions in the UK, as well as in Pakistan have resulted in internally divided communities. This is exemplified by several differently affiliated mosques in the same cities; divided along denominational lines as well as national lines, e.g. in Oxford, London, Bradford, Manchester, Edinburgh and Glasgow.

The two major denominational lines of Islam are Sunni and Shia, with Sunni Islam being the most prevalent in the UK. A small denomination called the Ahmadiyya are usually not considered Muslim due to their basic creed. However, there is an Ahmadiyya community in Britain established since the 1980s when they came under legal and physical harassment in Pakistan (Lewis 1994).

In addition to these broad splits, there are many sects within even the majority Sunni Islam for British Pakistani Muslims. This causes further demarcations and disputes, with the two main sects called Barelvi and the Deobandi. Barelvi Sunnis follow the Sufi mystical tradition and often derive from rural communities where they were originally drawn into Islam through devotional songs, e.g. a famous worldwide figure is Nusrat Fateh Ali Khan. In contrast, Deobandi Sunnis take a more orthodox and literal understanding of the Quran and Prophetic teachings, shunning mysticism and performing regular missionary work to propagate their message. Whilst most Pakistani Muslims are Barelvi by descent, in recent years there has been a gradual shift towards Deobandi beliefs and practices, particularly in the younger generations which might be linked to its easier alignment with western thought.

### 3.3.4 Unity

There is still a larger sense of unity and inter-dependence in the Pakistani Muslim community more widely, despite divisions. Local organisations have been set up which articulate the Muslim community's interests as a whole and bring together the many factions of the faith (Lewis 1994). British Pakistani Muslims are also united by the Urdu language, becoming the lingua franca of communities like Bradford with its diverse linguistic population, e.g. Kashmiri, Gujarati, Punjabi and Bangladeshi. Another major unifying force is the fear of moral decline living in the West, especially with respect to younger generations. Perhaps the greatest concern by older generations is the control of girls' behaviour, because from a cultural and religious perspective, women should be protected and guarded, especially their chastity. Concerns surround aspects like: schooling such as dress, mixed gender P.E. and sex education; and a fear of western influences such as drinking alcohol, clubbing and pre-marital relationships/sex, which contradict general religious teaching.

### 3.3.5 First Generation Women

A new era began for the early migrants where women began to feature from the 1960s. Men who were already married sent for their wife and children. Unmarried men were encouraged to marry, and usually to women from their extended family in Pakistan and sometimes linked to worries about male deviance from Pakistani norms (e.g. dating White girls) and the lack of social control in the UK context which was difficult for families back in Pakistan (Ballard 1994, Shaw 2000, Wardak 2000). Apparent moral conformity to religious and cultural values was extremely important, and is still a

pervasive feature of the Pakistani Muslim community. An anthropological study by Shaw (1994) looking at the Oxford Pakistani Muslim community revealed that religion, and especially mosques, became increasingly important with the arrival of women as a way of bringing the men 'back on track'.

The newly arrived women took on many roles in the household, not least looking after the many men that stayed with her partner, whether relatives or family friends. Many women had an extremely difficult time during this early period. This was because they did not know anybody in their new environment; had little or no grasp of English; no support structures; and were living under poor, often cramped conditions with little or no privacy.

By the 1980s, due to such frictions, lack of personal space and increasing wealth, many Pakistanis began buying their own council houses and becoming landlords. Pakistanis also started buying their own businesses in the face of increasing unemployment in industrial areas, seeking financial help from family and friends. As a result, men began sending less money to Pakistan as they had families of their own to support in the UK. Furthermore, most first generation women did not take jobs as it was considered against some ideals of 'purdah' (modesty of women); a man with a working wife could lose 'izzat' (honour, respect) as it would suggest he was incapable of providing for his family (Shaw 2000).

However many women did work informally from home to help their weak economic situations, e.g. by sewing 'shalwar kamiz' (traditional Pakistani clothing); cooking samosas; and working unpaid in family businesses such as corner shops. Because they often also had young children, they could not necessarily work outside the home even if they wanted to because there was no free available childcare at the time, e.g. in-laws, mothers or sisters as in Pakistan (Shaw 2000). Whilst some women were unfortunately subordinated, depressed, isolated and confined to the home and childcare; in some instances they were actually liberated from their communal responsibilities. For example, they had freedom from the hierarchical family structures of their in-laws back in Pakistan having more personal control over their daily lives. Importantly though, these women had little interaction with the wider British community and their daily lives were centred on their families, allowing very limited integration to occur.

As the early Pakistani community gradually moved into different jobs such as becoming shop owners, status and caste ('biradari') differences began to matter. The idea of biradari has been adopted from the Hindu caste system, based on nominally occupationally-linked descendent groups (Shaw 1994). Broadly speaking, there are three main groups, with Ashrafs ranking the highest to the Kammis at the bottom. The caste system may be viewed in a similar way to the social class-based system in the West though direct comparisons are difficult and not easily transferable. The caste system is also more rigid and structured, based on genetic heritage, and especially so in India. An individual cannot change their caste in the same way as for example a working class individual might move to middle class status through occupational and

monetary success. Typically, in-biradari marriage was the norm, as it was seen to forge greater kinship and status ties. Biradari is patri-lineal so if a man decided to marry a woman from a lower caste, his children would still retain his biradari and not that of his wife. However, if a woman marries a man from a lower caste, it would be regarded negatively as her future generations would be degraded to a 'lower' caste. Endogamous marriage was also prevalent at this time, allowing women more contact and support with her own family sphere.

With the arrival of women during the 1970s and subsequently children, not only did the status competition intensify in terms of which biradari one belonged to, but also in terms of monetary success. This led to the concept of 'lena dena', a cultural tradition of exchanging gifts mainly by women between families, allowing families to judge one another's wealth, generosity and status (Shaw 1994). Another cultural tradition is that of 'Khatmi-Quran' where women read the entire Qur'an collectively in one sitting by taking one part each, with customary food being served afterwards by the host, and this responsibility is then rotated among family and friends. Women's Committees were another tradition introduced by Pakistani women in order to provide financial help. These functioned with every member depositing a fixed amount of money into a fund run by the women each month, and each month someone's name is drawn who will receive the total amount collected that month, ensuring that each person receives the fund within a prescribed period depending on the number of members. This also allowed for flexibility, so that if one member was in dire need of money one month, they could request that they be given the money, so it was not always randomly selected. At this time, ideas about health and illness were also drawn from Pakistan as well as religious norms, e.g. spiritual healers or 'pirs'. Such social practices and ideologies did not facilitate integration for Pakistani women, as they did not need to venture out of their own communities to socialise or out of economic need.

As time went on, the strength of the community grew. The idea of a permanent return home to Pakistan became unrealistic as families settled and children started to go to school. The beginnings of a mini Pakistani Muslim ethnic economy also started, e.g. community language classes, religious classes after school for children, ladies clothes shops, halal butchers, radio stations and TV broadcasting catering exclusively for the Pakistani community. These types of social, political, religious and cultural resources meant individuals had many different opportunities to hear and use their native languages as well as stay in tune with cultural and religious customs. The micro-economies acted as social and linguistic maintenance mechanisms, providing employment but also creating an environment where it was more natural to partake in Pakistani traditions and use the community language (Edwards 2000, Clyne 1997).

# 3.4   Younger British-Born Generations

## 3.4.1   Overview

It is impossible to deny the existence of a number of changes that are taking place within the British Pakistani Muslim community with the emergence of the second, third and even fourth generations. However, it is important to note that the issue of being able to pin down generations exactly is difficult due to the different ages and times of arrival in the UK (e.g. Sharma & Sankaran 2011, Sharma 2014).

Differences include: greater participation in the wider social order by younger generations such as education and politics; greater interaction across ethnic boundaries; attitudinal differences towards British culture; loss of ties with their mother culture and Pakistani traditions; weakening of the original community structure related to access to a wider range of jobs particularly with a movement towards professional careers; greater mobility and related movement away from ethnically dense housing areas; improved economic status and wealth from birth; as well as less interdependency due to fluency in English and knowledge of British society (Shaw 2000).

As such, one of the main concerns facing young British Pakistani Muslims is one of identity. What does it mean to be a young British person? What does it mean be a British Pakistani? What does it mean to be a British Muslim? What does it mean to be a Muslim in the UK? Defining identity in these ways sets up important distinctions: the first question is connected to generic western youth identity; the second encapsulates elements of cultural and national identities; the third implies a religious identity with a sense of citizenship and belonging; whilst the latter represents the Muslim presence (or 'otherness') in a particular context. Perhaps the most relevant question for younger generations is actually, what does it mean to be a British Pakistani Muslim in the UK? These co-present identities are highly context-dependent. New generations can shift identities depending on domain, adopting certain behaviours in religio-cultural situations for instance and other behaviours in British contexts. In this way they are constantly reinterpreting and re-evaluating their daily lives. Newer generations can choose to marry elements of Western and heritage ideologies which may begin as oppositional and require to be rejected, compromised, conciliated or unified. The following sections will outline concerns surrounding identity as applicable to the younger generation of Pakistani Muslims.

## 3.4.2   Trapped between Cultures?

Younger British-born generations are better integrated and assimilated to British society, mainly because they gain education in schools, colleges and universities, socialise with the dominant majority and have shared workplaces. Ballard (1994) highlights the fundamental changes in the socialisation of the first British-born generations around 20-25 years ago who were conceived as being trapped between two cultures, constantly

trying to balance their private home life and public social life. For example, on one hand young people partake in Pakistani customs such as traditional wedding rituals, but may oppose parental adherence to the caste system when arranging marriages especially if they wish to choose their own spouse, albeit within the arranged marriage framework.

Adolescents may also feel unable to express their social identities particularly in conservative Pakistani families leading to familial tensions. In this way, they may conform to typical Pakistani lifestyle in the home domain, but also have a different British-influenced identity in education institutions, never fully feeling secure in either identity. However, this sort of 'crisis of identity' (Agnihotri 1987) does not dismiss developmental changes linked to teenage angst and rebellion, but in fact heightens it.

There is also a shift in the understanding of culture and religion between the generations, i.e. Pakistani versus Islamic. Older generations equated Pakistani with Muslim, whereas the younger generations can take the same view or separate these two elements as distinct.

'Old School' thought is very much out-of-date and irrelevant to the younger cohort, exemplified in the media in Asian TV programmes like *Goodness Gracious Me, The Kumars at No.21* and *Citizen Khan*. Certainly the newer generations find little connection with the stereotypical representations portrayed in the media, especially as many of the older generations have died out, and the replacement mixed identities of their current predecessors have much greater influence. Conceptually, the 'trapped between cultures' generations were perhaps the middle generations who were still strongly tied to their heritage in a way unknown to contemporary youth.

### 3.4.3 Hybrid Identities?

Hall (1992) stipulates that identity is an ongoing product of history and culture rather than a finished product and introduced the notion of 'cultures of hybridity'. He viewed all modern nations as cultural hybrids, because there is a mix of languages, religions, customs, traditions and feeling for place which are all shared by a people (Hall 1992). This aligns with post-modern ideas surrounding dislocation of identity related to processes of globalisation and nation states where plural identities are not fixed at any given time.

Processes of globalisation can lead to a number of different social changes. Firstly, it can lead to an erosion of national identity because globalisation causes greater interconnections between people transcending time and space. Increasing consumerism and advances in information technology and communication may induce cultural homogenisation whereby everything is accessible to anyone at any given time or space (e.g. TV gives access to youth culture, modes of dress etc). Secondly, globalisation may cause a strengthening of national, cultural, ethnic and religious identity. For instance, there has been a rise in religious orthodoxy and political separatism in Muslim groups producing a counter-ethnicity to the cultural racism of political ideas, ironically

destabilising and de-centring the West. Thirdly, and perhaps most importantly for the present work, there may be the production of *new identities of hybridity* being formed in place of national identity.

In the UK, there has been interest surrounding the ideas of cultural hybridity following Hall (1992), Hewitt (1992), Rampton (1995) and Sebba (1993). Specifically, there has been an interest in the large British South-Asian group and especially the youth.

A key work in the tradition of British cultural studies was by Harris (2006) on British-South Asian adolescents mainly of Indian origin in a West London secondary school near Southall. Participants were largely Indian/Gujerati (predominantly Sikhs and Hindus, but also Muslims) who typically spoke Punjabi and English. Harris (2006) suggests the emergence of plural *hybrid new identities* or *new ethnicities* in relation to language use. These are blended, not separate, discounting the notion of being 'torn between two cultures' and celebrating 'wholeness' within plural identity backgrounds. He coins this idea as *Brasian* whereby both British and Asian elements of identity are always co-present unlike the term British-Asian which suggests two equal parts. This term also subverts the idea these youth will return to their so called 'original' heritage, as they have a different heritage to their predecessors linked to time and place. Importantly, the participants in Harris' study view 'Britishness' or being 'British' as being primary over Asian identity with respect to factors like accent, language, clothing, hairstyles, musical tastes, popular cultural preferences and interaction with the opposite sex.

Young British Pakistanis are continually negotiating and developing their perceptions of national, ethnic and religious belonging, and consider Britain to be their home. The primary identification as British might also be linked to limited ties with their mother country in general, linguistic and cultural barriers with overseas relatives and negatively viewed South-Asian lifestyles by native Britons. This may cause a constant pressure to distance themselves from their parents' and communities' linguistic, cultural and religious conventions. For some, their British identity is paramount, for some their Muslim faith, for some their Pakistani heritage, and for some a hybrid mixture of all of these elements.

It is certainly apparent that young South-Asians are forging new styles of interaction among themselves drawing eclectically on their varying heritages and influences in the creation of new ethnicities. For example, a British-born singer of Indian descent from Birmingham called *Apache Indian* interweaves English, Asian and Jamaican elements using English and Punjabi, rap, bhangra and reggae. More recently in 2015 there is even a British-Asian reality show on Sky TV called *Desi Rascals* which charts the lives of a multi-generational Asian community in ethnically diverse West London, with a specific focus on the youth in terms of their social, professional and family lives which commonly crosses cultures. These examples suggest that identities are not exclusively ethnic and can traverse ethnicities, whilst still being connected to wider local, regional,

national and international identities.

Gendered identities are also very different in the British Pakistani community. Young men typically have a different set of concerns like education, employment, marriage, girls, gangs, music and cars, with less monitoring of their behaviour and less social control (Wardak 2000). Often they are more distanced from Pakistani customs and traditions than young women who are more likely to uphold and understand them. The next section will focus on female British-born generations.

### 3.4.4  Young Pakistani Women in the UK

First generation women were typically segregated from mainstream society with little participation in the wider community; had arranged marriages, often though not always, due to parental choices; had few, if any, educational qualifications and rarely worked outside the home environment. On the other hand, young British-born women have different experiences in terms of choices for marriage, work and appearances.

**Marriage and Relationships**

Perhaps the single most important event in any woman's life is her marriage, and this is even more so for Pakistani Muslim girls. It becomes the central point of discussion in many social situations, e.g. match-making, rituals and customs surrounding actual weddings as well as post-marriage concerns such as fertility, family and wealth (e.g. see Pichler 2008, on British Bangladeshi girls in East End London). The significance of marriage in Islam is linked to love, companionship, family stability and as an act of worship in itself.

Female chastity before marriage is an extremely important concern in the Pakistani Muslim community as a whole. It is linked to the idea of female honour with its associated principles of modesty ('purdah') and respect ('izzat') (Shaw 2000), though associated problems of cultural relativism cannot be dispelled (Abu-Lughod 2002). This is especially so in western societies like the UK which have differing views regarding women. For example, often British men and women are perceived as inappropriately clothed, provocative and promiscuous - all undesirable characteristics for conservative Pakistanis and even more so for girls.

There are a number of options for young Pakistani women when it comes to the issue of marriage and some can be contentious. For example, they may have an arranged marriage with a relative from Pakistan or the UK; an arranged marriage with a non-relative in either Pakistan or the UK; a 'love' marriage with someone of their choice (be they Muslim, Pakistani, or of a different caste, faith, nationality or background); or not get married at all. Of these options, the first two are highly preferred by conservative Muslims. Cultural and linguistic differences with prospective partners in Pakistan and the decline of endogamous marriage has reduced the number of overseas marriages, with many women choosing to marry Muslim men in the UK. This is typically through a form

of arranged marriage in which the potential spouse is introduced with the presence of familial escorts. Through mutual understanding, the individuals may correspond and communicate before deciding on the marriage. Contrary to Western views, many girls look forward to their arranged marriages as they are not the same as 'forced' marriages.

Alternatively, some British Pakistani girls may choose to have relationships outside marriage, often to the dismay of more traditional families. A possible explanation is that for some girls, a typical Pakistani's social life is considered mundane and restrictive consisting mainly of regular family and friend gatherings at people's houses, educational contexts and the work place. Some want to experience the lifestyles of their British peers, particularly from puberty onwards such as being able to attend clubs, pubs, concerts, cinemas and date boys all without escorts and with free-intermingling of the genders. However, such practices are not reconcilable in most families and even where more leniency is granted, a breakdown of traditional and religious protocols can be seen. Such defiance of community norms means they are classified as 'gorafied' (becoming like a white person) or 'a coconut'; brown on the outside but white on the inside and essentially acting like a white person (Shaw 2000). Inter-generationally, social assimilation to this level is highly controversial. Girls who go down this route may eventually get married to their partners which is the least shameful and honour-retaining course of action for both them and their families, or continue such relationships without family consent thereby becoming marginalised in the Pakistani community. In Pakistani families, lack of conformity to traditional values and behaviours is a massive cause for concern and family turmoil.

The biggest perceived problem is the relative freedom and independence granted due to British government laws post-16 years of age, whereby parental guardianship is no longer required and consequently parental control diminishes. Pakistani, as well as western families, may find themselves in difficult emotional situations feeling helpless regarding their children's decisions which may directly oppose family, cultural and religious norms. As a result, the traditional family hierarchy and family structures may be affected, impacting on family members in different ways. Greater independence at age 16 may indeed be viewed more positively by young Pakistanis.

**Work**

Another key difference between the generations is that younger women are participating in paid employment in workplaces outside the home domain. For young Pakistani women, work opportunities have become an important defining feature, presenting greater options for their future in terms of career, financial independence as well as the perception of better marriage prospects which in turn may imply a better future. Employment is now also a pre-requisite of sponsoring a spouse from Pakistan to live in the UK. On the whole, young Pakistani women have taken professional jobs in the education and medical sectors, with a prevalence of teachers, doctors, dentists and opticians. Such professions are considered positively by the community not only as

useful, altruistic and appropriate from a cultural perspective, but also holding high status from a class-based and financial perspective.

**Appearances: Fashion, Faith and Culture**

Young women in general are often concerned with appearance such as fashion, hair and make-up which is no different for young Pakistani women, but with the added element of faith-based expectations. British generations have a wider and different range of options: from Pakistani clothing types such as traditional shalwar kamiz (long top and trousers with long scarves); Arab/Islamic clothing, e.g. jilbabs and abayas (long dresses); 'niqab' (face-covering); to more western styles including jeans, trousers, t-shirts and dresses worn in educational, work and leisure settings.

It is broadly accepted that Islamic modesty requires women to cover the whole body (including the hair), excluding the face, hands and feet and can be related to the idea of female chastity. However differential and sometimes conflicting views on dress are to be found amongst different sects, denominations and schools of thought in Islam. Usually, personal choices regarding fashion trends are influenced by friends and family and Islamic modesty become the main premises for clothing selection for young Pakistani women.

There is a common preference by Pakistani girls to wear 'modest' western styles with a view to fit in and be accepted as British; and to avoid unnecessary stares and comments from the native population. Despite the preference of western clothing, wearing it still has rules in terms of modesty especially for conservative Pakistanis. For example when selecting garments they may choose: looser fitting garments, higher necklines, longer tops that cover past the hips, sleeved garments or consider layering items to cover all the necessary areas of the body. In recent British Pakistani fashion there have also been trends which are a fusion of east and west such as long shirts with leggings, though again not all would agree that leggings are modest enough as they may be deemed too figure-hugging, but strictly speaking are 'covering the body'. Such fusion in fashions would also concur with 'Brasian' identities suggested by Harris (2006). It also sets up a clear differentiation with older women who adhere closely to Pakistani fashions.

Hair and make-up also have their own issues in the Pakistani Muslim community as they are linked to the concept of modesty. On one hand, there are those who believe that an interest in excessive hairstyling and use of heavier make-up is completely acceptable in daily life; whilst on the other extreme there are those who believe that hair should be covered and no make-up applied in mixed gender settings, with a myriad of views in between. Such huge differences of opinion and behaviours reflect the broader challenges faced by younger generations. Simultaneously they are mainly influenced by British youth culture which encourages an eclectic mix of fashion, hair trends and cosmetics; yet are still subject to cultural expectations from the community, as well as their own construction of autonomous personal identity. It seems then that young

Pakistani women have a range of different options for identity construction, including lifestyle and personal styling related to British and Pakistani Muslim cultures.

### 3.4.5   Religion and Culture

Younger generations are beginning to take a more reformist stance against some cultural Pakistani norms and understanding that culture is not necessarily the same as religion (Shaw 2000). Importantly, British born generations are not necessarily motivated by Islamic values but by Western and modern ones too in overcoming traditional opposition to lifestyle choices such as marrying outside caste where Islamic arguments are more convincing than personal ones. In this way, young British Pakistanis may be turning to Islam as a more significant source of identity than culture because of its more universal appeal.

One of the main challenges to Pakistani tradition lies in the teaching of Islam to younger generations. For instance, there is a growing trend towards parents wanting qualified Muslim teachers from any ethnic background to teach their children (e.g. Quran and Arabic), with a move away from traditional South-Asian *Ulema* from Pakistan (experts, learned religious men) who are less likely to understand British social, cultural and linguistic differences (Lewis 1994). Their teaching styles are also considered outdated and teaching materials may be irrelevant to UK generations, e.g. textbooks embedded in rural agrarian society. Educational programmes such as *ISyllabus* are also becoming more common nationally, aiming to provide classical as well contemporary Islamic knowledge for Muslims living in the West. English lectures, talks, seminars and events from Islamic perspectives are also a common feature in many UK cities providing more accessible alternatives to traditional Pakistani teaching methods.

### 3.4.6   Discrimination and Islamophobia

The focus will now shift to British Muslims as a diverse group, and not just Pakistanis. Approximately over the last 70 years, British Muslims have faced discrimination and prejudice on the grounds of race and religion for a number of reasons. Historically, riots involving ethnicity and race have occurred in the UK since the 1950s, e.g. the Notting Hill riots in London between Blacks and Whites, the Bradford riots involving South Asians and Whites in the 1980s and in 2001. Hostility from groups such as the British National Party (BNP) and UKIP has triggered awareness of political issues for many immigrant communities catalysing political mobilisation in these groups, e.g. in 1987 Mohammad Sarwar from Glasgow became the first Pakistani Muslim Member of Parliament (MP) since the Second World War and a growing number have emerged from that time (Anwar 1990). Despite the efforts of extreme right-wing, political groups to remove immigrants, ethnic minority groups have remained resident in an increasingly multicultural Britain.

Many historical events have brought about a general anti-Islamic sentiment at a

local level in the UK as well as worldwide. British Muslim identity came to the forefront in 1988 with the publication of the novel *The Satanic Verses* by Salman Rushdie. This single event united the British South Asian diaspora on the grounds of religion, and was perceived by some to be the 'death of multiculturalism' (Shaw 2000). Most British Muslims saw government support for Rushdie as an attack on their faith. Further apathy, financial and arms support by the British government during the later Bosnian War of 1992-1996 intensified feelings of anger and renewed vigour in British Muslim identity. At this time the concept of the Muslim nation (or 'ummah'), which breaks down national boundaries, became significant in resisting the negative attitudes of mainstream society.

The attack on the World Trade Centre on September 11th, 2001 also had a massive impact on Muslims, with many global repercussions. Differential views on motivations, propaganda and suspected culprits have been presented by the media though it is generally held that Islamic terrorists were involved. The attacks were condemned worldwide, including by British Muslims who felt misrepresented. Mobilisation of organisations like the Muslim Council of Britain (MCB) also led to the confrontation of internal issues surrounding misguided factions *within* the Muslim community. Xenophobia and Islamophobia has escalated, exemplified by verbal and physical abuse, including knife attacks, and arson and bomb threats against mosques and Muslim organisations (Ahmed 2005).

Moreover, a series of subsequent world events have affected Muslim/ non-Muslim relations, e.g. the wars in Afghanistan in 2001 and in Iraq in 2003. Further ongoing crises around the world at large relating to increasing instability, civil unrest, oppression and violence in areas such as Kashmir, Palestine, Sudan, West Africa and Syria have fuelled perceptions of western apathy towards the Muslim world. There is an awareness by Muslims that the Islamic world is being targeted, and the 'war on terror' is actually a 'war on Islam'. On the whole, the discourse of the western media has portrayed Islam to be a violent and bloody religion; linked to jihadists, suicide bombings, fundamentalism and extremism (Geaves 2005, Osler & Hussain 2005).

Despite combined anti-war campaigns by native Britons and British Muslims, British 'terror' laws have also impacted on the British Muslim community. 'Anti-terror' legislation has been continually changed since 2000 with stricter measures being enforced regarding arrest and detention, and even opposed by civil liberties groups such as *Amnesty International*. Increasing numbers of stop and search activities by the authorities, notably in airports and especially following the London (2005) and Glasgow (2007) attacks, has specifically discriminated against visible Muslims, e.g. women with headscarves, or men with beards. Ironically whilst governmental authorities have tried to counteract terrorism, some Muslims have been more radicalised. Unbalanced and negative media reporting has exacerbated the situation, leading to a growth of Muslim organisations established to dispel growing tensions, educate and be the 'Muslim voice'. Legislation such as the French ban on religious symbols and apparel in public schools

in 2004 including all overtly religious dress and signs (including Muslim headscarves) has also been felt by the worldwide Muslim community.

This hostile situation has necessarily impacted on the identity of British Muslims in a number of ways, especially the youth. These include: feelings of victimisation in their daily lives by peers and colleagues with a general perception of social and economic exclusion from British society; a revival of Islamic identity and Muslim pride; a rejection and separation from Islam to dissociate from the negative connotations; changes in national sentiment; heightened political and social mobilisation; as well as an overarching sense of anger, condemnation, embarrassment, unease and sadness.

There is a sense of a revival in Islam in younger generations. This Islamic regeneration may be attributed to economic and social exclusion of Muslims, by helping to create a sense of belonging, solidarity and function as a means of political mobilisation. It may also help individuals to deal with widespread islamophobia through greater knowledge and understanding of their faith. All this has led to a greater sense of belonging to the global ummah ('nation'). To counteract mainstream views often mistrusted by Muslims, increased Muslim media coverage of 'terror' events became important to help give a more neutral standpoint, e.g. local British Muslim media such as *The Awaz, The Daily Jang, EMEL magazine, British Muslim TV* and the international media such as *Al-Jazeera.* In this way, the media plays an important role in developing a sense of being a British Muslim creating a shared experience and subsequent shared identity. As a result, an 'entire social, cultural and educational infrastructure appears to be developing amongst young Muslims that provides Islamic alternatives in the areas of entertainment and social life as well as news and knowledge acquisition' (Ahmed 2005, p.122). The very fact that it is produced by second and third generation Muslims makes it more appealing and relevant. This is because they can actually relate to the issues that are being reported from a similar perspective.

### 3.4.7   Summary

The South Asian community in the UK has come a long way since its inception in the 1950s with regards to identity and integration. The early migrants established strong close-knit communities with limited integration and retained close ties with their Pakistani heritage. Newer generations are more integrated and British and Muslim identity has become more important than Pakistani identity. Worldwide events have changed life for Muslims in Britain, and with the constant scape-goating of Muslims greater Islamic sentiment has also grown. In essence, British-born generations have a completely different set of problems compared to their predecessors and face challenges at a much larger global scale. Arguably, young British Pakistanis will react to the wider societal issues through their linguistic choices and identity as they now need to defend their position and stances in unprecedented ways both within and across ethnic communities. The next sections will turn to a broad overview of British South Asian language research before focussing on the Scottish Pakistani community which is the

sample for this study.

## 3.5 Research on British-Asian Language

### 3.5.1 Introduction

There has been little research in terms of the language of the broad South-Asian community with an even smaller body on Pakistani Punjabi and Urdu speakers. Typically, linguistic research has concentrated on language contact, language change, language shift, code-switching and bilingualism (Romaine 1995) with few sociolinguistic studies (though cf. Rampton 1995, Harris 2006) and a few phonetic studies on their English (cf Lambert et al. 2007). Furthermore, while there is limited sociolinguistic and phonetic work on this community nationally, strikingly there is hardly any in Scotland, especially given that this is Scotland's largest ethnic minority group.

In this study, British-Asian identities are central to British, Scottish, Glaswegian as well as Pakistani identities and ideologies of place. This thesis seeks to explore speech, accent and identity in a group of Scottish-Pakistani girls who are typically multilingual in Punjabi and Urdu. An overview of these varieties will be presented first for context, before an outline of the general literature on South Asian language in the UK. An overview of the Scottish context in terms of society and language with specific reference to Glasgow will also be presented in this section.

### 3.5.2 Urdu, Punjabi and Pakistani-English

Urdu, Punjabi and Pakistani-English are often spoken or known by British Pakistanis and may influence their linguistic variation to greater or lesser degrees as well as their British-English varieties. Linguistically, Punjabi and Urdu speakers have emerged as a result of political changes in what was once collectively called India. The Punjab area of India (before partition in 1947) was a single state where the majority of the population spoke one of the local dialects of Punjabi as their mother tongue. On formation of the nation states of Pakistan and India, the region's main languages of Punjabi, Urdu, Hindi (and English) took on different roles. The Muslim majority in Pakistan took Urdu as their official language of state, but still spoke predominantly Punjabi, whilst the Indians took Hindi as the national language, and also retained Punjabi. Urdu and Hindi are still mutually intelligible today though there are variations in the lexicon and writing system, especially as languages became entwined with national and religious identity. However, Punjabi is more distinct in both Pakistan and India, in terms of syntax and is less mutually intelligible.

Urdu unified language across Pakistan as the four main geographical regions all speak different languages, e.g. Punjabi is spoken in the Punjab region, and Sindhi is spoken in the Sindh region of Pakistan. Urdu is considered the language of power, education, religion and culture, the 'high' variety next to Punjabi which is the low

variety in this diglossic situation (Schiffman 1997). Common features of Urdu are: retroflex and dental stops (see Chapter 6); nasalised, oral, long and short vowels (see Chapter 7); consonant gemination and syllable timing in rhythm where all syllables are roughly the same length (Schmidt 2003).

Punjabi has much lower prestige in Pakistan, and is often associated with the family, lower working classes and agrarian parts of society. Some of the older generations and those living in rural areas are often only fluent in spoken Punjabi having limited literacy in reading and writing overall, as well as limited or no access to Urdu through mainly educational establishments. Common features of Punjabi are: tonal contrasts; retroflex and dental stops; retroflex approximants like /l/ and /r/; trill /r/; three-way aspirated stops; velar fricatives and long and short vowel contrasts; vowel nasalisation alongside oral vowels; consonant gemination and syllable timing (Karamat 2001, Shackle 2003, Stuart-Smith & Cortina-Borja 2012). (Also refer to Chapter 6 and Chapter 7 which explore stops and vowels more specifically).

Pakistani-English has also become a popular variety for younger generations in Pakistan and is one of the national languages. It holds high prestige with mainly American-English being taught in English-medium schools in Pakistan. Pakistani-English originally derives from former colonial language contact. Common features of Pakistani-English are: rhoticity; no /v,w/ distinction; epenthesis e.g. *bilue* for *blue*; consonant gemination in words like *happy*; clear /l/ with no dark-light contrast; retroflexion of /t/ and /d/ - e.g. dress pronounced with retroflex /d/; non-aspirated stops of /t, d/- like Scottish-English; stops for fricatives in words like *north* and *then*; and it is generally a syllable-timed variety (Mahboob & Ahmar 2004).

Pakistanis in Britain have greater language choice beyond English, but still predominantly use Punjabi in most family and informal contexts. This is particularly as the first immigrants arriving in the UK shortly after the India-Pakistan partition were most proficient only in Punjabi which has been passed on to consecutive generations. However, Urdu is still considered more cultured and refined even in the UK. Also because Urdu is fast becoming the norm alongside the growing preference for English by young people in Pakistan, limited Urdu (and even Punjabi) proficiency for British Asian youth is mocked by Pakistani-born relations.

### 3.5.3 Previous Sociolinguistic Research on British-Asians

Sociolinguistic work on British-Asians has largely focused on cross-cultural communication, language contact, bilingualism, code-switching and language maintenance and shift. One of the earliest studies is that by Gumperz (1982) who examined cross-cultural and inter-ethnic communication. He analysed miscommunications in a British canteen illustrating the need for social and cultural knowledge and also how language is unconsciously imbued with wider contextual meaning.

Subsequent research on South-Asian languages has tended to concentrate on aspects of language contact, language change and acquisition. One major work focusing on

Punjabi/English bilinguals in the UK is by Romaine (1989, 1995) who examined bilingualism, in terms of bilingual patterns and language loss in bilingual Punjabi/English speakers in London and Birmingham. She explored code-switching and language mixing from a sociolinguistic as well as from a more neurolinguistic standpoint noting that such behaviour does not necessarily motivate language shift (e.g. language loss) but should be considered another discourse strategy. She further assessed claims about the positive and negative impact of bilingualism on children's holistic development and tackled beliefs behind language policies and programs for bilingual children.

Other research examines the uses and structure of Punjabi/English code-switching, e.g. Agnihotri (1987), Moffatt & Milroy (1992), Stuart-Smith (1997), Pert & Letts (2003), Martin et al. (2003). Code-switching is a frequent feature in the Punjabi or Urdu speech of younger speakers and so is borrowing of cultural English loan words such as numbers, changes in word grammar patterns and vocabulary (Reynolds 2002, Martin et al. 2003). Code-switching has also been examined with specific relation to British-Asian identity. It has been noted in young speakers' English as a form of in-group solidarity as well as a measure of assimilation or acculturation (Romaine 1984). For example, Agnihotri (1987) conducted research with second-generation, Punjabi Sikh children in Leeds finding that children used a mixture of English and Punjabi as a language of intra-group communication. Informants with negative attitudes towards the Sikh community reflected this in their linguistic behaviour by using little or no Punjabi, thereby distancing themselves from the Sikh community symbolically through their language. In this way, language choice itself becomes an emblematic resource in identity construction.

A small amount of work has also shown that British-born generations have different patterns of language use to the early generations. There is notable language shift and attrition, borrowing and reduction in the morphological system and a move towards English as the dominant language (Khan 1991, Romaine 1995, Pert & Letts 2003, Harris 2006, Lambert et al. 2007). Early Pakistani Punjabi/Urdu/English multilinguals also acquire different systems of conceptualisation based on their L1 and L2. Pakistani children usually acquire Punjabi and Urdu in the home as their first language, but rapidly move to English once they start school, and for the youngest generations this process may start even earlier, with little or no heritage language in the home as it gradually dilutes across British-born generations. Consequently, it is difficult to conceptualise what is meant by the L1 of these younger generations, as it so variable (e.g. see Khattab 2007, on Lebanese Arabic).

Differences in language choice by younger speakers are often tied to different domains and non-native acquisition of the heritage language. For example, the use of more Punjabi and Urdu in the home domain (e.g. Lambert 2004) due to familial encouragement and expectations; a need with non-English speaking relatives; knowledge of Punjabi and Urdu vocabulary relating to the home domain (e.g. words for foods, clothes, parents, relatives); and feelings of deficiency in expressing concepts in their heritage

variety related to other domains such as education and work (Romaine 1989). Even in the home domain there is evidence of increased English use, e.g. Lambert (2004) showed that second-generation Punjabi/English bilinguals in Glasgow responded to their parents in English and rarely spoke Punjabi, suggesting evidence for language shift.

### 3.5.4    Language and Identity: 'Brasian'

Ethnically blended language varieties, e.g. London Jamaican (Sebba 1993) have been considered ethnolects and may represent hybrid new social identities for young British-born individuals. Harris (2006) uses the term 'Brasian' for British-Asians suggesting a new identity for younger generations, who also diverge *linguistically* from their parents' generations. From pupil language survey questionnaires, written accounts of patterns of language use, self-made audio recordings at home, open-ended interviews and self-report data, Harris (2006) unearthed findings which he typified as 'Brasian' language behaviour. These included:

- Brasians speak more English e.g. to siblings. Typically use of the community languages in limited spheres, e.g. with grandparents

- Limited proficiency in heritage languages like Punjabi and consequnt rapid generational decline in community language use

- Some use of South-Asian languages and 'Indianisms' (or heritage influence), e.g. use of Punjabi, code-switching, word for father's sister is *phuppho*

- Use of phonological and grammatical features of London Cockney English, e.g. London phonology such as t-glottalling, TH-fronting, changing [g] to [k], e.g. *somethink*, and systems of London grammar such as phrases like 'I done it' instead of 'I did it', use of *ain't* instead of *isn't*, multiple negation, non-standard 'was' (e.g. *we was saying*) and slang terms such as *innit*

- Extra-British languages and global teenage language features (Harris 2006), e.g. Americanisms, 'be' + like e.g. *she's like* used more by females, Australian up-speak with its rising intonation at the end of sentences, swearing and cussing and the use of the Black vernacular, e.g. Caribbean, Black London and African American varieties (also cf. forthcoming Tagliamonte n.d.).

From these characteristics, language patterns in British Asian English centre on a number of points which produce new identities different from their South-Asian (and Anglo-British) counterparts. These are related to heritage language loss and reduction; affiliation with the local area; global language use; and teenage language innovations. Linguistically there appears to be little 'Asian' in the 'Brasian', but these may work at a more subconscious level and be related to data collection methods. The existence

of style repertoires have also been noted in South-Asians where speakers vary across situational contexts using more or less 'Indian' features (Sharma 2011).

Harris' work paves the way for sociolinguistic discussion about new identities in action across all British-born ethnic groups nationally and also other ethnic groups born in a non-native country at an international level. This is also relevant in the Scottish context (e.g. Alam 2006). Indeed it would be interesting to observe if there were comparable new identities in the country of origin with the rising face of mass media.

### 3.5.5  The 'British-Asian' Accent

One way of signalling ethnic identity may be through fine-grained phonetic variation and this has been linked to the limited work on British Asian English (BAE) (e.g. Sharma & Sankaran 2011, Sharma 2011, Kirkham 2013). The Stylised British Asian (SAE) accent has been stereotyped in the media as possessing certain common features, despite gradual processes of language shift and attrition. The notion of a distinct hybrid Glasgow-Asian accent is also accepted, and even stereotyped, e.g. the character of Navid in the Scottish-based comedy TV show *Still Game*. The notion of a 'British Asian accent' is relevant and used by South-Asian heritage community members but it is just that at present - a notion. However, studies have found some linguistic commonalities across speakers of South-Asian descent.

British-Asian English accent features are linked to: retroflexion, pre-voicing, pre-nasalisation, tonal differences with English, clear laterals, rhoticity, monophthongal vowels and a general syllable-timed rhythm in comparison to stress-timed English (e.g. Heselwood & McChrystal 1999, 2000, Lambert et al. 2007, Hirson & Sohail 2007). The most extreme of these features are often more representative of older speakers who came to the UK as migrants who show high levels of language interference from Punjabi and Urdu in their English.

In contrast, younger speakers have developed their own styles of speech and identity in the UK, which do show heritage language features in their English but notably much less marked. It is apparent that there is less *direct* language interference from Punjabi/Urdu on an individual's English accent. Linguistic features may now be considered independent from bilingualism with the re-interpretation of accent features by younger generations.

Small scale accent studies on British Asian English from different South Asian groups such as Lambert et al. (2007), Zara (2010), Blakeley & Torgersen (2009), Kirkham (2013), Wormald (2014) also indicate the presence of shared British Asian accent features. There are also regional differences, characterised by features such as retroflexion (or retracted variants) in consonantal variables and differences in vowel quality.

Intergenerational approaches have also been useful in understanding linguistic change in the Asian community and giving a perspective on the speech of older generations. So-

ciolinguistic analyses of the use and development of dialectal varieties of English within families of Indian origin have been conducted on a project in London by Sharma & Sankaran (2009, 2011) and Sharma (2011). Broadly the project draws on: variationist methods to study dialect processes; interactional sociolinguistics producing qualitative accounts of the strategic use of dialect in everyday discourse; and the politics of language, addressing public representations of the language of ethnic minority groups. By exploring speech data, social networks and attitudes over three generations of predominantly Sikh families, they link linguistic features to language and dialect shift through structural and agentive processes. They identify conduits like family, bidialectalism, ideological stances, lifespan changes and gender differences in leading linguistic change across generations.

## Stops

Stop consonants may be an important distinguishing feature of Asian English accents and are different to Standard English which typically has alveolar stops. Punjabi and Urdu stops vary according to: place of articulation (dental or retroflex), voicing - where Punjabi/Urdu is more voiced than English, having fully voiced stops like /b, d, g/ versus /p, t, k/; and aspiration.

Two early studies, on stop production and perception, by Heselwood & McChrystal (1999, 2000) on young Punjabi speakers in Bradford demonstrated the presence of 'Asian' phonetic features. These were pre-voicing in production and retroflexion in perception, but differences emerged in terms of age and gender. They found specific accent changes taking place by examining different age groups. Speakers aged over twenty-five realised voiced stops with pre-voicing as expected for Punjabi, but younger speakers were much less predictable with regards to this feature. This suggests younger speakers are subject to language interference from English, losing heritage features albeit gradually with each generation. This study also showed gender differences, where young males in Bradford employed more marked Punjabi features than young females, e.g. using more noticeable retracted realisations in stop articulations and de-aspiration of voiceless stops. This suggests a greater degree of heritage loyalty and allegiance by boys, indicating that it is not just language interference at work but that accent features are deployed for identity.

Kirkham (2013) also analysed word initial stop /t/, e.g. *talk*, in terms of frication noise with respect to social patterning and socio-indexical potential. Results indicate that there is a complex relationship between ethnicity, social identity (or social practices) and heritage languages. Kirkham reports differences in /t/ affrication based on CofP, even between CofPs who had the same anti-school stance, and also gendered differences, where greater affrication was used to signal multi-ethnic youth identities.

Sharma & Sankaran (2009, 2011) report gender and inter-generational differences on retroflexion of /t/ in the West London Southhall Punjabi community - Hindu, Sikh and Muslim. Using data from 40 first generation and second generation bilinguals, they

show generational and gendered differences in /t/ realisation. Surprisingly younger speakers also used more retracted variants than older speakers, but importantly these had acquired reallocated social and positional salience. Classifying generations in this way is complex as first generation migrants arrived at different times, so there are also intra-generation second generation differences corresponding to changing social practices over time. Results also show that second generation men typically used more retroflex variants of /t/ than women, again highlighting male/female phonetic and identity differences. Sharma (2011) also highlights the importance of style shifting in different interactional settings, suggesting there is not a blanket ethnic speech variety for this community as it is constantly changing dependent on contextual factors.

Auditory analysis of /t/ and discourse analysis by Sharma (2014) examines transnational influence on the language practices of second generation South Asians born in the UK. Transnational influence is considered as direct or indirect, in terms of physical, virtual, cultural, ideologised exchanges or flows. Sharma devised a transnationalism index for speakers based on their responses about their connections to India and Indian culture, hypothesising that higher levels on this index would correlate with increased used of retracted variants of /t/. Whilst this was largely true for older first generation speakers, second generation speakers also used high rates of retraction despite the presence of low index scores. This might suggest more local rather than transnational meaning. Moreover, changing perceptions of Indian English over time as more prestigious compared to original migrant English may also be influential, so while personal ties to India diminish, they are still positively viewed by younger generations.

**Vowels**

Vowels in South-Asian speakers have been analysed with respect to language variation and change and identity, mainly in large multi-ethnic urban contexts, e.g. Birmingham, Manchester and London. British-born Pakistanis have also been examined with respect to socio-psychological orientation towards ethnic identity and locality and social networks, dialect levelling and diffusion (Khan 2006, Fox 2007, Rathore 2009, Cheshire et al. 2011, Drummond 2014).

Khan (2006) explored how social network and psychological orientation influenced linguistic behaviour in White, Pakistani and Black Caribbean working-class adolescents in Birmingham. Khan predicted that socio-psychological orientation, e.g. attitude towards the city and orientation towards ethnic identity would have a stronger influence on language use than social networks. Through recordings of 106 informants and analysis of phonological and grammatical variables (e.g. GOAT, PRICE vowels, /θ, ð/ in words like *think, they*, and past tense *BE*), Khan found that socio-psychological orientation towards ethnicity was indeed more important for Pakistani and Black Caribbean groups whereas social networks were more important for the White group. Speaker ethnicity was even stronger in accounting for language variability than attitudes orientation towards Birmingham. Typically, Pakistani speakers would orientate towards a British

identity through appropriation of phonetic features such as use of the urban and youth-related variants of /f, d/ instead of standard English forms but simultaneously use a more 'Asian' sounding vowel like closer monophthong of GOAT. Such fine-grained phonetic variation may allude to hybrid social identities as postulated by Harris (2006). Results emphasise the need to understand the speaker's local context, social network and inter-ethnic ties in order to more fully understand the diverse patterning of such variables, as well as intra-group variation.

Fox (2007) analysed the influence of the Bangladeshi community on the Cockney dialect in the Tower Hamlets borough of East London. Through ethnographic fieldwork in a youth centre, she examined the PRICE and FACE vowels, as well as linking and intrusive /r/ and allomorphic variation in the English article system. Results showed that the broad social categories of ethnicity and gender typically correlated with language use, but her ethnography also showed how inter-ethnic linguistic diffusion may occur in a community of practice more subtly.

South-Asian vowels have also been studied in smaller cities and towns in the north of England such as Blackburn (Blakeley & Torgersen 2009), Sheffield (Kirkham 2013) and Bradford (Wormald 2014) in attempts to understand ethnic accent features more widely. Specifically, researchers have tried to understand the impact of regional and local effects on language use as well as supralocal elements with much of this work focussing on vowels.

Blakeley & Torgersen (2009) examined vowels in the Lancashire town of Blackburn, an ethnically diverse area with a substantial Indian and Pakistani population. They examined the FACE, GOAT, NURSE, SQUARE and PRICE vowels revealing less local vowel features for Asians compared to non-Asians, where Asians tended to use monophthongs as opposed to diphthongs. However, FACE and GOAT are stereotypically monophthongs in northern accents and have become enregistered varieties therefore it becomes difficult to ascertain whether such distribution is indexical of ethnicity or local area. They also suggest there may be more similarities between Asian accents more widely across the UK, attributed to both ethnic heritage as well as ongoing dialect contact and levelling.

FACE and GOAT vowels have also been analysed by Wormald (2014, 2015) in the Yorkshire town of Bradford. She compared three Pakistani-Punjabi and three Anglo-English female speakers and found significantly lower F1 values for the Asian group indicating a closer realisations of these vowels as e.g. Khan (2006) and expected for South-Asian English. She suggests that this might be evidence of transfer or innovation.

Recent variationist research has used third wave methods to explore linguistic variation in the Asian community. Kirkham (2013) explored the relationship between small Communities of Practice and ethnicity in high-school adolescents from Anglo and non-Anglo backgrounds in Sheffield, with a focus on word-final /i/. Results for the HAPPY vowel (word-final /i/) in words like 'belly' reveals no ethnic differences but differences according to CofP. In this geographical area, HAPPY is traditionally realised as /ɪ/ according to Wells (1982), often considered a regional and 'classed' realisation, but is

now much more likely to be the tenser /i/ vowel in younger speakers. Typically this vowel often comes after liquids (/l,r/) which are known to have articulatory and acoustic influences on surrounding sounds. Kirkham (2013) confirms /i/ in both Anglo and Non-Anglo young speakers, and specifically, his pro-school CofPs (the Ashton and Twilight CoPs) have the tensest /i/ whereas the anti-school CoPs have a closer realisation to /ɪ/ (Parkdale and Rebellious CoPs). This might be explained in terms of preceding segment when a clearer or darker /l/ is used respectively, but also by perceived class-based divisions. Moreover, by finding CofP to be the only significant factor, it allows a description of identity based on school orientation, rather than ethnicity alone as the CofPs in Kirkham's study cross ethnic boundaries.

Despite the growing evidence for the relationship between linguistic behaviour and ethnic identity, Evans et al. (2007) on Indian-Gujerati speakers in Wembley, London, showed no effect of ethnic identity on vowel realisation. Evans et al. (2007) studied eleven British monophthongal vowels in a word list CVC context (e.g. *heed*) and found vowel qualities that were more similar to Standard Southern British English rather than a more ethnically influenced London-English with no significant differences. One explanation is that the speakers in Evans et al.'s study were aspiring on the social ladder, so here used the prestige forms, which would be SSBE. They argue that whilst some language features have been shown to display differentiation through ethnicity, social mobility and identity may also be factors in linguistic variation which may lead to accent convergence with the majority community as opposed to divergence.

**Rhotics**

Evidence has also suggested that phonetic realisation of /r/ may also carry sociolinguistic weight in South Asian communities in th UK (Hirson & Sohail 2007, Singh n.d.).

Patterns of /r/ pronunciation have been examined in young Pakistani Punjabi speakers in London by Hirson & Sohail (2007) and has been linked to an individual's perceived social identity. They suggest that the minority language Punjabi affects the dominant accent of English, but also that linguistic interference works both ways. Twenty-four speakers, aged 19-26 were asked to self-identify as either 'Asian' or 'British Asian', where the former term was linked to greater segregation from non-Asians and the latter to greater integration. They hypothesised 'British Asian' speakers of English would acquire the local (south east British) non-rhotic pronunciation excluding post-vocalic /r/ as opposed to the 'Asian' self-identified speakers who would retain features of Punjabi rhotic realisations (e.g. alveolar and retroflex taps and voiced alveolar trill). Through questionnaire data, informants were put into the two groups with equal numbers of males and females, and one monolingual Punjabi control group for comparison. A picture naming task was conducted where 40 words were elicited from each participant in the three groups and subsequent auditory and acoustic analyses performed.

Results showed that self-identified 'British Asians' had non-rhotic accents as hypothesised and used mainly the alveolar approximant while those identifying as 'Asian' had rhotic accents like the monolingual Punjabi speakers, using alveolar trills and retroflex taps. Gender differences also arose in the 'Asian' only group (and not in the 'British Asian' group), where females used more instances of south-east approximants and males used more typical Punjabi variants, e.g. trills, taps and retroflex rhotics. This is a similar finding to Heselwood & McChrystal (1999, 2000). Such gender differences suggest an accelerated linguistic integration and shifting to mainstream norms by young women as compared to the young men.

Following this, research by Singh (n.d.) on the phonetic variation of /r/ in Punjabi-English bilinguals in Manchester finds similar results. He examines /r/ in prevocalic and inter-vocalic position, e.g. *rain, ferret* and again finds that females used more of the local approximant /r/ whereas males tended to used taps, flaps and trills. Results also support the notion of regional ethnic Englishes with the emergence of a set of supralocal norms, strongly defined along racial and religious lines. This may distinguish some Punjabi-English vernacular spoken in Manchester from the region's vernacular varieties.

### 3.5.6   Summary of British Asian Research

Previous linguistic research has begun to look at aspects of British Asian accents using varied methodological approaches and different speech communities within the wider British Asian community and shows a numbers of important features. There is an apparent degree of language shift with a move towards the majority language of English by younger generations which may be related to newer ethnic cultural identities. Borrowings, code-switching and general language transfer are apparent, but there is also an exploitation and adaptation of some salient heritage language features in young speakers' English such as retroflexion.

Specific research on accent in the English Asian community has shown that linguistic behaviour may mark an Asian ethnic identity as well as a regional, local, urban or youth identity as evidenced through research on phonetic variation in stops, vowels and approximants. This gives grounds for considering the development of a British-Asian accent for England which may have some common features, e.g. retracted variants of stops, and close monophthongs for vowels such as FACE) and GOAT. This shows both ethnic/cultural and local influences, as well as generational heterogeneity. Also, while language divergence has been evidenced, language convergence to English is also present in certain communities and individuals as suggested by Evans et al. (2007). In this way there is a great deal of complexity when examining the accent of British Asians. To conclude, for South-Asian communities in England, evidence has suggested that there is a link between specific accent features, ethnicity, identity and social practices.

# 3.6 The Scottish-Asian Context

We will now move to the sample under investigation - the Scottish Pakistani Muslim community. This community has some major differences compared to its English counterparts, thus a brief outline of the Scottish context will be presented next. It will include a background to linguistic research on Scottish-English, and chapter finishes with studies to date on Glasgow-Asian.

## 3.6.1 Demography

Scotland's total population only stands at approximately 5.3 million compared with over 53 million in England according to the 2011 Census (Office for National Statistics 2011). Scotland's ethnic minorities are much smaller in overall number with a total of 211,000 (approx 4% of the total Scottish population). Strikingly in Scotland there are 147,000 (approx 3%) people of South Asian descent comprising 67% of the total Scottish ethnic minority population. This makes them proportionately much larger than their English counterparts, who have an approximate 8 million ethnic minority but only 4 million of South Asian descent (50%). Of these, the Scottish-Muslim population, which is largely Pakistani, comprises around 77,000 (approx 1.5%) people which is substantial given the context. Arguably such differences in population size may affect the social and cultural practices of the Scottish contingent.

Much of Scotland's total population, including ethnic minorities, is concentrated around the Central Belt area between Glasgow and Edinburgh, with more outlying areas having a sparser population density. This makes Glasgow a perfect test site in Scotland for looking at the Pakistani Muslim community. The emergence of Scottish-born Pakistani Muslims reflects the changing demographic makeup of Scotland and paves the way to thinking about new ethnicities and identities in this context as suggested by Harris (2006).

## 3.6.2 Early History of Scottish Asians

South Asians of Pakistani/Bangladeshi/Indian descent began to permanently settle in Scotland from the 1920s mainly from the Punjab districts of Jallandhar and Ludhiana (Weston 2005, Maan 2014). Originally these people began as itinerant workers doing odd jobs, but eventually settled with chain migration allowing families and kin to arrive as generally occurred across the UK. For example, a central figure in the early settlement of Glasgow was Nathoo Mohammad who began peddling goods and was later able to wholesale his wares, and lend credit as increasing numbers of South Asians arrived (Weston 2005).

By the end of the 1920s, only about one hundred South Asians were living in Glasgow, some of whom moved to Edinburgh and Dundee. In the 1930s, this population increased to around 175 and as the recession struck hard, many pedlars moved further

north, reaching the Highlands and Hebrides (Maan 1992). During the Second World War, alongside helping in the domestic war effort, community organisations had also begun to be established, e.g. the Muslim Mission was formed in Glasgow in 1940 (*Jamiat Ittehadul Muslimin*) and the Sikh Association (*Guru Singh Sabha*) in 1941 (Weston 2005), both increasing the emerging sense of community.

Gradually, the new Scottish Asian population moved away from peddling and into semi-skilled jobs in industry as the demand grew. In addition, there was a migration north from England to Scotland as workers were laid off, and they gained employment in the transport sector. By 1960, there were an estimated 4000 Indians and Pakistanis in Scotland (Maan 1992, 2008, 2014) from initial migrations and within-UK migration. However, stricter legislation in 1962 with the Commonwealth Immigrants Act slowed immigration only allowing dependents of those already residing in Scotland and work-permit holders to enter the country. In the 1960s, an increasing number moved towards self-employment particularly as shopkeepers, so that by the 1990s, about 65% of Asian families owned a business (Maan 1992). The first mosque was also established in 1984, the Glasgow Central Mosque, and funding was supplied by the local Muslim community.

### 3.6.3   Scottish Asian Society

A strong work ethic has led to the entrepeneurial success of Scotland's South-Asian communities and is visible today, for instance in form of large cash and carries such as *House of Suleman*. Alongside these family-run businesses is the widening of employment to professional careers in health and education in particular. South Asian communities have transformed over the course of their settlement in Scotland and continue to do so. Senses of identity vary in terms of context and situation as well as over and across generations. There are differing degrees of traditional and cultural norms being upheld, contrasted with similar degrees of assimilation into the Scottish lifestyle, through features such as dress, language, diet and worship (Weston 2005).

Traditionally Scotland prides itself on being a nationalistic but also multi-cultural, diverse and welcoming country built on tenets such as tolerance and social justice. Government-led organisations like *One Scotland Many Cultures* aim to celebrate the cultural diversity of Scotland and challenge racist attitudes and behaviours, with regular campaigns promoting tolerance and integration. Consequently Pakistanis have become part of multi-cultural Scotland drawing from it as well as contributing to Scottish society. Whilst some would argue that racism is less endemic in Scotland than in other parts of the UK (Maan 1992), others declare rising racism and particularly following the Glasgow Airport attack (Elias 2008) suggesting 'perfect integration' is a myth.

### 3.6.4 The Glasgow-Pakistani Community

Glasgow has the largest Pakistani Muslim population, approximately 30,000 (32%) of the total Glasgow ethnic minority of 91,600. Notably this is comparatively a small community in number compared to those in England. Despite this, Glasgow has a thriving Pakistani community with some densely populated Asian areas in the South side such as Pollokshields and Govanhill and in the West End such as Woodlands. These communities have a strong economic infrastructure, with businesses catering exclusively for the Pakistani Muslim community, e.g. halal takeaways, clothing shops, cash and carries, and travel agents with the common use of community languages.

Older Glasgow-Asian generations are often businessmen, with younger generations gravitating towards professional careers such as lawyers, doctors and teachers, often deemed 'respectable' professions within the Pakistani community. In this way they also compete in the white labour market, while some may still choose to run the family business.

Scottish local media such as *Radio Awaz* and local newspapers such as *The Awaz* ('The Voice') are also important sources of information for the community as well as the 28 local mosques where religious and community activities are held.

Clothing is also diverse in this community, where both traditional and western fashions are worn on different occasions and differ generationally. For example, Muslim women can be seen wearing an eclectic mix of garments from traditional *shalwar kameez* (trousers and long top), hijab (headscarf), niqab (veil) through to all types of western clothes, from jeans to sleeveless tops.

The Glaswegian-Asian youth have a very different experience to their parents and grandparents who are more likely to uphold Pakistani cultural and religious values. Religion may also be important for some youth, where younger generations are involved in organisations, youth clubs and Islamic educational programmes. For example, *Al-Meezan* is a popular centre for Muslim women in the south-side of Glasgow to learn about their religion running weekly classes, and the popular weekly *ISyllabus* course. Regular Islamic events in the city all facilitate a connection with the Islamic faith from different denominational and sectarian perspectives.

Many young Pakistanis in Glasgow and in Scotland are also proud of their Scottish identity, celebrating this national as well as ethnic identity. This is exemplified by growing community support for the Scottish National Party (SNP) and various events aimed at promoting ethnic relations and recognition in Scotland, e.g. *The Scottish Asian Business Awards, Scottish-Asian Wedding Exhibitions, Scottish Asian Womens Awards, Scottish Black Ethnic Minority (BME) Achievement Awards* and *the BME Youth Awards.* This mix represents how much Scottish Asians contribute to Scottish life in terms of culture, arts, sports, contribution to society, business etc. Such events tends to attract the leading figures in Glasgow's Asian community and further representative samples can be found at more popular events such as Asian fashion shows, the *Irn-Bru*

*Carnival* held annually every new year at the Scottish Exhibition Conference Centre (SECC) and the annual *Glasgow Mela* where an eclectic and diverse range of people from many backgrounds can also be seen.

In Scotland, and more specifically Glasgow, a degree of cultural assimilation is clear and for some Asian youth, lip-service is paid to religion and culture to keep their parents happy where they may in fact have little or no commitment to their heritage background. While many do still uphold their heritage through traditional marriages and appropriate Islamic etiquette, cultural assimilation is apparent through inter-ethnic and pre-marital relationships and marriages, drinking and the Asian club scene. Popular nightclubs in Glasgow for Asians include *Blanket* and *Bamboo* which welcome a keen R'n'B crowd - a popular choice of music for young Asians.

There is also a enregistrement of Glasgow-Asian. Within the community, there is reference to the notions of 'Shielders' or 'West-Enders' who are mainly Asian boys living in particular parts of the city who have a specific urban social identity. These are personified in their social practices like clothing and interest in cars. They might crudely be likened to the 'chavs' or 'neds' in the Asian community. Girls too can be 'Shielders' but are less likely to be referred to in this way.

### 3.6.5 Scottish-English

**General Background**

Scottish-English is an umbrella term for the varieties of English spoken in Scotland, and can range on a continuum from formal Scottish Standard English through to more informal Scots (Aitken 1979, 1982, Stuart-Smith 2003). Whilst not all varieties are spoken by all Scottish speakers, known varieties can be used in different social circumstances and registers, where individuals are able to style-shift in relation to constraints such as social class, age, gender, situational context and degree of familiarity with the interlocutor. Also further personal motivations for use of specific language might be linked to identity, culture and heritage, particularly heightened by the referendum on Scottish independence in 2014 and the revitalisation of Gaelic.

Around two thirds of all speakers of Scottish-English live in and around the Central Belt, loosely between Glasgow and Edinburgh. Glasgow itself is the largest city in Scotland and has a long history of industry such as ship building which declined in the mid-late 20th century. Glaswegians have a strong sense of belonging to Glasgow illustrated through their language, characteristic accent and culture (Stuart-Smith 1999, 2003).

General phonological features of Scottish English include: rhoticity (though recent work has shown a degree of de-rhotacisation in lowland Central Scotland (Lawson et al. 2014); presence of dark /l/; use of the glottal stop instead of /t/ word medially or word-finally; less aspirated voiceless stops /p,t,k/; presence of /x, ʍ/ as in *loch, while* that are not present in other British English varieties; and monophthongal vowels for

FACE and GOAT (Stuart-Smith 2004). Notable auditory and acoustic work on Scottish-English in **Glasgow** includes; Macaulay & Trevelyan (1973), Macaulay (1977), Macafee (1983, 1994), Stuart-Smith (1999), Stuart-Smith et al. (2007), Lawson et al. (2014), José et al. (2013); and in **Edinburgh** there is Romaine (1978, 1979), Aitken (1979, 1982), Johnston (1984), Chirrey (1999), Schützler (2014, 2015). More recent studies have been further afield such as Llamas (2000), Watt et al. (2014) in **Berwick**; Clark (2009) in **Fife**; Brato (2014) in **Aberdeen**; Smith & Durham (2012), Durham (2014), Smith-Christmas (2012) in **Shetland**; and Nance (2013) in the **Western Isles**. Much of this work focuses on vocalic and consonantal variables as well as dialectal, discoursal and lexical forms. Significantly, all these studies focus only on monolingual native speakers with no work from an ethnic minority perspective.

### 3.6.6   A First Look at 'Glaswasian'

No major sociolinguistic or phonetic study to my knowledge has been conducted on Asian English in Scotland, which is surprising given that South Asians are the largest non-white ethnic minority in the country. The little work that has been done has focused on language choice and language use in Scottish ethnic minorities more from an educational and bilingual perspective (Powney et al. 1988, Verma et al. 1992, Verma 1995). Two complementary and separate small-scale auditory studies, one an undergraduate dissertation by Lambert (2004) and one a Masters thesis by Alam (2006) on features of the Glasgow Asian accent generated the first phonetic research with respect to accent and identity which are summarised and synthesised in Lambert et al. (2007). An acoustic analysis of the same speech data from these studies has been conducted by Stuart-Smith et al. (2011) focusing on word-initial /l/ and the two vowels /e, o/.

Lambert (2004) examines *cross-ethnic* differences between Asians and non Asian males and females from the West End Glasgow. She analysed speech production through word list and read passage data, and analysed perception of accent using auditory and qualitative analysis. Through accent judgement analysis, she found phonological differences in Glasgow-Asian and non Glasgow-Asian speech. In Glasgow-Asian speech, there were auditorily retracted realisations of /l/ and /r/ in a range of phonetic environments; prenasalisation of voiced stops like /b/; and realisation of word-final /t/ as a voiceless ejective as compared to the more typical glottal or alveolar plosive in Glaswegian-English (though cf. McCarthy & Stuart-Smith 2013). Nasalised phonation is a feature of Punjabi and was salient in the Asian speech only, particularly in the female informant. A noticeable syllable-timed rhythm was also apparent in some Asian informants speech which is archetypal of Indic languages like Punjabi (Bhatia 1993) and this contrasts with the conventional stress-timed rhythm of the non-Asian monolingual English speakers.

Alam (2006) examines *within ethnic* differences in 18 Glasgow Asian girls in the south side of the Glasgow. This study examined stop perception of (/t, d/) using auditory analysis from naturalistic speech collected through a short three month ethnogra-

phy in a Glasgow high school. Retracted/post-alveolar realisations of /t/ and /d/ were noted in relation to engagement with particular social and cultural practices using the Community of Practice framework (3 CofPs). There was greater separation for /t/ than /d/ and typically, girls who had stronger affiliations with their heritage Pakistani culture showed more retraction (*not* retroflexion), whilst those who were more affiliated with British society used the least.

Acoustic analysis of these two original speech data was further conducted by Stuart-Smith et al. (2011), who compared Asian and non-Asian realisation of the /e/ and /o/ vowels and word-initial /l/. Preliminary findings reveal across ethnic and within ethnic differences. Across ethnicity, closer qualities for vowels were found in Glasgow Asians with more clear separation for /o/ compared to Glasgow non-Asians and clearer /l/ in Asians. Within ethnicity, there was patterning according to social practices (Community of Practice) and from the social profiles/networks of Asian speakers from both studies.

Results for /l/ were more robust than vowels. A clear lateral with high F2 is a feature of Punjabi/Urdu, whereas Glasgow /l/ is dark with a low F2. Glasgow Asian speakers had a dark /l/ with low F2 with respect to RP, but this was still not as dark as Glasgow non-Asians, taking on a comparatively clearer quality. This clearer /l/ was linked to speakers who affiliated with their Pakistani heritage. Language interference leads to specific phonetic outcomes and this illustrates that there is *not* direct phonetic interference, but more subtle re-interpretation of accent features.

This type of hybridity in the lateral realisation may suggest a regional ethnicity, which takes elements of both local and heritage linguistic features, Glaswegian and Asian or *Glaswasian* - a sociolinguistic notion proposed by Alam (2006) in her Master's study whilst unaware of Harris' term of *Brasian*. This term is a pun on *Glaswegian* and suggests pride in a Scottish identity and a local Glasgow identity, but also an Asian identity in a three-fold way, with an additional Muslim identity as a possible fourth.

Though findings are tentative it could be argued that particular features originally emanating from language interference look as if they are being deployed as English accent features by newer generations. Moreover, because speakers also identify strongly as Glaswegian, these features are realised and distributed in novel ways, which differ substantially from the original language but also by their use of Glaswegian speech features too, e.g. comparatively less clearer /l/ to Punjabi and comparatively darker /l/ to Anglo English accents.

Importantly both the vowel and lateral findings also show expected conditioning in relation to particular phonetic environments in addition to being influenced by the ethnicity and social profile of the speakers. In conclusion, Stuart-Smith et al. (2011) argue for preliminary evidence for hybridity at the level of phonetics, alongside regional ethnic hybridity in accent features for Glasgow-Asian speakers.

## 3.7   Summary

To conclude, this chapter has provided an overview to the sociological and linguistic background of the British Asian community as a whole, specifically the Pakistani Muslim community, and also the Glasgow-Pakistani community. As can be seen, the British-Asian community is not a homogenous group and linguistic, cultural and regional differences are apparent. Both societal and linguistic knowledge of the sample group is vital in understanding how both elements might inform each other. The next chapter will now turn to the present study by outlining the general methodology.

# Chapter 4

# General Methodology

## 4.1 Overview

This chapter will outline the general methods used for the research, and these will be elaborated on in the relevant results chapters - Chapter 6 (ethnography and CofPs), Chapter 7 (the stop /t/) and Chapter 8 (vowels). The present chapter also provides information regarding rationale, location of the study, ethics, data collection techniques, the final data set, data management procedures and data analysis methods.

## 4.2 Methodological Approaches

This study analyses the speech of adolescent female Pakistani Muslim girls in a high school setting and draws on three general methodological paradigms; variationist sociolinguistics, linguistic ethnography and phonetic theory. A combination of both quantitative and qualitative methodologies is especially useful in order to interpret the meanings of the distribution of forms across different individuals, groups or contexts. And whilst obtaining concrete data on the numerical distribution of forms is important, it is also necessary to evaluate the way in which distributional patterns are being used in particular social or interactional contexts.

### 4.2.1 Variationist Sociolinguistics

Firstly this research uses the classic third wave sociolinguistic approach in that it utilises variationist methods to analyse speech data (Eckert 2000). Variationists are particularly interested in speaker performance, i.e. actual language use and analyses of this linguistic behaviour based on empirical data (Milroy & Gordon 2003). The basic assumption is that linguistic variation is not free but that it is highly structured according to surrounding linguistic constraints and contexts, and has meaning conveying information about the speaker (Macafee 1994, Labov 2001).

### 4.2.2   Linguistic Ethnography

Secondly, this study uses methods from linguistic anthropology and the ethnography of communication (Gumperz & Hymes 1964, 1986), where the social meaning of language acts for individuals and speech communities is discerned through examining language in its wider cultural and social context. A long-term ethnography was conducted to shed light on the patterns of informal social organisation in the speech community focussing more on speakers, rather than on abstract language patterns and consequently a richer and more accountable interpretation of social information is produced (Milroy & Gordon 2003). The Community of Practice (CofP) framework was also employed to understand the shared salient local meanings of social and linguistic practices which may be representative of wider ideological stances (Lave & Wenger 1991, Wenger 2000).

### 4.2.3   Auditory and Acoustic Phonetics

Thirdly, the study draws on core phonetic theory and instrumental techniques to investigate speech data (Gordon 2007). Such techniques include auditory transcription, spectral moment analysis for the stop /t/ using smaller scale careful detailed hand-segmentation, as well as much larger scale automated methods for vowel formant analysis. These complementary approaches - small scale and large scale - yield different types of results but give a broader account of the Glasgow Asian phonological system with insights into how different features may work differently and independently.

## 4.3   Location and Ethics

### 4.3.1   Rationale

For the purpose of this study, it was necessary to choose a location with a large population of Pakistani Punjabi/Urdu-speaking Asians. Due to awareness of cultural and religious norms by the researcher, it was also deemed more appropriate to study female language.

Following a series of illuminating third wave studies in high schools in the US (Eckert 1989*a*, 2000, Mendoza-Denton 2008) and in the UK and New Zealand (Moore 2003, Lawson 2009, Drager 2009), a secondary school was deemed a perfect test site for examining linguistic variation as it involves individuals coming together on a regular daily basis for shared purposes such as education and socialising. Moreover, it houses young adolescents who have been known to innovate linguistic change (Kerswill 1996) and identity is also a central concern of this group. A final and useful reason for selecting a high school was related to the researcher's role as a secondary school English teacher for four years prior to embarking on this study. The school environment was familiar to the researcher with a good understanding of the Scottish education system, school culture and school protocols.

### 4.3.2   Access

After correspondence with Glasgow City Council about ethnicity statistics in Glasgow schools and informal conversation with Glasgow residents, Riverburn High School was chosen, located in the area of Riverburn (pseudonyms). Ethical approval was granted from the Faculty of Arts Ethics Committee, University of Glasgow, and an Advanced Disclosure was also obtained from the General Teaching Council for Scotland (GTCS) as the work involved close contact with minors. The school was approached through a formal letter and an interview was arranged with the head teacher. Permission was granted to research in the school, with the head teacher being aware that this would involve talking to pupils during free periods, break and lunch times, with a particular focus on Asian girls. The researcher was fully aware of the key issues regarding research ethics such as intellectual property, ownership, consent, institutional roles and requirements, and the protection of participants through anonymity and confidentiality (Eckert 2013).

### 4.3.3   Riverburn High School, Glasgow

Riverburn High School is a large state-run comprehensive secondary school of approximately thirteen hundred pupils. Of this, around four hundred are of Pakistani Muslim descent. The catchment area is largely the middle-class south side of Glasgow where the majority of the Glaasgow Pakistani Muslim community live. The area has a main shopping area where school children often spend their lunch and break times, mainly in the local food outlets.

Overall, the school has a wide ethnic and cultural mix consisting of native British pupils (Whites, Asians, Blacks and Chinese), refugees/asylum seekers from across the globe, and new arrivals from overseas who have relocated. Due to this diversity, bilingual support was a key priority for the school, where a dedicated unit had been assigned particularly for non-native speakers of English. They often had their schooling in the Bilingual Support Unit to help improve their English and also to acquaint them with British culture before being moved into mainstream teaching.

## 4.4   Data Collection

Data for this study was collected in two main ways:

1. Ethnographic fieldwork over a three-year period from April 2006- April 2009, including observations and informal conversations with pupils and staff generating qualitatively rich social data about the participants

2. Informal recorded interviews with speakers throughout the three years generating measurable speech data for analysis

An account of these data collection methods will now be presented in more detail.

### 4.4.1   Ethnographic Method

Ethnography has been used in sociolinguistic research for many years (e.g. Milroy 1980, Cheshire 1982, Eckert 1989*a*, Mendoza-Denton 1997, Moore 2003) and such approaches help reveal social relationships and the social meanings that people attach to their social and linguistic behaviour. Ethnographic methods allows researchers to describe and explain language use in naturally occurring social and cultural settings. As Johnstone (2000, p.82) points out, an ethnographer's primary aim is 'to learn what objects, people and events mean for different people in different situations, roles, groups and societies' and Agar (1996) further notes that the only efficient way to do this is by talking, acting and interpreting the world the way the locals do. In this way, participating in the daily lives of the informants allows more meaningful insights into all types of social and linguistic behaviour. Levon (2013) provides a good overview of relevant concerns whilst conducting ethnography such as access to the community, data collection, field-notes, interviews, recordings, follow-up and writing; and these were all carefully considered during the present study.

Initially, in this research, ethnography began with a focus on the social and linguistic patterns of Asian girls. As the researcher was a member of the Pakistani Muslim community, she had a good understanding of the cultural norms, values and behaviours which would allow her to socially interact and create relationships with females in a more accepted way than mixed gender interactions. However as with most ethnography, it began as largely explorative and opportunistic for a number of reasons. These included not knowing how the field would receive the researcher, what opportunities would arise for research and with whom, and what social and linguistic variables would be salient. The specific research aims regarding social and linguistic variables arose through the processes of participant observation and continual reflection during the fieldwork and beyond.

As an 'insider' the researcher was on the whole able to form relationships easily within the school and able to respond appropriately and casually given factors such as the setting, topic and interlocutors. Equipped with this insider knowledge, insightful and richer interpretations of linguistic and social behaviours could be deduced. The observer's paradox was also minimised as the researcher was part of the community under examination (Labov 1972*b*), but an awareness of accommodation to the researcher in the form of convergence or divergence in speech as well as other social behaviours was also noted (Giles 1973). The researcher tried to tap into the informants' interests and pursue these to the fullest during the fieldwork in order to unearth the personal and locally relevant information (Romaine 1984).

There are several key advantages in using such qualitative methods for data collection in this study. These are related to: the discovery of unanticipated information; insider knowledge by informants in interactions; complexity, subtlety and change which are not easily understood by quantitative methods; and no pre-conceived analytical

formats which require discarding potentially relevant information, as in many purely quantitative studies (Macafee 1994).

## 4.4.2 Speech Recordings

Interviews were arranged by asking pupils if they would like to be recorded with a friend and the researcher discussing various topics that included their language. By aiming to use such self-selected dyads, it was possible to further circumvent the observer's paradox to a degree (Labov 1972*b*). A letter explaining the research was written to parents/guardians and a signed and completed consent form from them was required if the pupil was under the age of sixteen.

These sociolinguistic interviews were conducted in quiet rooms in the school, mainly during the informants' free periods, breaks or over lunchtime, which often meant there were time constraints. Recordings typically lasted anywhere between 10-75 minutes generating many hours of speech data. Longer interviews were not arranged as this would have necessitated extra time after school thus further parental involvement and consent. Special provision for pupils to be allowed out during class time was deemed unsuitable as it may have put the researcher in a position of power, e.g. like a teacher.

Often, the format for the interviews was left open, and informants were invited to speak about anything they wished in what might be loosely termed semi-structured ethnographic interviews. Whilst many launched into conversation easily, some participants were shy, embarrassed or uncertain at the start of a recording situation. In such cases, the researcher intervened with some introductory questions and topic ideas based on what was known about the speakers or interesting issues surrounding being Asian, e.g. 'how do you feel about leaving school?' or 'who is your ideal man?' The researcher actively participated in the conversations that took place though encouraged greater contribution from the informants. The researcher also used a prompt sheet with some general ideas for conversation when there were natural breaks or pauses. A variety of topics were covered, ranging from peer groups through to culture and religion, providing information about the informants' social practices, attitudes and identity.

In year one of the ethnography, speech was recorded using a Sony DAT TCD-D100 recorder and lapel clip condenser microphones, which produced digital recordings. These recordings were then digitised from the DAT to CD player for further analysis. In year two and year three, speech was recorded using AT831b microphones and a Microtrack recorder with a sampling rate of 44,000HZ/16bit.

## 4.4.3 The Final Data Set

A total of 117 high school students both male and female were recorded for this study and comprises the full *Glaswasian* corpus. They were aged between 14-18 years of age, with 97 Pakistani Asian and 20 non-Asians yielding around 60 hours of data over

the three year ethnography. Non-Asians were native White-Scottish, Afghani, Libyan, Thai, Black African, Chinese, Swedish, Somalian and of mixed race heritage.

All speech from all speakers was not transcribed due to time constraints, with only 53 speakers transcribed in total (43 Glasgow-Asian girls, 5 non Glasgow-Asian girls, 5 Glasgow-Asian boys). This was due to a mixture of peer groups in the recordings. For this study, only female Asian speakers were examined who were of Pakistani heritage, Muslim, bilingual in at least one of Punjabi or Urdu if not both, and born and living in Glasgow.

## 4.5 Data Management

Data for this study was managed in three main ways:

1. **Social data** from the fieldwork for the informants was inputted to a Microsoft Access database

2. **Speech data** was transcribed and annotated using Praat software (Boersma & Weenink 2015)

3. **Storage of speech files and transcript files** was carried out using the LaBB-CAT online server creating a large searchable linguistic corpus

An account of these data management methods will now be presented in more detail.

### 4.5.1 Social Data: Microsoft Access Database

Fieldnotes were written up each day on a regular basis over the three year ethnography and gradually comprised several notebooks. Speaker information was gathered regarding factors like peer group, make-up, caste, family background, siblings, place of residence, hairstyles, clothing, musical preferences, career preferences, attitudes, age group, year of recording, total duration of speech recordings as well as any other relevant sociolinguistic information.

As so much meta-data was generated about the participants and at different times during the fieldwork, it was deemed extremely important to make this more accessible and consequently Microsoft Access database software was used. This enabled all the information about each speaker and their associated speech files to be in one central location which could easily be searched and queried. Each speaker was given a pseudonym, speech files were coded and named and speakers were also connected via their respective relationships with other speakers.

### 4.5.2 Speech Data: Praat Transcription and Annotation

Speech files of informants' conversations were orthographically transcribed, annotated and anonymised using Praat software (Boersma & Weenink 2015). Praat was selected

because it allowed time-aligned detailed phonetic analysis and transcription through using multi-tier phonetic and speaker information, automatic annotation as well as a useful scripting facility to perform automatic coding and other analytical tasks such as anonymisation of confidential information like names during speech.

Primarily, transcriptions were performed by the researcher, but two additional transcribers were employed towards the latter end of the project in order to increase the number of speakers and amount of data for the automated vowel analysis (Chapter 7). A useful overview of transcription is noted in Nagy & Sharma (2013) and Maclagan & Hay (2011) which includes how much to transcribe, orthographic protocols, consistency, transcription and software tools and planning transcription in terms of time, money and accuracy.

The original purpose of orthographic transcription in this study was to have a written representation of the sound file in order to extract speech tokens. Consequently, transcription was not overly detailed with only general annotations made, e.g. '(laughs)' in brackets. Due to time constraints all recorded speakers could not be transcribed; and of those that were transcribed sometimes not all their multiple recordings were transcribed.

## 4.5.3   Storage and Searching of Speech Data: LaBB-CAT

The anonymised speech and transcript files in Praat were difficult to search in Praat so other tools were investigated such as ONZE Miner. Speech files were originally uploaded to the ONZE Miner server, which during the course of the research was further developed and renamed LaBB-CAT to create the *Glaswasian* corpus for this thesis. LaBB-CAT can be used easily as a searchable repository of both audio and annotated transcript files (Fromont & Hay 2012).

ONZE Miner was primarily chosen to help create an online searchable corpus and the subsequent capabilities of LaBB-CAT included automated searching and segmentation using phonetic layers, extraction and forced-alignment capabilities, and its integration and compatability with Praat. All orthographic transcriptions and labelling had been carried out using Praat so it was easy to upload and store Praat textgrids and speech files. Tasks could be performed on these files such as searching for tokens using regular expressions and performing more complex procedures such as forced alignment of segmental boundaries using its inbuilt HTK aligner.

Another extremely beneficial element of LaBB-CAT for phonetic analysis is that it can automatically create phonemic transcriptions using the CELEX (English) dictionary from the orthographic layer of the transcripts. Whilst there are some issues regarding the accuracy of automatic versus manual phonemic transcriptions in terms of factors such as accent differences, this provided a baseline transcription which can also be annotated manually by the user should a more fine-grained transcription be required. Words were also added manually to the dictionary, e.g. proper nouns and code-switched items.

The steps used for token analysis were: 1) upload sound and transcript file to LaBB-CAT; 2) LaBB-CAT automatically phonetically transcribes the files; 3) Add extra words to LaBB-CAT dictionary; 4) Force-align to create textgrids with segment boundaries; and finally 5) search and extract relevant tokens.

Large corpus data such as this *Glaswasian* database is also well-handled in LaBB-CAT. For example, automatic vowel analysis can be conducted allowing for speedier analysis of different linguistic features in much greater number compared to manual processes of hand-segmentation which can suffer from analyser bias. A good synopsis of corpora and corpus methods in linguistics is provided by Gries & Newman (2013). They attribute the popularity of such methods to a growing desire by linguists for more objective, quantifiable and replicable findings as well as increasing technological and methodological advances over the past few decades. Evanini et al. (2009) also evaluate manual versus automated procedures for FAVE, and advocate the use of automatic measures.

## 4.6 Data Analysis

Data analysis was conducted in two main ways:

1. Qualitative analysis of ethnography using the CofP framework

2. Auditory and acoustic phonetic analysis of speech tokens and these results were analysed statistically

Language use or language choice patterns, proficiency in Punjabi/Urdu or assessment of dominant language were not assessed. Such an approach was not considered congruent with the researcher's shared understanding of community norms and may have been perceived as face-threatening. This is exemplified by the fact that pupils shared their anger at being perceived and defined as the 'bilingual children' because of their visible ethnicity and also as being similar to those pupils who had English as a second language. Their sense of identity was far more complex.

### 4.6.1 Qualitative Analysis

Over the course of the three year ethnography, clear social segregation was revealed between the Asian and non-Asian groups, as well as within the Asian girls themselves. Qualitative sociolinguistic analysis of the ethnography allowed a view of the data using the Communities of Practice framework with its focus on shared and developing social practices.

Such a perspective is useful as it utilises locally relevant information to discern fine-grained social and linguistic differentiation. In this study, the social behaviour in the form of CofPs informs the linguistic behaviour. Whilst the researcher is aware that such multi-faceted data could be explored in many different ways, the view taken here

was to use the theoretical CofP framework to ascertain elements of linguistic behaviour as CofPs emerged during the ethnography.

This does not preclude the use of other methodologies in analysing the data. There may be many possible layers of meaning and social groupings which could be examined in different ways such as using social network theory.

## 4.6.2   Variationist Analysis

Johnstone (2000, p.37) states that analysing sociolinguistic data often involves counting, explicit or implicit; in order to answer questions about how often things happen, in addition to descriptions that help answer qualitative questions about how and why things happen. Consequently, a variationist design was integrated into the qualitative design in order to objectify, measure and more fully understand the linguistic variation in the Asian girls (Milroy 1980).

## 4.6.3   Phonetic Variables

Using the variationist paradigm, this study analyses one consonantal feature, the plosive /t/, and six monophthongal vowels, /i, e, ʉ, o, ɔ, a/. The rationale for selection and general methodology for these will be discussed briefly in the next sections but will be explored more fully in Chapter 6 and 7 respectively.

Two different kinds of variables were analysed in order to gain richer insights about variation with respect to social meaning. The stop /t/ was chosen as it is a stereotyped and classic British Asian English feature and useful to analyse within ethnicity; whereas more broadly vowels allow within ethnic and cross-ethnic comparisons and have not been previously analysed in the Scottish context at all.

These are two complementary approaches to analysing stop and vowel data, which give both detail and breadth in terms of much greater token count respectively. Whilst automated methods can be criticised for not being thorough and hand-checked, the data reduction procedures for incorrect measures were rigorous allowing greater accuracy and analysis of many more tokens than would be possible with hand-measurements. Automated measures for vowels have also been strongly advocated as efficient and reliable for large scale corpora by sociolinguists such as Evanini (2009) and Evanini et al. (2009). Fundamentally this method was selected in order to ascertain the overall general vowel space of the six vowels in Glasgow-Asian, and their vowel quality distribution. Removal of clear outliers was deemed important to avoid obvious erroneous measurements but this does not deter from the potential social importance of such outliers which could be the basis of a further study (Eckert 2008*b*). Eckert (2008*b*) suggests variation in /ae/ in preadolescent non-crowd members in Californian schools is as important as the majority crowd members in indexing the norms of coolness that emerge during this life stage, as well as indexing ethnicity.

Importantly, the stops and vowels had different speaker samples due to methodological differences. The stop data was small to moderate scale (697 tokens, 18 speakers) using manual hand segmentation at the stop burst using auditory and acoustic analysis; whereas the vowel data was much larger scale (15,478 tokens, 41 speakers) and used automated segmentation procedures in LaBB-CAT to extract formant values.

**Stop /t/**

The plosive /t/ was chosen as it has often been linked to the stereotypical British Asian accent and prior research has suggested it varies according to social identity. All past literature points to /t/ being relevant for British Asian English and is the obvious starting point (see Chapter 3). Variation in the realisation of the stop /t/ is often connected with cross-linguistic features such as retroflexion present in Punjabi and Urdu, and this appeared to be a salient differentiating feature throughout the ethnography.

**Vowels: /i, e, ʉ, o, ɔ, a/**

Previous studies on British Asian English have also pointed to vowel differences (see Chapter 3). Originally the FACE and GOAT vowels were selected due to prior work indicating social differences in use. However, as methodological advances meant the ability to use automated methods, more vowels could be analysed at the same time. Consequently, vowels that represented a subset of the vowel system were chosen to gauge a general baseline for the Asian girls, as no prior work had examined this. A further rationale was linked to the fact that these same vowels were being examined in a study in Glasgow English vernacular by José et al. (2013) and Macdonald et al. (2015) so direct comparisons across ethnicity could be made with native Glasgow and Glasgow-Asian vowels. Vowel data was only analysed acoustically, and not auditorily due to a large number of tokens (Boersma 2013).

### 4.6.4 Statistical Testing: Mixed Effects Models

For both stops and vowels, descriptive analysis (Johnson 2013) and statistical analysis (Gries 2013) were conducted in R open source software (R Development Core Team 2015). R is currently one of the leading computational statistics programmes and was chosen as it has greater functionality, graphics as well as good compatability with LaTeX typesetting software compared to previous statistical software like SPSS. Specifically it is also able to run statistical tests using Mixed Effect Models which were chosen as the most appropriate for this data and will be discussed in the following sections. A good summary of the functionality of the programme R for linguistic work is given in Baayen (2008) with a more general description of its use given in Field et al. (2012).

Statistical testing has been carried out in sociolinguistic research in order to estimate the relationships between variables (Baayen 2013). Specifically, this study uses Mixed Effects Models (MEMs) which are a type of regression analysis which examines how certain predictor (or independent) variables may affect the outcome (or dependent) variable (Johnson 2010, Barr et al. 2013), controlling for expected sources of variability such as speaker and word.

There are several benefits of this type of MEM analysis. It allows a multi-dimensional view of the data through modelling fixed effects and their interactions, and by allowing random effects to be included in the model such as 'word' or 'speaker' as in this study. Because of this holistic view of the data, MEMs are also generally much more robust with more conservative results and less chance of over estimating significance effects unlike fixed effects regression models (e.g. Hay 2011).

Random effects are not included in fixed effect regression models, which assume each observation is independent, thereby facing problems of over-fitting, and potentially erroneously identifying chance findings as statistically significant. By including random effects, the MEM model inherently takes into account factors like different sample sizes across a dataset in response to an effect, i.e. it accounts for dependencies in the data. Including an estimation of population variance is useful for this present study as there is an unbalanced dataset which is often the case for non-experimental sociolinguistic studies, where there are often many observations for a relatively smaller number of speakers.

In this study, MEM analysis was conducted in R (R Development Core Team 2015) and differently for the stop and the vowels in terms of finding the best fit model for the data. For the stop /t/, the best fit model was revealed through hand-modelled comparisons using ANOVAs which are an accepted form of modelling in linguistic research (Baayen 2008). There were only three main fixed effects (preceding segment, following segment and CofP), and no interaction effects were found. For the vowel analysis which was conducted much later, the automatic 'step' function was used to find the best fit model for each individual vowel through analysing all the possible pairwise relationships. The 'step' function had been recommended for the main Glasgow vowel analysis by statistical collaborators, and so was also used for the Glasgow-Asian vowels. Different models resulted for the separate vowels for both F1 and F2 values.

Bonferroni post-hoc tests for pairwise comparisons were performed on /t/ and each vowel (F1 and F2) to mitigate the effects of family-wise error that can lead to Type I errors (i.e. finding an effect that is not present) (Field et al. 2012). However, exactly how and whether to use post-hoc tests to correct for multiple comparisons in mixed models are still under debate more generally (Gelman et al. 2012, Macdonald et al. 2015). Necessarily post-hoc tests like Bonferroni control Type 1 error rate very well but are conservative and this corresponds to a lack of statistical power therefore inflating the rate of a Type II error (i.e. so there is a greater chance that a genuine effect that does exist in the data might be missed). Due to the nature of social effects which are typically

much more subtle, marginal results are also reported here. Bonferroni corrections were deemed more important for the vowel data as there were many pairwise comparisons due to a much larger data set than /t/, but uncorrected p-values are reported as social effects which are being examined here work at a much more subtle level than linguistic effects (see Chapter 7).

## 4.7 Summary

This chapter has provided an overview of the rationale and methods used in this study which explores the social and linguistic practices of adolescent Asian girls. Importantly, the study now has three main results chapters - ethnography, stop /t/ and vowels. The ethnography itself is a qualitative result highlighting aspects of informants' identities which may correlate with their linguistic behaviour; and doubly it also provides access to the linguistic data which goes on to be empirically analysed.

# Part II

# Social and Linguistic Results

# Chapter 5

# The Ethnography at Riverburn High School

## 5.1   Introduction

Early work using ethnography in sociolinguistic research was conducted by the Milroys in Belfast in the 1980s during the Troubles in Ireland (Milroy 1987) (see Chapter 2). Ethnography reveals people's speech in its social context as used in everyday situtions and this approach complements and informs further experimental analysis of speech data.

This study uses ethnography to access adolescent speakers from the Glasgow Asian community to explore how identity and social meaning are constructed and indexed through language. In the same ethnographic method as Milroy (1980, 1987), and through convenience sampling by using a 'friend of a friend' approach which was considered 'safer' and because I was a female fieldworker, I had greater ease of access to casual intimate speech by female students in the school over a three year period from 2007-2009.

This chapter focuses on the process and findings of the ethnography which reveal social distinctions. These are theorised using the CofP framework which emphasises how a group's shared social practices may relate to linguistic behaviour (Eckert 1989$a$, 2000). This provides the social results for the speakers which strongly informs the understanding and analysis of the linguistic behaviour which will be explored in Chapters 7 and 8.

## 5.2   Riverburn High School

Ethnographic fieldwork was conducted over the course of three years between 2006-2009 at Riverburn High School (psuedonym) and all findings are based on this data which included the Masters work. It is a large, non-denominational mixed ethnicity school in the south-side of Glasgow with a school roll of around 1200 pupils situated

in a diverse area of Glasgow named Riverburn (pseudonym), which may be considered a lower middle class urban area.

The school is surrounded mainly by typical tenement flats [1] of the area and other predominantly privately owned housing and is nestled between prosperous middle class neighbouring areas and poorer more deprived parts of the city. On the basis of parental income many students at the school are eligible for free school meals, the Education Maintenance Allowance (EMA) for students post-16 and clothing grants for school uniform. The area also hosts a variety of shopping and eating outlets, and is close to the main shopping high street.

Despite some challenging pupil behaviour and nationally high exclusion rates, in recent years the school has been awarded for its excellence in international education by the British Council and has a range of students from different racial, language and cultural backgrounds such as native White Scottish, Pakistani, Indian, Afghani, Somali, Polish and Slovakian. Many students were bilingual and there was a dedicated Bilingual Support Unit catering for newly arrived students, students who had little formal English as well as providing general support for all bilingual pupils. Interestingly for this research, approximately one third of the school roll was of Asian and Pakistani descent.

## 5.3 Considerations for Research

### 5.3.1 Why Girls?

Although I had full access to all school pupils, the main focus of this study were Pakistani Muslim girls who were bilingual in Punjabi/Urdu. Girls were specifically targeted for cultural reasons. As a young, mid-twenties female coming into the school as an outsider, it would have been awkward to befriend boys through ethnographic work without potential problems arising, e.g. suspicions about my motives and possible disapproval by the school and the wider Asian community. Stricter Muslims may have frowned upon such intermingling of the sexes arousing negative reactions towards me, whereas more moderate Muslims may have taken advantage of the situation. As a member of the Asian Muslim community, I was fully aware of the cultural and religious background that may have inhibited my progress with the boys.

Sociolinguistic research has also suggested that females lead linguistic change, and lead boys in sound changes in progress. Eckert & Podesva (2011, p.87) also mention that females use socio-indexical variation more so than boys. They note girls are more licensed to be flamboyant, especially in the pre-adolescent and adolescent period when there is greater focus on the heterosexual marketplace. At this time, girls are more concerned with ideologies relating to power, beauty and relationships; and this was interesting as no previous work had examined this with respect to female identities in

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[1]Traditional sandstone tenements in Scotland are sizeable flats

the Scottish Pakistani Muslim context.

## 5.3.2 Age of Informants

A range of age groups were targeted though the older S5 and S6 girls, aged 16-18, tended to interact more frequently with me, possibly because of my closer age proximity. Older year groups were also used for analysis as they appeared more stable in their own identity, unlike younger girls who were still forging their identity. Early on, it was often difficult to ascertain ages anyway as many of the girls looked older or younger than their actual age. Throughout the course of the ethnography, pupils with whom I had built relationships were asked if they would like to be recorded in friendship groups.

## 5.3.3 My Identity

As a member of the Asian community, I was aware that my identity would be the first thing pupils noticed in terms of dress, hairstyle, make-up and other fashion choices. Interestingly through no prior plan, my overall fashion choices changed throughout the course of the ethnography due to changes in my own personal life, such as performing the Islamic pilgrimage to Makkah at the end of 2007. I began quite typically western in my clothing choices and ended with an overtly Islamic identity through appropriation of wearing the headscarf and more modest and covered items of clothing following my pilgrimage. However I will chart the ethnography as it happened chronologically though it is important to highlight that such changes may have impacted on overall student perceptions of my own identity.

## 5.3.4 Changes Across the Ethnography

A number of changes in terms of ethnographic method occurred during the course of the ethnography. In year one, I began mainly through participant observation where I walked around investigating social behaviours and hung around in various places such as local coffee shops to view student behaviours and friendship groups. As the research was explorative, initially I also actively tried to engage with anyone of any ethnicity to glean information about the school environment in general, including attitudes and opinions regarding different school groups.

As I became more established in the school environment, daily routines and more knowledgeable about the girls themselves, this participant observation moved to more active involvement in the daily lives of the older Asian girls. 'Friend of a friend' introductions expanded my links with the girls as my own networks grew making it easier and more natural to casually move between and join Asian groups throughout the course of the school day.

Another major change that occurred during the ethnographic period was the shifting socio-political situation which increasingly viewed Muslims in a negative light (see

Chapter 3).

## 5.4 Ethnography: The Early Days

### 5.4.1 Setting the Scene

The fieldwork began in the spring of 2007 and my first impressions of the school were diverse, in terms of perceptions about the students, locale, school social spaces and structures. Initially, I spent time wandering around the school three days per week, taking notes, familiarising myself with the environment as well as making sure the pupils saw me.

As I had no clearly defined role, I was unsure how to fit into the school environment and waited for opportunities to arise and hoped for gatekeepers. I decided to be involved only in the informal, low key rituals of school life that took place at lunchtimes and breaks, with no formal role in the classroom similar to Eckert (1989*a*) and Moore (2003) so that pupils did not associate me with any institutional status and power. The refusal by school authorities to give me a school login (IT account) for PC access despite my requests cemented this non-institutional status as governmental protocols meant I had to be a member of Glasgow City Council which I was not. Lunch and break time activities included: hanging around various school social spaces; getting lunch; pupils meeting teachers for information, to pick up work or finish class tasks; and involvement in school events, e.g. selling tickets for the school show or partaking in rehearsals.

Initially, I chose to wear western clothes, e.g. jeans, long skirts and tops, as this was my daily attire outside the home. I knew my choice of clothing may have distanced some of the students from me, e.g. such as the more religious girls, but this could not be avoided so I simply chose to be myself. At home, I typically wore *shalwar kameez* (traditional Pakistani clothing) at the time, mainly as I was newly married and living with my husband's extended family where this was culturally expected. However, personally I did not feel comfortable going to school wearing these types of clothes as they would be far too noticeable and I wanted to blend in as much as possible amidst the fairly lax school uniforms.

My first days at the school aroused suspicion and curiosity, with pupils and teachers constantly looking at me and obviously wondering who I was as I had only had direct contact with the headteacher to date. Surprisingly, many thought I was a new pupil (Moore 2003) - a new sixth year - which was flattering and also very conducive to my research as I was almost automatically considered one of the students and someone they could trust - an 'insider' (Milroy 1980).

To my amusement and embarrassment, when mistaken by teachers, I was reprimanded for lack of uniform or for hanging about in corridors when I 'should be in class', and even shouted at by a male teacher in the presence of many other students

to leave the library when his class were using the facility. Whilst such incidences were helpful in terms of student perceptions of me, I often felt discomfited and somewhat irritated at being perceived in this way by members of staff, and especially as I had always been a 'model' pupil during my own schooling. It was certainly a strange feeling to be considered a 'naughty' pupil.

### 5.4.2 First Encounters

As I became a more familiar face around the school by often hanging out in places like the social area, library and school grounds, pupils' curiosity peaked and I was actively approached with questions about who I was and my role there. My first experience of being approached was by a group of Asian boys who were larking around in one corner of the social area. I could see them discussing me from afar, and eventually one of them casually asked me if I was a new pupil. On telling them I was a Masters student at university, they became more interested and started asking further questions about my research but also evidently using this as an excuse to 'chat me up'. This was to be a feature of the ethnography which I had not anticipated, particularly at a cultural level where such intermixing and flirting of the sexes is frowned upon by more conservative Muslims.

I was also often approached by Asian girls or friends of those I had spoken to previously, and the barrier of being 'new' was soon diminished. As I became familiar with some of them and their local hangouts, I started to engage other Asian girls in conversation with questions like, 'is this the way to the toilet?' (even though I knew), or when the school fire alarm went off, asking for advice about evacuation points. Through a variety of such means, I made many friends, especially older S6 girls who I met in the library, social area and the sandwich shop during their regular free periods. The cafeteria was also a seminal space for befriending, particularly in the early days, where I formed relationships with older girls. I also befriended a group of 'naughty' S2 Asian girls, where the rebellious, interim status of younger adolescents was obvious. For example, these girls would swear profusely in daily conversation (e.g. 'Will you fucking eat!'), use slang regularly, have water fights in the grounds and regularly gossip about each other therefore constantly changing their alliances within the group. Thus, I always had someone to lunch with or generally hang out with on their free periods.

I felt the Asian pupils wanted to talk to me about themselves, perhaps because I was a young, non-judgemental, interested adult (Eckert 2000, Moore 2003) and shared their own cultural background. Such perceptions also reduced the notion of the observer's paradox (Milroy 1980) though importantly it cannot be underestimated how much the interviewer's persona and presence will affect the outcome. I felt a sense of bridging the gap between the generations, where I could understand the girls' dilemmas and feelings in a way many felt their parents and families did not.

The school context itself could be considered an outlet for the Asian girls as there was more freedom and perceived excitement compared to most home situations. Dif-

ferent identities could be performed compared to in the home domain due to differences in behavioural, language and dress norms. I am certain that had I dressed in Pakistani clothing, or recorded students in their own homes, the female identities and elicited conversations would have been very different.

Although I actively sought out and spoke to Asian pupils, as this was to be a sample of recorded data, I also found that they were more likely to approach me anyway, perhaps because I was visibly Asian myself and they saw me being accepted by other Asians thereby minimising any perceived threat. Whilst I tried to speak to native White students in the early period of research, I had little success because there were no real gatekeepers. Also as I became more established in the Asian groups, I realised hanging out with White students might be perceived a type of betrayal to the Asian school community, as clear ethnic divisions were to be an important feature of the ethnography.

I began to acquire communicative competence quickly and effectively at Riverburn High, gaining the ability to function the way the students did in their talk and other forms of communication (Johnstone 2000). I picked up teenage slang terms such as words like 'dingy' (to ignore) and 'dogging it' (truanting) and tried to use them in my own speech in attempts to be seen as part of the in-group.

## 5.4.3 Fieldnotes and Recordings

Each day, I wrote up field-notes on the interactions and general observations I had made, often in a small spare room in the school which I was given access to for recordings. This room was typically used for pastoral activities and special exam needs so was rarely in use. Consequently, I used this space (as well as the school library) as my make-shift private office during class time to record my observations about the students.

However fieldnotes were inevitably selective and only provided a snapshot of experiences (Emerson et al. 1995). To counteract this problem, researchers like Eckert (1989*a*, 2000) did try to 'hang out' with the children after school to see if their interactions were different in various domains. However, this was not possible in my case as most girls tended to go home as soon as school finished, largely due to cultural norms about girls' behaviour. Generally, there is little freedom outside the school given to girls in the Pakistani community, with social activities centred around the family sphere, though naturally some families will be more liberal. I did however accompany students to places outside the school and attend various social events at the school which allowed access to different aspects of the girls' identity.

As I became a familiar face around the school and word got out that my interviews took place in the pastoral care room, the room became my 'local haunt', with janitors and staff expecting me to be there. Many students would just turn up unannounced during free periods or during recordings by peeking through the glass in the door to see if I or anyone else was there. In this way many interviews were interrupted by other

friends of students, and many difficult questions were asked about what I was writing. Often I fumbled quickly trying to hide my notes and act as casually as possible.

I used the room for recordings but there were several technical problems with equipment. Early on I discovered that equipment would cease to work if it ran out of memory and this caused some recordings to be lost, wasted or rescheduled. I had to regularly clear and save the files from the recorder onto my PC in order to prevent such scenarios, but inevitably some days I was unable to clear the memory, longer recordings were conducted, or greater numbers of students decided to be recorded that day resulting in data loss.

Other problems were linked to the organisation of recordings. Whilst I encouraged only dyads of friends to be recorded at any given time as I only had two microphones, this was rarely the case as others wished to join the recording so the quality of the speech of unmiked students was often compromised. My frustration was also linked to frequent truanting by some students, especially during the period between the exam leave and the summer holidays - sometimes attributed to visits to Pakistan as well as general rebellion. This caused problems in terms of timetabling recordings, as many students would confirm a time slot but then fail to turn up.

## 5.5  Inter-Ethnic Divisions

Students at Riverburn High were distinct in many ways such as race, cultural heritages, languages, social class, family backgrounds, musical tastes and dress. Most obviously and despite the multicultural nature of the school, there was an apparent ethnic divide between pupils, with few obvious signs of inter-ethnic friendship groups (Basit 1997), and particularly boys who stuck together in large same ethnicity groups (Wardak 2000). The overt segregation is contrary to research in large communities in England, where mixed ethnic groups are much more common as well as inter-ethnic dating and relationships (Rampton 1995, Harris 2006, Cheshire et al. 2011). Such differences may be related to the smaller and newer ethnic minority immigrant communities in Scotland which are not yet as established.

### 5.5.1  Prejudice and Racism?

As discussed in Chapter 2, adolescence is a time of identity construction and an emerging sense of self in the wider society, where hormones and peer groups may govern unpredictable teenage behaviour. Students, including native White Scottish, were often badly behaved outside the classroom, with regular shouting and screaming heard in the social areas as well as more deviant acts such as under-age smoking, sexual acts, drugs and politically incorrect behaviour. Students did not openly express any racist or prejudice attitudes towards other ethnicities, and when asked about why they did not have many strong inter-ethnic friendships suggested it was easier, more natural

**Extract 5.1:** On inter-ethnic friendships

| | | |
|---|---|---|
| 1 | **Humaira:** | They used to come lunch with us but then after that it was just like |
| 2 | | cause they found their like goray friends. They stopped hanging about |
| 3 | | with us but it would be hi bye after that. So it was alright, but it was |
| 4 | | good to see they had friends cause then, cause we didnae exactly go out |
| 5 | | that much and if we did, we didnae really tell them! |
| 6 | **FA:** | Aye. |
| 7 | **Humaira:** | So, they didn't have anyone to go out with and that so... But it's good |
| 8 | | they got their goriyan friends cos they can talk to them and that. |

and 'safer' to stick to their own ethnic groups. They were even keen to dispel myths of ethnic segregation and gave various examples of classroom friendships, but did not choose to hang out during the more informal parts of the school day and outside school. In Extract 5.1 Humaira, one of the more traditional Pakistani girls, describes how she used to be friends with the White students ('goray, goriyan') but how they drifted apart naturally and amicably.

Inter-ethnic networks were present amongst the newly arrived immigrants, asylum seekers or refugee children from around the world, but notably native White or Asians were not part of their networks. Ironically, most pupils of Asian and White origin had some negative opinions regarding them with dismissive comments such as 'they should go back to their own country'. Much of this negativity stemmed from the often loud and boisterous behaviour of some of the newer groups who may have different cultural norms in their own respective countries of origin. They may also have been seen as intimidating as they closely stuck together in groups and possibly felt safer together. Some prejudice inevitably may have come from what the students heard in their family, community and wider society too.

Despite admittedly non-racist attitudes by the students, this did not preclude the existence of racism and prejudice at Riverburn High. Several incidents throughout the ethnography alerted me to the undercurrents of quite brutal racism and discrimination.

I witnessed one particular racist incident in the girl's toilets during my first year of ethnography, where two deviant White girls who could be considered 'neds' (a derogatory term in Scotland for a person who engages in anti-social acts) (e.g. Lawson 2009, 2014) pushed aside an Asian girl wearing a headscarf at the sinks who was washing her hands. They laughed and ridiculed her as they continued to apply their make-up in a leisurely way, and did not allow the girl to complete washing her hands. I remember being shocked at seeing this and could see them watching me suspiciously in the mirrors, perhaps wondering if I too could become a target. Intuitively I wanted to intervene but recalled my non-authority role and chose not to. Thankfully the incident passed with no escalation or violence, and I was secretly relieved.

Incidents like these, though perhaps less obvious, occurred throughout the fieldwork and always made me feel uneasy especially as I had never experienced such discrimination in my own personal life. Many of these situations were covered up or in hidden

areas of the school where authority figures or other students were not present, such as the toilets. I made a mental note to investigate every now and again what went on in the toilets and was often surprised and uncomfortable at the behaviour that went on such as: bullying, smoking, make-up application, and even affectionate and homosexual acts between girls.

A real sense of animosity hovered around the native White and Asian group, who were the two largest ethnic groups in the school, and was especially notable between the boys. Not only were fights a common occurrence at break and lunch times with everyone scrambling to see the latest spectacle, but they were also at odds when it came to general organisation of school social events. For example, when the end of year school show was arranged by the sixth years, there was a perception by the Asians that the White students were taking over and that their opinions were always ignored and trivialised. However, from my own perspective, I am not entirely sure ethnicity was the basis for this perception.

Sectarianism and caste prejudice were also a feature within the Pakistani students. The Ahmadiyya Muslims were clearly considered out of the fold of Islam by the majority Sunni Muslims in the school and I heard many pejorative comments thrown around in this regard. There was also a big divide between the Mirpuri and Punjabi speaking Pakistani students (see Chapter 3), where the Punjabis looked down on the Mirpuris as dirty and uncultured. In this way, not only was racism working across ethnicities, but there were divisive and prejudice attitudes at play even within the apparently homogenous Asian group.

### 5.5.2 Younger Students

I only observed the youngest pupils in the school, aged 11-14, with friends of different ethnicities outside the classroom, e.g. native Scottish Whites and Asians in the same peer group, and they seemed the most integrated across the school. However, in large they were still segregated and delineated across racial and cultural lines, with there still being a greater preference for same ethnicity friendship circles.

Younger age groups might be the most integrated for several reasons. This may be in part due to the new high school environment, where younger students themselves are still forging friendships and asserting their identity. Inter-ethnic friendships may also be more accepted by the wider Asian community at this age as children are less likely to be engaging in perceived 'inappropriate' and deviant practices. As children get older, there is a perception within the Asian community of having a 'bad influence' from non-Pakistanis (e.g. going out to clubs, pre-marital relationships and drinking) and consequently inter-ethnic friendships may be less encouraged. This is even more so for Asian girls at this age as western social practices are antithetical to Pakistani norms regarding female chastity and honour. In contrast, boys are often allowed to have inter-ethnic friendships for longer as their hobbies largely revolve around sporting similarities such as football, as well as the more relaxed parental and community attitudes with

Pakistani males in general.

### 5.5.3  Student-Teacher Relations

A further general feeling by many of the Asians, mainly boys, was that native Scottish school figures considered them dumb and unaspiring giving them little respect, responsibility or credit for their contributions. Student-teacher relationships were uneasy and I too experienced this sense of undermining when I was reprimanded by teachers during the ethnography. The fact that the school was due a Her Majesty's Inspectorate (HMI) inspection in the final year of ethnography added to the sense of panic, improvement in standards and perfectionism by the already stressed school staff.

Yet, there were several Asian teachers at Riverburn High who were more supportive of the Asian students on the whole, but they all had different personalities and backgrounds which were viewed in various ways. Teachers who had pastoral or designated subject teaching positions such as Mr Dawud (psuedonym) were well-liked by the Asian pupils as they were typically native British Pakistani and students could relate to them. Others who were mainly bilingual teachers were native Pakistani and were overtly non-Scottish in terms of their accents and clothing preferences. This distanced many students as they could not engage with them at a serious level, and instead chose to mock and ridicule them as 'freshies' (a pejorative term for Asians born in the Indian sub-continent). Others still had mixed heritage, or were married to non-Pakistanis and were thus less likely to conform to Pakistani ways. For example, a female British-Pakistani teacher who wore shorter skirts that revealed her legs was seen as hypocritical and distasteful when giving instructions regarding appropriate behaviour. Some White teachers were also supportive of Asian students, especially those with bilingual skills or knowledge about Pakistan and its culture, and students looked up to these teachers often seeking references from them for their university applications.

## 5.6  Fitting In

I partook in school recreational activities such as school non-uniform days and helped with Christmas shows and Eid celebrations, and gradually became part of the social rubric of the school. However, fieldwork was challenging both emotionally and psychologically for several reasons. These were related to: my own identity, opinions and behaviour; sense of obligation, sincerity and trust towards students; understanding the erratic and changeable nature of the girls' social practices; and the mismatch between outer and inner aspects of their identity.

### 5.6.1  'Who are you?'

There was a constant feeling of watchfulness from all students and teachers and I was always conscious that my behaviour could easily be seen from different perspectives,

both positively and negatively. Even though I knew this was the complex nature of fieldwork, I also knew that some students might view me as a 'good' or a 'bad girl' if I was seen with the wrong crowd and thus alienate myself from them.

Juggling amongst the different groups was difficult as I did not want to be labelled as one or the other to the detriment of the fieldwork. I tried to fit in to whoever I was with but felt constantly under suspicion and questioned by others who were not part of that same group. I felt each group wanted me to themselves and my intermingling with others could be construed as a sign of betrayal to the group, thereby jeopardising my relationship with them. The possessive nature of girls' relationships at this age was very obvious and it was difficult to maintain my integrity to them all. Moreover, my natural inclinations were not drawn to the 'bad' end of the behavioural spectrum so infiltration into these groups was doubly hard.

### 5.6.2 'You're part of our crew'

Despite the complexity of fieldwork and the constant justification of my own behaviour, many of the Pakistani girls genuinely accepted me as part of their school life. This was exemplified through a number of acts of mutual acceptance, bonding, respect, care and friendship where I felt a real sense of belonging with many of the girls. These included: letting me borrow their cafeteria q-cards for lunch when I had no formal card myself; insistence on my attending the Sixth Year Prom with them and being overtly upset when I refused, desperation for me to sign their final yearbooks telling me about their personal lives and who they 'fancied'; chilling with them in local shops, coffee shops, restaurants, parks and snooker halls; protecting and rescuing me when a group of White boys surrounded me in an overtly intimidating and sexual way; and even buying me ice poles, lollies and sweets from local newsagents. Surprisingly even local shop owners thought I was a student when I was with the girls and I was given pupil meal deals and even asked about how school was going!

Even though I was accepted as part of their crew and allowed to partake in their younger concerns and daily life, the girls also acknowledged that I was a helpful, knowledgeable adult and could be used as a figure of authority in certain situations. They asked me to proof read, tutor and help out with job applications and university references and also used me as an excuse if teachers were unhappy with their behaviour or to use interview recording as an alibi to truant from class. Whilst this was not always conducive to my research and could be seen as somewhat taking advantage, it also showed that students felt comfortable with me and trusted me to cover their back.

### 5.6.3 Perceptions versus Reality

The processes of ethnography also revealed many aspects to students' identity. It also allowed me to witness the dichotomy of what was originally apparent and the deeper aspects of individuals where long-term fieldwork moved from superficial to more

profound levels of understanding. Time was an important factor, as students needed this to adjust to my presence, figure me out and then actually open up.

This was especially true of more undercover and secretive social practices within the Asian community. For example, one girl seemed sweet and 'normal' during my first few encounters, however I subsequently discovered she was in fact very moody, hyper, promiscuous, even violent and often quite emotionally disturbed. Yet all of these aspects of her character were not revealed immediately and in fact it took me much time to gain her trust. Other Asian girls were even more noticeably different in terms of a mismatch between outer and inner aspects of identity and this was often related to wearing of the headscarf (hijab) (see Chapter 3). These types of findings reflect the importance of long-term ethnographic research methods where people cannot be ascribed or anticipated on the basis of a few meetings out of the social context.

### 5.6.4 Awkward and Risky Moments

There were several occasions throughout the fieldwork where I was put in an awkward position as I had a sense of duty not only to the research but my own values. These were also linked to my status and role within the school.

Prime examples were when being reprimanded by teachers on a regular basis. A key incident was of the teacher who shouted at me in the library because he was teaching a class and did not want any extra sixth year pupils there, of which he thought I was one. He bellowed 'Get out of here before I lose my rag with you!' at an inch's distance from my face. At the time and looking at the situational context, I did not deem it fit to embarrass the teacher in front of his students, fan his anger by arguing back or standing my ground, or show my own anger and annoyance at his rude behaviour. I quietly obliged and left the library, and whilst I spoke to the teacher at a later date and he apologised profusely, it was still a very infelicitous state of affairs.

Another unexpected situation arose when some teachers recognised and approached me who had attended a bilingual in-service training day I had presented at through my previous secondary school teaching work. This was uncomfortable especially when I was with students, as they began to question my connection with school authorities and essentially suspect my motivations.

Furthermore, my in-laws' family were personal friends of the families of some of the children that attended Riverburn High so I became a recognised adult by these students. This was awkward for me as well as them, because we both felt we had to create an acceptable persona in case word got back to our respective families. When siblings were involved this was even more uncomfortable as I could not be seen to side with one or the other, and there was always a fear that I might inform the other sibling of their behaviour. In this way, relationships were complicated, especially if these pupils knew or hung out with students I had befriended.

There were also child protection issues that arose during the fieldwork and these were often linked to psychological reasons. Some Pakistani girls were involved in self-

harming through cutting their wrists e.g. coming to terms with the loss of loved ones. There was also the presence of body-image distortion illnesses, like bulimia and anorexia, where some girls regularly did not eat lunch and refused to, even when pressed. I felt a constant sense of worry and concern for these girls, checking in on them every so often, yet feeling unable to report these behaviours due to their utmost trust in me (also cf. Lawson 2009, who had similar issues with his male informants and drug-taking).

Witnessing illegal behaviours was also a concern such as under-age smoking, drugs and drinking. Whilst I knew such behaviour was commonplace I did not expect to experience it first hand during the fieldwork, except perhaps visibly seeing pupils smoking. However, several awkward instances occurred where male students began smoking during the interviews, showed me joints, talked about drug-taking, even used lighters in the room, as well as turned up to interviews 'stoned', or high on drugs. This was not only illegal, happening on school property, a potential fire hazard in terms of smoke alarms going off, but extremely risky for my whole research project as I had a huge sense of responsibility. When one of the students starting ripping posters off the wall in the interview room, I became very worried, but thankfully the situation did not escalate. There was a sense of testing me, where I wanted to reprimand their behaviour but did not or could not due to my own research role.

Regular visits to the local pool hall during class time was also a means of defying the establishment, and surprisingly girls as well as boys chose to do this. It was a fairly dingy smoky place where drink was served, older adults were present, and it was considered a cool and simultaneously risky hangout by pupils. I was persuaded to accompany some of the girls and never having gone to a pool hall felt very uncomfortable in the environment, coupled with my obvious lack of snooker skills.

## 5.7   Social Spaces at Riverburn High

During the initial ethnography period, I discovered various hangouts for pupils at break time (15 minutes) and lunchtime (40 minutes) as shown in Figure 5.1. At these times, pupils went to various places to eat and spend their leisure time. It was particularly during lunchtime that social divisions were most noticeable, as students were left to constitute social groups with little apparent structuring on the part of the school (Eckert 1989*a*, Mendoza-Denton 1997). Often these spaces were symbolically attached to social identity.

Various spaces and places were used by different students, such as the school library, the social area, the playing fields and lunch places. These geographic boundaries often demarcated socioeconomic, ethnic and linguistic borders in subtle and not so subtle ways (Eckert 1989*a*). Furthermore, the use of these spaces varied throughout the academic year by age group, by gender, and according to the weather, e.g. on warm days students would typically hang around outdoor areas on benches and go to the

nearby park whereas on wet cold days, the indoor social area was more likely to be used.

### 5.7.1 The 'Social Area' and School Library

The social area consisted of a large open space inside the main school building with benches, school notice boards and vending machines. It was used for socialising during free periods, breaks and lunch times as well as being used as a central point for school events and associated ticket sales.

Interestingly, the social area had different meanings for different students at various times of the school day. For example, for older students at lunch time it was considered 'uncool' because it became a teacher-monitored zone and lots of younger pupils ate their lunch there, but during free periods it was 'cool' to be able to have personal space much like a common room.

Even within the social area itself there were divisions. For example, boys took over large areas if they decided to kick footballs about indoors during wet weather, and generally took up more physical space than girls who would bunch up into small groups. There was also the '6th Year Bench' on one side of the social area designated informally to the older students, and younger students would not sit there for fear of chastisement. Importantly, this area also marked off ethnic groups, with White students generally inhabiting one side and the Asians the other, with very little intermingling. Consequently this area had informal rules and regulations which were important to the students, and were often related to power and authority.

On the other hand, the library was a 'safe' space mainly for the youngest and oldest students of the school. Younger pupils tended to drift towards the library on the second floor above the cafeteria, which was open every day at break and lunch time and supervised by the librarian. Older, typically more conscientious, students used the library to study, check emails or surf the internet. Whilst many considered it to be the 'geeky' kids that hung around the library at lunch times; during free periods it became a 'cool' space for all older students signalling responsibility and authority because they were allowed to use it outside class time and it consequently became an extension of the social area.

### 5.7.2 Lunch Hangouts

There were many lunch hot spots in and around the school from the school cafeteria and the home to local sandwich shops, newsagents, fish and chip shops and Indian take-aways, all of which catered for pupils through specially discounted school meal deals. Many of these outlets were in competition with each other with some owners claiming that others were not providing truly 'halal' options (allowed in Islam). Whilst many students used several of these food facilities throughout the ethnography, they were often closely linked to specific social affiliations and groups.

**Figure 5.1:** Social Spaces at Riverburn High School
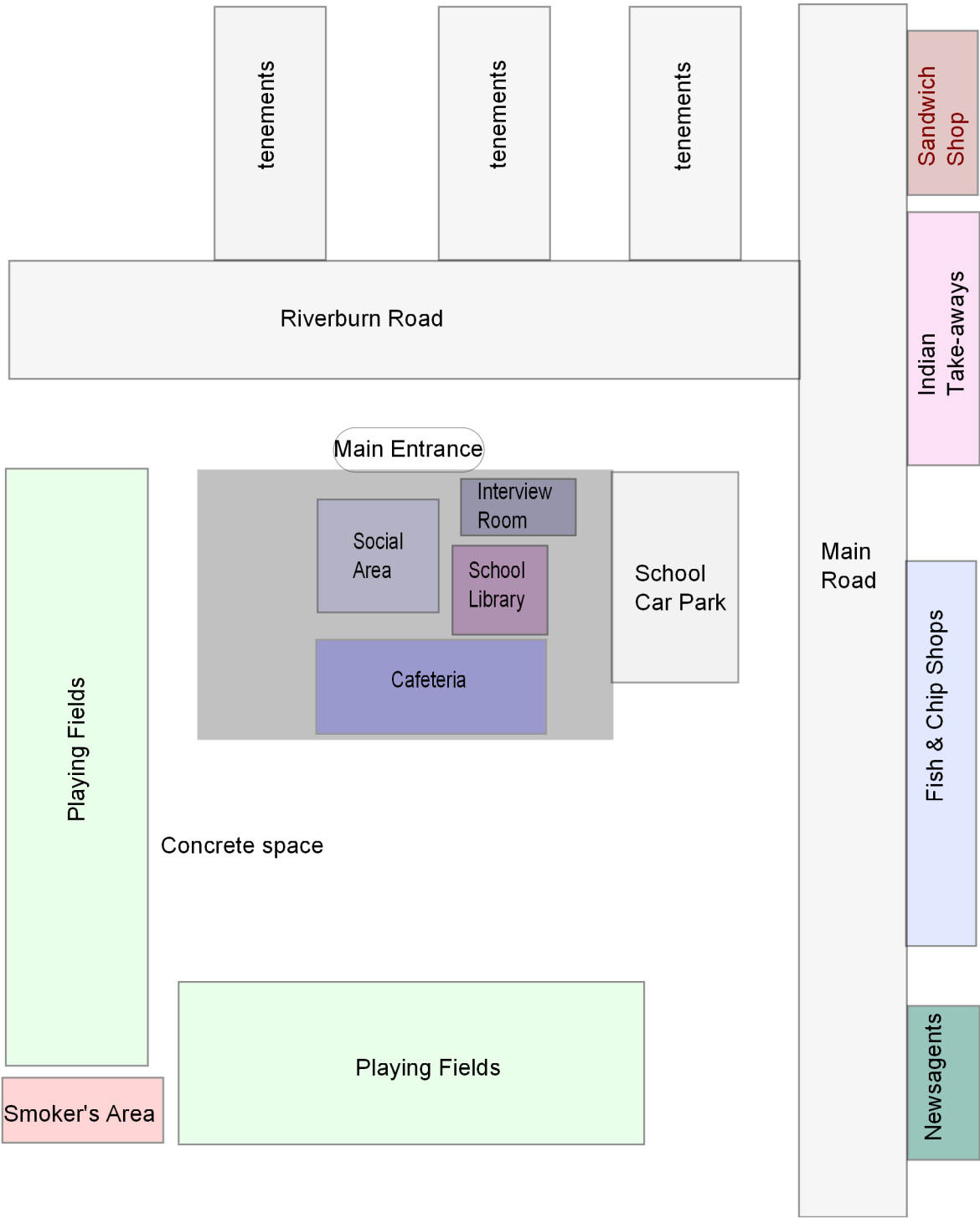
Students of all ethnicities but usually younger year groups used the school cafeteria for lunch. They were often considered uncool as it was a staff-monitored zone, where pupils spent their time eating quickly at the lunch tables or congregating in huddles in the adjoining social area as food was not allowed in the corridors or outdoor areas. They were either considered to be the 'good' pupils or alternatively those that were entitled to free school meals of which there was a large number in the school. Some students also went home for lunch, or chose to go cheaper shops, e.g. Greggs. Class divisions were thus set up each day with students who could afford better tasting food buying lunch elsewhere (Mendoza-Denton 1997, p.23).

The Indian take-aways were largely synonymous with Asian students who were proud of their heritage culture but were also seen as working class haunts where 'neds' hung out. Notably boys could be seen munching pizza, chips and burgers in large groups outside these shops, whereas the girls usually took their lunch back to school, eating it on the way or back in the school social area. These outlets were commonly owned and run by Asians and were considered to be sub-standard, unprofessional and unhygienic by some more middle class and White students, though there was still even an apparent hierarchy within the Asian takeaways.

A large proportion of the Scottish White students and some Asian girls preferred healthier food choices perceived to be prepared in more hygienic environments. They tended to purchase from shops that sold sandwiches, baguettes, salads, crepes, fruit smoothies and fruit juices. For some Asian girls, this was also symbolic of aligning with a more Scottish rather than Pakistani identity through their rejection of Asian food and places. However, many of these outlets provided 'halal' options, clearly catering for the Muslim target market so their choices were not an outright rejection of culture. Also, many girls were continually watchful of maintaining their figure (cf. Mendoza-Denton 1997), where some hardly ate lunch and were extremely body conscious, or wasted much of what they had bought claiming they were not hungry which was difficult to believe considering they had eaten nothing since breakfast. Illnesses relating to food like anorexia were apparent amongst some of the teenage girls in general.

The fish and chip shops were less popular for the Asian students with a mainly White clientele, and typically boys. They were also less popular for Pakistanis as the proprietors often cooked in animal fats which are 'haram' (disallowed) in Islam, though those that were ignorant of this fact or did not care still bought their lunch there.

### 5.7.3 The 'Refugee Corridor'

Some students floated about the school premises during free time in small groups, be it in specific corridors or the school grounds in general. Often it was in the corridors that pupils were reprimanded as these were not designated spaces for hanging out or eating.

I discovered the 'Refugee Corridor' close to the social area - a derogatory term used by the majority of the students to refer to the space the refugees, asylum seekers

and newer arrivals from abroad inhabited outside the Bilingual Support Unit. These students were often victimised, considered dumb, discriminated against and at a general disadvantage because of their diverse ethnic and linguistic minority backgrounds.

Newer arrivals to the UK were often considered over the top by students when trying to fit in. For example, one girl never fully integrated into the Asian or White groups despite styling herself and behaving in an excessively western way in attempts to shed all evidence of her Pakistani heritage. Her obvious Pakistani-English accent was also a clear give-away though gradually she had picked up some key Scottish phrases such as 'aye'. In particular refugee boys also swore and used profane language abundantly in attempts to be seen as cool, tough and funny. For example, during a lesson in the library they continued to use the word *tattee* which means 'faeces' in Punjabi, whilst laughing and mocking the monolingual English teacher who did not understand what was being said. They even decided to name their newspaper article 'Aloo Palak' which means 'potato and cauliflower' in Punjabi but told the teachers it was the name of a Pakistani newspaper! Many a time I could not help myself laughing at their antics and being part of their in-crowd, and simultaneously feeling sorry for the teachers.

### 5.7.4 'Naughty' Areas

There were also several areas around the school that were used to engage in unauthorised and rebellious behaviours, such as smoking, taking drugs and promiscuous behaviours, called here the 'naughty' areas. These included: the large playing fields which surrounded the school; the smoker's area; the toilets; the local park and pool hall; and hidden from public view areas such as the streets, tenements and doorways located near the school. However, most areas could still be used for acts of deviance, e.g. pupils ran around corridors hitting each other or playing tig, knocking bins over and smoking.

Boys in general marked off their territories around the school most obviously. They typically dominated the playing fields and larger concrete areas for recreational purposes, e.g. football, with the girls being relegated to sitting on walls and walking about the school. The smoker's area was also a popular place for some more deviant boys and was located behind the Maths block, as far from the school's main buildings as possible out of the view of teachers. Pupils of all ethnicities hung out here though evidence of racial segregation existed.

Usually Asian boys congregated in tighter spaces in greater numbers and this may be linked to feelings of vulnerability in open areas and safety in numbers and in smaller areas. Boys gravitated towards the residential tenements and park sufficiently far from the school authority to smoke; buy, sell and take drugs like weed, crack and smack; meet up with members of the opposite sex to engage in intimate acts; and partake in activities such as pre-planned fights. There was a noted consensus by all students that drugs were widespread across the school and especially amongst Asian boys, and when asked about this, strikingly some quoted figures as high as 40 per cent of the school

population as having taken or tried them.

## 5.8 Social Events and Social Practices

During the ethnography, a number of school social events took place, which I attended for two reasons: to be seen as part of the school community in order to make further contacts; and because some of these events were scheduled out of school hours would allow me to view potential differences in the girls' social and linguistic practices. Such events revealed the degree of heterogeneous social identity among the various school groups and also between the Asian students who shifted identities based on factors like context, situation and audience (cf. Sharma 2011).

There were a series of social events geared towards the whole school community, but largely revolve around organisation by the older year groups. There was much disunity between ethnic groups in particular surrounding such organisation, e.g. the failed Aberfoyle trip, and the all-Asian S6 Thank You Evening (which was originally arranged for all ethnicities). Whilst multicultural and internationally-embracing events with music and activities were organised such as the Christmas/Eid/Diwali lunch and Chinese New Year Event, ethnic divisions were apparent with mainly Asian pupils helping out and few native White students getting involved.

### 5.8.1 Dance Events

Throughout the ethnography, many popular dance-related events took place outside school hours but on school premises, e.g. the S6 Rock Show, Bhangra Night, the Dance Extravaganza and the Hip Hop Show. These events were frequently used by popular students to exhibit their dance and social prowess to prove their worth and status in the school hierarchy. Some teachers were also involved in the entertainment and made guest appearances, e.g. one teacher played the role of an Asian gangster in the Dance Extravaganza, and other teachers performed cabaret acts in the Moulin Rouge themed show, resulting in mixed responses from the audience.

The first of these events I witnessed was the S6 Rock Show, a multicultural event which was also a non-uniform day. Most Asian pupils wore western clothes, e.g. jeans and tops, but occasionally traditional dress. There was a mixture of performances ranging from cross-dressing comedy by White students to hip-hop, R'n'B, pop and bhangra dances by Asians and non-Asians. These dances were well-choreographed and quite suggestive, dancing to tunes like Pussycat Dolls' 'Beep' song where whistles of appreciation were heard from the crowd.

Surprisingly, it was only more western Asian and non-Asian girls that participated in these dance shows alongside White boys, wearing quite revealing, almost sleeveless short tops and cropped trousers. For me this was an eye-opener, as I had not expected this from certain girls. A mixture of responses emerged from the Asian students as

we left the assembly hall, from shock and disgust to admiration and applause. Non-participation by Asian boys may be linked to lack of skill in these types of dance which may have impacted negatively on their typically tough social image in what was commonly referred to in Punjabi and Urdu as 'bay-izzathee' ('losing respect').

Hip hop, R'n'B and other forms of black music were a regular feature of the events, and there was notable rivalry between Black, Asian and White students in terms of who had the best dance moves. In most cases, Black students were superior and this elicited jealousy by Whites, particularly as many White girls were dating the growing number of Black boys in the school.

By this point, I was not wholly unprepared for the all-school Bhangra Night which took place later. It was divisive rather than unifying across ethnic groups. An Asian DJ was present and it ended up being an all-Asian affair with limited White students attending and an overall low turnout was noted by staff and pupils. For Pakistani students, this may be related to stricter families who would discourage their children to attend such a mixed-sex gathering for fear of licentious behaviour. However, even more western Asian girls all wore traditional dress (*shalwar kameez*) perhaps as the event was 'Asian'. More strikingly some hijab-wearing girls also attended, but did not wear their hijabs on this occasion. Some boys also wore traditional Pakistani clothes, with dancing between the sexes as well as in single-sex groups. Interestingly, when White boys began dancing with the Asian girls, a big group of Asian boys surrounded them in a territorial fashion and in effect pushed them away. This possessive and protective streak seemed to be a characteristic of the Asian boys, perhaps linked to Pakistani cultural norms.

## 5.8.2 The S6 Prom

The S6 Leavers Ceremony and S6 Prom were slightly different in that many students displayed high levels of cultural assimilation, e.g. popular Asian girls choosing to wear predominantly western clothing such as sleeveless and backless dresses. Although I did not attend the prom I heard about it from pupils and staff alike and saw photographs on the school notice boards. Again the S6 Prom had low Asian attendance perhaps because it was not geared specifically at that community (Mendoza-Denton 1997). However, some Asians admitted to lying to their parents to attend the Prom. This was to be a feature of most events that would unlikely be authorised by Pakistani parents. The increasing use of personal mobile phones also meant pupils could make arrangements easily between themselves without parental knowledge. No expense was spared by the Asian students through assimilation to western cultural norms, e.g. hiring limousines and attending the prom with a date or partner for the evening. Mixed reactions were provoked from Asian pupils to such events and were often connected to etiquette, behaviour or clothing.

# 5.9 Intra-ethnic Divisions Amongst Asians

Even within the Asian group of students there was no obvious unity and there were marked social distinctions for both genders. They were not a homogeneous group as can often be assumed. There are many possible reasons for this as with any social group such as individual, family and economic differences, as well as factors related to upbringing and peer groups. Some differentiation was often based on where in the local area the students lived. In this sense, some element of class-based division was apparent, but not wholly so, especially as Riverburn High had such a diverse intake of pupils from the surrounding areas with different social status. Students often spoke about territory and particularly the Asian boys who were often divided along these lines.

## 5.9.1 Asian Girls

### 'Good' Girls and 'Bad' Girls?

Early on I noticed there were clear groupings even within the Asian girls with obvious divisions based on social practices. On the one hand, there were very 'good' traditional, Pakistani Muslim girls who were generally well-behaved, respectful and conscientious students and on the other hand, there were the 'bad' girls who were often loud, boisterous, secretive, 'bitchy' and generally not interested in school. Naturally there were many that floated around this continuum who dipped into various practices as suited (see Figure 5.2). Whilst a rudimentary generalisation like this may capture some aspects of the girls' behaviour, it is equally important to understand that anthropologists have noted the problems, questions and challenges of objectivity in ethnography (e.g. Geertz 1975) to which I too was not immune. Whilst objectivity in the ethnographic account has been aimed at, there is necessarily an element of personal positioning which comes with this type of research. Importantly, terms such as 'good' and 'bad' (or 'deviant') are simply reference points in relation to traditional Pakistani Muslim culture. Such reference points do not exclude other co-present identities, e.g. 'good' or 'bad' according to other norms.

Such divisions have apparent similarities to Eckert's work on Jocks and Burnouts in America in terms of a pro-school versus anti-school stance. However the divisions were not so clear-cut or based on one key factor like social class, and it took me a long time to properly understand the nature of these groupings. Originally, such divisions could perhaps have been theorised using stance in terms of positioning (Drager 2009). It could be as simple as 'good' and 'bad' with respect to school, or could even be theorised along more overall stance divisions like Pakistani/non-Pakistani or British/non-British. However these distinctions seemed too simplistic as the ethnography progressed as there were many shades of meaning linked to social orientation. These multiple levels of gradience in the Asian girls were central in later understanding how linguistic practices

**Figure 5.2:** Good Girls and Bad Girls
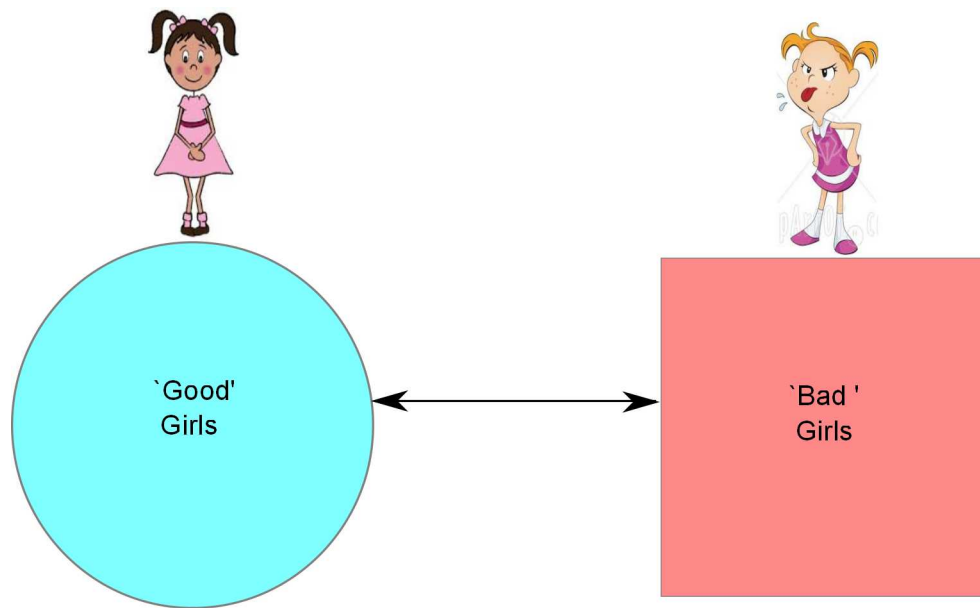


might vary.

I tended to veer more towards the 'good' girls, perhaps because it was more akin to my own sense of self and there were more common interests, thereby forging deeper relationships with these girls in general. The girls seemed to enjoy having me around, almost like a cool older sister. I felt that students were very interested in my personal life, family and recreational pursuits and I shared many elements of my own personality with the girls, with various types of conversations being relevant with different pupils.

One sure topic was marriage, a central concern for young Pakistani girls, and the fact that I was newly wed meant I was a huge source of interest (Pichler 2001). Most girls did not think I was married and after the initial shock went on to ask me endless questions about married life, my husband, in-laws and all the other associations with Asian marriages which I willingly presented. Many of the recorded conversations also allude to the same.

Due to my own comfort zones, I sometimes found it difficult to befriend the most westernised girls who acted in a culturally inappropriate fashion for traditional Pakistani Muslims. This was especially with their behaviour towards the opposite sex through flirting, smoking and indecent behaviour. Eckert (1996) notes the importance and pre-occupation of the heterosexual marketplace for females whereby they become engaged in the technology of beauty, relationships, power and personality. I also noticed hostility towards this group from the other Asian girls fairly rapidly. Even though I considered myself an educated, modern British Muslim, their degree of cultural assimilation was still a source of unease for me. At a personal level, I did not wish to associate with their social practices and I was also aware that it could be detrimental to the other girls' perception of my own identity, e.g. would they think I was like them thus alienate myself from the Asian majority? In a similar way, Lawson (2009)

also experienced great difficulty accessing the 'ned' group in his study who are also a stigmatised group more generally in mainstream Scottish culture.

I quickly realised that I could never fully infiltrate this group or be fully accepted by them as I did not associate or engage with any of their regular social practices. However, I did try to engage with them as much as was possible though I sensed mistrust and arranging recordings was less easy. I often felt like I was begging them to be recorded and this was demoralising. Some I pestered for months about getting recorded but they kept stalling or would just not turn up. The fact that they knew I lived close by, only a mile or so away, was also a source of curiosity, suspicion and unease if they wanted to hide elements of their identity.

**Hair and Headscarves**

In Islam wearing a headscarf ('hijab') post-puberty is considered a religious obligation; it helps protect female modesty, as hair in particular is considered to be one of the most beautiful aspects of female appearance; and it also functions as a symbol of Muslim identity. The concept of hijab also encompasses other aspects such as dressing modestly overall as well as metaphorically lowering one's gaze (i.e. not attracting male attention or becoming attracted to the opposite sex). For these reasons, many Pakistani women wear the headscarf often called a 'dupatta' in Punjabi and Urdu, though quite often this may be loosely draped around the face and neck or left flowing over the bosom and shoulders.

However, there is a great misconception in the West that wearing hijab equates to a religious and outwardly pious character and especially for British-born Muslim generations who may be subject to competing ideologies. As mentioned earlier my own appropriation of the hijab during the fieldwork may have been a barrier or influenced my interactions with other ethnic groups as well as the Asian girls who may either have been more reluctant or more inclined to speak to me depending on their own identity.

Some Pakistani girls at Riverburn High wore the headscarf in an eclectic range of styles, from pharoah and bandana styles to the traditional Pakistani and Arab styles, though not necessarily for any religious reason per se. Several motives became apparent throughout the fieldwork including: own personal choice; familial and community expectations ; as a fashion accessory; to cover a 'bad hair day' ; as a mark of particular group membership; outward display of religiosity to dupe others and avoid chastisement for unbefitting behaviour; and due to institutional pressures from the school community to retain wearing the headscarf (e.g. one girl who felt she could not remove the headscarf until she went to university as the school community would bully her). Essentially, there were as many reasons to wear the hijab as not, and many of these were linked to no overt religious identity.

There was much negative discussion surrounding girls who took the hijab on and off on whim and they were often viewed as morally lax by other Pakistani students in the school. They were not respected, especially by boys, and there was a pervading

perception that they were the worst type of Asian girl because of the apparent hypocrisy of their outward and inner aspects. In some cases these girls were very rebellious, dated boys, smoked, drank alcohol and wore excessive make-up perhaps as a compensatory measure - all typically unbefitting behaviours for Pakistani girls.

Asian girls' hairstyles were also varied, but generally had one thing in common - a longer length. In most cultures long hair is preferred, but in Pakistani culture this is always the case where long hairstyles are favoured and short hairstyles are not, though often it is one length, tied back off the face and kept in an orderly style such as a pony tail, plait or a bun. In the UK however, it is much more common for young Asian girls to style their hair according to British trends, so many of the more fashion-forward girls had fashionable layered cuts and dyed hairstyles - often blonde, red or brown all-over colour, dip-dyes and highlights. Throughout the ethnography, all things hair were discussed, including eyebrow, moustache and face threading occasionally carried out on free periods amongst friends; other forms of hair removal; and the general woes of having dark hair.

### 5.9.2   Asian Boys

**'Bad' Boys...and Much Fewer 'Good' Boys**

Asian boys in the school appeared to be more polar in their social practices than the Asian girls with less distinction in fine details and they might crudely be assigned as 'good' or 'bad' boys. This is similar to work by Kirkham (2013) in Sheffield where boys had two broad categories such as chavs/posh or Ashton/gangster, and these group-ings were not always within ethnicity but are attributed to a more general pattern in young male groups. Overall, male groups may have less differentiating factors as their spectrum of social practices can be smaller when compared with girls, often revolv-ing around sports and recreational activities. Less gradation among boys meant that shifting identities were less common and it was rare to find anyone floating between the so-called good/bad continuum - you were either one or the other. Male hierarchy, power and constructions of masculinity were a notable feature of the Asian boys (cf. Lawson 2009, Podesva 2004, 2007). However, as the fieldwork did not focus on Asian males, this discussion is exploratory and provides useful context.

'Bad' Asian boys were generally in the majority and were overtly anti-school in their social practices. Their more rebellious behaviour as well as their obsession with personal style might be linked to more leniency in the Pakistani community towards boys. Whereas girls had more cliques and subgroups that were secretly 'bitchy' and snide, boys were much more direct using phrases like 'what the fuck you staring at?' if anyone happened to look at them in the wrong way. Gendered male identities set up the pecking order in this group where there was typically a group leader, several other influential side-kicks and the rest as followers with little room for manoeuvre or newcomers.

**Extract 5.2:** Imaan and Ameera on Boys

1   **Imaan:**     they're useless, no -

2   **Ameera:**    they don't do nothing

3   **Imaan:**     aim in life they don't exactly want to reach, they don't have a like (...)

4   **Ameera:**    a goal

5   **Imaan:**     I don't know. Probably they don't have any motivation...


These Asian male groups survived on discourses surrounding ethnic and linguistic identity, black culture, solidarity, toughness, territory, fear, appearance, reputation, security and safety. Similar to the Rebellious boys in data by Kirkham (2013), they liked rap, hip hop, american urban, house and garage music; and often wore expensive and designer urban clothing brands such as G-Star and Superdry. The appeal of Black culture, music and style may be related to discussions surrounding anti-oppression, empowerment, racism, machismo and sex appeal which are not so apparent in traditional Asian cultural styles (Hewitt 1986).

The social practices of these boys also revolved around: smoking; drugs; cars and other forms of transport such as motorbikes and quad bikes; personal image; hairstyles; male-grooming; body-building; mobile phones and other gadgets; sex and girls. Drugs in particular were acknowledged as major problem for Asian boys, with few escaping due to heavy peer pressure. Cars were a central concern, especially for those who were old enough to drive or had older relatives that could drive, with an emphasis on sporty, sleek cars that were heavily modified for higher performance - essentially 'pimped rides'. Hair was also a key topic of conversation and had to be stylish and on trend, e.g. spiked, v-cuts, closely shaved with patterned tram lines, fashionable facial hair and beards, with hair having great symbolic value in male groups (Lawson 2009). Ironically, there was a dichotomy between the perceived masculinity of certain social practices, e.g. drug-taking; and the femininity of styling products like straighteners which were used to get the 'perfect' hair look. Two Asian girls, Imaan and Ameera, discuss the lack of any substance to the 'bad' Asian boys with disapproval in Extract 5.2.

'Good' Asian boys were more likely to be studious, middle class and pro-school but were often disliked by the majority of Asian boys and considered either soft, gay, geeks or 'coconuts' (brown on the outside but white on the inside). They did not ascribe to the typical Asian 'bad boy' behaviour, style or necessarily hold the same values or musical preferences. For this non-conformity, they were essentially punished on a daily basis through verbal and physical reproval by the 'bad' Asian boys. Some actually expressed a belief that there was greater bullying and trouble from Asian boys than the Whites in general. However, they were more likely to have friendships with Asian girls (not relationships) and were considered much more favourably by teachers and the wider Pakistani community overall.

**Racial Divides and Crossing**

There were clear racial divisions amongst the boys at Riverburn High, exemplified by the Asians by the common use of the Punjabi words 'goray' (Whites) and 'apnay' (us) or 'kalay' (blacks or non-whites). There was little or no social mixing between Asian and Whites setting up much more stark segregation compared to the girls who were more admittedly fluid in this respect. Boys were less inclusive and viewed ethnicity as a more formal way of classification which may be related to an awareness of important cultural and linguistic differences and restrictions.

Whilst limited evidence of crossing was apparent in this Scottish school context, particularly noticeable amongst the boys, ethnic roots were strongly entrenched in language use and deviations from this norm were frowned upon, as dense ethnic networks acted as norm enforcement mechanisms. Unlike larger cities like London (Cheshire et al. 2011), the smaller, more conservative and less ethnically diverse communities in Glasgow as a whole may be causal factors in less mixing, where multiculturalism is still very much in its infancy.

However, there was some indication of crossing of ethnic boundaries (Rampton 1995) by a few fearless White boys and the 'coconut' Asians. For example, a native White boy named Danny with Swedish heritage style-shifted regularly to a 'Riverburn Asian accent', when with Asians albeit in a comedic sense which was seen as funny. He commonly used Asian soundbites using words like 'goray' (White people), 'yaar' (friend) and 'kidha?' (what's up?) in exaggerated ways and commented that he found the Asian culture quite attractive, foreign and exotic. He even mimicked the Asian boys' style of walking and acting. Danny was a popular, muscular, tall and attractive boy idolised by many girls and he had much standing and respect in his native White ethnic community. These combined factors may have allowed him to get away with his behaviour with the Asians, which could have been misconstrued as verging on racism had it been from anyone in a weaker position or indeed if he had intended it in this way which was not apparent. As argued by Rampton (1995), language crossing may actually be a form of anti-racism whereby ethnicity becomes less relevant due to blurring of ethnic divisions.

Another White boy called Harry was even more involved in acts of crossing, and was often referred to disparagingly as a 'wigger' by the Asian boys - someone who is white but emulates Black cultural behaviour and tastes (Cutler 1999). A popular British TV comedy figure who encapsulates this is the infamous 'Ali G'. Harry was considered part of the Black groups in the school - essentially talking the talk and walking the walk. He had the same urban street style reminiscent of the Black boys with their urban cultural capital, e.g. low-rise trousers and baggy t-shirts. Music was a key source of crossing and he participated heavily in the school dance shows with his Black peers. Even outside the school in a Glasgow shopping high street, I saw him performing well-choreographed street dance routines with his Black peer group. Such acts illustrate his level of attunement and acceptance by Black peers.

### 5.9.3 Generational Divisions

There was also an obvious divide between the Asian students and their parent generations. Anecdotal evidence by the students suggests that there was a clear generation gap, with many expressing lack of understanding of British norms by parents to be the main reason (Anwar 1998, Ballard 1994).

Students often espoused this parental lack of empathy and knowledge as the reason for their undercover activities such as dating, smoking and dressing in culturally inappropriate ways for Pakistanis. Students had different identities to their predecessors and such activities were considered a normal part of growing up in the UK context (Harris 2006). Girls noted that non-participation in such behaviour was seen as uncool, backward and 'tea-pot-ee' or 'freshie' ('tea-pot' and 'freshie' are derogatory terms for traditional Pakistanis, usually Pakistan-born with a stylised Asian accent).

Limited forms of 'halal' entertainment in the UK context also exacerbated secretive behaviours, with few permissible activities in the Pakistani community, e.g. going to the cinema, shopping, eating out, bowling and cruising in cars. These were allowed usually as family-oriented or same-sex activities. Many parents did not realise these were used as excuses for more deviant social practices and especially as avenues for pre-marital relationships.

Asian students generally believed that stricter families had more corrupt children outside the family sphere due to the stringent controls on their behaviour at home. For example, Saira who had two deviant siblings at the school stated that 'their kids go off the rails'. She was also from an Ahmaddiya background which is a strongly knit community, and there were undercurrents of feeling repressed in many of her conversations. The continual watchfulness of young females in particular, by the so-called 'aunty-jee' network was a real source of contention, as older generations would inform parents about the goings-on and misbehaviours of their children (Shaw 2000).

There were several other social differences between the generations. There was a perception that older generations were more patient and tolerant with their family and community especially first generation women. Female students admitted to a general lack of upholding customs and expectations in the same way. For instance, many of the Asian girls discussed domestic tasks typically associated with Pakistani women such as cooking or sewing clothes, and acknowledged their own lack of skills and interest in these areas. Another example is the growing dismissal of caste differences in relationships in the UK context by young Pakistanis.

Religion and mosques were generally less important for many of the youth, with youngsters connecting them to experiences of chastisement, lack of understanding of what is taught especially in Arabic and Urdu, and a general sense of lack of engagement with religious and community events. The contradictions inherent between culture and religion by parental generations were also noted and spoken of in disparaging ways by the students. Greater religious literacy by parental generations, more British

cultural awareness and integration into British society as well as the need for more quality involvement in the girls' lives were all mentioned as central in forging better relationships between the older and younger cohorts.

Global diasporic links with the homeland were present but again less fundamental for the youth. For example, family holidays to Pakistan and continuing marriages to spouses abroad occurred, but younger generations had a distaste for the poorer living conditions especially in villages and essentially felt like tourists. A gradual lack of linguistic competence in mother tongues was also mentioned, where students felt unable to hold extended conversations with relatives abroad and felt these factors accentuated their Britishness (Harris 2006); or indeed their Scottishness with broader accent and dialect differences. Moreover, students mentioned notably less interest in Bollywood films, Indian songs and Asian TV dramas and shows compared to their parents' generation. They preferred Anglo-American culture and modern fusion music such as British Bhangra remixes. So despite the apparent transnational links (Sharma 2014) often enforced by parents, there was unmistakably a declining attachment to Pakistan and Pakistani ways of life by the youth. Transnational links do exist but function differently in younger generations.

## 5.10    Asian Language

Very early on in the ethnography, I noted there was a preference for English in all domains, with hardly any full conversations in Punjabi and Urdu amongst the British-born Asian students (Khan 1991, Pert & Letts 2003). Even common greeting phrases such as 'hi' were in English, with little Pakistani 'salaam' except mainly for the purposes of comradery and more obviously amongst boys. A shaky command of mother languages was mentioned as a key reason for this, with few having the full vocabulary or grammar to discuss topics outside the home, and especially school-based themes.

There were also notable differences across the genders in the use of English non-standard forms. Asian boys used significantly less standard English, but this depended on their own identity, in terms of the bad/good divide, where good boys were more likely to have academic aspirations thus utilised more standard forms. Poor English attainment for Asians nationwide, and especially boys may be related to generally greater non-standard grammatical language use; lack of dedication and commitment to school; as well as a proportionately greater use of bilingual code-switching overall.

Code-switching into mother languages was used, but these were usually phrases or words rather than wholescale style-shifting. New meanings for words were often derived in the school context, and especially for expletives and other types of profanities. Often these types of secret and coded speech were to used in order to evade, defy and mock mainly authority figures in the school, but could also be used between pupils to avoid others understanding what was being said.

Even when I was ignorant of certain ways of communication, the students took

pleasure in educating me. For example, they educated me in 'G-language' which was a type of pseudo or nonsense language where Asian pupils in particular would manipulate a word by adding the sound 'g' after each consonant in speech, making it incomprehensible to anyone who did not understand this rule. The use of 'g' was perhaps an allusion to *gang* culture or more dubiously even to *Glasgow*, but in any respect it was an urban youth variety that seemed to be a popular showcasing device amongst some pupils and especially boys. Such language games are used primarily by groups attempting to conceal their conversations from others but may also be have been used by Asian adolescent boys to enhance their preferred macho and gangster image.

There was also the notion of an Asian English language in the school which was connected to a specific accent, intonational style and set of lexical items often incorporating aspects of both Glasgow and Asian speech. It was stylised by the students themselves. Interestingly, students did not feel they had an unusual accent, but considered their speech 'normal' (cf. Bucholtz 1999) and connected more deprived areas of Glasgow with a distinct regional accent such as the East End. Common Asian lexical items were: 'shady, pure heavy, wido, yaar, brand new, safe, guppi, sai, innit, gangsta', and 'why lie?' These words could be combined in phrases like: 'you heavy did that yaar?' (meaning 'did you really do that pal?'); 'that's pure sai!' (meaning 'that's amazing'); or 'that's heavy guppi' (meaning 'that's really bad'). This type of language was especially common amongst Asian boys; bolstering ethnolinguistic unity and signalling their separate and unique identity from the mainstream White pupils.

## 5.11 Communities of Practice at Riverburn High

### 5.11.1 Rationale

As can be seen from the discussion of the ethnography at Riverburn High, there were an array of social practice differences between the Asian students ranging from personal style to general attitudes. Intra-group diversity has been explored in adolescents, where ethnic categories are not homegeneous as widely suggested and shared ethnicity or gender does not mean a uniform adolescent style (Mendoza-Denton 2008, Kirkham & Moore 2013). Gendered social differences were salient but here the focus will remain on Pakistani girls.

It was difficult to operationalise the multi-faceted nature of the Asian girls at Riverburn High, and there was no simple classification that would be accurately representative, though there has been some crude reference to 'good' and 'bad' girls in this chapter. The distinctions between the social groupings were certainly not as clear as in Eckert's (2000) Jocks and Burnouts with social class, or in Mendoza-Denton's (1997) Norteñas and Sureñas with geographical ethnic orientation. There were multiple layers of Glasgow Asian identity in the sample, all of which could be categorised differently and according to different criteria.

Consequently, there were many possible methods of analysis; all equally valid or useful as the data does not change but the analytical view from which it is examined does. Many approaches would examine linguistic data first such as Principal Component Analysis or Cluster Analysis and then explore how it patterns with social variation; but in the present study social information is used to understand linguistic variation, largely due to the robust ethnography which reveals the emergence of CofPs. The detailed observation and interaction over the course of three years allows a level of depth and insight unattainable in survey methods.

In this study, the chosen method of analysis was the Communities of Practice framework. This approach takes at its core the active and mutual involvement in a shared endeavour by a group of people to develop certain social and stylistic practices that are imbued with social meaning on a local level. The relevance of such a method is apparent when examining adolescents in a school environment and has become an established tool in sociolinguistic research (Eckert 2000). Using CofPs allows an analysis of the data that bypasses purely broad demographic categorisation to explain linguistic variation; and instead takes detailed local social information and considers linguistic data with respect to observed social grouping.

Several salient CofPs with varying social practices emerged during the course of this study. These were: Conservatives, Religionistas, Moderns, Shifters, Messabouts and Wannabes. For this type of empirical linguistic study, it was essential to have concrete categories, e.g. how much of particular element or practice had to be present before a girl was assigned a CofP. Much of this was through self-identification by the girls as well as my own impressions of them, though importantly the names for the different CofPs were assigned by myself bar the Messabouts who were a known and perceived entity in the school and beyond. Whilst there was overlap in the practices the girls engaged in as well as differences, a holistic view of the girls' behaviour was examined when distinguishing them in this way.

Importantly, I intended to make the CofP categorisation based on social practices but subconscious and perceptual processes may also have played a role. This is with respect to how I processed the way the girls spoke in my own formulations of their identity. There is an awareness that social and linguistic practices are heavily intertwined (Eckert 2009); and notably within and across ethnic groups (Eckert 2008*b*) with sociolinguists like (Eckert 2000) arguing that language itself *is* a social practice. This linguistic complexity is intriguing because not all categories appear for all features.

### 5.11.2 Asian CofPs

A total of 117 students, Asian and Non-Asian, were recorded during the entire course of the fieldwork, and titled the *Glaswasian* Corpus. Of this 97 students were Asian, with 70 girls and 27 boys being recorded. As an overview, a breakdown of the Asians by CofP in the *Glaswasian* corpus is presented in Table 5.1. The focus here is only on the Asian female CofPs.

**Table 5.1:** The *Glaswasian* Corpus by CofP

| CofP | No. of Girls | No. of Boys |
|------|:---:|:---:|
| Conservatives | 8 | 0 |
| Shifters | 25 | 11 |
| Religionistas | 6 | 0 |
| Moderns | 10 | 3 |
| Messabouts | 14 | 10 |
| Wannabes | 7 | 3 |
| **Total Asian** | 70 | 27 |
| Non-Asians | 13 | 7 |
| **Total Asian and Non-Asian** | 83 | 34 |

Each CofP engaged in varying social practices from hair and make-up to linguistic choices based on a continuum. A schematic representation of these groups in terms of size and overlap in social practices and space on the continuum and with respect to the school communities is presented in Figure 5.3. A summary of the social practices is presented in Table 5.2.

The main points to note are that Conservatives were the most traditionally Pakistani in their social practices with Messabouts being the most deviant of the Asian groups. The other CofPs were situated along this continuum with Wannabes largely on the fringes of the Asian school community.

**Figure 5.3:** Pakistani Communities of Practice at Riverburn High School
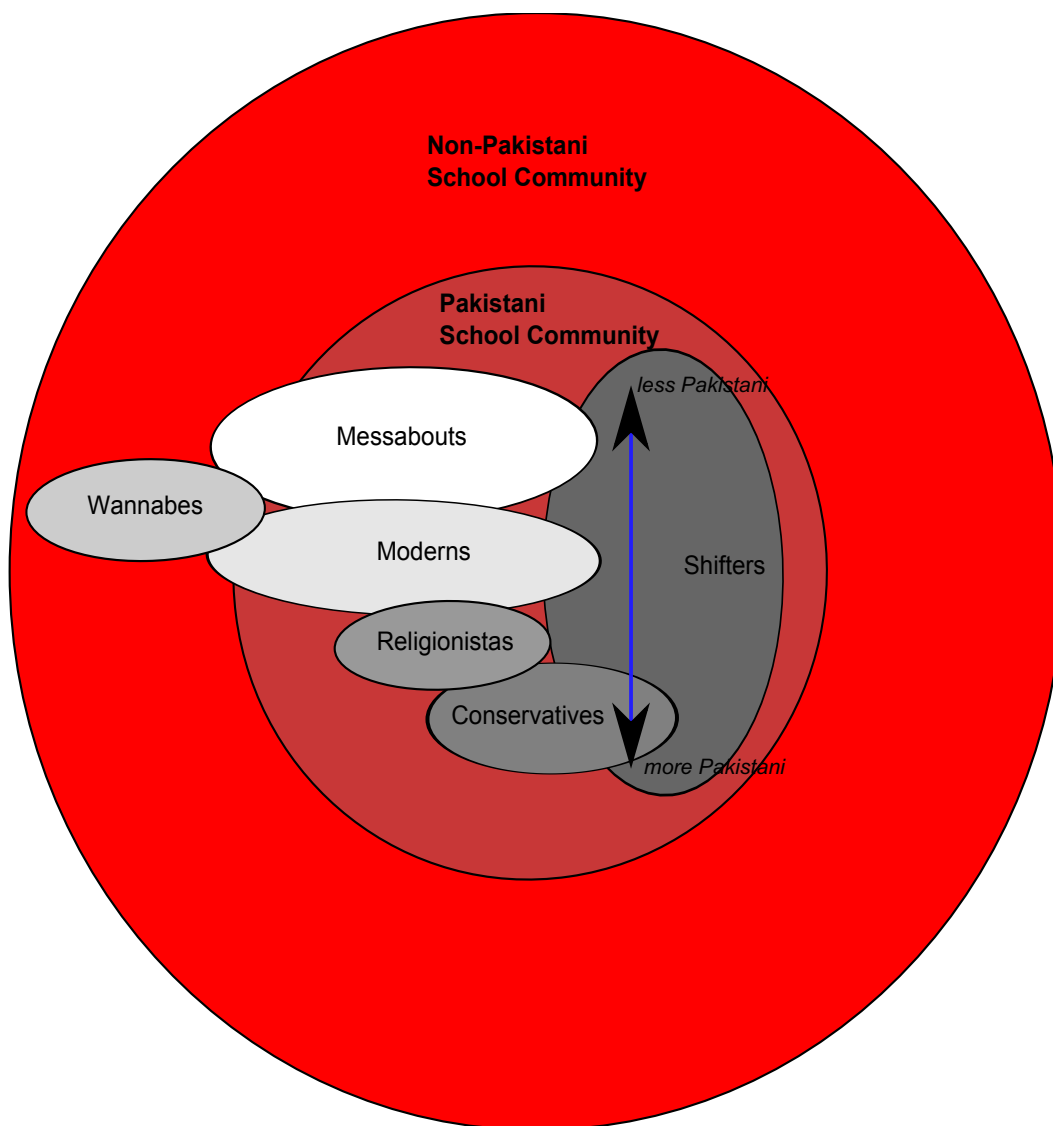
**Table 5.2:** Social Practices of Asian Communities of Practice at Riverburn High School

| CofP | Clothing | Make-up/ Jewellery | Hair | Hangouts | Relationships | Assimilation | Religious? | Language |
|---|---|---|---|---|---|---|---|---|
| **Conservatives** | longer, baggy or kurtah tops, no trendy or designer labels, plain | none or kajol, no jewellery | most wear hijab, long hair | cafeteria, social Area, library, corridors | none, or very few, favour marriage | very limited | Yes | prefer English, but codeswitching most common, often speak Punjabi and Urdu in home |
| **Shifters** | longer, baggy or kurtah tops, longer sleeves, baggier trousers and combats | eyeliner, kajol, eastern chains, rings and amulets | short, mid-length or long, some wear hijab | indian takeaways, sandwich shop, social area | few long-standing serious or none, favour marriage | to a degree | to a degree | prefer English, codeswitching common, sometimes speak Punjabi/Urdu in home |
| **Religionistas** | on-trend, fashionable, modest | eyeliner, kajol, lip gloss | mainly hijab, or long hair | social area, sandwich shops, healthy food outlets | none, but friendships with boys | yes, the most | yes, the most | many Arabic religious phrases, Punjabi and Urdu code-switching |
| **Moderns** | trendy, designer labels, combats, fitted trousers short-sleeved tight tops, colourful | eyeliner, lip gloss, western jewellery, light-coloured contact lenses | short, mid-length and long, sometimes dyed hair but more natural look | sandwich shop, social area, library | few long-standing with Asians, want commitment and eventually marriage | to a degree, e.g. dating | to a degree | prefer English, but can speak Punjabi and Urdu though little codeswitching |
| **Messabouts** | urban, street, tracksuit jackets, trendy, combats, short-sleeved tops, cropped trousers, black | foundation, blusher, eyeshadow, eyeliner, lipstick, gold 'bling' rings and chains, light-coloured contact lenses | short, mid-length or long often dyed hair e.g. blonde | tenements, Main Road, indian takeaways, fish and chip shops | many with Asians, want fun | yes, e.g. drinking, clubbing, pre-marital sex, dating, smoking | no | prefer English but proficient in Punjabi/Urdu, code-switching |
| **Wannabes** | trendy, plain | little or none | mixed hairstyles, some wear hijab | social area, 6th year bench | some with non-Asians | yes | no | prefer English in all domains |

**Extract 5.3:** Conservatives on Asian Music

1   **Imaan:**     ... I like bhangra and that, I like listening to that

2   **Ameera:**   it's because we've been listening to that kind of music and we know how
3                      it is

4   **Imaan:**     we're like, basically we understand it as well

5   **Ameera:**   yeah

6   **Imaan:**     I mean the goray they probably won't understand the words and that cos
7                      they're not Asian. We can understand the words and that and basically
8                      like it's kind of an Asian thing - basically we all listen to Asian music.
9                      Most people, Asian people do listen to Asian music.

### 5.11.3   Conservatives

The most Pakistani-oriented CofP were the Conservatives, who enjoyed elements of both their cultural and religious heritage. This was in terms of transnational links, clothing, hair, music, language, social activities, e.g. listening to more Eastern influenced music, wearing traditional Pakistani dress at school events. They also self-reported the most prolific use of Punjabi and Urdu, and also used them in some recorded data though more as occasional code-switched items. Their greater ties to Pakistani culture were often related to stronger transnational links, close Pakistani family networks, and sometimes connected to more recent parental migration from Pakistan. Imaan and Ameera talk about their interest in Asian musical styles and note that Whites (goray) would find it difficult to understand due to linguistic differences in Extract 5.3.

Overall, the Conservatives dressed less fashionably and were less obsessed with the norms of femininity at this life phase such as hair and make-up (Bucholtz 1998). Whilst they were always well-presented and neat, they were very plain in comparison to the style of the other CofPs, e.g. headscarf styles were not elaborate or particularly stylish. They were generally the unpopular girls in school, taking more interest in their studies, home and family life and personal achievement; with a conscious awareness of their unpopularity and uncool behaviour (see Extract 5.4).

Interestingly there were mixed Pakistani and Muslim identities, with little differentiation between culture and religion. In Extract 5.5 Inaya, a Conservative girl, discusses her sense of identity, highlighting both Pakistani and Muslim aspects. Interestingly In-

**Extract 5.4:** Conservatives on their Uncoolness

1   **Ameera:**     [the messabout girls]...they just

2   **Ameera:**     go everywhere but we're sad -

3   **Imaan:**       they go town, anywhere

4   **Ameera:**     we just stay in school!

5   **Ameera:**     we're sad innit, we just sit in the social area - that's us doggin' it

**Extract 5.5:** Conservative on Identity

| | | |
|---|---|---|
| 1 | **FA:** | What nationality would you consider yourself? |
| 2 | **Inaya:** | Pakistani because even though I've been living here, my parents have |
| 3 | | still taught me the traditions and how I've to live from what they would |
| 4 | | do in Pakistan, so I think it'd be Pakistani. Just Muslim, I normally go |
| 5 | | for Muslim on the forms. |

aya did not mention her Scottish or British nationality, focussing immediately on her Pakistani heritage. The Conservatives were stereotypically the 'good' girls.

## 5.11.4    Religionistas

The Religionistas were much more fashion-forward than than the Conservatives, like 'fashionistas' but with religious modesty and etiquette at the forefront of their personal style which usually involved wearing the headscarf. They were aspiring, well-spoken, confident, health conscious, forward-thinking and often from educated and more affluent backgrounds with clear aspirations for further education. They used many examples and references from Islam and the Arabic language in their daily interactions, where religious identity was central, yet simultaneously they enjoyed their co-existent urban and western-influenced identity as expressed by Neelum and Zainab in Extract 5.6.

Religionistas used the most religious vocabulary words and Urdu words, phrase and idioms that suggested Pakistani Muslim mentality or world-view. Arabic and Urdu phrases were associated with religion, piety spirituality and faith, e.g. 'inshallah' (if God wills), 'mashallah' (what Allah wills). Similar to the Sapir-Whorf hypothesis, such language use may influence the world-views of the speakers in different ways, by affecting thought processes at a subconscious level especially as some concepts were not applicable in English. This relation of habitual thought and behaviour to language was apparent in the Religionistas. In Extract 5.7, the girls talk about the importance of faith over issues like caste and wealth in terms of marriage partner choice. In Lines 17-20, Fyza displays annoyance at why Pakistanis only marry within Pakistanis, and prefers a more integrated approach where Muslims of different backgrounds are accepted. This type of view separates the Religionistas from the Conservatives.

They spoke disparagingly of Asians who were less intellectual, and particularly scathingly about 'gangsta' boys (and girls). Many conversations revolved around the unworthiness of such peers as potential life partners or friends - i.e. not marriage material. A prominent murder case in 2008 where an Asian girl had become pregnant out of wedlock to one such 'gangsta' exemplified their disapproval of the shameful behaviour of the murderers who were in the rival gang as well as disapproval of the girl's perceived level of morality. In this way, they viewed good moral behaviour and upholding religious principles as paramount, often expressing embarrassment, disdain and pity at those who did not exhibit these qualities. In Extract 5.8, they discuss the importance of the headscarf and their views on a female Muslim theology lecturer

**Extract 5.6:** Religionistas on Social Practices

| | | |
|---|---|---|
| 1 | **Zainab:** | soaps and stuff |
| 2 | **Neelum:** | and music, videos, that kind of |
| 3 | **FA:** | what kind of |
| 4 | **Neelum:** | stuff |
| 5 | **FA:** | music? |
| 6 | **Zainab:** | erm, r'n'b, hip hop |
| 7 | **Neelum:** | indian music |
| 8 | **Zainab:** | soul |
| 9 | **FA:** | what do you mean by soul? |
| 10 11 | **Zainab:** | soul kind of music you know like Robin Thick, Boyz to Men all them kind |
| 12 | **FA:** | why do Asians like black music like hip hop? |
| 13 14 | **Neelum:** | I think it's got nothing to do with ethnicity. I think it's-, just it appeals to everybody |
| 15 | **Zainab:** | and maybe they can relate to it |
| 16 | **Neelum:** | yeah that's it we can relate to it as well |
| 17 | **FA:** | why? Cos they're black as well? |
| 18 | **Neelum:** | maybe their stories are similar |
| 19 20 | **Zainab:** | maybe cos the environment they grow up in and then other people like them then they get into it as well so could be peer pressure |
| 21 | **FA:** | music is just better? |
| 22 | **Zainab:** | rock |
| 23 | **Neelum:** | yeah |
| 24 | **Zainab:** | and roll, is just you know |
| 25 | **FA:** | what do you want to do when leave school? |
| 26 | **Zainab:** | I'm thinking of maybe accountancy at Glasgow Uni |
| 27 | **Neelum:** | and I'm thinking of social work |
| 28 | **FA:** | you want jobs at the end? |
| 29 | **Zainab:** | yeah |
| 30 | **Neelum:** | yeah, we want to actually be able to use our degrees |
| 31 | **FA:** | some people just want education and then get married |
| 32 | **Zainab:** | we can do both we don't just have to |
| 33 | **Neelum:** | yeah, we can multi task |
| 34 | **Zainab:** | do one, we can do both |

**Extract 5.7:** Religionistas on Faith, Castes and Extremism

| | | |
|---|---|---|
| 1 | **Neelum:** | erm, ideal man, somebody who would be caring, honest and kind and |
| 2 | | because.. and who has faith, strong faith, because if you've got faith |
| 3 | | you can't really go wrong there cause the fundamentals lie there. See if |
| 4 | | you've got faith then you don't really need - |
| 5 | **Fyza:** | you can't go ever wrong |
| 6 | **Neelum:** | you can't go wrong |
| 7 | **Fyza:** | that's the main thing, I think Asian society, all they think about is stuff |
| 8 | | like caste and that doesn't really matter |
| 9 | **Neelum:** | we don't mean that yeah, and how wealthy they are |
| 10 | **Fyza:** | but if you have faith |
| 11 | **Neelum:** | and it's, we're not talking about people who are like religious like very |
| 12 | | religious, like you know maulvis (*religious leaders*) you know we're talking |
| 13 | | about people who have faith and who are educated |
| 14 | **Zainab:** | too religious is a bad thing as well - extremists |
| 15 | **Fyza:** | it's not even that, it's just that I think in the future, what I'd like to |
| 16 | | see is more integration of Muslim society like it's always like Muslim, |
| 17 | | like Pakistan to Pakistani, why not Pakistani to Ugandan or Pakistani |
| 18 | | to someone else you know |
| 19 | **Neelum:** | because cultures are different |

who regarded it as unnecessary. Wearing the hijab was symbolic of the Religionistas'
Islamic identity, where Neelum in another extract proudly notes that 'men don't look
at us as like whores'.

However, their disapproval of those less religious was sometimes ironic as they were
less than perfect in their own character, 'bitching' about other girls, whilst simultane-
ously trying to forge relationships with them to be seen as popular and on-trend as
well as having friendships with 'good' boys. They even attended the school prom with
'dates' though no obvious sexual attraction was apparent. Overall, they had a shared
endeavour to declare their religiosity but in a way that was still appealing to the wider
Scottish community in terms of accessibility, applicability and integration which they
viewed as representative of a moderate Islam.

### 5.11.5 Moderns

Moderns were confident, sociable, fashionable and probably the most assimilated into
Scottish culture in terms of dating, clothing, make-up, personal style, general be-
haviour, attitudes and values. They followed mainstream fashions, fashion blogs,
make-up bloggers, social media and were very current in their outward appearance,
thoughts and behaviours. They were typically obsessed with appearances and wore a
lot of make-up; hair styling was central as none of them wore the hijab. Moderns were
well-spoken and also usually from higher socio-economic backgrounds (like the Reli-
gionistas) with clear aspirations for further education and careers. They held strong
pro-school values, similar to the Jocks in Eckert's work.

**Extract 5.8:** Religionistas on the Importance of Hijab

| | | |
|---|---|---|
| 1 | **Fyza:** | Guys! I actually got a really good point to make. I didn't know this, |
| 2 | | I think I told you - you know the theologian, islamic theologian studies |
| 3 | | that is in uni, the woman that is teaching it, she's teaching everyone |
| 4 | | that in the Quran it does not say you need to wear a hijab |
| 5 | **FA:** | is this Mariam Saleh? |
| 6 | **Fyza:** | she doesn't wear the hijab and she's telling everyone else |
| 7 | **Neelum:** | she goes to Glasgow, she would |
| 8 | **Fyza:** | but it doesn't say |
| 9 | **Neelum:** | know |
| 10 | **Fyza:** | in the Quran you don't have to wear hijab and girls that want to hear |
| 11 | | that sort of stuff they're like alright that's fine |
| 12 | **Neelum:** | but then they prob- then she prob- |
| 13 | **Fyza:** | we shouldn't hate her but it is a bad example |
| 14 | **Zainab:** | see beforehand like |
| 15 | **Fyza:** | yeah |
| 16 | **Zainab:** | but like before |
| 17 | **Fyza:** | it doesn't matter if she's got her hair kullay (*open*) or |
| 18 | **Zainab:** | in the olden |
| 19 | **Fyza:** | not but - |
| 20 | **Zainab:** | before in the olden days right, they didn't have straighteners, they didn't |
| 21 | | have all these curlers right so that didn't you know, they didn't really |
| 22 | | cover up then either their hair cause that wasn't a main attraction but... |

**Extract 5.9:** Moderns on Social Practices

| | | |
|---|---|---|
| 1 | **Zahida:** | I know it's wrong to say, but you know, the people that I've come across |
| 2 | | and like the girls, they...they think differently. And I think they think |
| 3 | | of us as... |
| 4 | **Huma:** | really bad people |
| 5 | **Zahida:** | (laughs) |
| 6 | **Huma:** | but we're not at all. We're not. |
| 7 | **Zahida:** | (laughs) like bad girls, but we're not. |
| 8 | **FA:** | What do you mean by think differently? |
| 9 | **Huma:** | Like maybe what we wear and stuff. |
| 10 | **Zahida:** | The way we dress, the way we think. |
| 11 | **Huma:** | The way we are in school. |
| 12 | **Zahida:** | The way we talk to guys. |
| 13 | **Huma:** | Hang about with boys. They might think you know... |
| 14 | **Zahida:** | (laughs) |
| 15 | **Huma:** | But we're far from that. |
| 16 | **Zahida:** | Yeah. |

And while they dipped into some potentially deviant practices for the Pakistani community, they were not so daring or overt so as to suffer any major community chastisement. In Extract 5.9, the girls talk about how their social practices might be viewed negatively by other Asian pupils at the school, but protest against this incorrect view.

Usually they would also have relationships before marriage with Pakistani boys, but typically wanted commitment so in many cases they would end up marrying the same boyfriends. Extract 5.10 reveals the complexities of the Pakistani male-female relationships at the school, with the girls' dislike of the mentality of the 'bad' boys who are only interested in playing around with girls. The community might view Moderns as good marriage options for their sons, as they were usually beautiful, slim and fashionable - much sought after qualities for potential marriage matches in the Pakistani community. Essentially Moderns could be deemed the image-conscious, popular, pretty and trendy girls at Riverburn High.

### 5.11.6   Messabouts

Messabouts were the naughtiest of the Asian girls at Riverburn High. They regularly engaged in deviant social practices such as smoking, drinking, dating and drugs, with overt anti-social and anti-school values much like the Burnouts in work by Eckert (1989*a*, 2000). They could be seen as appropriating masculine norms, often participating in school fights and having fearless, uninhibited personalities with little sense of femininity in terms of clothing and general demeanour.

**Extract 5.10:** Moderns on Guys

| | | |
|---|---|---|
| 1 | **Zahida:** | Do you know...no. No, their mentality is right, like...girlfriends right, |
| 2 | | and that is something that I absolutely hate. |
| 3 | **Huma:** | No, that - it's none - it's just the way they are. They... Like five, six |
| 4 | | girlfriends right you have. We hate that. We don't like that in them, |
| 5 | | and then we think we're friends with guys |
| 6 | **Zahida:** | that do all the stuff |
| 7 | **Huma:** | that we don't like. They wanna do their thing and we do our thing. |
| 8 | **Zahida:** | I don't like guys like that. |
| 9 | **Huma:** | Although, if we meet up we can sit and have a laugh. |
| 10 | **Zahida:** | that is like the main factor. |
| 11 | **Huma:** | But... It's just ...we tend to not listen anymore |
| 12 | **Zahida:** | Yeah. |

**Extract 5.11:** Messabout on Social Practices and Prospects

| | | |
|---|---|---|
| 1 | **Naazi:** | well, I just like messing about with my mates going out and that and |
| 2 | | chilling. I don't like studying, I don't like reading books, cause I just |
| 3 | | find that too boring. Apart fae that, I don't know... |
| 4 | | Yeah, this was some guy from Dorrockhills and that, I used to like him |
| 5 | | and that but thought he was married right. He used to mess about as |
| 6 | | well, and all my mates told me off not to go beside him, not to talk to |
| 7 | | him so I got over him... |
| 8 | **FA:** | What do you want to do? |
| 9 | **Naazi:** | I don't really know like erm well, I don't know. I was thinking of working |
| 10 | | in a bank before but I like hair and beauty and that I like messing about |
| 11 | | with the hair and doing mad colours in the face so...So I decided I wanted |
| 12 | | to get into hair and beauty right, and then my mum goes, it's decent |
| 13 | | like working in the bank I said but I like, I want to do hair and beauty. |
| 14 | | I want to check it out if it's good or not. I'll do it for a year and if I |
| 15 | | don't like it, then I might just get trained and work in the bank, but if |
| 16 | | I do like it and that I'll do the course and then maybe work somewhere |
| 17 | | and then get my own shop and that... |

They were referred to as the 'messabouts' or 'gangsta' wannabe girls by other Asian students. Clothing and style comprised of 'blinging' gold jewellery, baseball caps, sporty shoes and jackets, coloured contact lenses and dyed blonde or brown hairstyles. Staying within their own ethnic community was central and friendships were always with Pakistanis which was incongruous as their social practices seemed to be very anti-Pakistani. In Extract 5.11, Naazi discusses her likes and dislikes epitomising much of the Messabout mentality. Although she expresses her desire for employment (perhaps only due to the direct question by the interviewer), many Messabouts knew this was impossible as they clearly had no qualifications, desire and often expected their future partners to provide for them.

Messabouts were concerned with self-preservation, and territorial in terms of their locality and ethnicity. They did not venture out of their 'safe' space with local re-

**Extract 5.12:** Messabout Language

| | | |
|---|---|---|
| 1 | **Asma:** | it's Buzz, I'm not nervous |
| 2 | **FA:** | (*goes outside room to speak to some other pupils who were loitering* |
| 3 | | *around outside*) |
| 4 | **Rifat:** | just talk shite |
| 5 | **Asma:** | what the fuck do you talk? Are we fucking getting recorded? Aye we |
| 6 | | are |
| 7 | **Rifat:** | talk code language |

gional identity an important element in these girls' lives. They often originated from lower socio-economic backgrounds and poorer residential areas with troubled home lives, and were jealous of those from more privileged backgrounds. Much like Eckert's 'Burned-Out Burnouts', some of the girls had extremely rebellious stylistic practices to assert their toughness and rejection of the status quo certainly within the Pakistani community but also in the wider community. Language was often non-standard Scottish-English, mainly English but they used Punjabi code-switches typically for swear words or Punjabi idioms, and generally had the most vernacular speech as expressed in Extract 5.12.

Hanging out with boys was connected to discourses of toughness and importantly sexuality, which broke all traditional female Asian stereotypes. Messabouts were the antithesis of the ideals of Pakistani Muslim female identity rebelling against all norms within the community. This was especially regarding modesty, chastity and traditional female roles; from their non-conformist appearance to look less Pakistani through using black urban street style and look more 'White' such as dyed hair and light lenses, to their non-conformist behaviours like drug taking, smoking and generally loud and brash behaviour.

Relationships and sexual activity were commonly associated with the Messabouts, with other Asian students frowning upon their behaviour. Sexual innuendoes could be heard commonly, where girls would flirt with each other as well as with the opposite gender. Lesbian innuendoes were also rife where the girls would sit on each others' laps, stroke each others' hair, hug each other profusely and typically engage in similar affectionate acts. In Extract 5.13, Naazi talks about her relationships with the other girls in school, with a particular favourite Nigat, who is unaffected by Naazi's self-confessed antics.

Such open behaviour may have been more acceptable between girls as such banter and physical touching with boys would have been viewed extremely negatively and be deemed impermissible within the Pakistani community. Between girls, perhaps there was less sense of accountability as it was not automatically associated with sexuality but more likely seen as friendship. Not surprisingly many incidents which took place in secluded areas were narrated about boys and sexual acts in the nearby park and in vehicles during free periods.

**Extract 5.13:** Messabouts on Friendships

| | | |
|---|---|---|
| 1 | **Naazi:** | it's just like whatever I do, she's always stayed away from it - that's |
| 2 | | why I love her so much. She's like, she's like my sister like whatever I'll |
| 3 | | do, she just stays away from it. Well like some mates when they find |
| 4 | | out you do shit, they just like back off and that but she's always been |
| 5 | | there for me she's just so sweet. I love her! (laughs) |
| 6 | **Nigat:** | I know, I'm sweet! |
| 7 | **Naazi:** | asmaan thay char gayee aa hun! (laughs) (*she's on cloud nine now!*) |
| 8 | **FA:** | so she's like your good side and you're like the, |
| 9 | **Naazi:** | yeah and I just feel so |
| 10 | **FA:** | you're like the dark side? |
| 11 | **Naazi:** | bad like she's always there for me whatever I do. I don't know, I feel |
| 12 | | bad at times as well |
| 13 | **FA:** | why don't you hang around with people who do stuff like you though? |
| 14 | **Naazi:** | but then they just, well I don't know then they be like yeah that's the |
| 15 | | bad gang and I don't know it's just... |

Ironically, not all the Messabouts looked as if they would behave badly due to a particular item of their clothing - the headscarf. A few of the Messabout girls wore the headscarf but admittedly in all cases this was forced upon them by family. One Messabout named Bilqees flirted prolifically with boys, especially Danny the attractive boy who regularly engaged in crossing discussed earlier, and she loved 'feeling his biceps'. She had five elder brothers who enforced her wearing of the headscarf who she described as being very strict and protective.She even jokingly threatened Danny with being 'beaten up' if her brothers found out. Clearly, she was not interested in any sense of religious modesty when she wore the headscarf, as it was worn scantily around her head exposing much of her hair and cleavage, though when leaving the house she explained how she was much more covered.

Some Asian students expressed disgust at these types of Messabout girls who wore the headscarf in an on/off way before, during and after school, feeling it to be an insult, especially for those who wore it for the 'correct' or 'right' reasons. A popular derogatory term for these girls by other Asians in the school was 'slut in a scarf'. In Extract 5.14, two Asian girls (Conservative and a Wannabe) discuss their negative perceptions of such girls, noting the lack of religious motivation for wearing the headscarf as well as its fashion accessory status.

Truancy was a key issue for these girls. Many of the older Messabouts in S5 and S6 were only in school because a Scottish Government scheme encouraged pupils from lower economic backgrounds to stay in education by dispensing a weekly grant or allowance of around £30 to each student. This was called the Education Maintenance Allowance (EMA) and was based on parental income. The majority of Messabouts tended to leave after 4th year when they were legally allowed to leave full-time education, and often went on to college courses, apprenticeships, unskilled employment or the

**Extract 5.14:** On Hijab

| | | |
|---|---|---|
| 1 | **Ulfa:** | I think it's become more of a fashion like a trend to wear scarves because |
| 2 | | that's what my cousins are like. They'll compete with each other, if one |
| 3 | | wears it, then the other one's gotta wear it if she has different styles, |
| 4 | | then she's got to get that style as well |
| 5 | **FA:** | oh right, okay |
| 6 | **Ulfa:** | so with my cousins, it's like a war who can-, who's the best |
| 7 | **FA:** | whose got the best hijab! (laughs) |
| 8 | **Ulfa:** | yeah, and it's also they all pretend that they're proper Muslims but |
| 9 | | they're not and they're competing with each other like 'I go to this |
| 10 | | class as well as this class, I go to all these fifty classes and I do uni and |
| 11 | | all this' no |
| 12 | **Maisa:** | it's not a competition |
| 13 | **Ulfa:** | that's what they don't understand, it's not a compe-, and people talk |
| 14 | | about them like that - the way they competing with each other, cause |
| 15 | | it's two of my cousins that are doing it... |

**Extract 5.15:** Messabouts on Cultural Expectations

| | | |
|---|---|---|
| 1 | **FA:** | you'll be the trendy mum Rifat |
| 2 | **Rifat:** | buddi (*old woman*), mum? |
| 3 | **Asma:** | we'll all be man. We don't want our kids to go through what we go |
| 4 | | through pure shitting it all the time |
| 5 | **Hibah;** | I know. My mum's gonna see me here - 'oh shit we can't do this!' |
| 6 | **Asma:** | oh naw, I cannie turn this corner, mum'll pop out or something like |
| 7 | | that, so it's pure... |

dole (job-seeker's allowance). The grant was a key incentive for these girls to continue with school and attainment. However, unbeknown to governmental authorities, some Messabouts would literally register their attendance in the morning and afternoon session and then spend the rest of the time truanting. Activities during this time included hanging out in the nearby areas such as the park or tenement smoking or chatting to boys, cruising in cars with boys, and generally loitering in non-public places in case they were seen by school authority figures or family members. Messabout girls, Rifat, Asma and Hibah, discuss female cultural expectations in Extract 5.15 expressing their annoyance at them and fear of their bad behaviour being caught.

### 5.11.7   Shifters

Shifters moved around in terms of their social practices, where they were accepted as being changeable depending on situational context and interlocutors. They mixed and matched their practices, not ascribing to any fully, tending to float around in no markedly distinct group. The majority of Pakistani girls were in this category from lower middle class backgrounds where they engaged in the social practices of the

**Extract 5.16:** Shifters on Marriage

| | | |
|---|---|---|
| 1<br>2 | **Aliyah:** | I don't want to be a housewife because I know what it's like being a housewife - my poor mummy, my poor poor mummy |
| 3 | **FA:** | why? |
| 4<br>5<br>6<br>7 | **Aliyah:** | cause I want, I want - this is, this is my little dream right. Me and my husband have a nice house, I work, he works we come home, we spend some time together I cook stuff for him, he takes day off for me and we go out shopping or something like that |
| 8 | **Shazia:** | (laughs) that's so sweet! Exactly that is so cute |
| 9<br>10 | **Aliyah:** | and I don't want to like stay in the house, cook rotiyan (*chapatis*) for him, wash his kapray (*clothes*) and do |
| 11 | **FA:** | isthree (*iron*) his shirts! |
| 12 | **Aliyah:** | everything for him |
| 13<br>14<br>15 | **Aliyah:** | yeah isthree (*iron*) his shirts cause erm, I want him to do some of the kam (*work*) like he could iron the clothes, and I could like wash the clothes erm, I could, I could- |
| 16 | **Shazia:** | hand wash! |
| 17 | **Aliyah:** | I could, shut up! I could, I - |
| 18 | **Shazia:** | that's sweet! |
| 19 | **Aliyah:** | could cook the khana (*food*) |
| 20 | **Aliyah:** | and he could put it out on the dining table you know like that |
| 21 | **FA:** | equality in marriage? |
| 22 | **Aliyah:** | yes |

Conservatives, Religionistas, Moderns and Messabouts, though generally gravitating more towards the 'traditional' end of the spectrum.

In many respects the Shifters were quite naive and innocent, unsure of what was really ''bad' and what was 'good', dipping into the respective behaviour but not to any extreme. For example, they would truant from school and spend time at the pool hall but not go as far as smoking and drinking; they would talk about boys incessantly yet not venture as far as physical relationships; they would wear hijab but take it off casually for school dance shows; and they would even swear and be rude but not in front of authority figures or other students who were not part of their CofP.

In Extract 5.16 and Extract 5.17, Aliyah and Shazia talk about what their ideal marriage expectations and musical choices combining both traditional Pakistani and British elements, also exemplified through their regular code-switching between English and Punjabi. In many ways the Shifters took the most appealing aspects of both cultures, marrying them together in a seamless and off-the-radar type of way so as to avoid any criticism from any of the other Asian CofPs, the wider Pakistani and the non-Pakistani community. In this way, they remained safely within accepted norms at all times whilst enjoying the freedom to constantly shift their social practices.

**Extract 5.17:** Shifters on Music

| | | |
|---|---|---|
| 1 | **FA:** | What about music? What kind of music do you like listening to? |
| 2 | **Shazia:** | I would say Bollywood dance music |
| 3 | **Aliyah:** | bhangra! |
| 4 | **Shazia:** | some some kind |
| 5 | **Shazia:** | of bhangra obviously, Bollywood dance and some of them lovey dovey |
| 6 | | but definitely lovey dovey English music, aww they're sweet |
| 7 | **Aliyah:** | in my phone, there's so many weird different types of song |
| 8 | **Shazia:** | she's |
| 9 | **Aliyah:** | like you know when |
| 10 | **Shazia:** | got the worse songs ever |
| 11 | **Shazia:** | no I'm only joking |
| 12 | **Aliyah:** | no when I'm in that kind of mood to listen to them like I like listening |
| 13 | | to the sad Bollywood songs and stuff like that, but you know when I'm |
| 14 | | hyper and all that I feel like listening to all these Punjabi, and I'll feel |
| 15 | | like dancing and stuff like that |
| 16 | **Shazia:** | I love English songs, I think they're so cool and the guys who sing them |
| 17 | | are just so hot well some of them |
| 18 | **FA:** | like Enrique Inglesias? I think he's quite attractive |
| 19 | **Shazia:** | no, I think, I don't know who I think about but I think Jay Holiday's |
| 20 | | voice is so cool. Jay Holiday, yeah Jay Holiday |
| 21 | **Aliyah:** | I don't listen to these |
| 22 | **Shazia:** | 'Bed' (sings) 'I'm gonna put you to bed'. Have you not heard that song? |
| 23 | | It's such |
| 24 | **FA:** | I'm gonna put you to |
| 25 | **Shazia:** | a cool- it's called |
| 26 | **FA:** | bed? |
| 27 | **Shazia:** | 'Bed' - it's nothing dirty or anything but it's really really good it's really |
| 28 | | really, I like it I listen to the slow version, it's so sweet! And it's like |
| 29 | | oh my god! It's like thanks for letting me bless you and stuff, it's like |
| 30 | | what your saying it's just so sweet, the words and so... |

### 5.11.8 Wannabes

Wannabes were the least Asian of the CofPs at Riverburn High, and were so named as their social practices suggested they 'wanted to be White'. They were peripheral and isolated from the mainstream Asian school community likened to the Lames in Labov (1972*b*) or the Nerd girls in Bucholtz (1999). Often they were disparagingly referred to as a 'coconut' or an 'ABCD' 'a born confused desi' (*Asian*) by other Asian CofPs. (A 'desi' is the Punjabi word for an Asian). This was conceived of as a person who had a major identity crisis in terms of heritage and essentially trying to be something they are not. Interestingly many of the Wannabes had at least one or both of their Pakistani parents who were born and raised in the UK so were native English speakers. Moreover, those of mixed heritage, e.g. Pakistani and another heritage, were almost always part of this CofP.

Wannabes had the strongest inter-ethnic friendships networks, where many of their friends were predominantly White or from other ethnic minorities. Accordingly they engaged in and enjoyed many Scottish social practices e.g. playing musical instruments; fine arts; classic old school English music; watching British TV soaps and dramas like 'Eastenders' and sporting events like Wimbledon; drinking alcohol and dancing. In Extract 5.18 two Wannabes scathingly discuss the disapproval from the mainstream Asian school community of friendships with White students. Often Wannabes were marginalised or even bullied by the mainstream Asian groups in the school for being uncool thereby perhaps encouraging their greater inter-ethnic networks.

Many of their personal styles were linked to the relevant styles of their non-Asian friends, e.g. moshers, goths and emos, with punk, pop, rock and American influences featuring heavily in their daily lives. Such pursuits have sometimes been linked to the middle classes (Kirkham 2013) and Wannabes certainly had a sense of superiority over those with more traditional Pakistani pursuits. In Extract 5.19, a Wannabe Maisa acknowledges her different identity compared to other Asians in the school. In general, Wannabes were more casual, relaxed, comical and witty in their conversations, having a somewhat unusual sense of fun and amusement and certainly not worried about fitting in. This was contrary to how they perceived the uniform social practices of other Asian students who they found irritating and difficult to engage with and this is exemplified in Extract 5.20.

Purposefully, they rarely alluded to their Pakistani heritage except in negative and sarcastic ways, e.g. seldom speaking Punjabi or Urdu or wearing traditional clothes even at school events (unless forced by family in terms of the headscarf or their own personal issues surrounding the donning of the headscarf and peer pressure to retain it). Even when their peers mocked Asian culture they said little or laughed along, e.g. when their non-Asian friends mocked elaborate choreographed Bollywood dances in Indian films.

They were a hard group to infiltrate and conversation flow was awkward as there

**Extract 5.18:** Wannabes on Inter-Ethnic Friendships

| | | |
|---|---|---|
| 1<br>2<br>3 | **FA:** | oh that's quite unusual actually - I think you're like the first people that I've actually spoken to who've like actually talked about having goray (*White*) friends... |
| 4<br>5<br>6 | **Maisa:** | oh we're on, we're on the border of 'uncool' in Asian peoples' eyes. Well me I was, I was classed as uncool for a very long time cause, talk to Asian cause people I don't, you know |
| 7 | **Romeeza:** | yeah I mean since |
| 8 | **Ulfa:** | so was I |
| 9 | **Maisa:** | you know us Pakis should 'stick together!' |
| 10 | **Ulfa:** | cause in first and second year, I never used to hang around with Asians, |
| 11 | **Ulfa:** | I used to hang around with Buzz |
| 12 | **Romeeza:** | I hung about with like goray, like Buzz, |
| 13 | **Maisa:** | all of them yeah exactly and like like |
| 14 | **Romeeza:** | you did it as well, Buzz |
| 15 | **Maisa:** | lots of people in this school find that very difficult to swallow |
| 16 | **Ulfa:** | a lot? Everybody finds it! |
| 17 | **Romeeza:** | but now, now we've like |
| 18 | **Maisa:** | but now I'm alright with some |
| 19 | **Ulfa:** | as if you know |
| 20 | **Romeeza:** | yeah, I didn't used to have any Asian friends in like |
| 21<br>22 | **Ulfa:** | one of them actually asked me that, she goes, 'Why do you hang around with only Christian friends', I was like, |
| 23 | **Maisa:** | Buzz used to say that to me, she used |
| 24 | **Ulfa:** | it wasn't Buzz, it was someone else |
| 25<br>26 | **Maisa:** | to say 'Oh why do never hang around with Asian people oh! You should be ashamed of yourself!' and stuff like that |
| 27 | **FA:** | Buzz who? oh |
| 28 | **Romeeza:** | aye, she's left now |
| 29 | **Maisa:** | she doesn't go to this school any more |
| 30 | **FA:** | I don't know |
| 31 | **Ulfa:** | I can't remember who asked me that |
| 32 | **Romeeza:** | oh she was weird! |
| 33 | **Maisa:** | it's my choice of friends, what does it matter to you? |
| 34 | **FA:** | why should you be ashamed? |
| 35 | **Maisa:** | because they're (*whispers*) '**White**'! |

**Extract 5.19:** Wannabe on Identity

1    **Maisa:**      it's just one mould and everybody has to fit the mould... I'm slightly
2                      strange from everybody...else, I'm like a rock'n'roll kind of, that's why
3                      I've got my skull and cross bones shoes and my big baggy jumper and
4                      my nail polish. Black nail polish if I wanted. But erm, no just kind of
5                      very different. I know, I know it sounds strange. I know it sounds like
6                      I'm trying to be- but I've always kind of been like an outsider.

**Extract 5.20:** Wannabes on Other Asians

1    **Maisa:**      I sort of tend to find that I don't mind neds as much as I mind Asian
2                      people

3    **FA:**          (laughs) What? The Asian neds or just generally the Asian people?
4                      What are you trying to say? Maisa's just like, 'I don't like Asian people!'

5    **Ulfa:**        some can annoy you

6    **Maisa:**      no, no just the kind of proper like the girls that all look the same and
7                      the guys that try and act hard when they're not. It's just like you know-

8    **Romeeza:**   I know, I hate, I-

9    **Maisa:**      on the, I'm not exactly

10   **Romeeza:**   hate people like that

11   **Maisa:**      on the same level as them. I don't listen to like the same music, and I
12                     just kind of have different morals and stuff like that, so I find it kinda
13                     difficult to...

were few common interests especially as their recordings were often with their non-Asian friends. However my own schooling and upbringing in an all-White Catholic school in a small Scottish border town coupled with my fairly standard Scottish English accent put many of them at ease, as I was not unaware or ignorant of their preferred lifestyles and was consequently not seen as a 'hardcore' Asian.

They derived from mainly more affluent backgrounds and were in many respects diametrically opposed to the Messabouts who still shared some of their deviant social practices. Messabouts were considered poor, unaspiring, Asian, unrefined, bad, 'gangsta wannabes'; whereas Wannabes were richer, aspiring, more British, refined, good and 'posh'. Surprisingly they were not as centred on appearances in terms of hair, clothing and make-up, and used more alternative styling with a focus on personality and humour. Linguistically, they sounded more nasalised and creaky in phonation characteristic of an 'emo-esque' or American style, whilst still generally having one of the most standard-sounding Scottish English accents of all the Asian CofPs.

## 5.12 Summary

Ethnographic methods revealed a number of important qualitative observations about the adolescent Asian girls at Riverburn High School. Observations ranged from inter-ethnic and intra-ethnic divisions as well as gender and generational differences in social

and linguistic practices. These were operationalised using the Community of Practice (CofP) framework and the salient CofPs that emerged were the Conservatives, Religionistas, Moderns, Shifters, Messabouts and Wannabes. The CofPs had varied social identities and sometimes oppositional and complementary stances relating to orientation towards their Pakistani Muslim and British identity. A basic schematic representation as in Figure 5.3 illustrates that Conservatives were generally seen as the most traditional in terms of Pakistani heritage and Wannabes the least, but other subtle differences distinguished all CofPs in terms of psycho-social orientation towards ethnicity, religion and culture.

During the course of the three year ethnography, perceptions of the Asian girls in the school developed and changed as more was gradually revealed. And while there is recognition that the Asian CofPs described in this chapter are not the only way of conceptualising their social identity, it was deemed the most appropriate to capture the fieldwork. However, this is not to say that the Asian girls or the CofPs could not be categorised in other ways, such as using stance or demographic information which could also yield useful results. Work by Drager (2009) used stance as a much broader grouping of common room versus non-common room girls in order to assess the social meaning of variation., where CofP was not a useful depiction of her data. However, in the present study, the use of CofP yields interesting and significant results as will be revealed in Chapters 6 and 7.

Importantly, whilst social class distinctions have been suggested, this does not imply that class divisions in the Asian community work in the same way or even on the same axis as the British class system. This is especially linked to factors such as the complexity of the Pakistani caste system, place of origin in Pakistan (e.g. rural or urban areas) and differing levels of education which do not correlate easily with social class which is linked to wealth, aspirations and attitudes. Moreover, CofPs cannot be easily correlated with class as a CofP by its very nature is fluid and evolving through time; not a fixed demographic category. Here CofP is treated as fixed because that is the snapshot that was provided at the time of ethnography.

Previous linguistic research in America and in the UK has suggested that social identity can influence language behaviour including phonetic features such as vowels and consonants (Labov 1972b, Eckert 2000). In Eckert's work in America for instance, phonetic features construct and reflect personal identities. In Scotland, with its demographically smaller ethnic community and smaller still Pakistani Muslim community, this study examines whether social differences like these map onto linguistic differences. The next two chapters will examine the stop /t/ and vowels in Glasgow Asian speech with respect to the girls' CofP membership.

# Chapter 6

# Realisation of /t/

## 6.1 Overview

As seen from the ethnography in Chapter 5, social and contextually relevant identities are salient for individuals through engagement in particular social practices theorised using the CofP framework. Such variation in social practices might map onto linguistic practices as language itself is considered a type of social practice (Eckert 2000).

This chapter investigates one salient phonetic feature of 'stylised' British Asian English speech, the realisation of the stop /t/, which has also been previously identified as a feature of *Glaswasian* (Alam 2006, Lambert et al. 2007). The structure of this chapter will first outline the background and motivation for /t/, followed by a description of the methodology which takes an auditory and acoustic view of the data. Descriptive and statistical results will be presented for both auditory and acoustic analysis before finishing with a discussion of the findings.

## 6.2 Research Question for /t/

The main focus for /t/ is to ascertain whether fine-grained phonetic variation of stressed syllable initial /t/ (e.g. *talk*) in Glasgow-Asian girls signals different social identities. Specifically, this chapter will address the following question:

1. How is /t/ realisation conditioned by linguistic and social factors?

## 6.3 Background on Stops

Stops are common across all the world's languages (Ladefoged & Maddieson 1996) and coronal stops are the most prevalent (Laver 1994). Stops are characterised by a silent closure phase then quick release away by the active articulator and a burst phase (or transient on a spectrogram) which shows the aspiration from the build up of pulmonic air pressure which is released suddenly as the burst.

**Table 6.1:** Consonant Phonemes of Modern Standard Punjabi of India (adapted from Shackle 2003, p.589)

| Place Artic. | Bilabial | Labio-Dent | Dental | Alveolar | Post-Alv | Retroflex | Palatal | Velar | Uvular | Glottal |
|---|---|---|---|---|---|---|---|---|---|---|
| Plosive | p, pʰ, b | | t̪, t̪ʰ, d̪ | | | ʈ, ʈʰ, ɖ | c, cʰ, ɟ | k, kʰ, g | | ʔ |
| Nasal | m | | n | | | ɳ | | ŋ | | |
| Tap/Flap | | | ɾ | | | ɽ | | | | |
| Fricative | | f, v | s, z | | ʃ | | | x, ɣ | | h |
| Approximant | | | | ɹ | | | | | | |
| Lateral | | | l | | | | | | | |
| Affricate | | | | | tʃ, tʃʰ, dʒ | | | | | |
| Semi Vowels | | w | | | | | | j | | |

**Table 6.2:** Consonant Phonemes of Standard Urdu (adapted from Schmidt 2003, p.308)

| Place Artic. | Bilabial | Labio-Dent | Dental | Alveolar | Post-Alv | Retroflex | Palatal | Velar | Uvular | Glottal |
|---|---|---|---|---|---|---|---|---|---|---|
| Plosive | p, pʰ, b, bʰ | | t̪, d̪, d̪ʰ | | | ʈ, ɖ, ɖʰ | c, cʰ, ɟ, ɟʰ | k, kʰ, g, gʰ | q | |
| Nasal | m | | n | | | ɳ | | ŋ | ɴ | |
| Tap/Flap | | | ɾ | | | ɽ | | | | |
| Fricative | | f, v | s, z | | ʃ, ʒ | | | x, ɣ | | h |
| Approximant | | | | | | | | | | |
| Lateral | | | l | | | | | | | |
| Affricate | | | | | tʃ, dʒ | | | | | |
| Semi Vowels | | w | | | | | | j | | |

Sociolinguistic variation in the realisation of the stop consonant /t/ has been well-documented in British English, focusing on features such as glottalisation (Wells 1982, Foulkes & Docherty 1999, Clark 2009, Drummond 2011, Schleef 2013) and /t/ affrication (Watson 2007, Ogden 2009, Kirkham 2013). Realisation of /t/ in many British English accents is typically a voiceless alveolar plosive, but studies like Foulkes & Docherty (1999) in Newcastle and Derby have shown that it can be glottalised, exhibit pre-aspiration, use creaky voice and have no obvious closure period or release burst. Such diverse variation has been systematically linked to the social attributes of speakers such as gender and age. American linguists have also studied hyper-articulation of /t/ release suggesting it has an important indexical value and partakes in a wide indexical field in the construction of different social identities linked to factors such as intellectual, religious and sexual orientation (Eckert 2008*a*, Bucholtz 2011, Benor 2011, Podesva 2004).

For the English accent of the British Pakistani community it is the **place of articulation** when producing stops that has become a salient part of their English accent. These are often related to post-alveolar realisations possibly linked originally to substrate language influence (Alam 2006, Lambert et al. 2007, Kirkham 2013, Sharma & Sankaran 2011). The phonemic inventories of Punjabi and Urdu are shown in Table 6.1 and Table 6.2 which indicate dental-retroflex contrasts in stops. Importantly, Pakistani-Punjabi may vary slightly to Indian-Punjabi as it has been greatly influenced by Urdu which in turn was largely influenced by Persian/Farsi, Arabic and latterly English. However, surprisingly very little has been documented about Pakistani-Punjabi phonology (though c.f. Karamat 2001, and other small studies by the Centre for Research in Urdu Language Processing (CRULP) in Pakistan).

Previous work on British Asian English has reported the use of retroflex linguistic

variants (Heselwood & McChrystal 2000, Hirson & Sohail 2007, Sharma & Sankaran 2011, Zara 2010). Stylised Asian English in the British media often portrays characters using typical Pakistani features of speech, especially retroflexion in stops such as /t, d/ and in approximants such as /r, l/, e.g. 'Navid' in the Scottish comedy *Still Game*, 'Taj' in the satirical comedy *Airport* and 'Mr Khan' in the Birmingham based comedy *Citizen Khan*.

In contrast to Punjabi/Urdu, Scottish-English stops will typically show a denti-alveolar place of articulation with Stuart-Smith (1999) also reporting laminal tongue tip gestures in Glaswegian (which are different to the apical gestures characteristic of Anglo-English alveolar stops). Scottish-English stops also have little or no aspiration in word-initial or word-medial position and are usually only aspirated word-finally (Aitken 1984).

Third wave sociolinguistic research using the CofP framework has connected /t/ realisation in British-Asian varieties to social identity. In previous work by Alam (2006) and Lambert et al. (2007) on a small subset of the current sample, auditory analysis of /t, d/ suggested there was a relationship between auditory impressions and social identity, specifically CofP which connects the development of linguistic practices with the wider development of social meaning. Alam (2006) found post-alveolar realisations for both phonemes in young Glasgow Asian girls varied according to engagement with social practices, with /t/ carrying greater sociolinguistic weight, e.g. the most traditional Pakistani girls used the most retracted variants suggesting a stronger affiliation to heritage culture and language. Importantly, these realisations were not truly retroflex from an articulatory perspective, but ranged on some type of continuum between alveolar and retroflex as well as nuances in other dynamic aspects of the gesture. Older generations might typically select the retroflex /ʈ/ in place of English /t/ but younger generations are certainly less likely to do so, and instead may appropriate some type of auditorily retracted variant signifying a 'different' social or ethnic identity.

Kirkham (2013) in his acoustic study on Sheffield English also showed robust differences in the realisation of /t/ in word elicitation tasks between White and Pakistani adolescents using measures such as voice onset time, relative burst intensity as well as spectral moments. He too links these differences in /t/ to the construction of different social identities. His analysis examined /t/ affrication which is an unenregistered feature of the local area, in stressed word initial position, e.g. *time*, and found that anti-school groups such as the Rebellious CofP used more affricated variants. These findings support observations from European research which links /t/ affrication with anti-school stances indexical of an urban multi-ethnic youth identity (Quist 2008). Gendered differences in /t/ affrication were also apparent, with boys using ethnicity as an axis for differentiation (e.g. boys from ethnic minorities used more affrication compared to White boys) whereas girls' use of affrication patterned with CofP membership, highlighting the salience of social grouping for individuals which does not always match with ethnic categories.

Sociolinguistic work from a discourse analytic perspective on a Punjabi Indian Sikh community in Southhall by Sharma & Sankaran (2011) examines generational differences in /t/ realisation with regards to retroflexion. Auditory analysis of /t/ suggests that retroflexion is experiencing variation in meaning and usage in this community such that bidialectalism is apparent whereby speakers acquire local features such as t-glottaling whilst retaining exogenous features such retroflexion but both are independently constrained by cognitive and social forces. From variationist analysis of /t/, young women were found to use the least retroflexion and men the most. However subsequent work by Sharma (2011) includes the use of three other linguistic features, /e, o, l/ in a wider repertoire analysis whereby clusters of variables may work together. She concludes that individual speakers actually use a wide variety of /t/ articulations in different interactional contexts, including women who showed very low rates in the earlier analysis. She also found dialectal and exogenous forms for the other variables such as diphthongal /e/ which is common in London Cockney accents, linking dialectal repertoires to network diversity indexes, gender roles and community history in terms of settlement period. To summarise, much of the linguistic work on /t/ realisation in British Asian has suggested that it may mark aspects of social identity in this community.

## 6.4 Methodology

### 6.4.1 Methods of Phonetic Analysis for /t/

Whilst prior auditory and acoustic analyses of /t/ in British Asian varieties have shown social correlates, recent advances in articulatory work in phonetics have highlighted how difficult it is to be certain about the place of articulation - or indeed what the articulation itself is. For example ultrasound speech analysis on post-vocalic Scottish rhotics (e.g. *car*) have identified the presence of 'bunched' /r/ realisations once thought to be defined auditorily as retroflex approximants /ɻ/ according to IPA conventions which have supposed articulatory characteristics (Lawson et al. 2014, Stuart-Smith et al. 2014). Incongruous data like this indicates that auditorily defining articulations in two dimensional ways such as place of articulation and shape of active articulator, using IPA labels to represent sounds can be problematic. This is because the relationships between auditory, articulatory and especially acoustic measures is still very unclear. Future articulatory work would help pin down these relationships more fully, but meanwhile IPA labels should be regarded as a kind of 'quasi-articulatory' shorthand.

Auditory phonetics can be thought of as componential; where what is heard by an individual is taken in as a holistic unit but is then broken down into chunks for ease of processing (Laver 1994, Ogden 2009, Johnson 2011). For example, when hearing a /t/, an individual may define it as a fronted place of articulation, laminal tongue shape etc. The problem with this however is that the description necessarily loses

aspects of the full dynamic gesture, which can be more accurately analysed by instrumental analysis such as electropalatography (EPG) and ultrasound tongue imaging. Such methods allow a more specific examination of tongue contact patterns, linguistic strategies and combined movement of articulators throughout a speech token which involves the production of variable filters in the vocal tract with different cavities and resonances. Nonetheless, auditory analysis is useful as it gives a recognizable and necessarily rough approximation of what the analyst hears through the auditory apparatus, including segmental, lexical and suprasegmental aspects of speech. Foulkes et al. (2011) note that if auditory categories are defined, justified and applied consistently and accurately, such methods can be as valid as instrumental techniques. Acoustic speech analysis, whilst becoming increasingly detailed, cannot be dissociated from what the human ear actually perceives holistically. For this reason, it was deemed useful to have an impressionistic auditory view of the speech tokens for this speech community.

Acoustic phonetic analysis is perhaps even more complex than auditory phonetics, as mapping specific objective measurements such as spectral moments of the stop burst onto perception and articulation is still very unclear, though general assumptions may be made through inference and extrapolation from the data (Johnson 2011). The main benefits of acoustic methods are yielding continuous data which has not been predefined into analytical categories. Acoustic representations make it possible to see detailed static and individual aspects of speech in a way that auditory representations cannot (Ogden 2009). These types of measures may also have potentially greater statistical robustness due to the linear data which can be analysed more easily. Nonetheless, Ogden (2009) also notes that while acoustic measures appear on the surface to be more objective because of the greater replicability of analysing acoustic signals, they are still prone to subjective decisions by the analyst, e.g. measurement points, temporal resolution or window length, software settings and recording equipment. Also whilst multiple quantifiable measures such as four independent spectral moments can give greater insight, they cannot capture the dynamics of human speech perception which is not segmented in the same way as acoustic analysis necessitates. More importantly one should consider the fact that the Hertz scale does not translate well into how the ear and brain actually analyse the signal as they do not use a linear scale. In order to mitigate such effects Arbisi-Kelm et al. (2008) have suggested the use of an auditory-based transform which may be more meaningful in relation to capturing the production and perception of stop consonants. Such issues highlight the fact that these different views of speech are necessarily partial and fully understanding the fine-grained acoustic-auditory-articulatory relationships is exceedingly complex.

In the present study, the stop /t/ was analysed using both auditory and acoustic methods allowing a richer understanding and representation of speech variation. To summarise, auditory analysis is discrete, holistic, arguably more subjective but gives an impression of the whole dynamic entity; whereas acoustic analysis is continuous, atomistic, static but potentially more objective and replicable. On one hand, auditory

**Table 6.3:** Data Sample for /t/

| CofP | No.Tokens | Sample % | Speaker | No. Tokens | Spk % |
|---|---|---|---|---|---|
| Conservative | 162 | 23 | Aneela | 79 | 11 |
| | | | Inaya | 49 | 7 |
| | | | Ruqaiyya | 34 | 5 |
| Religionista | 81 | 12 | Fyza | 25 | 4 |
| | | | Neelum | 29 | 4 |
| | | | Zainab | 27 | 4 |
| Modern | 172 | 25 | Alisbha | 31 | 4 |
| | | | Huma | 59 | 8 |
| | | | Zahida | 82 | 12 |
| Shifter | 96 | 14 | Aliyah | 33 | 5 |
| | | | Asiya | 31 | 4 |
| | | | Nyla | 32 | 5 |
| Messabout | 94 | 13 | Asma | 19 | 3 |
| | | | Naazi | 46 | 7 |
| | | | Rifat | 29 | 4 |
| Wannabe | 92 | 13 | Kinza | 14 | 2 |
| | | | Maisa | 35 | 5 |
| | | | Romeeza | 43 | 6 |

analysis relies on a holistic view of the shape of the stop constriction and the dynamics of the stop burst; whereas acoustic analysis is derived from a single time point at the stop burst giving a static view of the front cavity and shape of the constriction. Arguably both views are valid, useful and complementary, hence the undertaking of both forms of analysis. Importantly, taken together they give an impression of the possible relationships between speech perception and production.

## 6.4.2   Data Sample

Speech from eighteen female speakers was used in the /t/ sample which yielded a total of 697 stressed syllable initial tokens. Speakers were all taken from the *Glaswasian* corpus, aged 15-18 years old and three speakers were taken from the six CofPs (Conservatives, Religionistas, Moderns, Shifters, Messabouts and Wannabes). Table 6.3 shows a summary of the CofPs and speakers (pseudonyms) including information about the number of tokens and proportion of the data sample.

The aim was to analyse 30 tokens per speaker but this was not always possible given exclusions (see Section 6.4.4), and inevitably meant that some of the CofPs had a larger number of tokens than others. The Conservative and Modern CofP comprised approximately 50% of the data, whilst the remaining four CofPs (Religionista, Shifter, Messabout and Wannabe) comprised the remaining 50% in roughly equal proportions.

### 6.4.3 Data Preparation

In LaBB-CAT, searches for all stressed syllable initial /t/ tokens were extracted back into Praat with their utterance and corresponding Praat textgrid. The extracted /t/ sound files were high pass filtered at 450Hz and low pass filtered at 12000Hz to remove extraneous low frequency energy and to prevent aliasing, or the appearance of false peaks in the spectrum (Harrington 2010).

Auditory analysis was done through hand-annotation in Praat. At the same time, for the acoustic analysis each stop was hand-segmented through careful examination of the wideband spectrogram and waveform. The burst was labelled at the first discernible peak in the speech waveform which also typically coincided with the darker striations on the spectrogram with a duration window of around 0.01 seconds when zoomed in. Preceding and following segment were also coded as well as the assumed Tongue Place and assumed Tongue Shape.

### 6.4.4 Excluded Tokens

All tokens were checked during the listening and coding process to ensure they met the required criteria and dubious tokens were discarded. The main reasons for discarding of tokens are given below:

1. Unstressed /t/ tokens: different stress patterns for different speakers emerged. Due to differing intonation patterns for some participants, this meant that typically unstressed tokens in English were occasionally stressed, e.g. in the word *into* in Conservatives /t/ was stressed so this token was retained, whilst the more usual unstressed tokens of such words were removed

2. Double peaks at the burst on the waveform: sometimes the waveform would show a very slight first initial peak, and then a much greater second peak, but for consistency it was always the first sharp peak that was measured and not the pseudo peaks which occurred before as these did not seem to correspond with the burst on the spectrogram

3. Co-articulation, e.g. *told to*: difficulties in segmenting the /t/ from the previous segment meant these were excluded

4. Geminates e.g. *got to*: again, difficulties in segmentation as well as problems with where the stress lay, e.g. word-finally or word-initially

5. Noise interference with microphone, e.g. rubbing of clothing, outside noises: such instances were difficult to label as extraneous noises were recorded in the speech signal

6. Instances of speaker overlap: again difficult to label accurately as well as unclear bursts

**Table 6.4:** Classification of Preceding Segments

| Classification | Preceding Segment |
|---|---|
| plosive | p, t, d, k, ʔ |
| nasal | n, m, ŋ |
| fricative | s, z, f, v, ʧ, ʤ |
| approximant | r, w |
| lateral | l |
| front vowel | i, ɪ, e, ɛ, a, ai |
| non-front vowel | ʉ, o, ɔ |

**Table 6.5:** Classification of Following Segments

| Classification | Following Segment |
|---|---|
| approximant | r, w |
| front vowel | i, ɪ, e, ɛ, a |
| non-front vowel | ʉ, o, ɔ |

7. Pre-fricative contexts within-word, e.g. no /t/ after /s/ in words like *start*: fricative energy interfered with the realisation of /t/ and consonant clusters such as these made segmentation difficult.

8. Extreme outlier tokens were removed after inspection of raw data and summary statistics after being checked in Praat again for possible errors in the coding procedure.

### 6.4.5 Coding Adjacent Phonetic Context

During coding of the stop burst, phonetic environments (both preceding and following) were categorised according to manner of articulation for consonants and Scottish vowel quality as shown in Table 6.4 and Table 6.5. Mid vowels were considered front vowels as they are typically more fronted in Scottish English. Also notably, approximant contexts were nearly always /r/ in preceding segments, e.g. *you're talking* but with fewer instances of the voiced labial-velar approximants in following segments, e.g. *twelve, twenty*.

**Preceding Segment**  Table 6.6 gives a summary of the preceding segments, and reveals that plosive, nasal, fricative and front vowel contexts comprise a much larger proportion of the data - approximately 20% each. (Thirty tokens were not coded for preceding segment as these were phrase and word initial tokens of /t/ so when extracting from LabCaTT preceding segment was not visible).

**Following Segment**  Table 6.7 shows the raw counts and percentages of the following segments. Front/non-front vowel contexts had considerably greater numbers, compared

**Table 6.6:** Summary of Preceding Segment for /t/

| Preceding Segment | No. Tokens | Sample % |
| --- | --- | --- |
| plosive | 146 | 20 |
| nasal | 136 | 20 |
| fricative | 112 | 16 |
| approximant | 50 | 7 |
| lateral | 18 | 3 |
| front vowel | 133 | 19 |
| non-front vowel | 72 | 10 |
| phrase-initial | 30 | 4 |

**Table 6.7:** Summary of Following Segment for /t/

| Following Segment | No. Tokens | Sample % |
| --- | --- | --- |
| approximant | 57 | 8 |
| front vowel | 175 | 25 |
| non-front vowel | 465 | 67 |

to the approximant context, with non-front vowels accounting for 67% of the data. There were a total of 108 different words in the data set, with the most frequent words being *to, time, talk, two* and *too* respectively (See Appendix A). Interestingly, the majority of the non-front vowel classification was comprised of the /ʉ/ vowel, where the word *to* made up 39% of the data in total (305 *to* tokens). As many of the girls' 'to' tokens sounded syllable-timed (a feature of Punjabi/Urdu), the vowels were not heard as fully reduced to schwa. This lack of full vowel reduction may be as a result of the whole utterance being heard as syllable-timed, so even typically English unstressed sounds were heard as stressed. Future work could isolate the lexical item 'to' from the rest of speech tokens in order to assess particular effects that may occur with this particularly frequent word, (cf. Bybee & Hopper 2001).

Following contexts were collapsed together due to the low numbers, e.g. front close vowels and front vowels were collapsed together as *front vowel* in following segment (e.g. /i, e/), as were back close vowels and back vowels (e.g. /u/ and /ʉ/). This was done only after initial summary data (boxplots) of the separate categories were produced. Data were very similar, so were merged for the purposes of the chosen analysis using R, where fewer levels are more easily interpreted and more levels may mean the models may not be possible.

## 6.4.6 Statistical Method: Mixed Effects Models

After the initial summary statistics, Logistic and Linear Mixed Effects Models (LMEMs) were employed as discussed in Chapter 5 to ascertain whether linguistic constraints and/or social constraints affected /t/ realisation in this sample. To summarise, this method was primarily selected over Analysis of Variance as this allows inclusion of

random effects such as Word and Speaker which are in a nested structure alongside the fixed effects or predictor variables (Barr 2013, Johnson 2009). Such random effects cannot be included effectively in ANOVAs but should be accounted for, as outliers may skew results leading to Type I errors (finding significance where there is none), though subsequently increasing the risk of Type II errors (where genuine effects are not observed). Importantly, as social effects are likely to be weaker, they may be more statistically subtle thereby possibly more prone to Type II error.

In preparation for running the LMEM, two main steps were undertaken. Step One was identifying the fullest possible model by including variables (main effects and interactions) until the most saturated model was possible in a manual forward step. However, early on it became apparent that a fully saturated model was not compatible with the data due to unbalanced token counts within each possible combination (cell). Step Two involved identifying the best-fit model. A methodical and targeted procedure was used in testing the different models, bearing in mind that the main hypothesis was that linguistic (e.g. adjacent phonetic context) and social constraints (e.g. CofP) may have an effect on the response variable (e.g. Centre of Gravity). Analysis of Variance (ANOVA) tests were used for model comparisons to see which model fitted the data best and the simplest model was selected based on Chi Square values. Planned comparisons using relevelling of the factors allowed an inspection of significant effects (p<0.05).

### 6.4.7    Auditory Analysis: Tongue Place and Shape

A narrow fine-grained auditory phonetic transcription was made for each token of /t/ following phonetic notation conventions from the International Phonetic Association (International Phonetic Association 1999, Ogden 2009). Specifically, a coding system for the phonetic annotation was used for the assumed **place** of articulation of the tongue but also the transcription in the assumed **shape** or gesture of the tongue shape which was heard as apical (tongue tip) or laminal (tongue blade). This two parameter coding system was used due to the initial auditory impressions of the stop. Transcriptions were double-checked by an experienced phonetician for consistency.

Stops are fairly complex in terms of articulation. Here the auditory analysis was broken down into two parameters: place of articulation (Tongue Place) which relates to the position of the tongue on the front/back dimension; and shape of the tongue (Tongue Shape) in terms of the tongue configuration when contacting the upper part of the oral cavity when producing a stop. As noted in Section 6.4.1, such distinctions are assumed and expressed via IPA symbols without definitive knowledge about the exact articulatory movements when a sound is heard.

Table 6.8 presents the auditory codes used for Tongue Place and Tongue Shape as well as a summary of the token counts. For Tongue Place it shows that the neutral tongue position was most common at 58%, whereas the fronted and retracted tokens make up substantially less. Tongue Place was initially coded as fronted, neutral (alveolar) or retracted and later recoded to retracted/not-retracted for binomial

**Table 6.8:** Summary of Tongue Place and Shape for /t/

| Tongue | Code | No. Tokens | Sample % |
|---|---|---|---|
| Place: fronted | f | 123 | 18 |
| Place: neutral/alveolar | n | 404 | 58 |
| Place: retracted/post-alveolar | r | 170 | 24 |
| Shape: apical | a | 619 | 89 |
| Shape: laminal | l | 78 | 11 |

statistical analysis. The baseline reference dependent variable for Tongue Place was 'not-retracted'. Tongue Shape was categorised here in two ways; apical (tip) or laminal (blade), with the apical realisation most common at 89% compared with 11% laminal realization. Apical tongue tip realization of /t/ has a 'sharper', clearer sound compared with the laminal realization which sounds 'softer' and more diffuse - both of these auditory impressions resulting from the different cavities that are formed by the constriction (Catford 2001). The dependent variable for Tongue Shape was 'apical'.

Logistic Mixed Effects models were run on the auditory data and the results are presented in log-odds, or probabilities, which show the predicted statistically significant results given so many iterations of the same model. Categorical dependent variables were: a) Tongue Place of articulation (retracted/not retracted); and b) Tongue Shape (apical/laminal).

### 6.4.8 Acoustic Analysis: Spectral Moments

For the acoustic analysis, a Praat script was used to take the four spectral moments, (centre of gravity, standard deviation, skew and kurtosis) from the FFT spectra of the stop burst. A 10ms Hamming window was used manually centred on the stop burst, and measures were taken at the first discernable peak in the waveform (see Figure 6.1). A rectangular window was not chosen for spectral analyses as it can introduce spectral edge effects. It was also centred on the burst so that information from the burst remained in the section of the window which was least affected by the skirts of the window, i.e. so that the calculated spectrum is weighting the energy in the burst most highly. Following Arbisi-Kelm et al. (2007) a very small window size was used to effectively isolate the front cavity resonances of the burst, and therefore minimize the influence of the following vowel. Correlations of continuous data were also carried out and histograms of the four spectral moments were also produced revealing normally distributed data.

## 6.5 Auditory Results for /t/

As noted auditory analysis /t/ realisation was divided into discrete categories which were 'quasi-articulatory' labels separated along two dimensions: Tongue Place (fronted,

**Figure 6.1:** Hand Segmentation of a Stop (Conservative - *talk*)
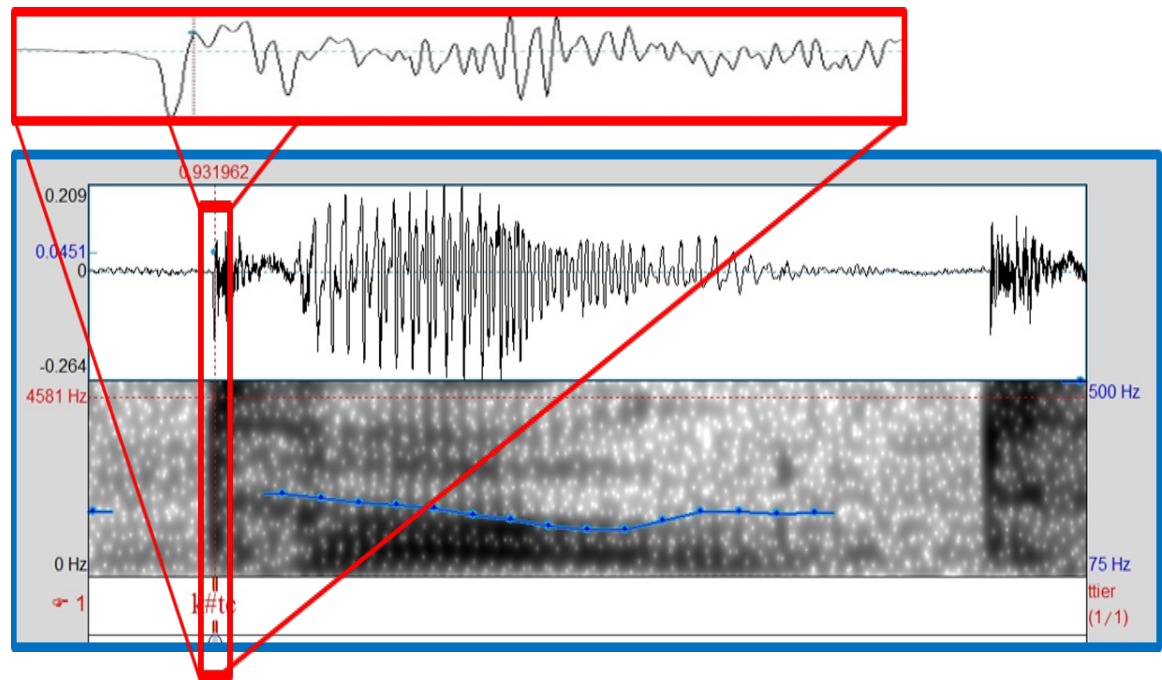


neutral, retracted) and Tongue Shape (apical or laminal). This section will present both the descriptive and statistical data for both in terms of the social constraints of CofP and Speaker, as well as the linguistic constraints of adjacent phonetic context to the stop, i.e. Preceding Segment and Following Segment.

## 6.5.1   Tongue Place

Tongue Place here describes the auditory response in terms of the position of tongue contact in the oral cavity when producing the stop /t/, ranging on a pseudo continuum from a fronted to a retracted realisation. Tongue Place could be considered the passive articulator (and Tongue Shape the active articulator).

**Tongue Place by CofP**   Tongue place was broken down further to gain social insights at a descriptive level and count data converted into percentages for ease of reference (see Figure 6.2). The most common place of articulation was neutral/alveolar, however, overall Shifters have the highest proportion of retracted tokens (roughly 50%) and Messabouts have the greatest proportion of fronted or dentalised tokens of /t/ (75%) and this is consistent with previous work by Stuart-Smith (1999) that notes dental realisations of the voiceless stop in Glaswegian. In contrast Conservatives have a tiny proportion of fronted tokens unlike all the other CofPs.

**Tongue Place by Speaker**   Tongue Place was also broken down by speaker and descriptive results are presented in Table 6.9 by percentage demonstrating inter-speaker variation as well as within CofP. For example, within the Messabout CofP, it can be seen that although Naazi and Rifat have high rates of fronted /t/, Asma does not share

**Figure 6.2:** Percentages: Tongue Place by Community of Practice
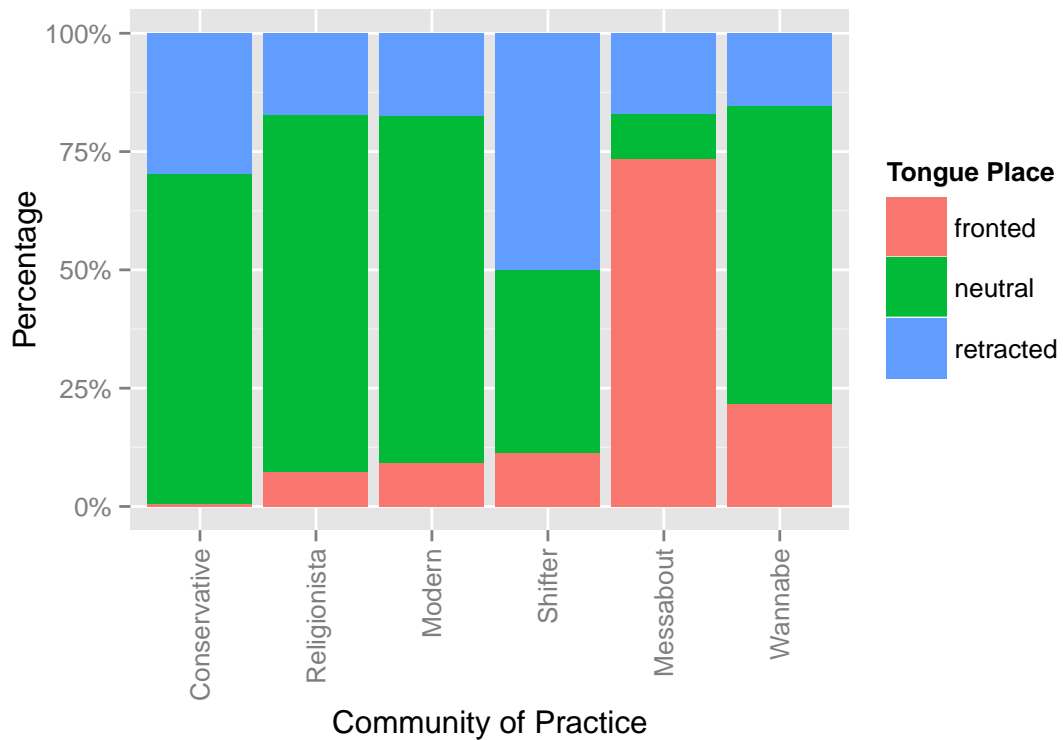


this pattern, and in fact has higher rates of retraction overall.

To recap, for Tongue Place most /t/ tokens were heard as alveolar, followed by retracted and then fronted tokens. Shifters were the most retracted, then Conservatives and then the remaining four CofPs in roughly equal number. Notably, Messabouts were heard as the most fronted in their stops, but individual speaker variation was apparent.

**Statistical Results**    The best fit model for Tongue Place is given in Model 6.1. No interaction effects were retained after model-comparisons.

$$(6.1) \quad tplace = glmer(TonguePlace \sim PreSeg + FollSeg + CofP + (1|Speaker) +$$
$$(1|Word), data, family = "binomial")$$

In preceding phonetic contexts, approximants (here always /r/) were predicted to be significantly different to all other linguistic preceding contexts, where /t/ was more likely to be retracted in this context e.g. *you're talking, near to.* Approximants such as /r, w/ typically show lip-rounding and a subsequent lengthening of the front cavity and because this lowers the pitch it might be heard as more retracted. Table 6.10 shows the significant comparisons for preceding and following context. The usual asterisks are used to show at what level of probability such an occurrence could be due to chance at p<0.05; marginal results which are between p>0.05 and p<0.09 are marked using the period (.) symbol, and model comparison is with 'not retracted' /t/ realisation. For

**Table 6.9:** Token Count and Percentages of Speaker /t/ Realisation by Tongue Place and Tongue Shape

| CofP | Speaker | Tongue Place | | | | | | Tongue Shape | | | | Total Spk N |
|------|---------|--------------|---|---------|---|-----------|---|--------------|---|---------|---|------------|
| | | Fronted | | Neutral | | Retracted | | Apical | | Laminal | | |
| | | N | % | N | % | N | % | N | % | N | % | |
| Conservative | Aneela | 1 | 1 | 47 | 59 | 31 | 39 | 58 | 83 | 21 | 27 | 79 |
| | Inaya | 0 | 0 | 43 | 88 | 6 | 12 | 30 | 61 | 19 | 39 | 49 |
| | Ruqaiyya | 0 | 0 | 23 | 68 | 11 | 32 | 33 | 97 | 1 | 3 | 34 |
| Religionista | Fyza | 1 | 4 | 18 | 72 | 6 | 24 | 25 | 100 | 0 | 0 | 25 |
| | Neelum | 1 | 3 | 26 | 90 | 2 | 7 | 29 | 100 | 0 | 0 | 29 |
| | Zainab | 4 | 15 | 17 | 63 | 6 | 22 | 27 | 100 | 0 | 0 | 27 |
| Modern | Alishba | 0 | 0 | 8 | 26 | 23 | 74 | 31 | 100 | 0 | 0 | 31 |
| | Huma | 10 | 17 | 44 | 75 | 5 | 8 | 58 | 98 | 1 | 2 | 59 |
| | Zahida | 6 | 7 | 74 | 90 | 2 | 2 | 80 | 98 | 2 | 2 | 82 |
| Shifter | Aliyah | 1 | 3 | 11 | 33 | 21 | 64 | 33 | 100 | 0 | 0 | 33 |
| | Asiya | 0 | 0 | 6 | 19 | 25 | 81 | 31 | 100 | 0 | 0 | 31 |
| | Nyla | 10 | 31 | 20 | 63 | 2 | 6 | 29 | 91 | 3 | 9 | 32 |
| Messabout | Asma | 2 | 11 | 4 | 21 | 13 | 68 | 19 | 100 | 0 | 0 | 19 |
| | Naazi | 45 | 98 | 1 | 2 | 0 | 0 | 25 | 54 | 21 | 46 | 46 |
| | Rifat | 22 | 76 | 4 | 14 | 3 | 10 | 24 | 83 | 5 | 17 | 29 |
| Wannabe | Kinza | 9 | 64 | 5 | 36 | 0 | 0 | 13 | 93 | 1 | 7 | 14 |
| | Maisa | 8 | 23 | 17 | 49 | 10 | 29 | 33 | 94 | 2 | 6 | 35 |
| | Romeeza | 3 | 7 | 36 | 84 | 4 | 9 | 41 | 95 | 2 | 5 | 43 |

**Table 6.10:** Significant Comparisons for Adjacent Phonetic Context and Tongue Place

|  |  | Estimate | z | p | sig |
|---|---|---|---|---|---|
| pre-approx | pre-plosive | -1.55 | -3.49 | 0.00 | *** |
| pre-approx | pre-nasal | -1.46 | -3.26 | 0.00 | ** |
| pre-approx | pre-fricative | -1.56 | -3.34 | 0.00 | *** |
| pre-approx | pre-lateral | -2.07 | -2.20 | 0.03 | * |
| pre-approx | pre-front vowel | -2.01 | -4.40 | 0.00 | *** |
| pre-approx | pre-non-frontVow | -2.17 | -4.06 | 0.00 | *** |
| foll-frontVow | foll-nonfrontVow | 1.07 | 2.56 | 0.01 | * |

the following manner of articulation, front and non-front vowels showed separation, with front vowels producing less retracted stops as one might expect.

There were no significant comparisons for CofP though it was retained as a significant factor in the model, as a marginal term in light of the descriptive data. A possible explanation may be that the descriptive data do not show the CofP and linguistic constraints taken together, which might explain lack of statistical separation.

### 6.5.2 Tongue Shape

Tongue Shape refers to the tongue gesture when producing a stop, namely through an apical tip or laminal blade gesture, i.e. whether the tongue is heard as apical or laminal when realising the stop. As can be seen from Table 6.9 and Figure 6.3, overall most speakers were heard to use apical tongue tip gestures when producing stops, with proportionately much fewer laminal tokens.

**Tongue Shape by CofP** One obvious pattern did emerge across CofPs, where four CofPs had very limited laminal realisations (Religionista, Modern, Shifter and Wannabe) whereas Conservative and Messabout CofPs had the most laminal articulations - approximately 25% of all their tokens which again may also be accounted for by individual speaker variation. Such combinations of both laminal and retracted features may relate to substrate language influence though not in a straightforward way. There is a laminal dental phoneme /t̪/ (e.g. in words like *tera* meaning 'your', *tareek* meaning 'date', *theen* meaning 'three') as well as the more typically apical retroflex phoneme /ʈ/ in Punjabi and Urdu (e.g. *tand* meaning 'cold', *tokri* meaning 'basket').

A key result across the Conservatives and Messabouts appears when combining the two parameters of /t/. Conservatives have a higher number of retracted tokens for Tongue Place more similar to the Punjabi/Urdu retroflex phoneme and have a higher rate of laminal tokens; where Messabouts have mainly fronted tokens and high laminal tokens too, which is classic of a more Glasgow dental stop. In this way, these two

**Figure 6.3:** Percentages: Tongue Shape by Community of Practice
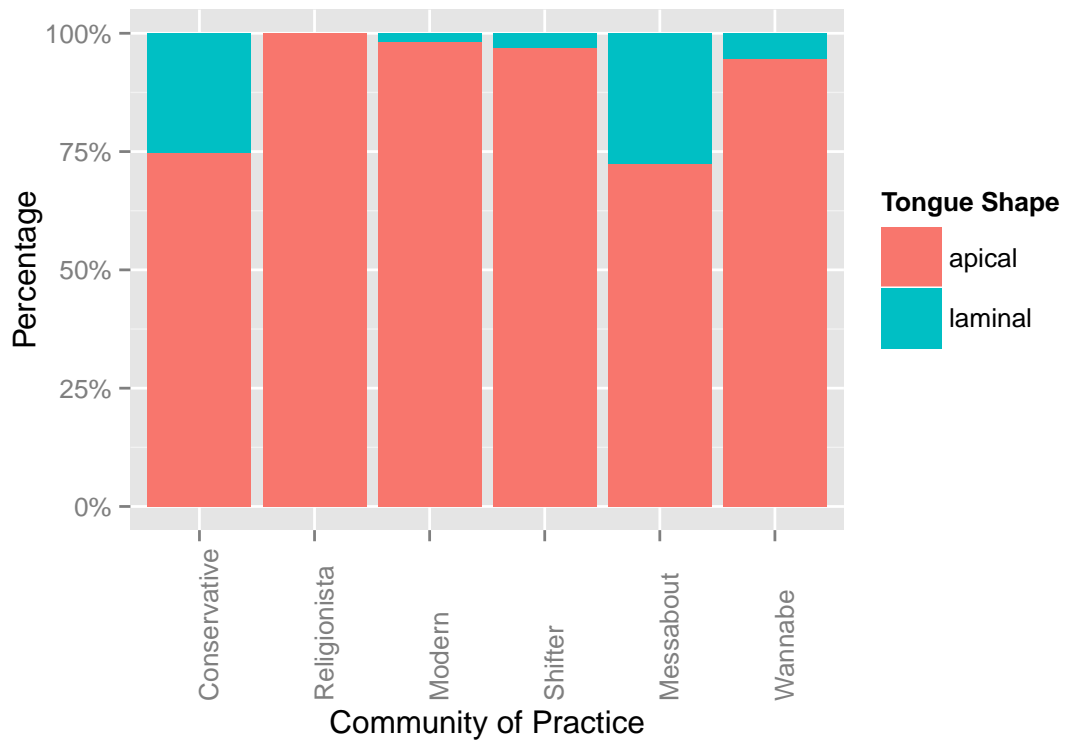


CofPs differentiate themselves very subtly across multiple aspects of the stop, whilst seemingly being the same for Tongue Shape.

**Tongue Shape by Speaker**   Once CofP is broken down by speaker, individual speaker variation is apparent. Certain speakers within CofPs use the majority of the laminal tokens. Of the Messabouts, Naazi and Rifat have laminal articulations, whilst Asma does not share this pattern (in fact she has none). In the same way, for the Conservative CofP, Aneela and Inaya use laminal stops, whereas Ruqaiyya has markedly less.

**Statistical Results**   The best fit model for Tongue Shape is given in Model 6.2.

$$(6.2) \quad tshape = glmer(TongueShape \sim PreSeg + CofP + (1|Speaker) + (1|Word),$$
$$data, family = "binomial")$$

There were significant differences for CofP for Tongue Shape and although no significant comparisons were found for preceding context it was retained as a significant predictor in the model suggesting only a weak relationship. Table 6.11 shows significant predicted comparisons and here model comparison is with apical tongue shape for /t/ realisation. Being a Conservative or a Messabout was a significant predictor of being more laminal, e.g. Conservative versus Modern, p<0.05. Descriptive data also

**Table 6.11:** Significant Comparisons for CofP and Tongue Shape

|              |         | Estimate | z     | p    | sig |
|--------------|---------|----------|-------|------|-----|
| Conservative | Modern  | -2.82    | -3.08 | 0.00 | *** |
| Conservative | Shifter | -2.38    | -2.59 | 0.01 | **  |
| Conservative | Wannabe | -1.61    | -1.97 | 0.05 | *   |
| Messabout    | Modern  | -2.55    | -2.70 | 0.01 | **  |
| Messabout    | Shifter | -2.12    | -2.23 | 0.03 | *   |

confirms that both Conservatives and Messabouts showed more laminal realisations of /t/ - around 25% compared to the apical realisations of the other CofPs despite their majority apical /t/ variants.

Figure 6.4 provides a schematic representation of the significant comparisons between CofPs. Note: the coloured lines represent significant differences between CofPs.

### 6.5.3   Summary of Auditory Results

To summarise, auditory results show that both adjacent phonetic context and Community of Practice membership affect the realisation of the stop /t/. Adjacent phonetic context is significant for Tongue Place (front/backness) as one might expect as it is related to both preceding and following segment. In contrast, it is the Tongue Shape that is heard to vary significantly between the CofPs. In other words, the listener may hear and interpret linguistic information like adjacent phonetic context on the front/back parameter whereas social information like CofP seems to be heard and interpreted more by the dynamics of the articulation in terms of Tongue Shape gesture.

## 6.6   Acoustic Results

### 6.6.1   Background: Spectral Moments

The specific methodological approach used for the acoustic phonetic analysis was spectral moments. Following Forrest et al. (1988), a spectral moment analysis was conducted on the data to map the acoustic properties of the stop burst /t/ (also cf. Harrington 2010). Obstruents have been classified through the use of spectral measurements as they can provide important acoustic cues for place of articulation, where there is often a correlation between specific spectral moments and length of the front oral cavity. Spectral moments have been used to discriminate between place of articulation of stops such as /p, t, k/ (e.g. Blumstein & Stevens 1979, Lahiri et al. 1984, Jongman et al. 1985, Forrest et al. 1988, Stoel-Gammon, Carol et al. 1994, Ladefoged 2003, Sundara 2005, Kochetov & Lobanova 2007). Typically gross differences in place of articulation have been studied, e.g. between alveolar and velar stops, and research has

**Figure 6.4:** Sociophonetic Dimensions: Significant Differences between CofPs for Tongue Shape for Glaswasian
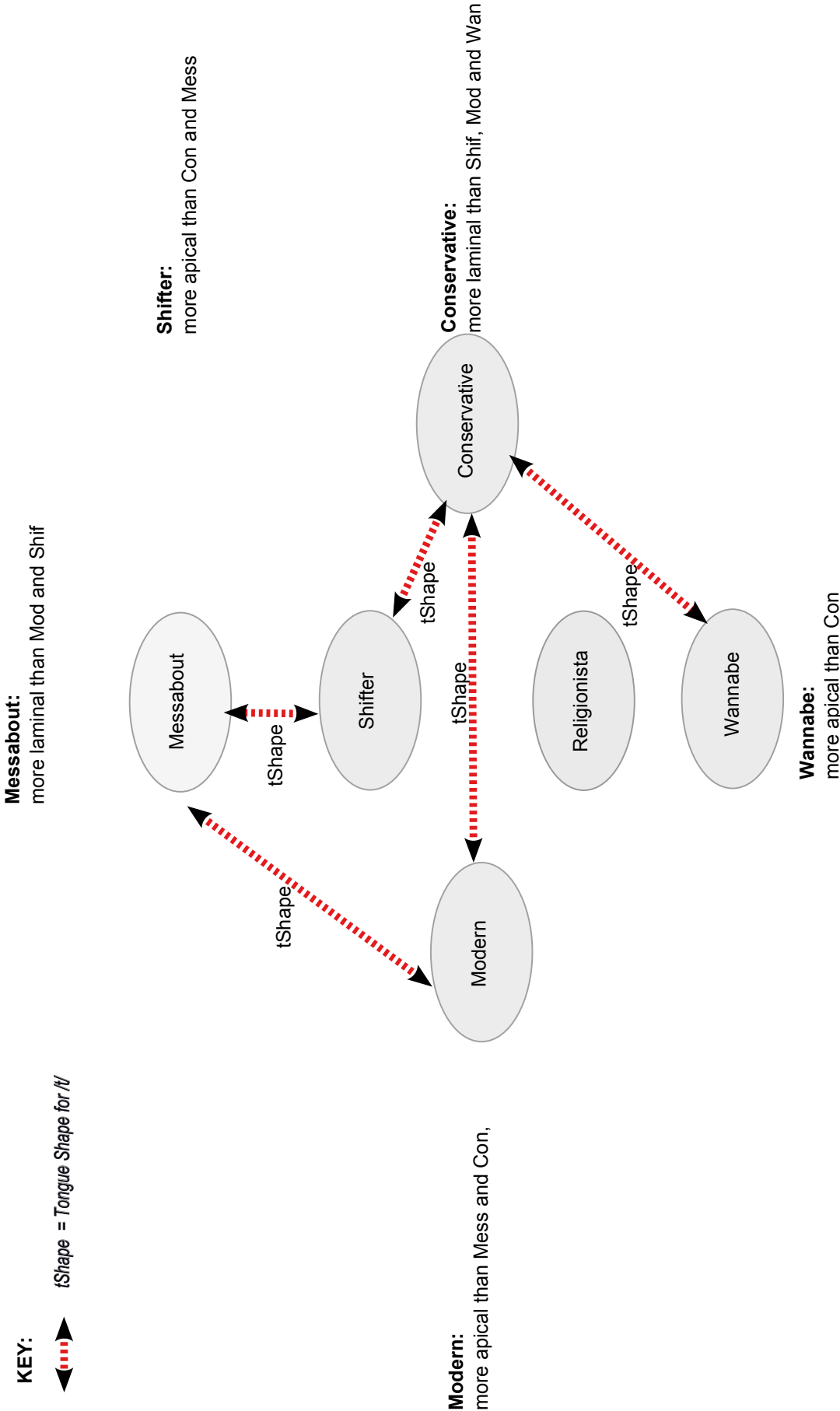
often examined different varieties of language, e.g. the differences between American English and Swedish stops by Stoel-Gammon, Carol et al. (1994).

An under-researched area is using spectral moments to discriminate between fine grained differences in articulation, or very small regions of the vocal tract and how this might relate to stops within the same language variety. Cross-linguistically, Sundara (2005) showed that spectral moment analysis can reveal the presence of fine-grained differences between dental and alveolar stops in Canadian English and Canadian French speakers. Fine-grained differences in stops are also considered by Stoel-Gammon, Carol et al. (1994), Buder et al. (1995) and Kirkham (2013) and others, but these use laboratory style speech with clear differences in recording conditions, e.g., physical location and recording equipment.

Spectral moments analysis uses Fast Fourier Transform (FFT) spectra to characterise the overall distribution of spectral energy. The energy spectra are modelled as a normal distribution whereby four spectral moments are calculated. The four measures are characterised as follows (Sundara 2005, p.1027):

1. **Centre of gravity (CoG)** - mean or midpoint frequency

2. **Standard Deviation** - spread or bandwidth of the energy around the mean

3. **Skew** - asymmetry or tilt of the energy around the mean

4. **Kurtosis** - peakedness of the distribution.

If we consider /t/ articulation on a continuum like t̪ ← t → ʈ, a simple prediction taking these four measures into account might be that more fronted realisations such as a dental stop might have higher CoG values and a more peaked spectral shape due to the smaller front cavity after the constriction. Retracted stops on the other hand might have a lower overall CoG and less peaked spectral shape due to the larger front cavity. As this is a relatively small area of the vocal tract, where dental, alveolar and retracted regions of /t/ articulation are very close, mapping acoustic measures onto articulation is complex. Retracted variants in these speakers also diverge from fully retroflex ones as in the Punjabi/Urdu stop which has the tip curled back.

However, if more fronted stops are expected to have higher CoG values, this would suggest that dental stops should have the highest CoG values which in fact is not the case. Sundara (2005) shows in her work on Canadian French-English, that dental stops actually exhibit an extremely short or non-existent front cavity immediately in front of the stop, which confounds the assumed predictions about the spectral measures and may be related more to the shape of the constriction. She notes that the spectra of dental stops are generally more flat or falling lacking any type of overall peak (see Figure 6.5), compared with alveolar spectra which show a rising spectrum with a peak. A false or artificial peak may also be produced by the nature of the spectral filtering of the signal, thereby giving rise to inaccurate measures which are simply an average of

**Figure 6.5:** Schematic representation of a dental falling spectrum cut off by a high pass filter
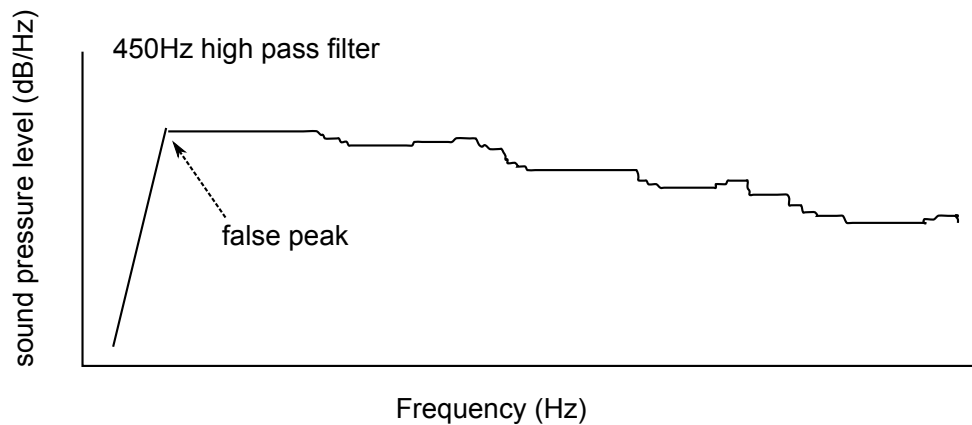


the stop's energy based on some type of normal distribution modelled by the moments analysis. Fronted dental spectra typically have the highest energy loss most quickly compared with the alveolar and retracted stops which have more rising spectrum before falling off (Kochetov & Lobanova 2007). So whilst the first spectral moment, Centre of Gravity, is often used to help predict the length of the front cavity immediately in front of the articulatory constriction, it can be misleading because high CoG does not always represent a short front cavity in front of the stop constriction and lower CoG does not means a longer one.

Sundara (2005) showed that whilst spectral measures could indicate place of articulation for dental and alveolar stops in Canadian English and differences in Canadian French following methods used by Jongman et al. (1985), it was not always in the presumed way. Burst intensity was found to be an important cue to place of articulation, where the Canadian English bursts were louder (alveolar), therefore having higher burst frequency or centre of gravity. This means they are more compact and have a more peaked spectral shape. In contrast the Canadian French stops (dental) were quieter and had a lower centre of gravity measure, with more diffuse standard deviation and lower kurtosis suggesting a less peaked spectral shape.

However, it is not even this simple, as Sundara argues that the overall shape of the articulatory front cavity and the shape of the constriction itself may also affect the patterning of spectral energy for different variants of /t/. This means that it is not only the positioning of the tongue (and lips) from dental to post-alveolar planes that affect the centre of gravity, but other factors such as the shape of the active articulator, i.e. the tongue (apical or laminal tongue tip), resonating cavities and the amount of pulmonic pressure produced in the vocal tract before the /t/ is released. Sundara (2005) notes that dentals also have a longer constriction in general appreciably lowering the CoG.

Such complexity makes direct assumptions about articulation difficult (Sundara 2005). Spectral moment analysis is also very sensitive to different recording set-ups

**Table 6.12:** Correlations of Spectral Moments

|          | CoG | St.Dev | Skew | Kurt |
|----------|-----|--------|------|------|
| CoG      |     | 0.53   | -0.75 | -0.54 |
| St.Dev   |     |        | -0.42 | -0.58 |
| Skew     |     |        |      | 0.84 |
| Kurtosis |     |        |      |      |

(e.g. frequency ranges) thus accounting for greater variability for the 'same' feature across studies. To conclude, spectral moment analysis permits observation of phonetic differences but how these relate to precise articulation is not yet clear.

## 6.6.2   Correlations of the Four Spectral Moments

Before running LMEMs, a cross tabulation was carried out and these are presented in Table 6.12. High correlations were found between all four spectral moments at around 0.5; and notably CoG and Skew are highly negatively correlated at -0.75 (as CoG increases, skew decreases) and Skew and Kurtosis are the most highly correlated at 0.84 (i.e. as skew increases, kurtosis increases). As /t/ articulation is reflected by all four spectral measures, not any single measure and due to high correlation values, a Principal Components Analysis (PCA) was conducted to ascertain if spectral moments may be collapsed into fewer representative components or measures. Results of the PCA showed that all four measures could be combined into just one single component which we might call 'spectralness'. For clarity only CoG will be presented here due to high correlations across all four moments, and Standard Deviation only where it differs from CoG. CoG is also generally considered the most useful measure of the four spectral moments and is the one most cited.

The acoustic results will now be presented in two ways: linguistic/internal constraints (Adjacent Phonetic Context) and social/external constraints (CofP).

## 6.6.3   Centre of Gravity (CoG): Spectral Moment 1

To recap, the Centre of Gravity (CoG) measure relates to the mean spectral energy of the stop burst, similar to where the main concentration of energy is. Standard deviation is the spread of the frequencies about the mean which is related in a complex way to the length of the front cavity and the shape of the constriction, in this case /t/.

**Linguistic Constraints**   Figure 6.6 and Figure 6.7 show the centre of gravity (CoG) range for all the tokens according to adjacent phonetic segment, preceding and following segment respectively. Descriptively it can be seen that approximants (here only /r/, such as *you're talking*) and nasals have a much lower range compared to the other contexts, with laterals having the highest CoG, but also note the low numbers for the laterals (18 out of a possible 697 tokens). For following segment, CoG is also lowest for

**Figure 6.6:** Centre of Gravity for Preceding Segment
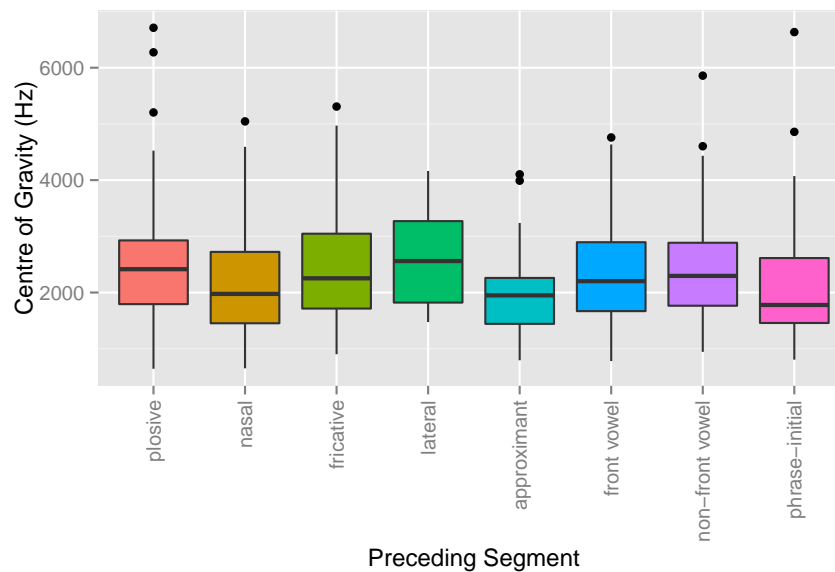


approximants compared to all other contexts but note the low numbers again for this category (57 tokens out of a possible 697). Most of the non-front vowel data (52%) of is made up of the Scottish BOOT vowel which is rather more central - /ʉ/ mainly deriving from the frequent word *to* though other non-front vowels /o, ɔ/ are also included in this category, e.g. *told, talk*. This might explain why front and non-front vowels have similar distributions for both adjacent phonetic contexts.

**Social Constraints**    For Community of Practice, Figure 6.8 shows that Conservatives have the highest values (mean = 2659 Hz) patterning with the Moderns and Shifters, and Wannabes have the lowest CoG value (mean= 2010 Hz) patterning with the Religionista and Messabout CofPs.

**Statistical Analysis**    An acoustic analysis of the centre of gravity was conducted using LMEMs and the best-fit model is given in Model 6.3 which included all three fixed factors.

$$(6.3)\quad CoG = lmer(CoG \sim PreSeg + FollSeg + CofP + (1|Speaker) +$$
$$(1|Word), data)$$

Acoustic results confirm the descriptive results for CoG and are reported in Table 6.13. Centre of gravity for the approximant adjacent contexts are significantly lower than all other preceding segments except the pre-nasal context. Also for following segment, approximants have lower CoG compared to both vowel contexts. Interestingly, for CofP, Conservatives have a higher estimated CoG compared with the

**Figure 6.7:** Centre of Gravity for Following Segment
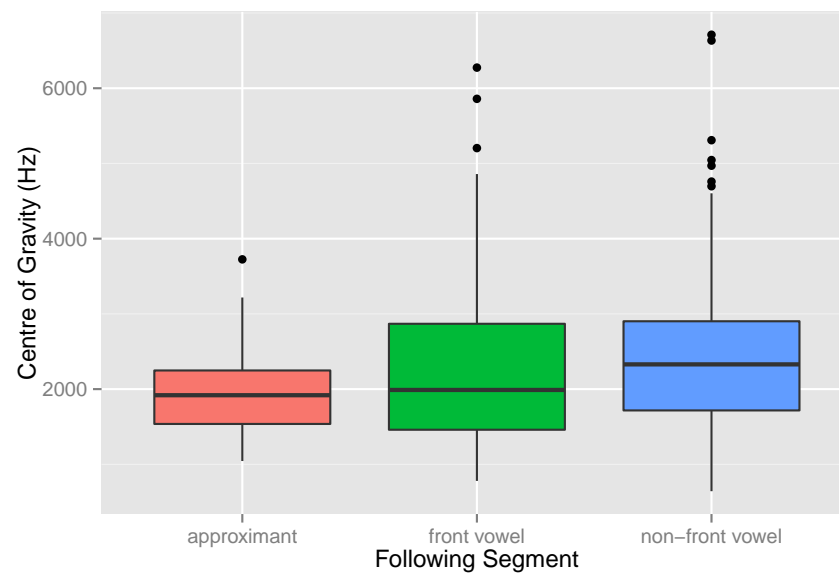


**Figure 6.8:** Centre of Gravity for Community of Practice
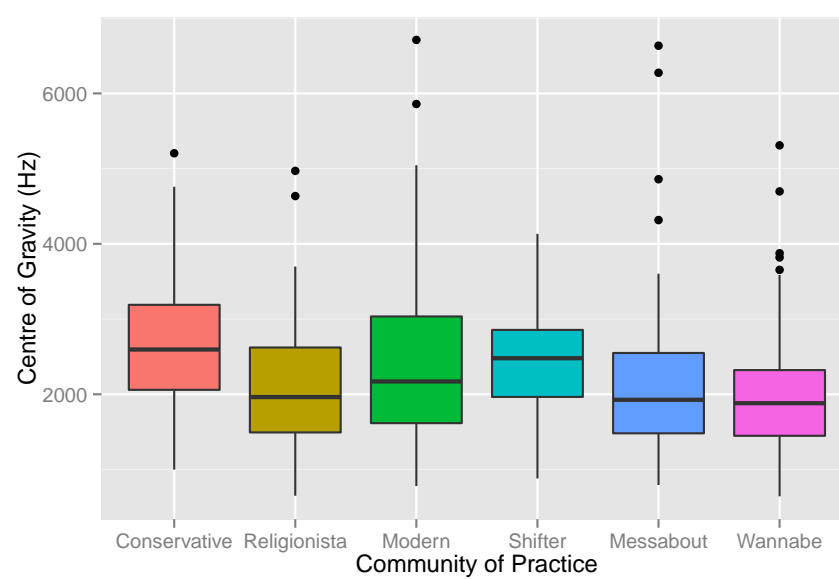
**Table 6.13:** Significant Comparisons for Centre of Gravity (and Standard Deviation only when no significance for CoG)

| Moment | | | t | p | sig |
|---|---|---|---|---|---|
| CoG | pre-approx | pre-plosive | 2.93 | 0.00 | ** |
| | pre-approx | pre-fricative | 2.85 | 0.00 | ** |
| | pre-approx | pre-lateral | 2.72 | 0.01 | * |
| | pre-approx | pre-frontVow | 2.77 | 0.01 | * |
| | pre-approx | pre-non-frontVow | 2.27 | 0.02 | * |
| | pre-nasal | pre-plosive | 2.80 | 0.01 | * |
| | pre-nasal | pre-fricative | 2.63 | 0.01 | * |
| | pre-nasal | pre-lateral | 2.39 | 0.02 | * |
| | pre-nasal | pre-frontVow | 2.47 | 0.01 | * |
| | foll-approx | foll-frontVow | 2.81 | 0.01 | * |
| | foll-approx | foll-nonfrontVow | 2.81 | 0.01 | * |
| | CofP-Conservative | CofP-Messabout | -2.24 | 0.02 | * |
| | CofP-Conservative | CofP-Religionista | -2.45 | 0.01 | * |
| | CofP-Conservative | CofP-Wannabe | -2.42 | 0.02 | * |
| St.Dev | pre-non-frontVow | pre-lateral | -2.00 | 0.05 | * |
| | foll-nonfrontVow | foll-frontVow | -4.41 | 0.00 | *** |

Messabout, Religionista and Wannabe CofPs with no other significant results yielded from subsequent re-levelling. Graphic representations of model predictions are given in Figures 6.9, 6.10 and 6.11 for clarity in terms of directionality for interpretation of significant results.

Figure 6.12 provides a schematic representation of the significant comparisons between CofPs. Note: the coloured lines represent significant differences between CofPs.

**Summary: Centre of Gravity** For the linguistic results, acoustic analysis of /t/ has shown that adjacent phonetic context affects stop realisation. Specifically, preceding and following segments can affect the values for centre of gravity. For preceding segment, approximants (e.g. *you're talking*) and nasals (*e.g. been taken*) have lower values descriptively and this is confirmed for approximants by significant statistical differences for CoG compared to other contexts. For following segment, approximants (e.g. *twenty, train*) are also significantly different to both front (e.g. *teach*) and back vowel (e.g. *told*) contexts, showing significantly lower CoG values.

For the social results, Community of Practice, an interesting result has emerged, where descriptive statistics show two general groupings: Conservative, Modern and Shifter who have higher CoG values, versus the Messabout, Religionista and Wannabe CofPs who have lower CoG values. Statistical results confirm Conservatives as having significant differences with higher CoG values compared to the Messabout, Religionista and Wannabe CofPs. Conservatives, Moderns and Shifters are the same. This may also mean that Conservative members have a louder burst in comparison with the other CofPs, hence a higher CoG, and therefore a potentially more compact and

**Figure 6.9:** Centre of Gravity Model Estimates for Preceding Segment
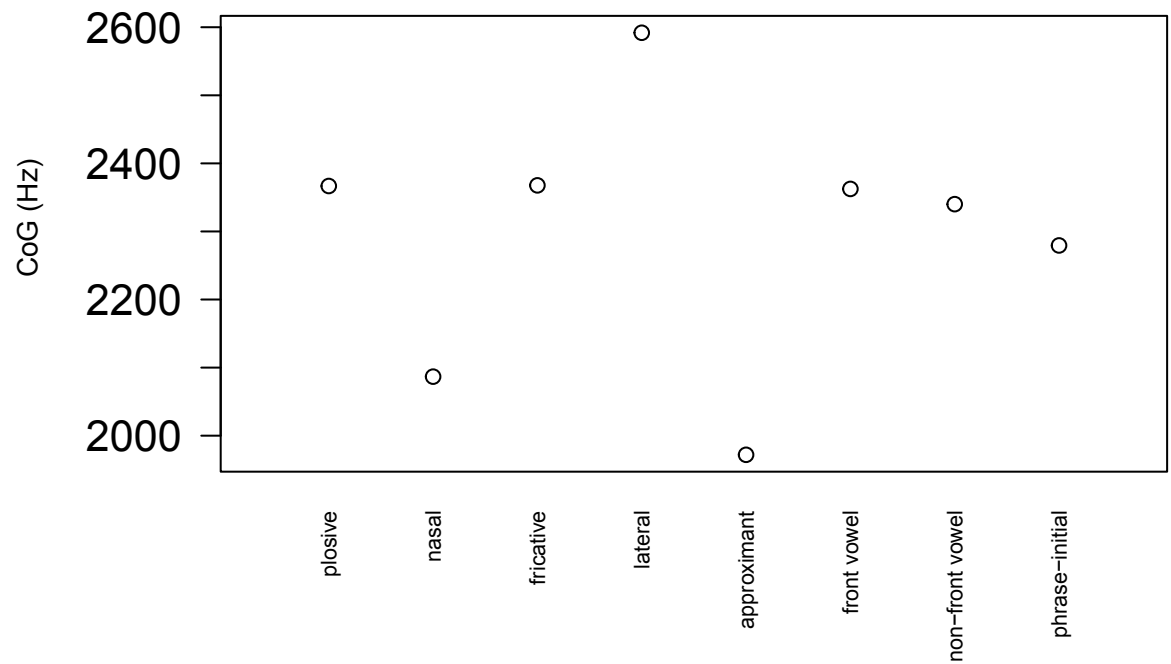


**Figure 6.10:** Centre of Gravity Model Estimates for Following Segment
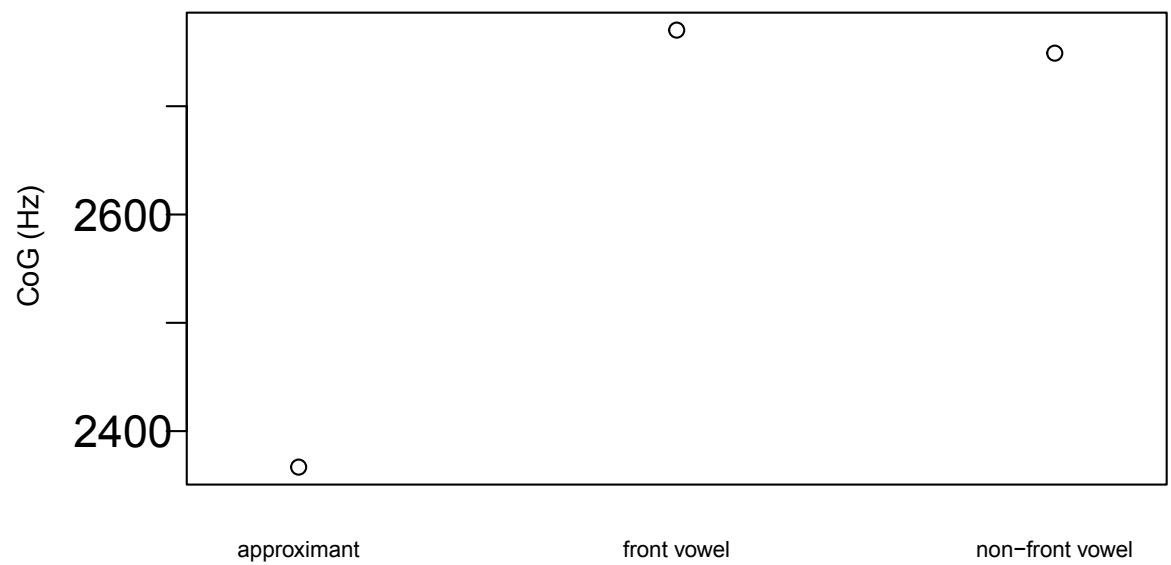
**Figure 6.11:** Centre of Gravity Model Estimates for Community of Practice
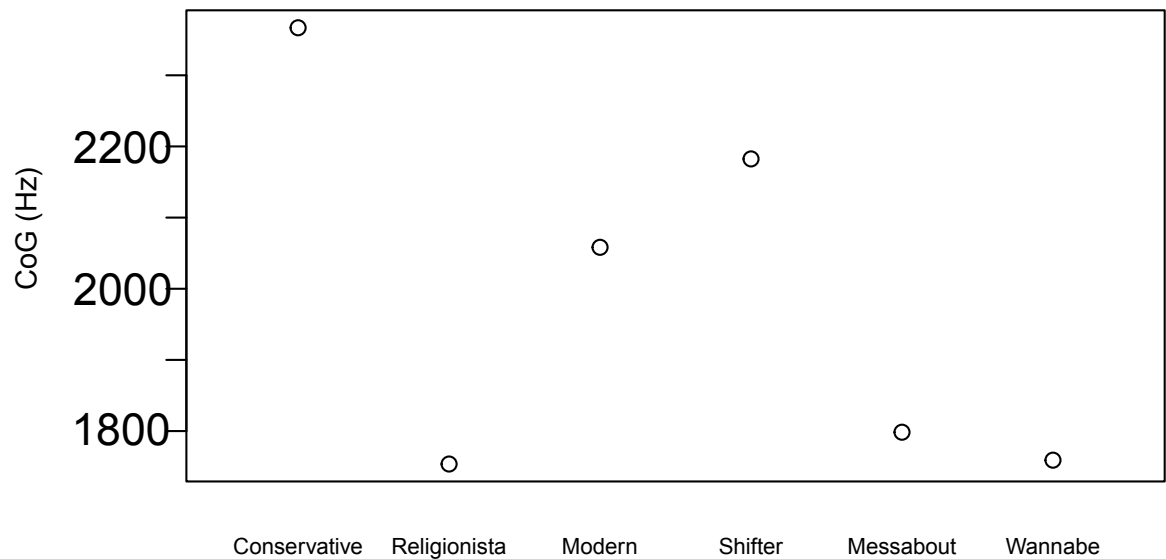


peaked spectral shape (cf. Sundara 2005). If this is the case, it would confirm that Conservatives have a more retracted or post alveolar articulation as these bursts are heard as louder and sharper compared with more fronted articulations of /t/. However while burst may be important, differences in descriptive and statistical results are likely to be related to individual variation within CofP too.

### 6.6.4   Standard Deviation: Spectral Moment 2

The second spectral moment is the standard deviation which can be defined as the spread or bandwidth of energy around the mean. Standard deviation results are the same as with CoG with only two additional significant comparisons not found for CoG shown in Table 6.13 earlier. Non-front vowel contexts for /t/ (e.g. *boot*) significantly differ in two cases: when preceded by a lateral (e.g. *all talk*), or when followed by a front vowel (e.g. *task*). Overall, linguistic and social constraints had many fewer significant comparisons for standard deviation than CoG.

Descriptively, for preceding segment Figure 6.13 shows that the lateral (e.g. *all taken*) and fricative (e.g *was totally*) contexts have higher standard deviation values than the other contexts which have more similar standard deviation values. This is likely related to the fact that laterals and fricatives both have have diffuse spectra due to the way air flows over a wider area through the oral cavity in their production. Figure 6.14 also shows that approximants have a much lower standard deviation compared to the other contexts suggesting that /r/ conditions lower overall energy and more diffuse spectra. The social constraint of CofP has no significant comparisons (see Figure 6.15).

**Figure 6.12:** Sociophonetic Dimensions: Significant Differences between CofPs for Centre of Gravity for /t/ for Glaswasian
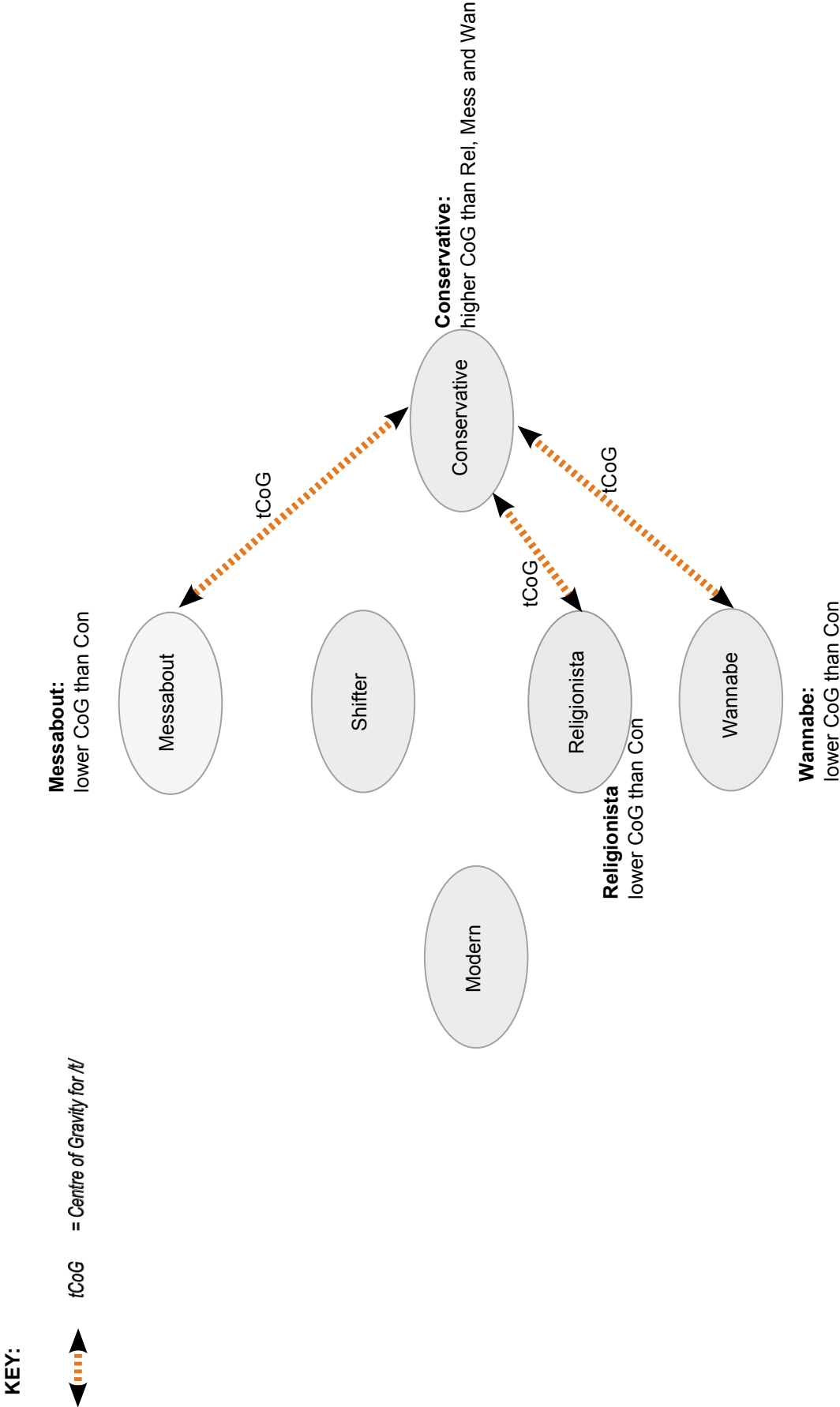
**Figure 6.13:** Standard Deviation for Preceding Segment
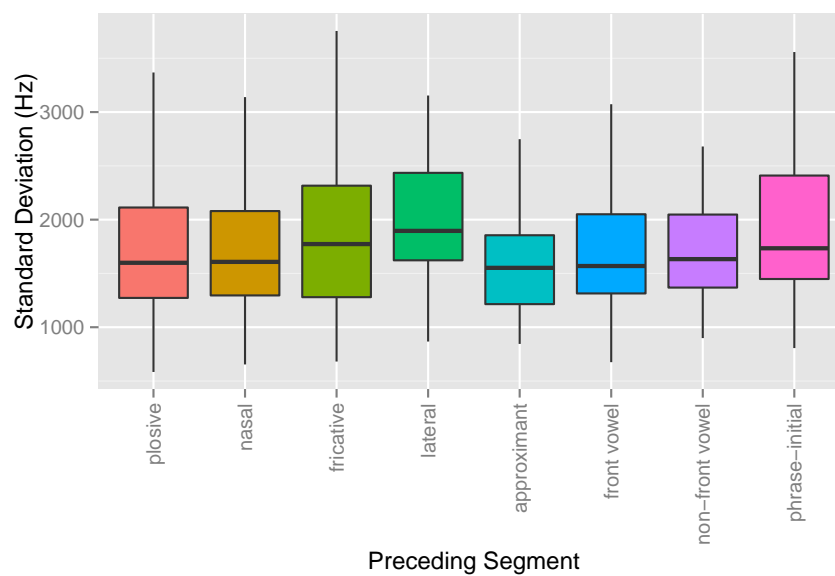


**Figure 6.14:** Standard Deviation for Following Segment
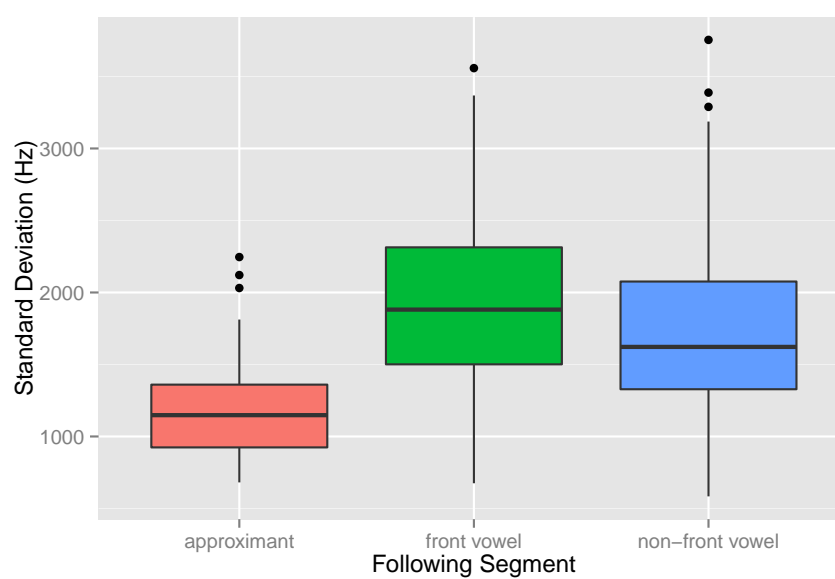
**Figure 6.15:** Standard Deviation for Community of Practice
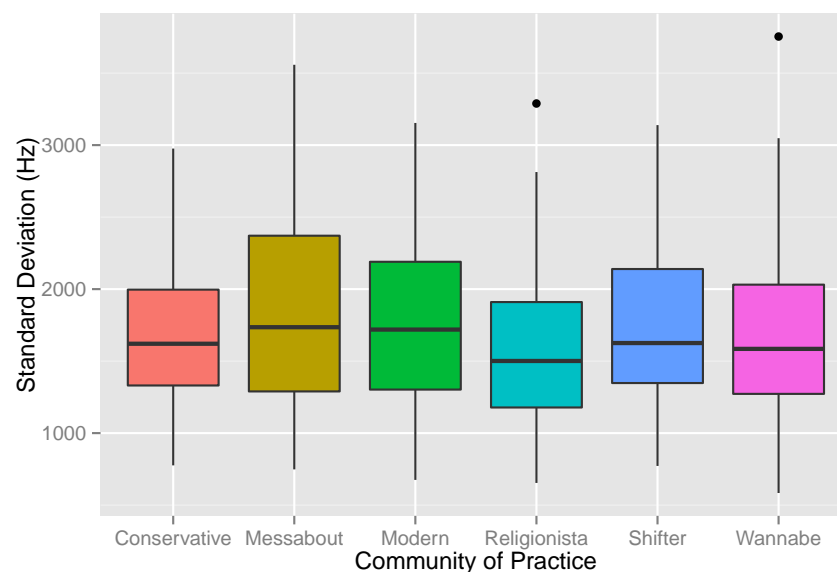


### 6.6.5 Summary of Acoustic Results

To recap, the acoustic results for /t/ show that both linguistic and social constraints shows statistical significance for the stop realisation in this sample of Glasgow Asian speakers. For adjacent phonetic segment, if approximants or nasals are in the preceding segment to the /t/ (e.g. *you're talking, been taken*), there are significant differences for both Centre of Gravity and Standard Deviation. For following segment, approximants again show a significant difference for CoG and Standard Deviation and non-front vowels for Standard Deviation. With regards to the social constraint of Community of Practice, only Conservatives show statistical difference from three other CofPs, specifically the Messabouts, Religionistas and Wannabes only for Centre of Gravity. They descriptively pattern with Moderns and Shifters for CoG, but show no significant comparisons.

## 6.7 Discussion

### 6.7.1 Summary of Results for Realisation of /t/

In summary, auditory and acoustic analysis of the stop shows that both linguistic and social factors have an important function in the realisation of the stop /t/, namely adjacent phonetic context and Community of Practice membership. Auditory data shows that linguistic context is significant for Tongue Place as one might expect, as it is related to both preceding and following segment, suggesting that the listener hears relevant phonetic information on the front-back parameter. In contrast, for Tongue Shape, it is the social effect of Community of Practice that shows the clearest results.

Specifically, Conservatives and Messabouts use more laminal realisations of /t/ and sound different to Moderns and Shifters, with Conservatives also significantly different to Wannabes. Acoustic data using the first two spectral moments of Centre of Gravity and Standard Deviation reveals linguistic constraints are significant, especially with relation to approximants which condition overall lower values; but social effects of CofP are also apparent. Acoustic results show that Conservatives have significantly different CoG values in stop production compared to Messabouts, Religionistas and Wannabes.

Figure 6.12 provides a schematic representation of the significant comparisons between CofPs for Tongue Shape and CoG. Note: the coloured lines represent significant differences between CofPs.

### 6.7.2   Social Constraints: Community of Practice

As expected while linguistic effects on /t/ realisation are present in this dataset, there is still a persistent effect of CofP. In combining both forms of analyses - auditory/logistic and acoustic/linear regression - it is evident that social factors are working on different aspects of speech and especially for the Conservative CofP.

On one hand, we have the Conservatives who are different to the Wannabes, Moderns and Shifters for Tongue Shape, but we also have the Conservatives being significantly different to Wannabes, Messabouts and Religionistas in their spectral moment measures for CoG. Also auditorily Conservatives are heard as having no fronted tokens for Tongue Place unlike all other CofPs, which interestingly suggests that being a Conservative is not necessarily about using retracted /t/, but about not using fronted articulations. Such results reveal that linguistic practices are being shaped by social practices for the Conservative CofP; and that they vary at different levels distinguishing themselves clearly from other CofPs through a range of subtle and fine-grained phonetic features. Conservatives are the most culturally attuned to Pakistani norms and this might explain why they are so different to the other CofPs who are typically more diverse in their practices with greater cultural similarities to their Scottish counterparts. By combining the two phonetic approaches of auditory which are holistic and dynamic, and acoustic which takes spectral energy of the stop burst, we see that Conservatives are different to all other five CofPs, allowing a complementary and richer picture to be developed of how this variable might work for this speech community.

Interestingly, subconsciously during the researcher's auditory encoding process, subtle differences in Tongue Shape configuration for /t/ production were heard and these may carry social meaning. The fact that the majority of /t/ tokens were heard as apical suggests laminality is a socially salient feature, so that certain speakers may use laminal Tongue Shape to mark social difference - here the Conservatives and the Messabouts. Though even more interestingly, Conservatives are laminal and non-front (i.e. retracted), while Messabouts are laminal and front (i.e. not-retracted).

Acoustic model predictions also show that Conservatives have the higher CoG mean

**Figure 6.16:** Sociophonetic Dimensions: Significant Differences between CofPs for Tongue Shape and Centre of Gravity for /t/ for Glaswasian

**KEY:**

tShape = *Tongue Shape for /t/*
tCoG = *Centre of Gravity for /t/*

**Messabout:**
more laminal than Mod and Shif
lower CoG than Con

**Shifter:**
more apical than Con and Mess

**Conservative:**
more laminal than Shif, Mod and Wan
higher CoG than Rel, Mess and Wan

**Religionista**
lower CoG than Con

**Wannabe:**
more apical than Con
lower CoG than Con

**Modern:**
more apical than Mess and Con
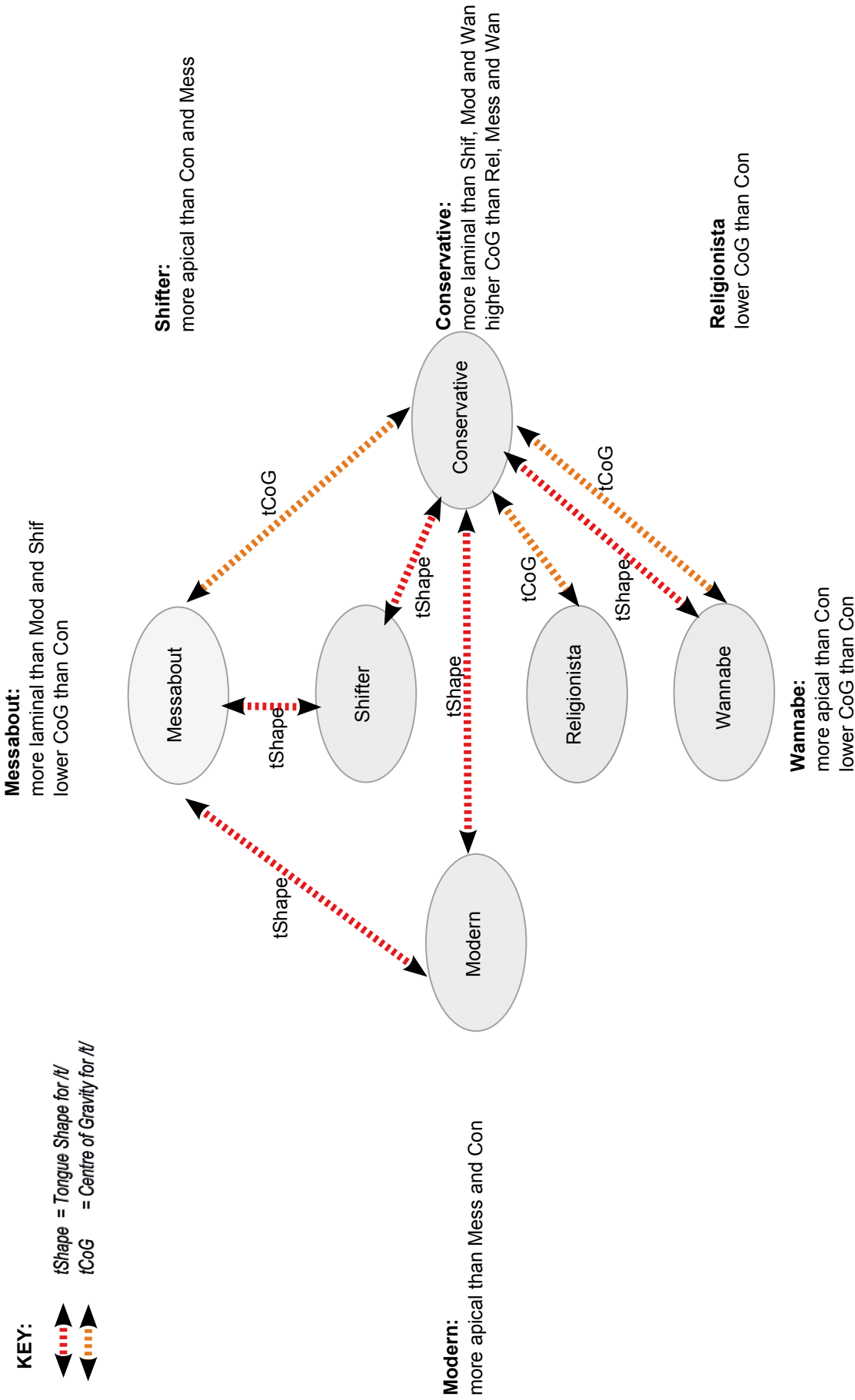
and possibly suggests post-alveolar realisations; mid-range CoG values indicative of an alveolar place of articulation for Shifters and Moderns; with the lower CoG measures indicative of a dental place of articulation for Wannabe, Religionista and Messabout CofPs. It is possible that Conservatives have a non-dental possibility and are more retracted/post-alveolar and compared to other CofPs but in a very small part of the vocal tract (within the alveolar region). Auditory data also show they can be laminal and non-fronted in their stops. A possible explanation might suggest that Conservatives who are the most aligned with cultural Pakistani practices use the most Punjabi/Urdu linguistic features which might include retraction of /t/, compared with the more Scottish-aligned CofPs such as the Messabouts, Religionistas and Wannabes who potentially use more dental or Glasgow-based realisations of /t/.

It is possible that similar overall stances between CofPs may also account for general trends in auditory and acoustic data in stop realisation (Drager 2009), e.g. Conservative, Shifters and Moderns may have closer affiliation to Pakistani cultural practices in general, whereas Messabouts, Religionistas and Wannabes are all more Glasgow/Scottish in their social practices, taking pride in their 'Scottishness' over their Pakistani identity but in diverse ways to each other. For instance, Messabouts display deviant overt social behaviour to Pakistani norms whereas Religionistas internally reject Pakistani norms in favour of religious ones.

### 6.7.3 The Realisation of /t/ in Glaswasian

Glaswasian /t/ shows a range of realisations according to social practices. Precisely how CoG and StDev map onto specific articulation is uncertain (Sundara 2005). Due to limited work on fine-grained articulation differences using spectral moments in conjunction with no articulatory data, there are no conclusive benchmarks or typical patterns for the moments for /t/. This is further exacerbated by the fact that recording conditions differ across studies and in fact can change the results quite dramatically. For example, Stoel-Gammon, Carol et al. (1994) report statistical differences for standard deviation and kurtosis for American English and Swedish stops, while Buder et al. (1995) re-analyse the same data in different recording conditions and find that CoG also becomes significantly different. In addition, the speaker's ages, gender and size of vocal tracts may also have an impact on the spectra. This shows that spectral shapes are extremely sensitive to the recording set-up from which measures are extracted, therefore values will vary from one study to another.

Bearing this in mind, it is possible to look at comparability of the present study to varieties of English across the world, such as American English, Canadian English and Sheffield English. These varieties have presence of an alveolar realisation of /t/ much like Anglo-English which would typically have a higher CoG value compared to bilabials, velars or dentals due to the short cavity in front of the burst. Auditorily if the alveolar articulation is reflected in higher CoG values, this would align with the higher CoG values for the (Glasgow Asian) Conservatives, Moderns and Shifters. However,

the CoG values captured in this present study are much lower than the values reported by Forrest et al. (1988) and Stoel-Gammon, Carol et al. (1994) on American English (and Swedish); and Sundara (2005) on Canadian English.

Within a different British-Asian speech community, work by Kirkham (2011, 2013) on the differences between Sheffield English coronal stops in adolescent Pakistani and White speakers, also gives some potentially comparable spectral moments values. However due to the huge effect of recording conditions where he uses lab speech, one must still be extremely cautious. He reports higher mean CoG values (4783Hz) compared with 2319Hz for the present study and higher mean standard deviation (3012Hz) compared with 1718Hz. As we can see, there are large differences in the spectral moments which could be attributed not only to the recording arrangements, but the fact that there is a much lower token count in Kirkham's data (N=192 compared with N=697 here) and the speech was collected through word elicitation with fewer speakers (only 2 female speakers) to derive the mean values. One can speculate that individual speaker variation may be a greater factor in Kirkham's results than reported here. Also, even though he examines the same language variety (English only) and the same ethnic group (British Pakistani), unlike others who have tried to look at the acoustic correlates of stops across languages, the findings may not relate to connected, natural speech in noisier surroundings. Moreover, there is a different linguistic phonetic contrast in Sheffield English /t/ (typically alveolar) which is very distinctive to the Glaswegian realisation of /t/ (typically dental-alveolar).

Such results are also consistent with previous work by Stuart-Smith et al. (2011) on the lateral /l/. The lateral was found to be clearer in Asian men compared to Non-Asian men who were 'darker', but the /l/ was still dark when compared to other English varieties such as RP. The relative 'clearness' may be related to the heritage language lateral which is clear but is unlikely especially given that the Asian men have comparatively clearer variants but obviously with Glasgow dynamics. Such hybridity in linguistic features at this granular level proposes a view of British Asian identity that is not simply characterised by substrate language interference or even degree of bilingualism, especially as many British born generations rarely use Punjabi/Urdu; but one that exemplifies and truly encapsulates 'Brasian' as espoused by Harris (2006) where linguistic features take on specific socio-indexical meanings.

Without a comprehensive and co-ordinated socio-phonetic study of regional British Asian accents including articulatory data, much more cannot be said about the comparability of such data. What can be said is that the present study has shown that both linguistic and social factors affect the fine-grained phonetic realisation of /t/ in Glasgow Asian female adolescents at both an auditory and acoustic level.

## 6.7.4 Future Directions

An analysis of Voice Onset Time (VOT) - often conducted for phonological, regional or social variation studies - may also shed light on the differences between stops, as

VOT is shorter in all English speakers in voiceless stops like /t/ compared to voiced stops like /d/ (though cf. Kirkham 2011, 2013, Sundara 2005). Using VOT to examine aspiration and voicing would be interesting. However, VOT was not considered here because it cannot effectively differentiate close articulations such as laminal and apical tongue shape for stops because the length of contact time with the alveolar ridge or dental area is negligible.

Foulkes et al. (2011) also suggest other aspects of stop production so far largely neglected in sociophonetics include analysis of amplitude and frequency of energy and phonation quality at release. Whilst these measures can provide some insight into the acoustic properties of stops, they do not discriminate well between different auditory perceptions and as has been observed from the spectral moment analysis, it is extremely difficult to map such measures onto articulation.

A more novel and innovative approach to understanding the phonetic properties of stops comes from researchers such as Arbisi-Kelm et al. (2007, 2008) who suggest the use of auditorily-transformed spectra. They advocate the use of non-linear spectral analysis to generate more compact distributions of spectra, and to thus more accurately model audition as perceived by the listener (Kewley-Port et al. 1983). Arbisi-Kelm et al. (2008) state that one major criticism of 'linear acoustic analysis is that it imposes different scales of loudness and frequency on the acoustic signal than does the human ear, thus generating power spectra with different frequency distributions than are produced by the auditory system'. Essentially, a linear analysis such as spectral moments is thought not to reflect accurately what one hears. Interestingly in their study of word initial stops produced in Cantonese, English, Greek, Japanese, and Korean, measures derived from a psycho-acoustic model of auditory perception showed better discrimination between stops than spectral moments. However, an auditory transform method is still under research and little or no implementation of such a method is possible at this present moment.

Having examined a salient consonantal feature of Glasgow Asian, the next chapter will move onto vocalic variables which also show evidence of salience in this community. A different type of analysis and new variables may shed further light on the linguistic behaviours of the Pakistani girls. Do vocalic variables work in the same way; share the same patterns in terms of linguistic and social constraints; and what can these linguistic features tell us about social identity construction in this sample?

# Chapter 7

# Vowels in Glasgow-Asian

## 7.1 Overview

We now move to different variables, vowels in the Glasgow-Asian linguistic system, to consider possible links between social practices and linguistic variation. Six monophthongal vowels, /i, e, a, o, ɔ, ʉ/, were acoustically analysed using automated methods for formant extraction. Both linguistic and social factors were investigated using statistical methods.

As noted in Chapter 4, these vowels were selected for a number of reasons, but primarily in order to ascertain the overall vowel space of Glasgow Asian which has never been conducted before. At the outset of the study, only the /e, o/ vowels were to be examined due to their salience in Asian-English speech and because of the prior research in other contexts (Lambert et al. 2007, Wormald 2014). However, ongoing work on Scottish-English vernacular (José et al. 2013, Macdonald et al. 2015) has suggested that vowels should not be examined in isolation, but rather as part of a system in order to understand change and their role in a wider context. Phonetically exploring vowels also allows another view of the Glasgow Asian linguistic system, as opposed to a sole focus on the typically more salient consonantal features.

The chapter begins with the specific research questions for vowels, followed by a background on vowels, with a focus on Scottish-English and heritage Punjabi/Urdu vowels, before outlining the methodology, presentation of results and a concluding discussion.

## 7.2 Research Questions for Vowels

The main research question examines whether Community of Practice affects the acoustic characteristics of six vowels, /i, e, a, o, ɔ, ʉ/. In order to examine this, the following research questions will be addressed:

1. Within ethnicity, does Community of Practice(CofP) affect vowel realisation?

2. Across ethnicity, how acoustically similar or different are Glasgow-Asian and Glasgow Non-Asian vowels?

## 7.3    Vowels in Sociolinguistic Research

Vowels have long been studied in sociolinguistics as they play a vital role in language variation and change. Specific vowel realisations have often been used to discriminate between different social groups and personal identities. Early sociolinguistic work by Labov (1963) on Martha's Vineyard, an island on the Atlantic coast of North America, revealed that linguistic variation and change in two diphthongal vowels in American English was closely related to the social identity of the inhabitants; those who ascribed closely to the rural traditional island lifestyle used more centralised variants which marked them as islanders, whereas those who were more mainland-oriented used more standard variants representative of their more cosmopolitan identity. Further work by the Milroys (e.g. Milroy 1980, 1987) in working class Northern Irish communities suggested that an individual's social networks influenced vocalic variation; strong networks acted as norm enforcement mechanisms for mainly vernacular variants whereas looser networks were more likely to adopt ongoing linguistic changes in the wider society. More recent and particularly relevant to the present study is research by Eckert (2000) who showed that vocalic variation was connected to different Communities of Practice, i.e. the Jocks and the Burnouts.

All such previous research emphasises the role of linguistic variation in conveying some sense of social meaning, whilst recognising the significance of phonetic conditioning and other linguistic factors. Studies on sound change in vowels have suggested that innovations are commonly led by females and are consistently conditioned by phonetic factors. Vowels have also been studied in the UK context with respect to dialect contact, dialect levelling, diffusion and innovation of speech features (Trudgill 1999, Kerswill & Williams 2000, Cheshire et al. 2011) and demonstrate how accent features convey subtle social information about the speakers. Vowels and consonants have also been found to show different patterns in social variation, in some studies (e.g. Kerswill & Williams 2000).

## 7.4    Vowel Production and Classification

A vowel is a type of sonorant produced when air from the lungs is expelled through the vocal apparatus without any significant obstruction to the airflow. This is in contrast to an obstruent (e.g. fricative or plosive) where the airflow is constricted due to the arrangement of the articulators. Sonorants are nearly always voiced, unlike obstruents which are often voiceless.

Vowel production is often considered using source filter theory (Fant 1970). It demonstrates that complex sound waves generated by vocal fold vibration (the glot-

**Figure 7.1:** IPA Vowel Chart
(International Phonetic Association 1999)
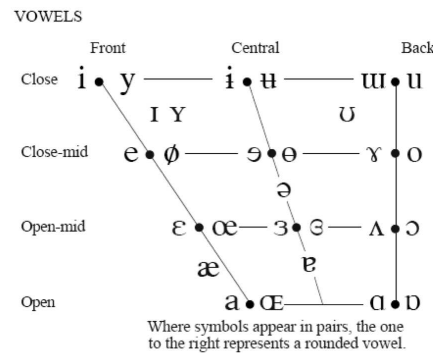


tal source) are filtered through the dynamically changing oral cavities during speech, creating unique resonances. These resonances are produced through a combination of an individual's tongue configuration; lip shape; laryngeal and pharyngeal wall settings; length, shape and size of the vocal tract as well as voice quality.

Distinct resonances are then produced in the oral cavities due to the unique settings and natural frequency of the vocal apparatus, ultimately resulting in varying vowel sounds and quality. Still, complex waves from the glottal source that have different fundamental frequencies filtered by the same vocal tract arrangement will all show an analogous spectral shape (reflecting the resonance curve of the filter). This means that even speakers with different pitched voices will produce similar sounding vowels.

Vowels are typically characterised along three dimensions as shown in Figure 7.1 (cf. Jones 1956). Changes in tongue configuration and the shape of the vocal tract determine the vowel quality and may vary in:

1. tongue height or first formant resonance (F1)

2. tongue frontness/backness or the second formant resonance (F2)

3. degree of lip rounding - lowering of formants, especially F2 and F3

In early sociolinguistic studies, vowels have often been analysed auditorily, but current technological and methodological advances in sociophonetics have allowed quantitative acoustic analysis e.g. analysis of spectral characteristics of vowels using digital spectrography (Thomas 2011). Acoustically, it is accepted that the first and second formant values are considered enough for a general characterisation of different vowels, despite the fact that vowels are extremely complex articulations.

## 7.5 Relevant Varieties for Glasgow-Asian

There are four main linguistic systems that may relate to the speech of the Glasgow Asian girls in this study: Scottish-English, Punjabi, Urdu, Pakistani-English - as well

**Figure 7.2:** Impressionistic Vowel Chart of Standard Scottish English (Stuart-Smith 1999)
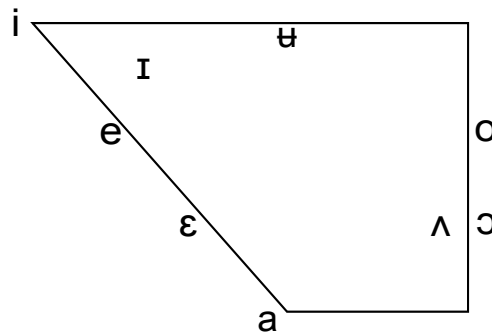
**Table 7.1:** The Vowel Phonemes of Standard Scottish-English (SSE)

| Lexical Set (Wells 1982) | SSE Phoneme | SSE Lexical Set (Johnston 1997) |
|---|---|---|
| FLEECE/NEAR | i | FLEECE |
| KIT | ɪ | BIT |
| FACE/SQUARE | e | FACE |
| DRESS | ɛ | DRESS |
| TRAP/BATH/PALM/START | a | CAT |
| STRUT | ʌ | STRUT |
| LOT/THOUGHT | ɔ | COT |
| GOAT/FORCE | o | GOAT |
| FOOT/GOOSE | ʉ | BOOT |

as the limited information on British Asian English. Each have different vowel systems in terms of vowel quality and length contrasts.

## 7.5.1 Scottish-English

The Scottish-English vowel system comprises of twelve main phonemes: nine monophthongs /i, ɪ, e, ɛ, a, o, ʌ, ɔ, ʉ/ and four diphthongs /əi, ae, oe, ʌʉ/ (Stuart-Smith 2004). Monophthongal vowels are displayed in Figure 7.2 and in Table 7.1, with notable missing oppositions like FOOT/GOOSE as expected in English-English (e.g. Abercrombie 1979).

Scottish vowels are often monophthongs where diphthongs would be expected in English English (Abercrombie 1979) and are subject to the Scottish Vowel Length Rule (SVLR) whereby vowel length is conditioned by phonetic environment (e.g. Scobbie et al. (1999); and also see Chapter 3). Differences in vowel realisation arise due to regional, class and other social differences between speakers as suggested by Johnston (1997, 1985), Stuart-Smith (1999), Macaulay (1977) and Chirrey (1999). A comprehensive examination of phonetic variants in Scottish English varieties such as Urban, Central, Southern and Northern Scots can be found in Stuart-Smith (2004).

Urban varieties of Scottish-English in the Central Belt area have been the focus of

**Figure 7.3:** Vowel Chart of Standard Punjabi (Shackle 2003)
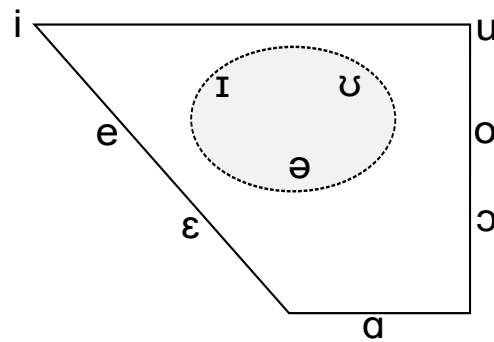


much linguistic research, especially Glasgow and Edinburgh (Stuart-Smith 1999). Very recent preliminary work on Standard English in Glasgow suggests raising of GOAT and COT, but fronting and lowering of BOOT (Macdonald et al. 2015). Closer realisations of GOAT in non-Asian Scottish Standard English speakers in Edinburgh have been linked to accent-internal differentiation and Anglicisation, and a generally changing position for this vowel (Schützler 2014).

### 7.5.2 Punjabi

There are ten vowel phonemes of Modern Standard Punjabi, /i, e, ɛ, ɪ, ə, ʊ, ɑ, ɔ, o, u/, and eight diphthongs /ĕɑ, ĕo, ĕɔ, ĕi, ĕe, əu, əo, ʊɑ/ (Shackle 2003, Karamat 2001) illustrated in Figure 7.3. A systemic contrast between short and long vowels is highlighted by the shaded area marking the centralised short vowels against the remaining peripheral long vowels (Shackle 2003). Phonemic nasalisation is also a common feature of peripheral vowels and is typically strongest in word-final position, often marking important morphological and semantic differences, as well as by use of tone. (For clarity, nasal vowel phonemes are not included in the list of phonemes).

### 7.5.3 Urdu

The phonemic vowels of Standard Urdu are:/i, e, a, ɑ, o, u/ with two diphthongs /ai, au/ and are charted in Figure 7.4 (Schmidt 2003, Saleem et al. 2002). Like Punjabi, it has contrasting vowel length, nasalised vowels and also features the semi-vowels /j, v, w/.

### 7.5.4 Pakistani-English

As no formal detailed phonology of Pakistani-English has been documented, some small-scale studies by Mahboob & Ahmar (2004) in Karachi, and Sheikh (2012) in Lahore, propose a suggested vowel system. Speakers under study were Urdu-speaking and read word-list data (taken from Foulkes & Docherty 1999) and the 'North Wind'

**Figure 7.4:** Impressionistic Vowel Chart of Standard Urdu (Schmidt 2003)
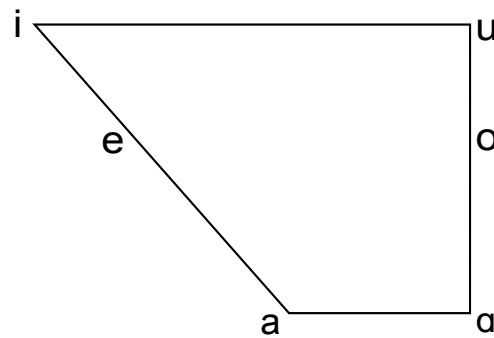


**Table 7.2:** Vowel Realisations in Pakistani-English in Pakistan

| Lexical Set | Pakistani-English |
|---|---|
| FLEECE | iː |
| FACE | eɪ, e |
| TRAP | æ |
| BATH | ɑː |
| THOUGHT/LOT | ɔː/ ɔ |
| CLOTH | oː |
| GOAT | əʊ, oː, ʊ |
| FOOT | ʊ, uː |
| GOOSE | uː |

After Mahboob & Ahmar (2004)

reading passage for direct comparison to English-English. The six vowels under consideration which correspond to those in Pakistani-English, are presented in Table 7.2. This reveals similar realisations to Anglo-English varieties such as diphthongal qualities for FACE and GOAT which are uncharacteristic of Scottish-English, Punjabi and Urdu. There is also some variation, e.g. /e/ and /o/ is also a possibility for FACE and GOAT. Distinctive variation in vowel length, tenseness/laxity and suprasegmental features combine to give the characteristic quality of Pakistani-English.

## 7.5.5 British-Asian English

A few small-scale accent studies on vowels in British-Asian English have been conducted on different South Asian groups in mainly urban areas. They have revealed local, regional and gender variation as well as evidence of ethnic differences when compared with other ethnic groups (Khan 2006, Blakeley & Torgersen 2009, Stuart-Smith et al. 2011, Kirkham 2013, Wormald 2014) (see Chapter 3). Research in the UK across ethnic groups has been done but none to my knowledge within ethnicity.

Typically, many vowels in British-Asian are realised as monophthongs even in geographical areas where English-English diphthongs might be expected, such as in Southern-English accents; but as many studies have focused on northern areas of Eng-

land which generally have monophthongs in their dialects such as FACE and GOAT, it can be difficult to disambiguate local or ethnic orientation for their use at this stage. One study by Evans et al. (2007) on an Indian-Gujerati community in Wembley actually found less 'ethnically-accented' vowels and more use of standard British English realisations. This could be linked to their methodology (word list data) which can elicit a more formal style, as well as participants' greater career and educational aspirations compared to mainstream ethnic minority speakers of London-English.

Preliminary evidence from small-scale phonetic work in Scotland on Glasgow-Asian on two vowels has suggested some interesting results (Stuart-Smith et al. 2011, speech data taken from Lambert 2004 and Alam 2006). When compared to non Glasgow-Asian male speakers, FACE was found to be closer and GOAT more fronted with greater separation found for GOAT in Glasgow-Asian speakers. Moreover, speakers who had the greatest Asian networks used the most extreme variants.

In data drawn from the researcher's Masters pilot study, in female speakers, vowel quality largely patterned with Community of Practice membership with marked and systematic differences between some speakers within CofP. These findings suggest that variation in vowel realisation may play a role in constructing ethnicity and identity in these speakers.

### 7.5.6  Summary of Relevant Varieties

Vowels in Scottish-English, Punjabi, Urdu, Pakistani-English as well as British-Asian English varieties have many similarities in terms of realisation, especially the frequently observed monophthongal vowels. The next sections will introduce the vowel data set and the methodological procedures used for vowel analysis.

## 7.6  Methodology

### 7.6.1  Speaker Sample

Speech from forty-one female adolescent speakers from the Glaswasian corpus was used in the final vowel sample which yielded a total of 15,478 vowel tokens. Speakers were all Scottish-Pakistani Muslim girls, born in Scotland, aged 15-18 years old and were observed to belong to six CofPs: Conservatives (7), Religionistas (4), Moderns (6), Shifters (10), Messabouts (8) and Wannabes (6).

The girls were selected because they were characteristic of their particular CofP, had enough available speech data for analysis, and may already have been transcribed for previous analyses (Alam 2006). On average, thirty minutes of speech was transcribed for each speaker but this was not always possible. Some speakers also spoke more or less during the recordings so the amount of speech data was inevitably variable. An initial target of a minimum of six speakers per CofP were to be transcribed in order to attain sufficient statistical strength, but due to time constraints for transcribing

and the limited number of speakers in the Religionista category this was not possible. Moreover, knowledge of using Linear Mixed Effects Models for statistical analysis meant that such imbalance would be accounted for accurately.

A summary of the speakers and their attributes is given in Table 7.3. This shows a degree of individual variability within CofP in some of the main social practices e.g. wearing hijab or further education or career aspirations. This demonstrates that while CofP is one way of categorising the girls, this does not imply uniformity across all practices, and some practices may still be emerging and being negotiated across and within CofPs.

### 7.6.2 Vowel Sample

Six stressed unchecked vowels in Scottish English were analysed: /i, e, a, ɔ, o, ʉ/ (cf. Scobbie et al. 1999). According to Johnston (1997) the corresponding keywords for the vowels when comparing Anglo-English to Scottish-English would be FLEECE, FACE, BOOT (FOOT/GOOSE), GOAT, COT (COT/CAUGHT) and CAT (TRAP/PALM/BATH) respectively. Unchecked vowels occur in open syllables e.g. *be* unlike the checked or lax short vowels such as /ɪ, ɛ, ʌ/ which require a closing consonant, e.g. *beat*.

A summary of CofP, speaker by vowel is presented in Table 7.4. It shows that per speaker there was a combined range across all vowels of 66-1117 vowel tokens. Per vowel, each speaker ranged between 3-291 vowel tokens. The range across the 6 vowels was between 1642-3495 tokens. A summary of the counts for CofP by vowel is presented in Table 7.5.

#### Selected Linguistic Context

Vowels were selected either in word-final position (e.g. *be, see*), followed by obstruents (e.g. stops and fricatives as in *meet, good, close, thought*), or nasal sonorants, e.g. *shame, moan*. A full list of the selected words by vowel and their frequency is given in the Appendices for reference (Appendix B, Appendix C, Appendix D, Appendix E, Appendix F and Appendix G). Exclusions are given in Section **??**.

#### Phonetic Coding for Preceding and Following Segment

Phonetic coding for preceding and following segment was performed following José et al. (2013). The original coding used for preceding segment was: labial, coronal, dorsal, glottal, palatal, vowel, liquid and none. Coding used for following segment was: labial, coronal, dorsal, syllable boundary and none. For instance, in a word like *blame* where the target vowel was FACE, preceding context was a liquid /l/ while the following context was coded as a labial for /m/.

Whilst all tokens were initially finely coded for preceding and following place of articulation these were recoded and reduced to four contexts for both due to small numbers in some of the categories. The final codes were **labial, coronal, dorsal**

**Table 7.3:** Speaker Attributes

| Speaker | CofP | Age | Year Recorded | Clothing | Make-up | Hair | Educ/Career |
|---|---|---|---|---|---|---|---|
| Ameera | Conservative | 17 | 2 | plain/unfashionable | eyeliner, mascara | long | college |
| Azeeza | Conservative | 17 | 2 | plain/unfashionable | eyeliner, mascara, lip gloss, blusher | hijab - on/off | college |
| Imaan | Conservative | 17 | 2 | plain/unfashionable | mascara | hijab - always | university |
| Inaya | Conservative | 17 | 1 | plain/unfashionable | none | hijab - always | university |
| Razia | Conservative | 17 | 2, 3 | plain/unfashionable | eyeliner | hijab- always | college |
| Ruqaiyya | Conservative | 17 | 2 | plain/unfashionable | none | hijab - always | university |
| Ulfa | Conservative | 17 | 3 | plain/unfashionable | none | hijab - always | college |
| Fyza | Religionista | 17 | 2 | trendy/fashionable | eyeliner, mascara, bronzer | hijab - always | university |
| Hadeeqa | Religionista | 17 | 3 | trendy/fashionable | none | hijab - always | university |
| Neelum | Religionista | 17 | 2 | trendy/fashionable | eyeliner, blusher, foundation, mascara | long | university |
| Zainab | Religionista | 17 | 2 | trendy/fashionable | eyeliner, mascara, lip gloss, blusher | hijab - always | university |
| Alishba | Modern | 17 | 1 | trendy/fashionable | winged eyeliner | long, layered, straightened | university |
| Areesha | Modern | 17 | 3 | trendy/fashionable | eyeliner, lip gloss | short | university |
| Farheen | Modern | 17 | 3 | trendy/fashionable | winged eyeliner | long, layered, straightened | university |
| Huma | Modern | 17 | 1 | trendy/fashionable | winged eyeliner | long, layered, straightened | university |
| Shabeena | Modern | 17 | 2 | trendy/fashionable | winged eyeliner | long, layered, straightened | university |
| Zahida | Modern | 17 | 1 | trendy/fashionable | eyeliner, lip loss, | long, layered | college |
| Aliyah | Shifter | 17 | 2 | trendy/fashionable | eyeliner, mascara, lip gloss, blusher | hijab - on/off | university |
| Aneela | Shifter | 17 | 1 | plain/unfashionable | none | hijab - always | university |
| Arshiya | Shifter | 15 | 2 | trendy/fashionable | eyeliner, lip gloss, blusher, foundation | long, layered, straightened | college |
| Asiya | Shifter | 17 | 1 | plain/unfashionable | eyeliner, mascara | hijab - on/off | university |
| Humaira | Shifter | 17 | 2, 3 | trendy/fashionable | eyeliner, blusher, mascara, foundation | hijab - always | college |
| Nyla | Shifter | 17 | 1 | trendy/fashionable | eyeliner | long, straightened | college |
| Saiqa | Shifter | 17 | 1 | plain/unfashionable | none | hijab - on/off | college |
| Shazia | Shifter | 17 | 1 | trendy/fashionable | eyeliner, lip, gloss, mascara | long, layered, dyed | college |
| Urooj | Shifter | 17 | 1, 2 | plain/unfashionable | eyeliner, lip gloss, blusher, foundation | hijab - on/off | university |
| Zeyba | Shifter | 16 | 2, 3 | trendy/fashionable | blusher | hijab - on/off | college |
| Asma | Messabout | 16 | 3 | trendy/fashionable | eyeliner, mascara, blusher | hijab - on/off | college/marriage/unsure |
| Bilqees | Messabout | 16 | 3 | trendy/fashionable | eyeliner, mascara, eyeshadow | hijab - on/off | college |
| Hibah | Messabout | 16 | 3 | trendy/fashionable | eyeliner, mascara, blusher | hijab - on/off | college/marriage/unsure |
| Hirra | Messabout | 17 | 2 | trendy/fashionable | eyeliner, lip gloss, mascara, blusher | long, layered | college |
| Naazi | Messabout | 17 | 2 | trendy/fashionable | eyeliner, lip gloss, mascara, foundation | long, dyed, highlights | college |
| Rifat | Messabout | 16 | 3 | trendy/fashionable | eyeliner, mascara, eyeshado, foundation | long, layered | college |
| Saira | Messabout | 16 | 2 | plain/unfashionable | eyeliner, lip gloss | hijab - on/off | college |
| Sakeena | Messabout | 17 | 2 | plain/unfashionable | eyeliner, coloured lenses | long, layered | college |
| Kinza | Wannabe | 16 | 3 | plain/unfashionable | none | mid-length | university |
| Maisa | Wannabe | 16 | 2, 3 | plain/unfashionable | none | hijab -always | university |
| Malaika | Wannabe | 17 | 3 | trendy/fashionable | eyeliner, lip gloss, coloured lenses | hijab - on/off | university |
| Romeeza | Wannabe | 16 | 2 | plain/unfashionable | none | mid-length | university |
| Yusra | Wannabe | 17 | 3 | plain/unfashionable | mascara, foundation | mid-length | university |
| Zareen | Wannabe | 17 | 3 | plain/unfashionable | none | hijab - always | university |

**Table 7.4:** Counts for Vowel Sample by CofP and Speaker

| CofP | Speaker | FLEECE | FACE | CAT | COT | GOAT | BOOT | Total |
|------|---------|--------|------|-----|-----|------|------|-------|
| **Conservatives** | Ameera | 35 | 19 | 52 | 72 | 73 | 53 | 304 |
| | Azeeza | 14 | 16 | 8 | 29 | 29 | 10 | 106 |
| | Imaan | 103 | 109 | 83 | 118 | 147 | 70 | 630 |
| | Inaya | 53 | 33 | 55 | 66 | 70 | 39 | 316 |
| | Razia | 54 | 44 | 71 | 94 | 103 | 101 | 467 |
| | Ruqaiyya | 27 | 28 | 37 | 45 | 53 | 53 | 243 |
| | Ulfa | 24 | 16 | 32 | 51 | 47 | 26 | 196 |
| **Religionistas** | Fyza | 82 | 79 | 104 | 128 | 93 | 73 | 559 |
| | Hadeeqa | 39 | 28 | 65 | 71 | 47 | 66 | 316 |
| | Neelum | 46 | 29 | 53 | 81 | 69 | 52 | 330 |
| | Zainab | 25 | 31 | 49 | 51 | 48 | 49 | 253 |
| **Moderns** | Alishba | 70 | 36 | 31 | 95 | 158 | 55 | 445 |
| | Areesha | 14 | 8 | 17 | 18 | 33 | 30 | 120 |
| | Farheen | 17 | 3 | 25 | 38 | 19 | 27 | 129 |
| | Huma | 58 | 61 | 76 | 94 | 103 | 74 | 466 |
| | Shabeena | 52 | 65 | 117 | 100 | 93 | 65 | 492 |
| | Zahida | 85 | 85 | 89 | 118 | 175 | 73 | 625 |
| **Shifters** | Aliyah | 53 | 31 | 51 | 104 | 55 | 55 | 349 |
| | Aneela | 83 | 68 | 100 | 137 | 92 | 60 | 540 |
| | Arshiya | 8 | 7 | 14 | 15 | 23 | 16 | 83 |
| | Asiya | 179 | 151 | 135 | 291 | 258 | 103 | 1117 |
| | Humaira | 88 | 77 | 150 | 232 | 205 | 182 | 934 |
| | Nyla | 30 | 34 | 54 | 58 | 76 | 49 | 301 |
| | Saiqa | 44 | 49 | 39 | 63 | 81 | 46 | 322 |
| | Shazia | 46 | 44 | 43 | 53 | 67 | 69 | 322 |
| | Urooj | 14 | 11 | 13 | 9 | 28 | 17 | 92 |
| | Zeyba | 35 | 35 | 35 | 83 | 75 | 63 | 326 |
| **Messabouts** | Asma | 24 | 10 | 22 | 56 | 48 | 13 | 173 |
| | Bilqees | 66 | 30 | 75 | 107 | 116 | 124 | 518 |
| | Hibah | 30 | 17 | 30 | 57 | 41 | 13 | 188 |
| | Hirra | 8 | 4 | 11 | 21 | 15 | 7 | 66 |
| | Naazi | 35 | 21 | 36 | 104 | 126 | 39 | 361 |
| | Rifat | 45 | 28 | 45 | 97 | 52 | 35 | 302 |
| | Saira | 106 | 66 | 93 | 140 | 111 | 128 | 644 |
| | Sakeena | 90 | 81 | 81 | 132 | 184 | 146 | 714 |
| **Wannabes** | Kinza | 41 | 24 | 30 | 68 | 70 | 33 | 266 |
| | Maisa | 30 | 25 | 39 | 65 | 50 | 28 | 237 |
| | Malaika | 26 | 17 | 45 | 51 | 58 | 52 | 249 |
| | Romeeza | 30 | 30 | 38 | 60 | 53 | 30 | 241 |
| | Yusra | 105 | 65 | 92 | 171 | 166 | 180 | 770 |
| | Zareen | 29 | 27 | 58 | 60 | 85 | 98 | 357 |
| **Total** | | 2043 | 1642 | 2293 | 3503 | 3495 | 2502 | 15478 |

**Table 7.5:** Counts for Vowel Sample by CofP

| CofP | No.Spk | FLEECE | FACE | CAT | COT | GOAT | BOOT | Total N |
|------|--------|--------|------|-----|-----|------|------|---------|
| Conservative | 7 | 310 | 265 | 338 | 475 | 522 | 352 | 2262 |
| Religionista | 4 | 192 | 167 | 271 | 331 | 257 | 240 | 1458 |
| Modern | 6 | 296 | 258 | 355 | 463 | 581 | 324 | 2277 |
| Shifter | 10 | 580 | 507 | 634 | 1045 | 960 | 660 | 4386 |
| Messabout | 8 | 404 | 257 | 393 | 714 | 693 | 505 | 2966 |
| Wannabe | 6 | 261 | 188 | 302 | 475 | 482 | 421 | 2129 |
| Total | 41 | 2043 | 1642 | 2293 | 3503 | 3495 | 2502 | 15478 |

**Table 7.6:** Summary of Vowel Counts by Variable

| Linguistic Context | Total Tokens |
|---|---|
| Vowel: FLEECE | 2043 |
| Vowel: FACE | 1642 |
| Vowel: CAT | 2293 |
| Vowel: COT | 3503 |
| Vowel: GOAT | 3495 |
| Vowel: BOOT | 2502 |
| Preceding Segment: labial | 2171 |
| Preceding Segment: coronal | 6123 |
| Preceding Segment: dorsal | 1900 |
| Preceding Segment: other/NA | 5284 |
| Following Segment: labial | 2005 |
| Following Segment: coronal | 7412 |
| Following Segment: dorsal | 1343 |
| Following Segment: other/NA | 4718 |
| CofP:Conservative | 2262 |
| CofP:Religionista | 1458 |
| CofP:Modern | 2277 |
| CofP:Shifter | 4386 |
| CofP:Messabout | 2966 |
| CofP:Wannabe | 2129 |

and **other/NA**. For instance in the *blame* example, preceding context was coded as 'otherNA' for /l/ and the following context remained a labial for /m/. Further examples are: *cough* which was coded as dorsal for the preceding segment /k/ and following phonetic segment was coded as labial for /f/.

**Summary of Vowel Data tokens**

The token counts of each of the linguistic contexts of vowel, preceding segment, following segment, CofP and speaker are very broadly summarised in Table 7.6. It shows a substantial but variable token count for each of the contexts. A more detailed cross-tabulation of token numbers by vowel, preceding and following segment is also presented in Table 7.7.

Cross tabulations with CofP for the preceding and following segment respectively are shown in Appendix H.7 and presented here in the text in Table 7.8. Whilst some numbers are low, these cross tabulations do show a fairly wide range of tokens in most contexts. This type of unequal variance, missing data, and even correlated data or collinearity can be handled much better in mixed models (Baayen 2008).

Where there were very low Ns, some models were not possible for interactions. Appendix H.7 and Appendix I.8 are also included for a three-way and four-way cross-tabulation with vowel, preceding segment, following segment and CofP. However there are very low numbers in some of the cells and LMEMs are not suitable for this type of

**Table 7.7:** Counts for Vowel, Preceding Segment and Following Segment

| Vowel | FollSeg / PreSeg | labial | coronal | dorsal | otherNA | Total |
|---|---|---|---|---|---|---|
| FLEECE | labial | 154 | 202 | 103 | 567 | 1026 |
|  | coronal | 18 | 144 | 8 | 254 | 424 |
|  | dorsal | 26 | 0 | 0 | 0 | 26 |
|  | otherNA | 227 | 230 | 34 | 76 | 567 |
| FACE | labial | 62 | 190 | 74 | 6 | 332 |
|  | coronal | 143 | 172 | 70 | 387 | 772 |
|  | dorsal | 39 | 16 | 1 | 9 | 65 |
|  | otherNA | 22 | 274 | 16 | 161 | 473 |
| CAT | labial | 79 | 196 | 101 | 3 | 379 |
|  | coronal | 22 | 537 | 65 | 1 | 625 |
|  | dorsal | 17 | 146 | 0 | 1 | 164 |
|  | otherNA | 596 | 298 | 213 | 18 | 1125 |
| COT | labial | 18 | 88 | 1 | 0 | 107 |
|  | coronal | 70 | 578 | 291 | 12 | 951 |
|  | dorsal | 40 | 743 | 0 | 0 | 783 |
|  | otherNA | 225 | 1281 | 142 | 14 | 1662 |
| GOAT | labial | 2 | 114 | 20 | 8 | 144 |
|  | coronal | 1 | 762 | 13 | 1509 | 2285 |
|  | dorsal | 1 | 202 | 1 | 455 | 659 |
|  | otherNA | 91 | 245 | 20 | 51 | 407 |
| BOOT | labial | 49 | 123 | 11 | 0 | 183 |
|  | coronal | 0 | 107 | 19 | 940 | 1066 |
|  | dorsal | 0 | 196 | 7 | 0 | 203 |
|  | otherNA | 103 | 568 | 133 | 246 | 1050 |
| **Total** |  | 2005 | 7412 | 1343 | 4718 | 15478 |

**Table 7.8:** Counts for Vowel, Following Segment and CofP

| Vowel | CofP | Conservative | Messabout | Modern | Religionista | Shifter | Wannabe | Total |
|---|---|---|---|---|---|---|---|---|
| **Vowel** | **FollSeg** | | | | | | | |
| fleece | *labial* | 74 | 68 | 50 | 55 | 123 | 55 | 425 |
| | *coronal* | 78 | 106 | 87 | 46 | 187 | 72 | 576 |
| | *dorsal* | 31 | 23 | 30 | 8 | 42 | 11 | 145 |
| | *otherNA* | 127 | 207 | 129 | 83 | 228 | 123 | 897 |
| face | *labial* | 47 | 50 | 38 | 32 | 61 | 38 | 266 |
| | *coronal* | 133 | 94 | 87 | 73 | 187 | 78 | 652 |
| | *dorsal* | 22 | 36 | 25 | 15 | 47 | 16 | 161 |
| | *otherNA* | 63 | 77 | 108 | 47 | 212 | 56 | 563 |
| boot | *labial* | 18 | 21 | 24 | 26 | 40 | 23 | 152 |
| | *coronal* | 169 | 156 | 149 | 105 | 268 | 147 | 994 |
| | *dorsal* | 30 | 43 | 15 | 23 | 43 | 16 | 170 |
| | *otherNA* | 135 | 285 | 136 | 86 | 309 | 235 | 1186 |
| goat | labial | 17 | 17 | 17 | 11 | 23 | 10 | 95 |
| | *coronal* | 203 | 252 | 208 | 86 | 414 | 160 | 1323 |
| | dorsal | 9 | 17 | 7 | 5 | 10 | 6 | 54 |
| | *otherNA* | 293 | 407 | 349 | 155 | 513 | 306 | 2023 |
| cot | *labial* | 54 | 61 | 59 | 30 | 102 | 47 | 353 |
| | *coronal* | 355 | 560 | 361 | 271 | 756 | 387 | 2690 |
| | *dorsal* | 63 | 92 | 41 | 24 | 174 | 40 | 434 |
| | *otherNA* | 3 | 1 | 2 | 6 | 13 | 1 | 26 |
| cat | *labial* | 103 | 119 | 118 | 101 | 193 | 80 | 714 |
| | *coronal* | 178 | 200 | 171 | 123 | 335 | 170 | 1177 |
| | *dorsal* | 57 | 69 | 57 | 46 | 99 | 51 | 379 |
| | *otherNA* | 0 | 5 | 9 | 1 | 7 | 1 | 23 |
| Total | | 2262 | 2966 | 2277 | 1458 | 4386 | 2129 | 15478 |

heavily uneven data with many zero values.

## 7.6.3   LaBB-CAT, HTK-Training and CELEX

Speaker sound files and the associated transcribed speech files in Praat were uploaded to the online database resource and easily searchable repository, LaBB-CAT (Fromont & Hay 2012) which generated the *Glaswasian* Corpus.

Primarily used as a speech recognition tool, the Hidden Markov Model Toolkit (HTK) was used so that each speaker's utterances were HTK trained and aligned. Transcripts were corrected during the HTK training whereby utterances not recognised by the CELEX lexical English database were inserted, e.g. place names, code-switched items in Punjabi or Urdu and spelling inconsistencies.

The CELEX lexical database allows detailed information regarding aspects of orthography, phonology, morphology, syntax and word frequency (Baayen et al. 1995). Phonological aspects of speakers' utterances were accessed using CELEX such as phonetic transcriptions, syllable structure and primary stress, though CELEX uses Anglo-English forms. HTK speaker training allowed the generation of accurate phonetic transcription, so that subsequent automatic vowel formant measurements could be conducted in LaBB-CAT.

### 7.6.4 Vowel Searches using LaBB-CAT

Vowel searches were carried out in LaBB-CAT to extract instances of the six vowels under analysis /i, e, a, ɔ, o, ʉ/ for each of the forty-one speakers. As LaBB-CAT used the CELEX English-English dictionary, the additional vowels /ɑ, ɒ, u/ which are not distinguished in Scottish English were also searched as the first two are usually subsumed under the Scottish /a/ whilst /u/ is typically pronounced as /ʉ/. As a result, nine vowels were sought: FLEECE, FACE, TRAP, BATH, LOT, THOUGHT, GOAT, GOOSE, FOOT.

Searches were performed using LaBB-CAT's layer generator, regular expressions and the CELEX dictionary. An example of a regular expression search using the 'segment' layer for the Scottish BOOT vowel is to search for the segments 'U' and 'u' corresponding to the FOOT ('U') and GOOSE ('u') vowels in English English.

Using other layers in LaBB-CAT such as the stress or orthography layer, a more detailed regular expression could be used in order to include or exclude certain phonetic contexts, strings or keywords. For instance, the regular expression '.*U[ˆRrl]*.*' generated all stressed tokens of the FOOT vowel but excluded vowel tokens followed by /r, R, l/.

In the orthography layer, words which were to be excluded were noted, e.g. removal of unstressed tokens which were often prepositions, pronouns or contractions like *he, they, say, they'd*. Removal of 'multi-targets' was also necessary, e.g. *logo*, as it was ambiguous as to which /o/ vowel was measured (unclear where the lexical stress was in the word) and these only comprised a tiny number.

While the majority of tokens from such searches were viable, some unsuitable tokens still managed to be found in the searches and this may be related to subtle inconsistencies in punctuation, spelling or formatting as well as variation in Scottish versus the English pronunciation used by CELEX. A detailed breakdown of the data reduction methods is given in Section 7.6.6.

The search results for each vowel were then automatically presented in a .csv file where the researcher selected useful information to be included such as the vowel, speaker's name, transcript name, CofP as well as the actual orthographic word. In this way a spreadsheet for each vowel was generated. R code was then used for further conversion and classification of these segments into phonetic contexts, e.g. labial, coronal.

### 7.6.5 Vowel Formant Extraction

The over-arching method for vowel analysis followed José et al. (2013) for direct comparability with their Glasgow vernacular speech data. This methodology included the same: phonetic coding of linguistic contexts e.g. labial, dorsal; vowel formant extraction procedures, data reduction methods; and vowel normalisation.

Spreadsheet results of the nine vowel searches were uploaded into LaBB-CAT and

**Figure 7.5:** Three Timepoints in any Sample Vowel where Formants Extracted
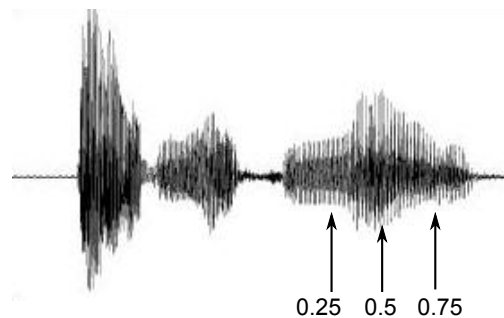


the function 'process with praat' was used for automatic vowel formant measurement for F1, F2 and F3. Default settings in Praat set for female speakers were used.

It is possible to measure vowels at a midpoint, or across the vowel at different points. Following José et al. (2013), three points were taken. Consequently, the formant values for F1, F2 (and F3) of each vowel token at three pre-defined time-points during the vowel, 0.25, 0.5, 0.75 (which corresponded to vowel onset, vowel midpoint and vowel offset respectively) were extracted into a .csv file for further analysis (see Figure 7.5). By using three time-points within the duration of the vowel greater confidence was placed in the reliability of the formant measures, as inconsistent formant values across the three time points would indicate any obvious inaccuracies in the data, e.g. caused by incorrect formant tracking. The data from these three time points were averaged (as well as a calculation of vowel duration which is not used in this present analysis).

## 7.6.6    Data Reduction

From the original 43 speakers, a total of 26,225 tokens were extracted from LaBB-CAT for all nine vowels /i, e, a, ɑ, ɒ, ɔ, o, u, ʉ/. After data verification procedures to remove potentially erroneous automated measures from LaBB-CAT, as well as excluded tokens, 10,747 tokens (41%) of the data was lost. A final 15,478 usable tokens were selected for analysis. The main data reduction methods are summarised in Table 7.9. (Note that all percentages are rounded to whole numbers where possible). Broadly data reduction removed: 1) exclusions; 2) erroneous measures; and 3) two speakers with extremely low token numbers.

Exclusions were: unstressed tokens (e.g. *they*), multi-targets (e.g. *logo*) and vowels followed by liquids /r, R, l/ ('R' refers to linking or intrusive /r/). Co-articulatory effects of following liquids can affect vowel quality by causing the vowel to sound diphthongal or schwa-like - e.g. lowering of F2 (Carter & Local 2007) and vowel breaking is also common before /r, n, l/ (Stuart-Smith 1999). Words that are rhotic in Scottish-English like *scarf* were also removed as LaBB-CAT used the English-English CELEX dictionary and therefore did not assume words like *scarf, arm* were followed

**Table 7.9:** Data Reduction Summary

|  | No.Tokens | % |
|---|---|---|
| *Initial data* | *26,255* | *100* |
| **Exclusions** |  |  |
| Followed by /R, r, l/ | 1968 | 8 |
| Scottish /r/ words | 420 | 2 |
| Speakers with very low Ns | 72 | 0.3 |
| **Erroneous** |  |  |
| Inconsistent formant tracks | 7095 | 27 |
| Mathematical outliers | 1192 | 5 |
| Total tokens removed | 10, 672 | 41 |
| **Final Token Count** | **15478** | **59** |

**Figure 7.6:** Inconsistent formant values across three time points in a vowel
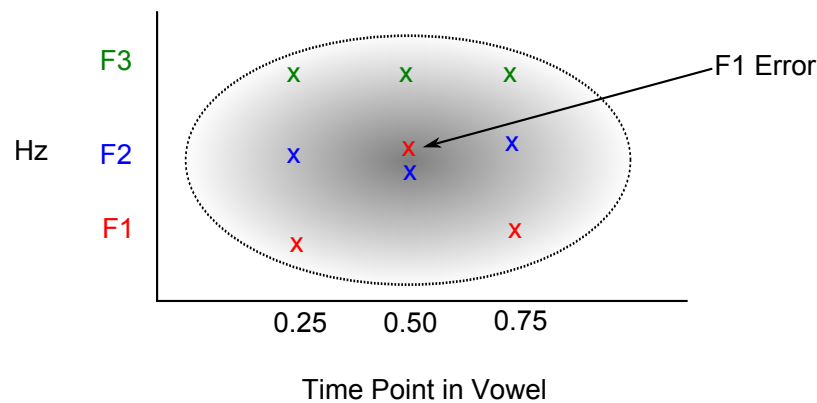


by /r/, hence manual removal.

Erroneous measures were: tokens with inconsistent formant values across the course of the vowel and extreme mathematical outliers. The majority of tokens (7095) were removed with inconsistent formant values at the 0.25, 0.50, 0.75 time point of the vowel, suggesting the extreme usefulness of the three time-point measures as opposed to a single measure in verifying an accurate vowel token (i.e, one point was outside a certain range of the other points). Figure 7.6 demonstrates the formant tracking where the shaded ellipse represents any vowel and an F1 formant error is marked with a red cross. From boxplot data, mathematical outliers assumed to be likely impossible formant measures were also removed in R.

In this analysis, all phonetically extreme tokens in of vowels were removed, allowing a more conservative view of the general vowel system in Glasgow-Asian. This serves as a good baseline for future analysis of more extreme and outlier variation both statistically and qualitatively with respect to immediate interactional context which can often be important socially in terms of language variation and change (Eckert 2008*b*).

### 7.6.7 Vowel Normalisation

Vowel formants (F1 and F2) were normalised using the NORM Suite online resource (Thomas & Kendall 2007). Vowel normalisation is important to account for factors such as vocal tract size which can affect formant resonances, whilst retaining sociolinguistic differences. Essentially, normalisation seeks to 'reduce physiological differences between speakers; preserve sociolinguistic, dialectal, cross-linguistic differences in vowel quality; preserve phonological distinctions among vowels; and models the cognitive processes that allow human listeners to normalize vowels uttered by different speakers' (Thomas & Kendall 2007, on the NORM webpage). There are many possible mathematical methods of vowel normalisation which are suited to different data sets and a good overview is provided in Flynn (2011).

Two separate methods of normalisation were undertaken for this study: **Lobanov** and **Bark** transformation. (1) Lobanov vowel-extrinsic transformation was used to normalise Hertz data for three main reasons: partly because this method has been demonstrated to provide optimal normalisation (Adank et al. 2004); other favoured methods such as Watt and Fabricius by Flynn (2011) require retracted /u/ which does not hold for Scottish-English; and it also followed the study by José et al. (2013) on Glasgow vowel data in order to make the data directly comparable. The Glasgow study also used Lobanov normalisation because this method reduced the additional impact of noise on the formants (Rathcke & Stuart-Smith 2014). (2) Data were transformed auditorily using the 'Vowels' package within R to convert the Hertz measurements to the Bark scale, and then the Bark measures were normalised using the Lobanov method (Kendall & Thomas 2010). The main rationale for Bark transform is to make a similar auditory translation across speakers.

All data reported here will be Lobanov-normalised data only, *not* the Bark Lobanov-normalised data mainly for comparability with the Glasgow vowel data by José et al. (2013) as well as only negligible measurement differences in the two different forms of vowel normalisation. This does not imply that auditorily transformed measures are less valid or relevant.

### 7.6.8 Summary Statistics

Normalised data was explored numerically and charted descriptively in R using the 'ggplot2' package in order to generate some summary statistics and to note any general trends and patterns in the data before more formal statistical analysis.

### 7.6.9 Linear Mixed Effects Models (LMEMs)

Linear Mixed Effects Models in R were applied to the data using the 'lme4' and 'lmerTest' package (lmerTest for p-values). Best-fit models were derived using the automatic 'step()' function which works through different possible model terms/structures

until it finds the best for the dataset. For example, 'step()' retains factors in the model for each individual vowel's F1 or F2 that affected formant values, whilst removing factors that did not show any effect.

## 7.6.10   Methods of Vowel Analysis

Vowel data was examined in four ways. Firstly, it was necessary to ascertain vowel differences accounting for linguistic factors and gaining insights about CofP at a general level when there were no interactions for linguistic factors. All data was put into a model which had main effects and possible interactions in order to determine vowel differences. Consequently, two linear mixed effects models for F1 and F2 were run in order to identify if there were significantly different vowels overall for Glasgow-Asian girls (main effects) which would be expected, and whether CofPs were significantly different across all combined linguistic contexts which might be less expected as social factors are more subtle. Such modelling would also ascertain whether some vowels are different for some CofPs and not other ones, which could be a possibility. An example of a full starting model for F2 is given in Model 7.1.

$$(7.1) \quad m = lmer(F2.lob \sim (Vowel + PreSeg + FollSeg + CofP + Vowel * CofP +$$
$$Vowel * PreSeg + Vowel * FollSeg + (1|Speaker) + (1|Word), data = alldata)$$

In order to examine within ethnicity effects of CofP and differences across ethnicity, three further analyses were conducted - Analysis A and B (within ethnicity) and Analysis C (across ethnicity). Specifically, these examined all six vowels /i, e, a, o, ɔ, ʉ/ and were:

- **Analysis A: Within Vowel Across CofP** comparing individual vowels across CofPs, e.g. comparing FLEECE vowel across CofPs

- **Analysis B: Within CofP Across Vowel** comparing vowels within a CofP, e.g. comparing all the Conservative CofP vowels to see vowel contrasts, e.g. FLEECE vs FACE vs CAT

- **Analysis C: Across Ethnicity** Asian/Non-Asian corpus comparison, e.g. to ascertain cross-ethnic differences across all six vowels

These different 'views' of the data were considered for a number of reasons. Firstly, Analysis A and B examine vowels within ethnicity. Analysis A (within vowel across CofP) allowed an examination of potential variation within a single vowel according to social practices, e.g. do Conservatives show different vowel qualities from e.g. Messabouts for all or some vowels? Linguistic variation across vowels according to CofP might be predicted, e.g. more fronted and closer realisations for GOAT for Conservatives; fronter realisations of FACE for Moderns with more retracted realisations for

Shifters as suggested by Stuart-Smith et al. (2011). However this prior research does not examine all six vowels or indeed all the same CofPs, so no concrete predictions regarding different vowels or directionality could be made at this point.

Secondly, Analysis B, looking at vowel qualities for each CofP, e.g. all vowels for Conservatives, and then for Messabouts etc, allows a different comparison, as vowel contrasts for one CofP might be different from another.

Finally Analysis C examines vowels across ethnicity and might reveal cross-ethnic rather than inter-ethnic differences in vowel quality. Certain vowels may be signalling ethnicity itself instead of a more general social identity linked to engagement in particular social practices.

The 'step' function was used in all three analyses.

**Analysis A: Within Vowel Across CofPs**

Using LMEMs, vowel formant values, F1 and F2, were set as the dependent variables for each vowel, e.g. FLEECE. Fixed factors were the two linguistic factors of *Preceding Segment (PreSeg)* and *Following Segment (FollSeg)* and the social factor of *Community of Practice (CofP)*. The starting LMEM model run in R is shown in Model 7.2 for FLEECE F1 only, which includes all 3 fixed factors and all the 2-way interactions among them, but not the 3-way one due to very low numbers as discussed earlier. Random intercepts included in the models were *Speaker* and *Word* in order to remove undue effects of speaker or word bias.

$$(7.2) \quad m = lmer(F1.lob \sim (PreSeg + FollSeg + CofP)\hat{\ }2 + (1|Speaker)$$
$$+ (1|Word), data = fleece)$$

**Analysis B: Within CofP across Vowels**

Using LMEMs, vowel formant values, F1 and F2, were set as dependent variables for each CofP, e.g. Conservative. Fixed factors were still *Preceding Segment* and *Following Segment* but this time the third fixed factor was *Vowel* with all two-way interactions. Random intercepts were still *Speaker* and *Word*. Model 7.3 shows the full model.

$$(7.3) \quad m = lmer(F1.lob \sim (PreSeg + FollSeg + Vowel)\hat{\ }2 + (1|Speaker)$$
$$+ (1|Word), data = Conservative)$$

**Analysis C: Across Ethncity**

This included all three main effects (*Corpus, PreSeg, FollSeg*), all two-way interactions (except *PreSeg:FollSeg*)and the two random effects of *Speaker* and *Word*. An example

of the full starting model for FLEECE is noted in Model 7.4.

$$(7.4) \quad m = lmer(F1.lob\tilde{\ }(Corpus + PreSeg + FollSeg + Corpus : PreSeg+ \\ Corpus : FollSeg + (1|Speaker) + (1|Word), data = fleece)$$

## 7.7 Results

### 7.7.1 Overview

An analytical strategy was devised due to the difficulties in interpreting the results of LMEMs if there are many interactions for complex datasets. Firstly, general descriptive and overall models were carried out for all the data (all speakers, all linguistic contexts); then more specifically within vowel across CofPs (Analysis A); within CofP by vowel (Analysis B): and finally a comparison of Glasgow Asian and Glasgow Non-Asian vowels (Analysis C). The results of these four separate views of the vowel data will now be presented.

### 7.7.2 General Descriptive and Statistical Data

Overall the six vowels showed statistically significant differences to each another where $p<0.05$, indicating separate realisations in the vowel space. A general representation of the Glasgow Asian vowel space for all the female speakers is charted in Figure 7.7 which gives a mean value for each vowel without separation for linguistic context. Boxplots show the general spread of the data for each vowel also in all contexts (see Figure 7.8 and Figure 7.9). As expected all six vowels showed many F1 and F2 differences conditioned by phonetic context (place of articulation of preceding segment and following segment).

Each vowel illustrates the typical patterns found across Scottish English language varieties. For example, CAT is the lowest vowel with FLEECE showing the highest F1 value. Similarly, COT and GOAT show the most backing distinguished by F2. There are some more unusual results for the front vowels where /i, e/ are reversed on the F2 dimension when all contexts are taken together. Given the results in Chapter 6 for /t/ and especially for FLEECE here, results may be related to co-articulatory relationships between the preceding coronal context and realisation of the /i/ vowel.

Key points are the similarities between /i, e/ and /ɔ, o/ on F1 (vowel height); and /e,ʉ/ on F2 (vowel front/backness).) Strikingly there is a FLEECE/FACE flip on the F2 dimension, where FACE is more fronted than FLEECE, and FACE is also very high on the F1 dimension (even higher than BOOT which is also fronted). This may suggest closer and fronter realisations for the FACE vowel as well as a more general pattern of closer realisations for all the vowels with respect to each other. Such patterns and formant values align with observations on British accents by Ferragne & Pellegrino (2010) who report similar findings for Glasgow vowel formants, albeit in word list data and using different methods of normalisation (Bark-only).

**Figure 7.7:** F2-F1 Vowel Plot of Means for All Glasgow-Asian Girls
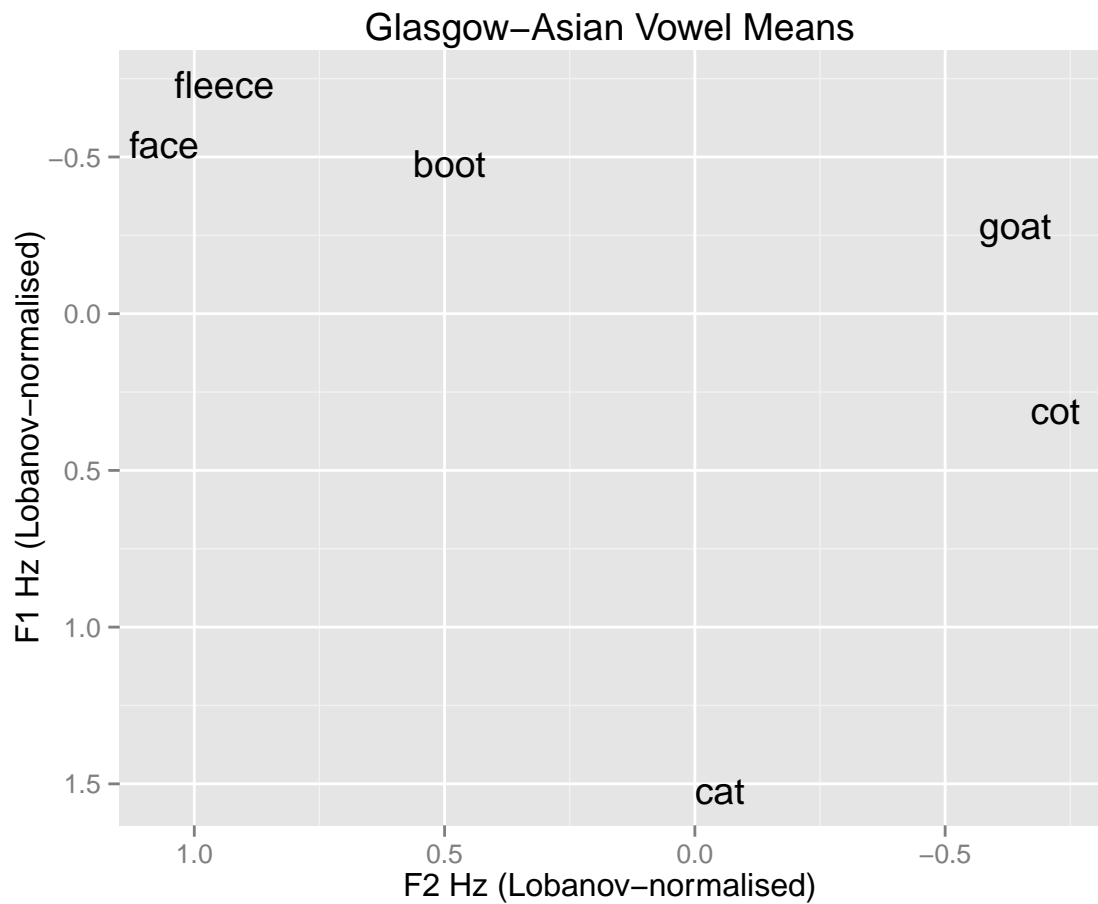


**Figure 7.8:** F1 by Vowels (all linguistic contexts)
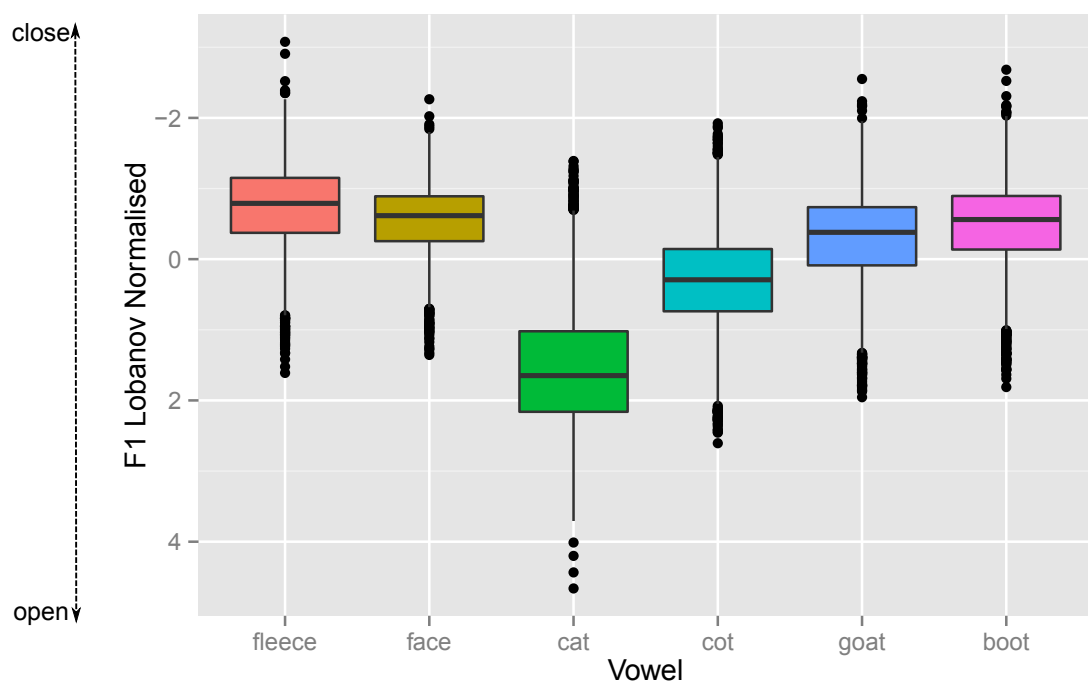
**Figure 7.9:** F2 by Vowels (all linguistic contexts)
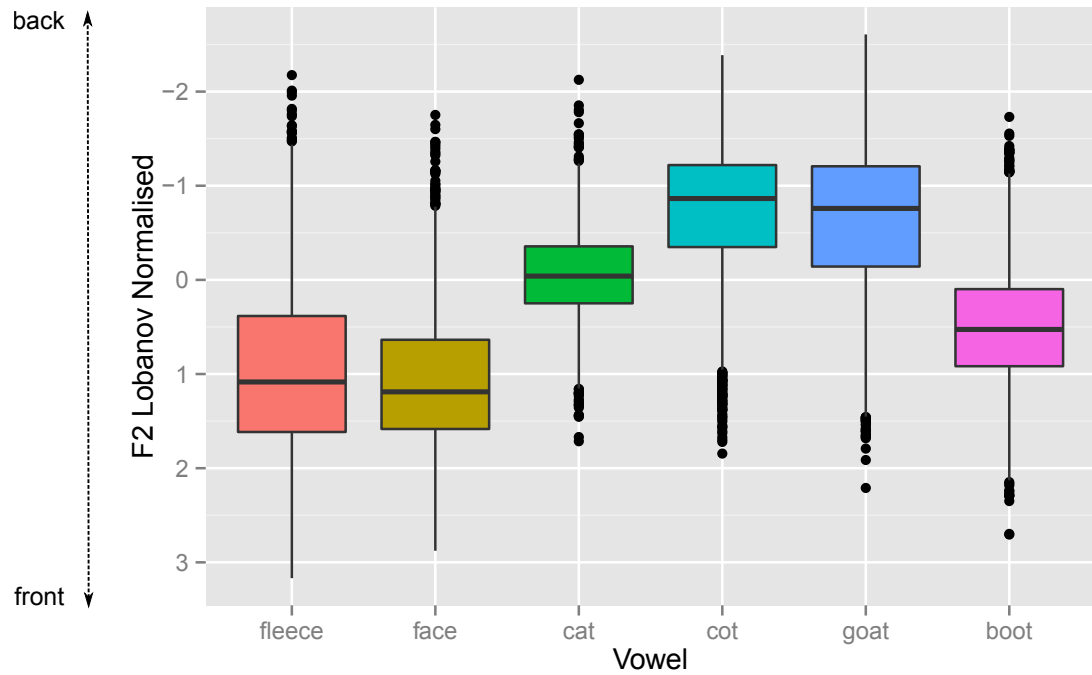
**Differences in F1** The best-fit model is given in Model 7.5. For F1 or vowel height, all vowels were statistically significantly different to each other at p<0.05, except FACE and BOOT. For following segment, there were only statistical differences for the labial and 'otherNA' categories. CofP was retained in the model, but was significant only in interactions with vowel. There were also many statistically significant results for vowel and following segment across F1 values. These differences are considered through Analysis A and B.

$$(7.5) \quad m = lmer(F1.lob \sim (Vowel + FollSeg + CofP + Vowel * CofP +$$
$$Vowel * FollSeg + (1|Speaker) + (1|Word), data = alldata)$$

**Differences in F2** For F2 or vowel front/backness, all vowels were statistically significant to each other at p<0.05, except the COT/GOAT vowels and the FLEECE/FACE vowels were only marginally significant (p=0.08). There were some significant differences across preceding and following linguistic contexts, e.g. coronals and labials and several interactions with vowel. CofP was again retained in the model with one marginal result between the Messabouts and Shifters (p=0.079). These differences are considered through Analysis A and B.

### 7.7.3 Analysis A: Comparing Vowels Across CofPs

Table 7.10 shows only the *significant* fixed factors kept in the models following the 'step()' function for each vowel in Analysis A, where each row is a result of a separate model. The random factors of *Speaker* and *Word* were significant factors in every

**Table 7.10:** Significant Fixed Effects kept in LMEMs for Analysis A (Within Vowel Across CofP)

| Vowel | Formant | Fixed Effect | df | f | pr |
|-------|---------|--------------|-----|-------|------|
| FLEECE | F1 | CofP:PreSeg | 15 | 2.05 | 0.01 |
|        | F2 | PreSeg | 3 | 3.13 | 0.03 |
| FACE | F1 | - | - | - | - |
|      | F2 | PreSeg | 3 | 9.87 | 0.00 |
|      | F2 | FollSeg | 3 | 2.88 | 0.04 |
| BOOT | F1 | - | - | - | - |
|      | F2 | PreSeg | 3 | 8.25 | 0.00 |
|      | F2 | FollSeg | 3 | 3.33 | 0.03 |
|      | F2 | CofP:FollSeg | 15 | 1.86 | 0.02 |
| GOAT | F1 | - | - | - | - |
|      | F2 | PreSeg | 3 | 6.06 | 0.00 |
|      | F2 | FollSeg | 3 | 3.75 | 0.01 |
| COT | F1 | PreSeg | 3 | 4.57 | 0.00 |
|     | F2 | FollSeg | 3 | 4.71 | 0.00 |
| CAT | F1 | FollSeg | 3 | 6.81 | 0.00 |
|     | F2 | PreSeg | 3 | 9.70 | 0.00 |
|     | F2 | FollSeg | 3 | 16.71 | 0.00 |

LMEM model bar FACE F1 where only *Speaker* was significant in the explanation of variance.

Bonferroni post-hoc tests for pairwise comparisons were performed on each vowel (F1 and F2) to mitigate the effects of family-wise error that can lead to Type I errors (i.e. finding an effect that is not present) (Field et al. 2012). For /i, ʉ/, the Bonferroni corrected p-value was 0.0002 (297 comparisons for /i/ so p = 0.05/296, and 303 comparisons for /ʉ/ so p= 0.05/302). Due to the nature of social effects which are typically much more subtle, marginal results are also reported here that were between $p > 0.0002$ and $p < 0.05$, especially given current debates over the usefulness of correcting for multiple comparisons in mixed models more generally (Gelman et al. 2012, Macdonald et al. 2015).

Overall results revealed that linguistic factors (preceding and following phonetic segment) showed the strongest effects in accounting for variation in vowel formants for /i, e, a, ɔ, o, ʉ/ in comparison to the social effect of CofP which showed fewer and weaker effects. This may be expected due to the effect of the vocal tract on vowel resonances. A summary of the Lobanov-normalised means for F1 and F2 across all vowels in all phonetic contexts by CofP is presented in Figure 7.10.(Note: for the COT vowel Shifters and Wannabes had the same mean F1 and F2 values. Also the vowel symbols key by default in R has taken the /a/ symbol but simply taken shows the colour for each CofP on the graph).

The means of each CofP by vowel by place of articulation in each preceding and following phonetic context are plotted in the vowel space for quick comparison in Fig-

**Figure 7.10:** Vowel Means Across CofPs (all contexts)



Vowel Means Across CofPs
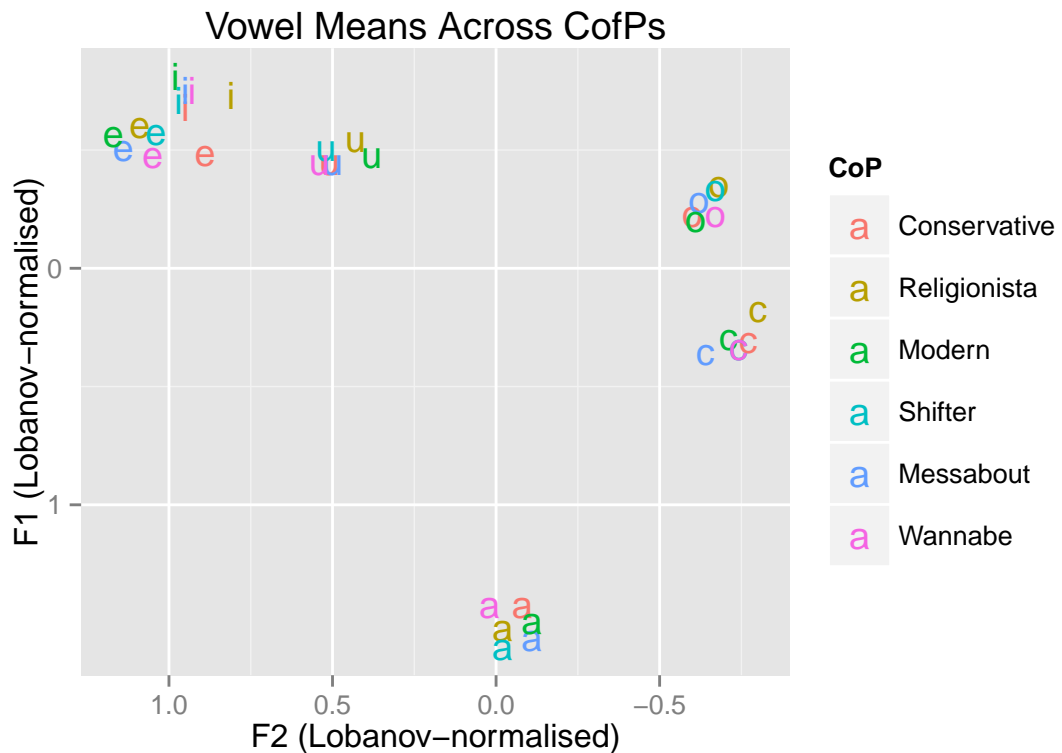
ure 7.11 and Figure 7.12 respectively.

The only two vowels that showed some social effect of CofP when involved in an interaction with place of articulation were /i, ʉ/, whilst /e, o, ɔ, a/ showed no sociolinguistic effect of CofP on vowel articulation. These were FLEECE F1 (vowel height) with preceding segment; and BOOT F2 (vowel front/backness) with following segment.

**Sociolinguistic Effects: FLEECE F1**

In Analysis A (Within Vowel across CofP), the /i/ vowel varied in height (F1) according to an interaction effect with the preceding segment and CofP. Significant differences are reported in Table 7.11 and observational descriptive results are charted in Figure 7.13 which shows where the significant interactions between the CofPs occur in red brackets only for labial and coronal places of articulation. Estimates of the interactions in relation to F1 are plotted in Figure 7.14 and shows the direction of difference (labial = red, coronal = blue).

From the estimates of the interactions, a summary of the FLEECE F1 or height is as follows:

- Conservatives have a higher F1 (lower in vowel space) compared to Shifters when preceded by a coronal, e.g. *team, deed, need*

- Moderns have a lower F1 (higher in vowel space) compared to Conservatives, Shifters and Wannabes when preceded by a labial, e.g. *been*

**Figure 7.11:** CofP Means by Preceding Phonetic Context
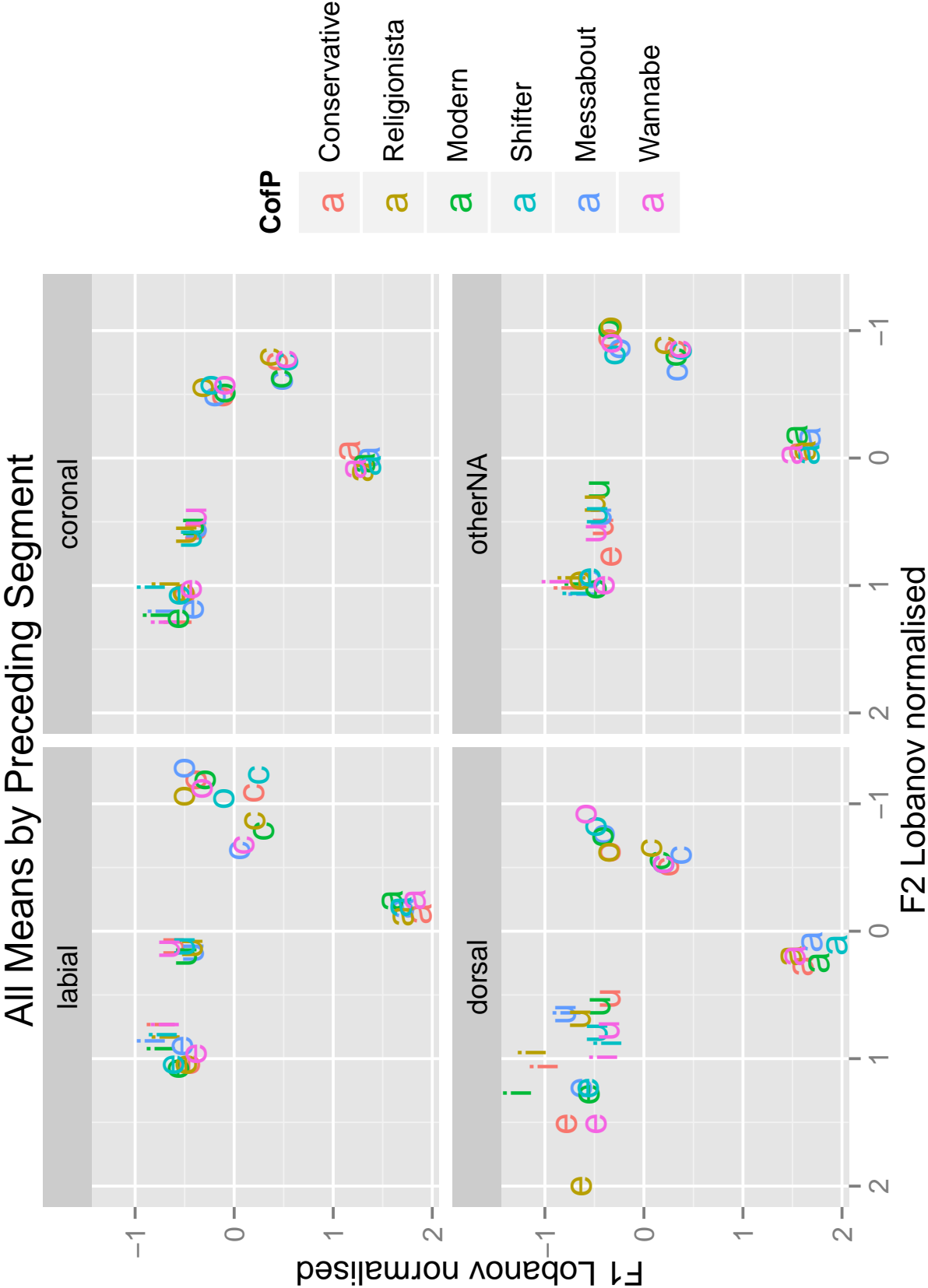
**Figure 7.12:** CofP Means by Following Phonetic Context
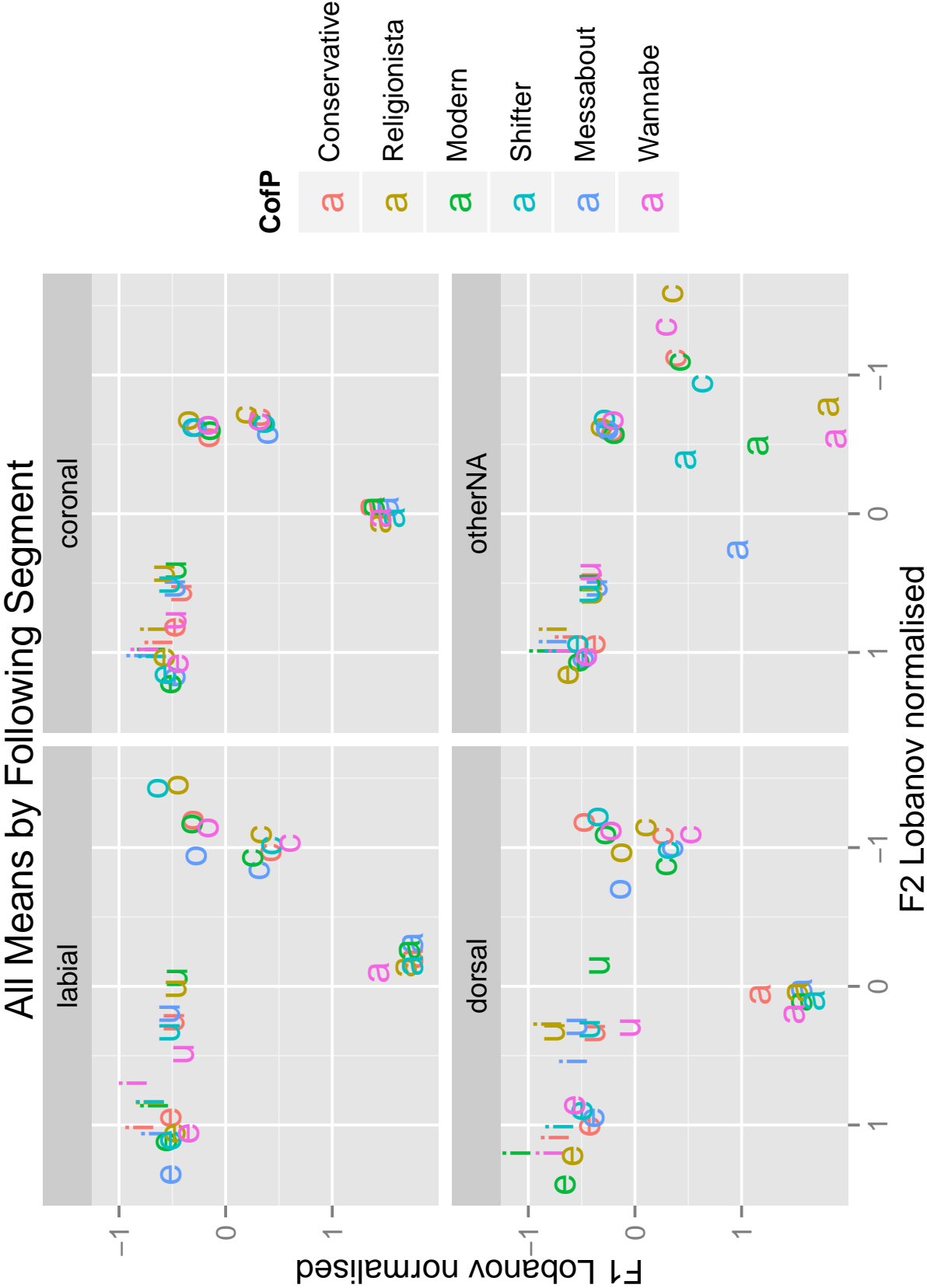
**Table 7.11:** Significant Comparisons for Interaction of CofP and Preceding Segment for F1 of FLEECE

|          |          | df  | t     | pr   |
|----------|----------|-----|-------|------|
| Con-cor  | Shif-cor | 175 | 2.22  | 0.03 |
| Con-lab  | Mod-lab  | 56  | 2.05  | 0.05 |
| Mess-lab | Shif-lab | 59  | -2.24 | 0.03 |
| Mod-lab  | Shif-lab | 53  | -2.52 | 0.01 |
| Mod-lab  | Wan-lab  | 61  | -2.13 | 0.04 |

**Figure 7.13:** Observational Data for Interaction of Preceding Segment and CofP for F1 of FLEECE
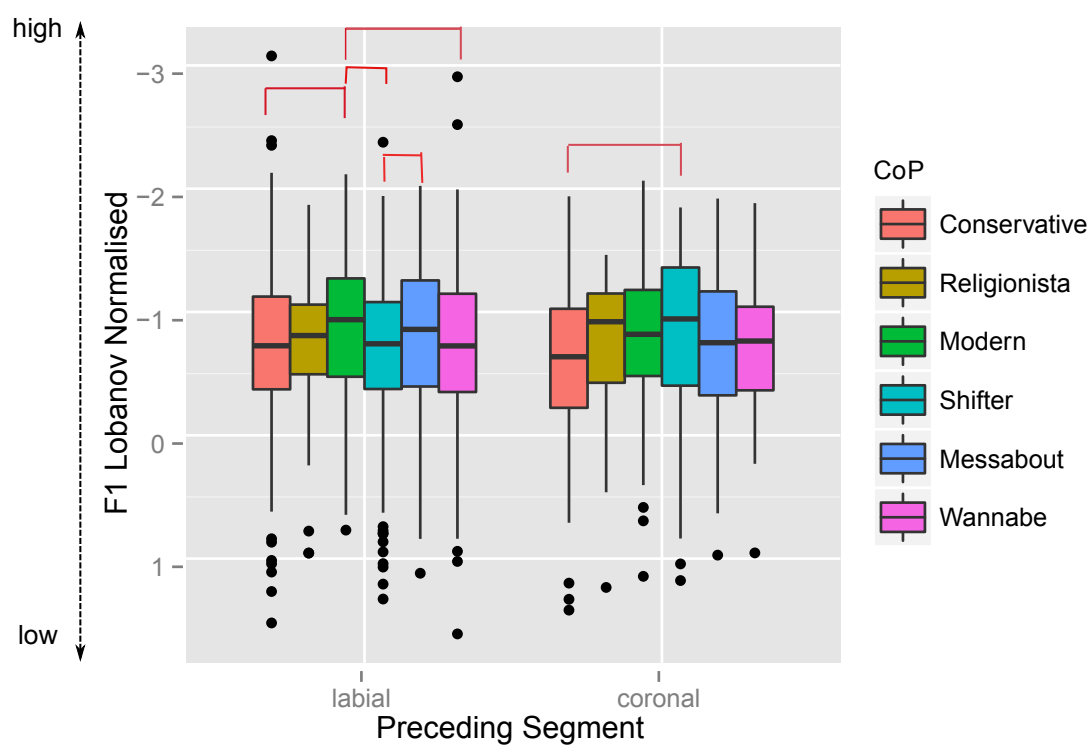
**Figure 7.14:** Fleece F1: Plot Estimates for CofP by Preceding Segment
(Note: Coloured lines indicate locations of significant interactions)



Fleece F1
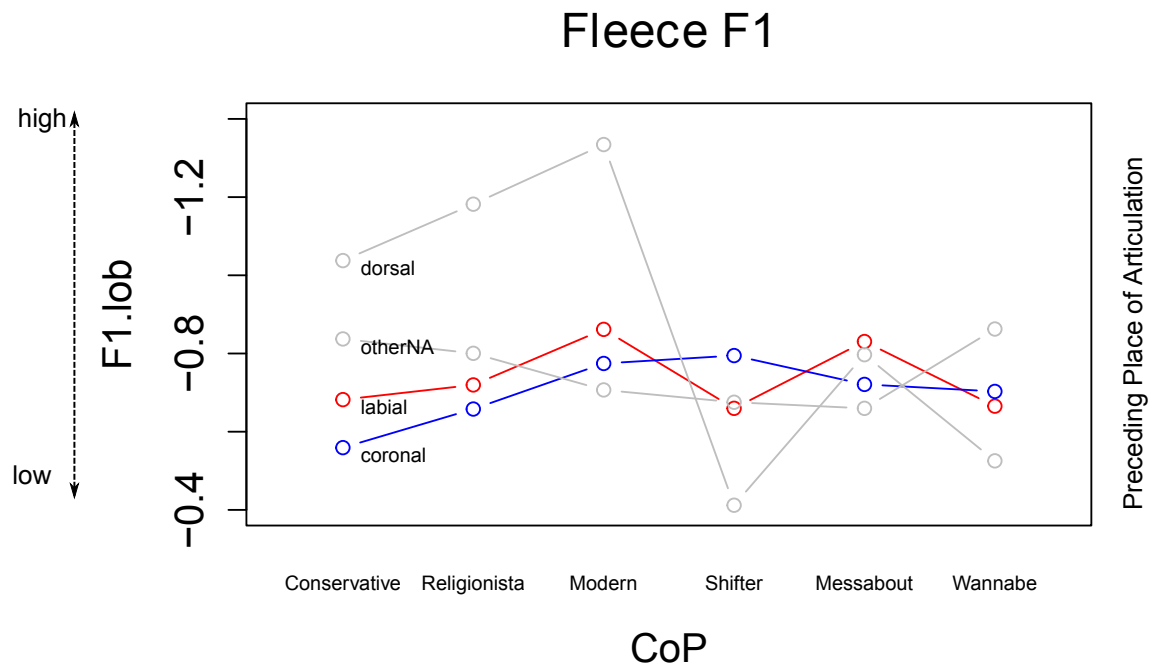
- Messabouts have a lower F1 (higher in vowel space) compared to Shifters when preceded by a labial

Figure 7.15 provides a schematic representation of the significant comparisons between CofPs. Note: the coloured lines represent significant differences between CofPs.

Effect size emphasises the size of the difference rather than confounding this with sample size and are reported here ranging from 0 = no effect, to 1 = a perfect effect. Above 0.5 is a large effect (about 25 percent of total variance), 0.3 = medium effect (about 9 percent of total variance), and 0.1 = small effect (about 1 percent of total variance). Table 7.12 shows the effect sizes (ranges) for the Preceding Segment and interaction of CofP. While the effect size for the dorsal context is extremely large (0.92), this must be balanced with the much lower Ns in this category (see Appendix H.7). The remaining three preceding linguistic contexts are much the same in their explanation of the total variance whilst CofP have greater effect sizes with Moderns being the highest with a value of 0.63.

**Sociolinguistic Effects: BOOT F2**

The /ʉ/ vowel varied on the front-back dimension (F2) according to interaction with the following segment and CofP. Direct significant differences are reported in Table 7.13, observational data is charted in Figure 7.16 and predicted estimates are plotted in Figure 7.17 (labial = red, dorsal = green).

Whilst there are many more significant differences in /ʉ/ F2 compared to /i/ F1, only three instances are directly comparable and all involve differences with the Modern

**Figure 7.15:** Sociophonetic Dimensions: Significant Differences between CofPs for FLEECE F1 for Glaswasian
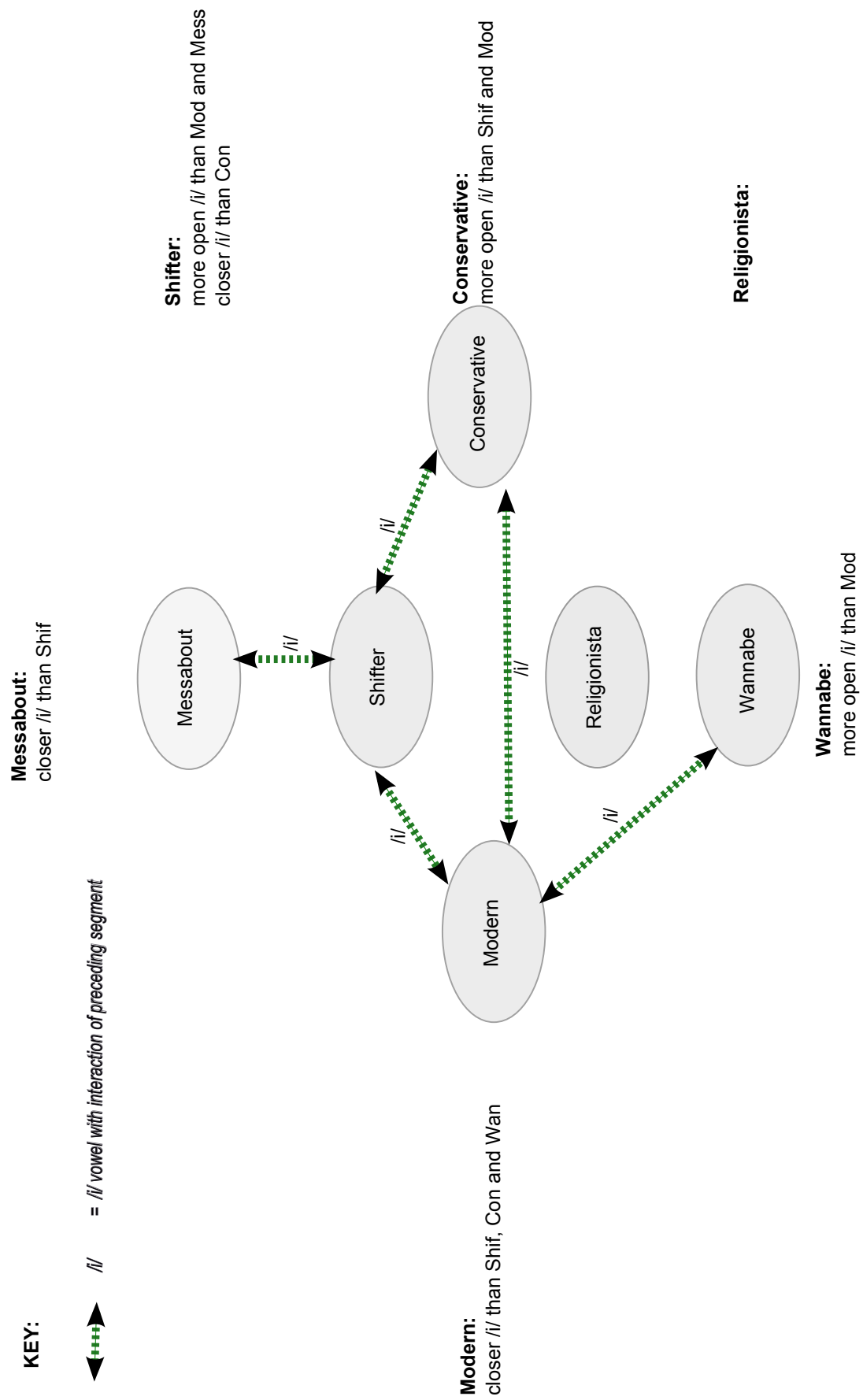
**Table 7.12:** FLEECE F1: Effect Sizes for Preceding Segment and CofP

|  | Effect Size |
|---|---|
| labial | 0.22 |
| coronal | 0.24 |
| dorsal | 0.92 (low Ns in all CoPs) |
| otherNA | 0.20 |
| Conservative | 0.48 |
| Religionista | 0.52 |
| Modern | 0.63 |
| Shifter | 0.38 |
| Messabout | 0.17 |
| Wannabe | 0.33 |

**Table 7.13:** Significant Comparisons for Interaction of Following Segment and CofP for F2 of BOOT

|  |  | df | t | pr |
|---|---|---|---|---|
| Mess-dor | Mod-dor | 483 | 1.98 | 0.05 |
| Mod-dor | Shif-dor | 570 | -2.06 | 0.04 |
| Mod-lab | Wan-lab | 485 | -3.03 | 0.00 |

**Figure 7.16:** BOOT by CofP: by following segment
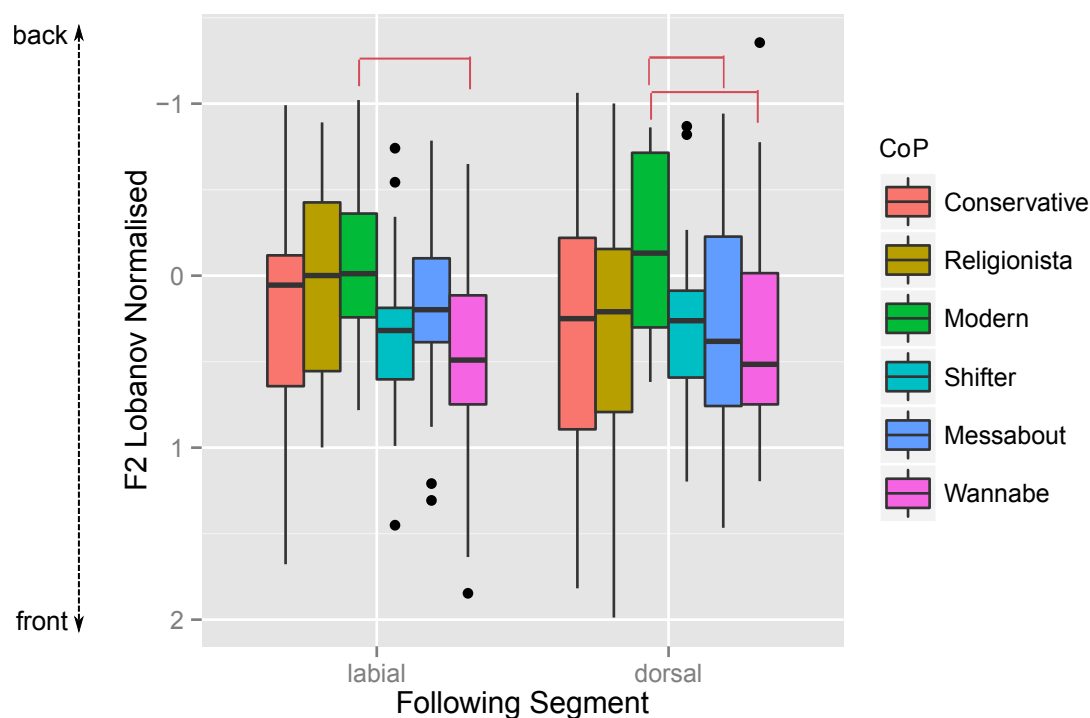
**Figure 7.17:** Boot F2: Plot Estimates for CofP by Following Segment
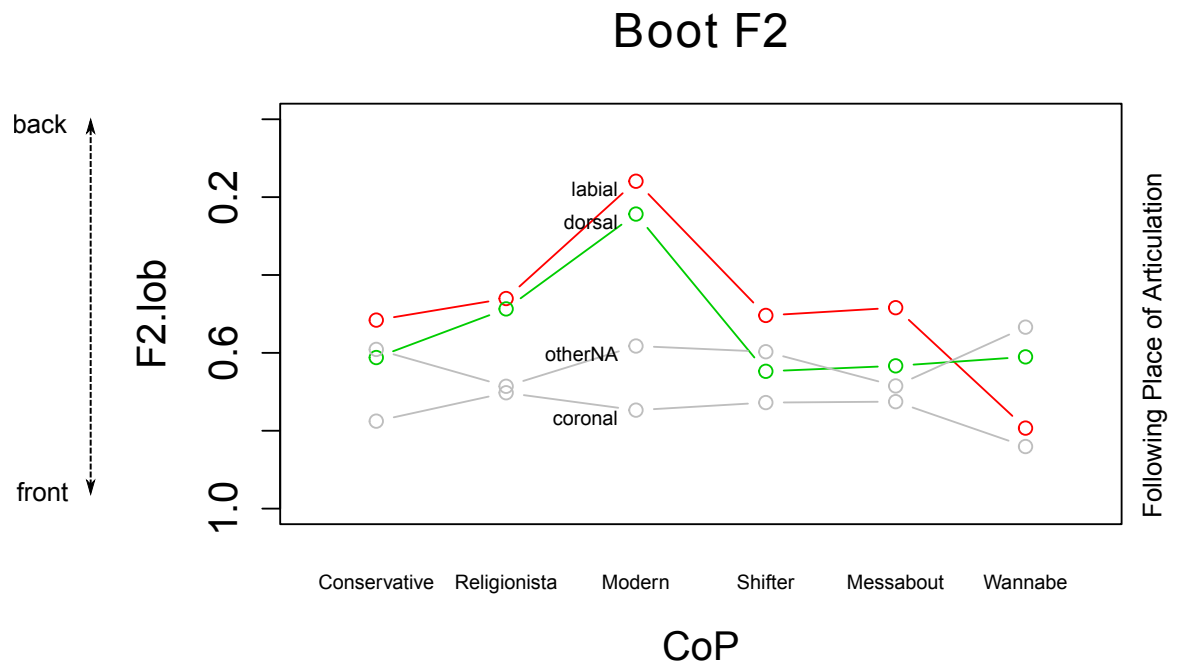


CofP across two following linguistic contexts. Essentially Moderns are significantly different to three other CofPs. Estimates of the interactions are plotted in Figure 7.17 and show:

- Moderns have a lower F2 value (more backed) compared to Wannabes when followed by a labial, e.g. *room*

- Moderns have a lower F2 value (more backed) compared to Messabouts and Shifters when followed by a dorsal, e.g. *book*

Moderns are varying from Shifters, Messabouts and Wannabes in their vowel quality by being more backed, or alternatively the Shifters, Messabouts and Wannabes use fronter /ʉ/. Figure 7.18 provides a schematic representation of the significant comparisons between CofPs. Note: the coloured lines represent significant differences between CofPs.

Interestingly for BOOT, ethnicity and identity correspond with F2 which is the front/back dimension, whereas José et al. (2013) report vowel change in Glasgow vernacular for BOOT is on the F1 dimension (i.e. the lowering of BOOT). Such contrasting results indicate that BOOT may be carrying social weight, but in different ways across individual speech communities. Work on Canadian ethnic minority English by Boberg (2004) on vowels also indicates the importance of F2 vowel formant values in distinguishing ethnicity, where /ʉ/ was centralised or non-centralised for the purposes of ethnic identity construction.

**Non-Significant Vowels for CofP**

A description of the tendencies in the data given non-significant results for the vowels /e, a, ɔ, o/ will now be presented by CofP.

**Figure 7.18:** Sociophonetic Dimensions: Significant Differences between CofPs for BOOT F2 for Glaswasian
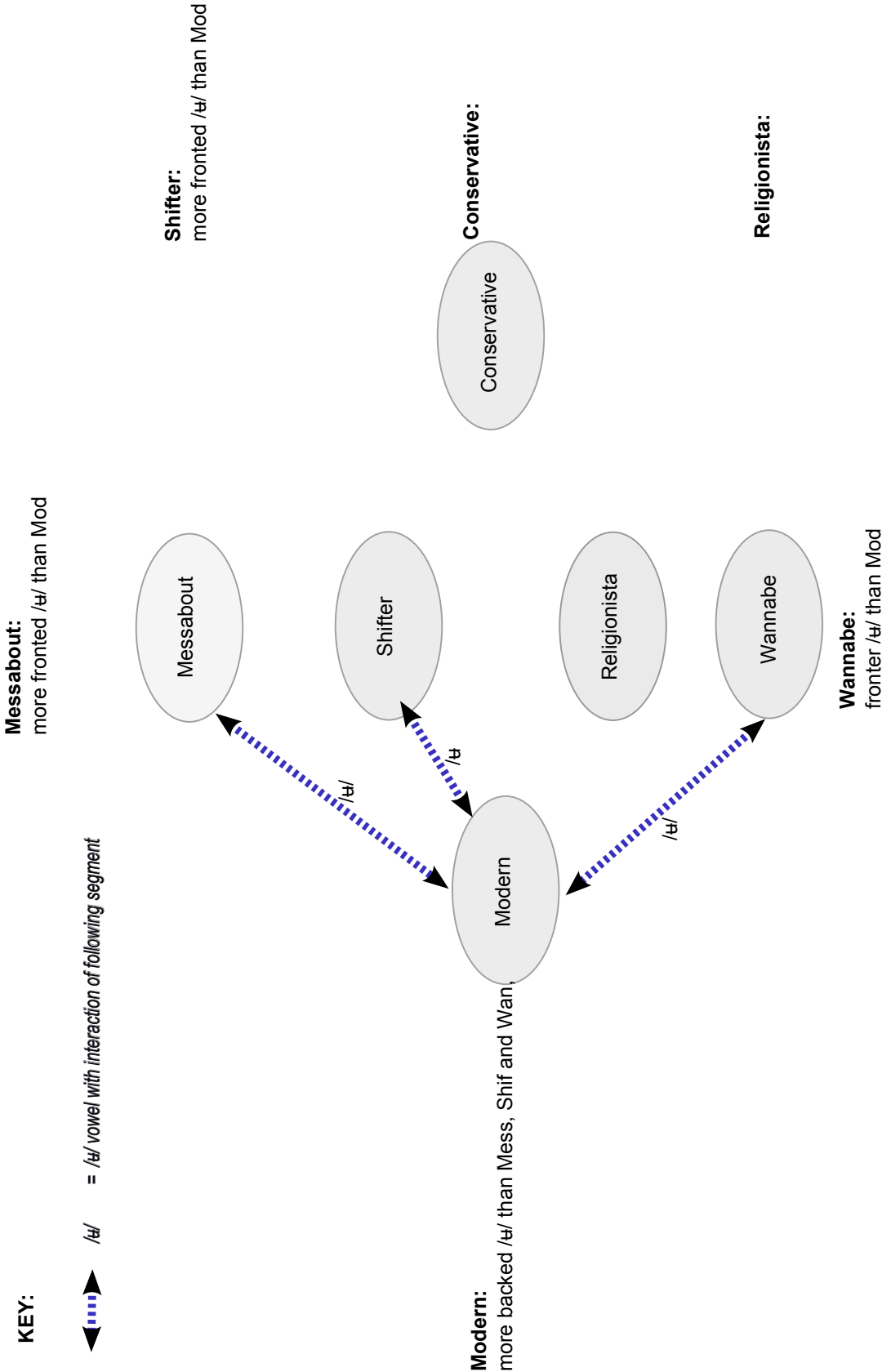
**Table 7.14:** BOOT F2: Effect Sizes for Following Segment and CofP

| | Effect Size |
|---|---|
| labial | 0.63 |
| coronal | 0.14 |
| dorsal | 0.40 |
| otherNA | 0.15 |
| Conservative | 0.25 |
| Religionista | 0.24 |
| Modern | 0.58 |
| Shifter | 0.22 |
| Messabout | 0.24 |
| Wannabe | 0.30 |

**FACE and GOAT**     Previous research has suggested that the FACE and GOAT vowels in British Asian English are closer and fronter than other British English varieties as well as separation according to engagement with social practices (e.g. Wormald 2014). Overall spread of formant data across all phonetic contexts for CofP for the FACE vowel are shown in Figure 7.19 and Figure 7.20 and for GOAT in Figure 7.21 and Figure 7.22.

Work by Stuart-Smith et al. (2011) on a small sub-sample of the same data set used in the present study also suggests that there was separation by CofP for the FACE and GOAT vowels according to CofP. For FACE they found that Moderns were fronter, whilst Shifters (then named 'In-Betweens') were more retracted. For GOAT, Moderns were lower while Shifters were higher. Notably, the two Conservative girls showed two distinct vowel qualities, where for both vowels the 'Conservative Religious' was closer and more fronted while the 'Conservative Cultural' girl was lower and more retracted.

Here, Conservatives tend to show the most retracted of all the groups for both vowels. Possible reasons for such differing results may be related to sample size, normalisation methods, and statistical methods. Stuart-Smith et al. (2011) only had two speakers per CofP, where they report that speaker was actually a better or equal explanation of variance than CofP for FACE and GOAT respectively. Moreover, their data was auditorily transformed to the Bark scale and not acoustically transformed using e.g. Lobanov; and they used ANOVAs which did not account for random factors unlike the LMEMs in the present study. It is possible that a fixed factor regression may show an effect of CofP in the present data for the FACE vowel like Stuart-Smith et al. (2011). Here it is clear that phonetic context is very important in mediating social differences. GOAT shows a tendency where it is closer in Religionistas than in Moderns. Intra-CofP variation may also be relevant as well as interlocutor effects, as the data used by Stuart-Smith et al. (2011) was gathered in the earliest period of the ethnography at Riverburn High where the researcher was less well-known to the students.

**Figure 7.19:** FACE F1 by CofP
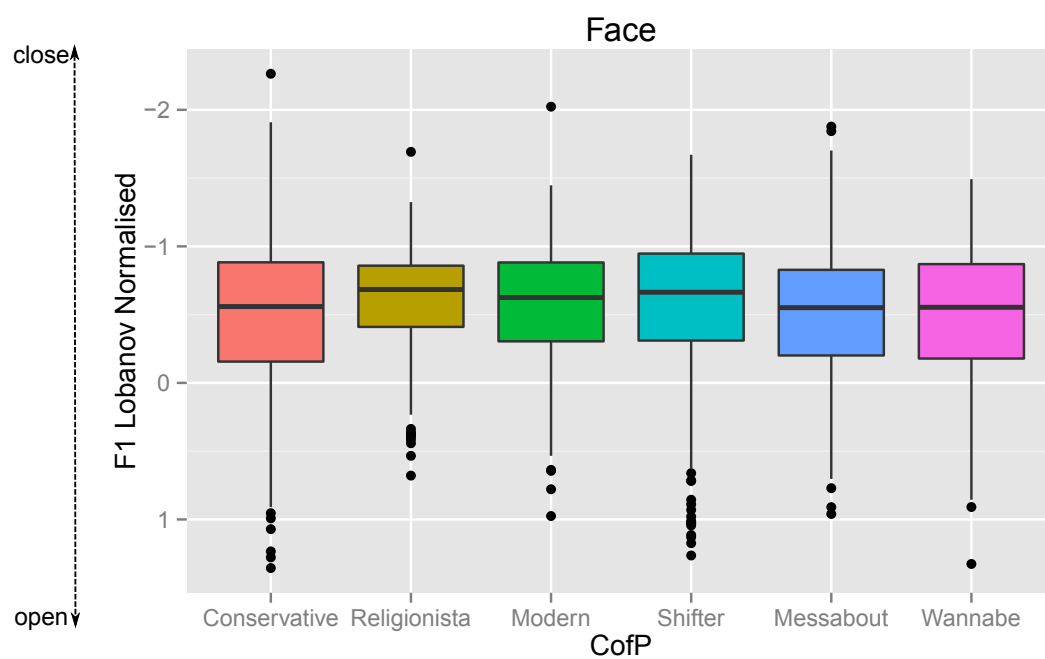


**Figure 7.20:** FACE F2 by CofP
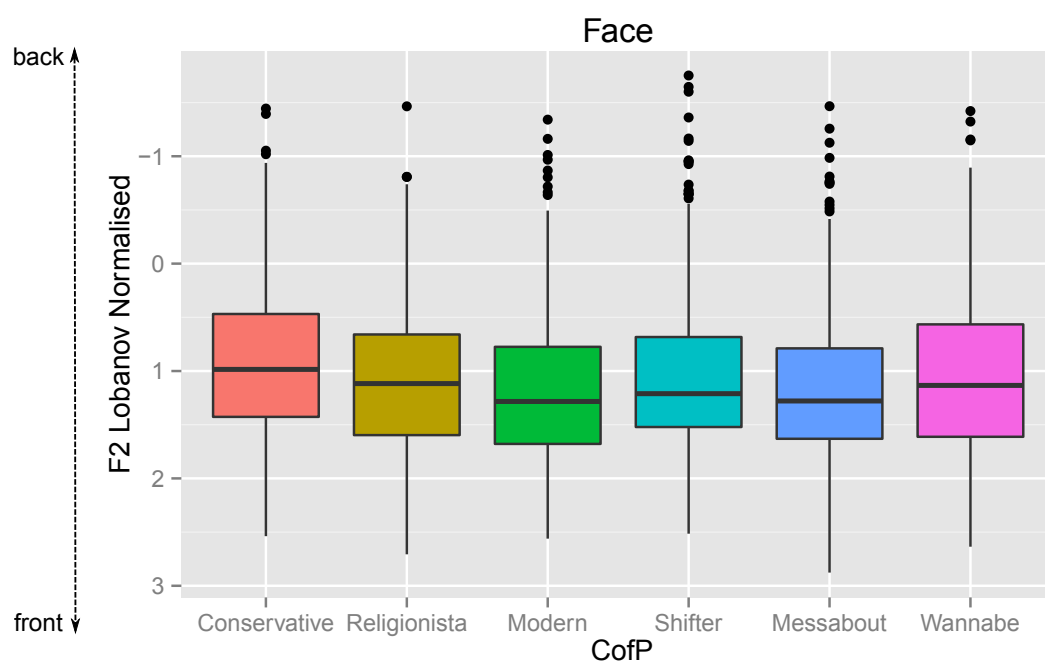
**Figure 7.21:** GOAT F1 by CofP
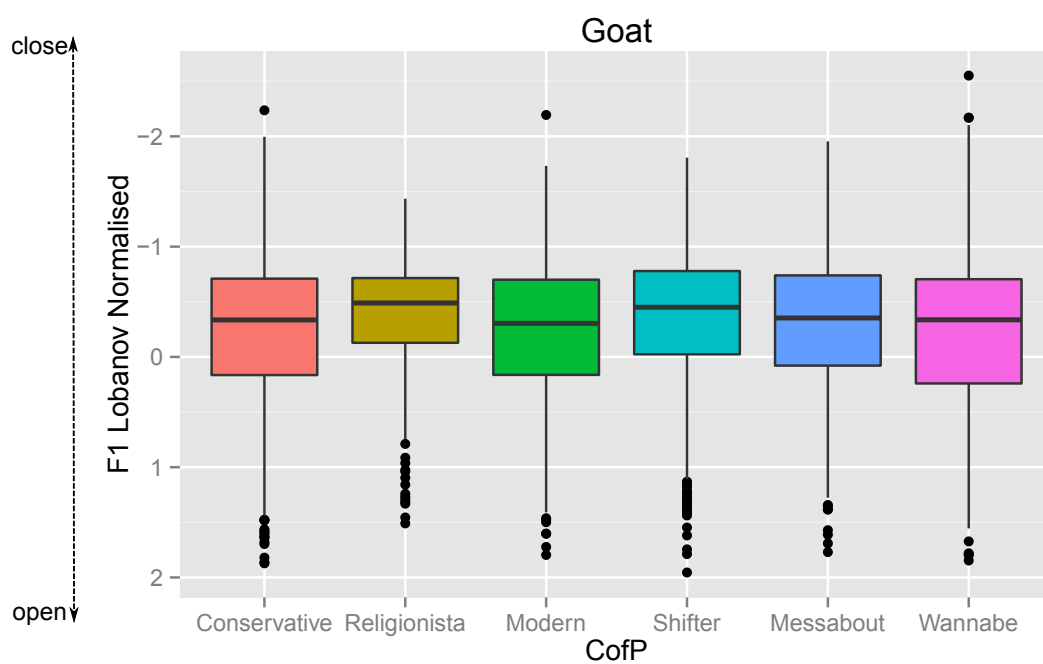


**Figure 7.22:** GOAT F2 by CofP
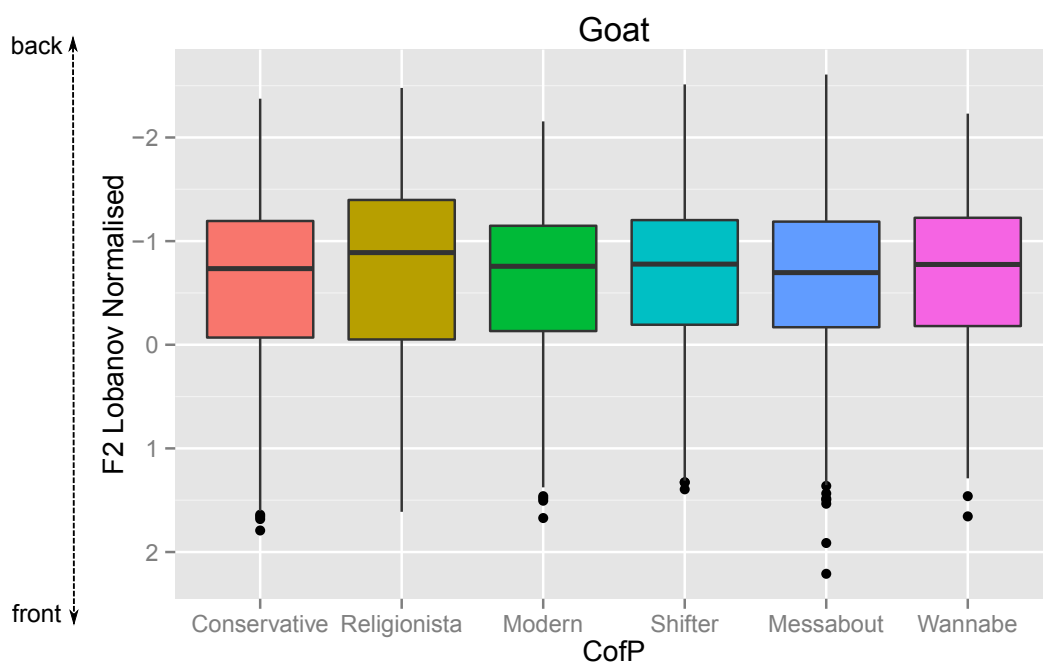
**Figure 7.23:** COT F1 by CofP
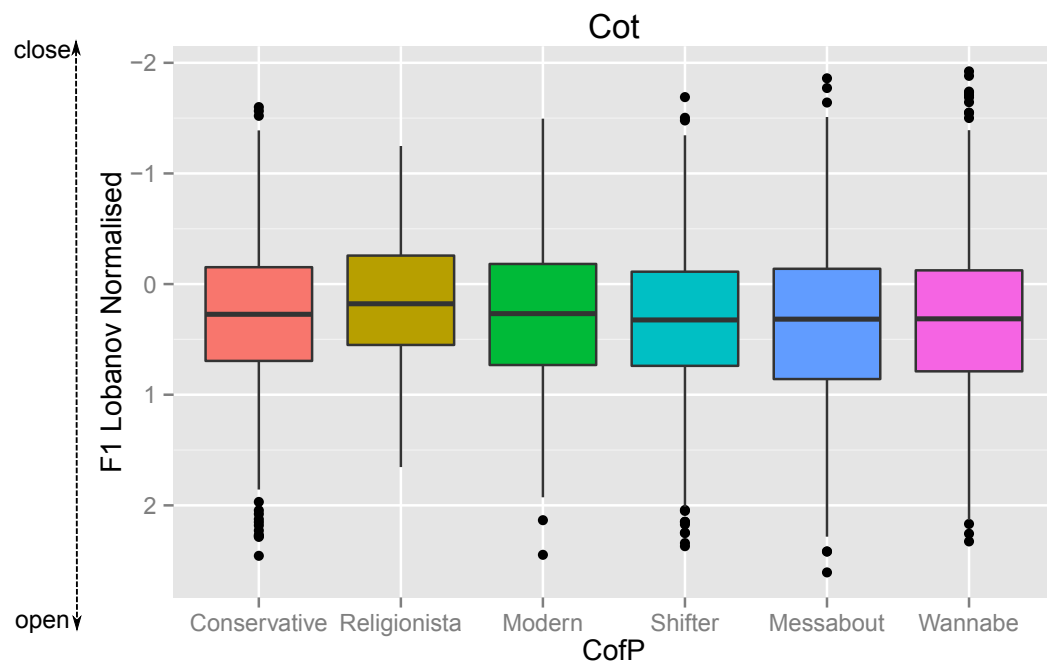


**COT**    Figure 7.23 and Figure 7.24 show the overall spread of data for the COT vowel across all phonetic contexts.

**CAT**    Figure 7.25 and Figure 7.26 show the overall spread of data for the CAT vowel across all phonetic contexts.

## 7.7.4    Analysis B: Within CofP Across Vowels

All six vowels showed different acoustic qualities within each CofP (combined phonetic contexts) and most vowels were statistically significantly different to each other as expected with all p-values in the region of 0.0001. Figure 7.27 shows a descriptive view of the vowel spaces for each CofP using the vowel means for reference. Non-significant differences are reported in Table 7.15 and indicate an overlap in vowel space within a CofP.

There were only two main non-significant statistical patterns common across **all** CofPs. These were:

- **F1:** FACE and BOOT did not differ on vowel height (F1) across all CofPs. One might expect FACE to be lower than BOOT. José et al. (2013) report that BOOT may be undergoing linguistic change in working class Glaswegian speech represented by an overall lowering in the vowel space, but there is little evidence regarding this for middle class speakers represented by the Glasgow-Asian girls in this sample. So it appears that these two vowels are distinguished only on the F2 dimension.

**Figure 7.24:** COT F2 by CofP
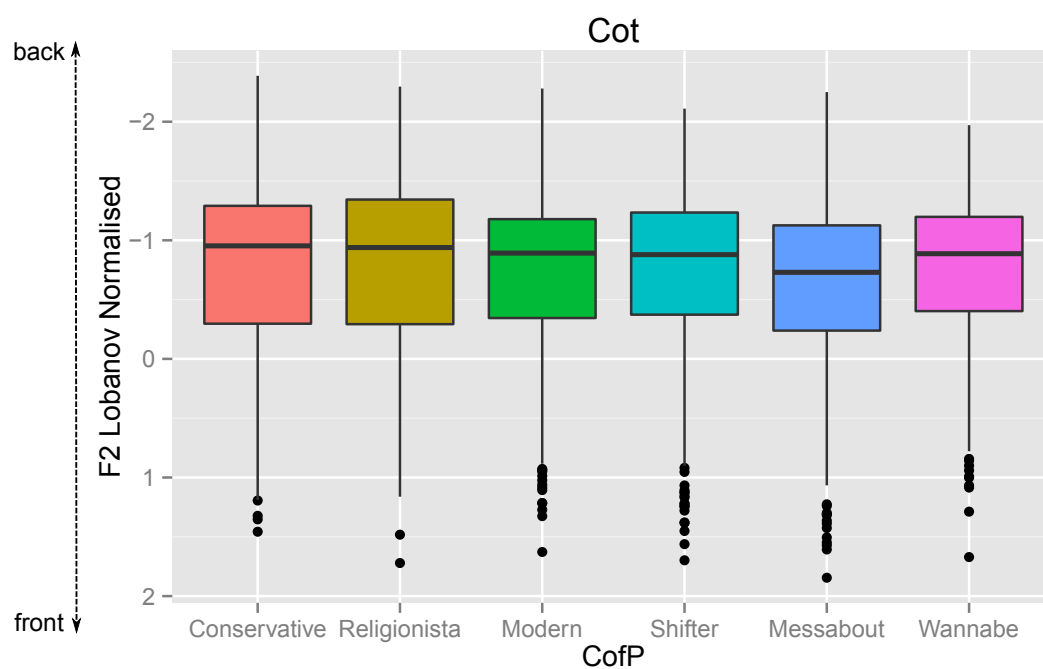


**Figure 7.25:** CAT F1 by CofP
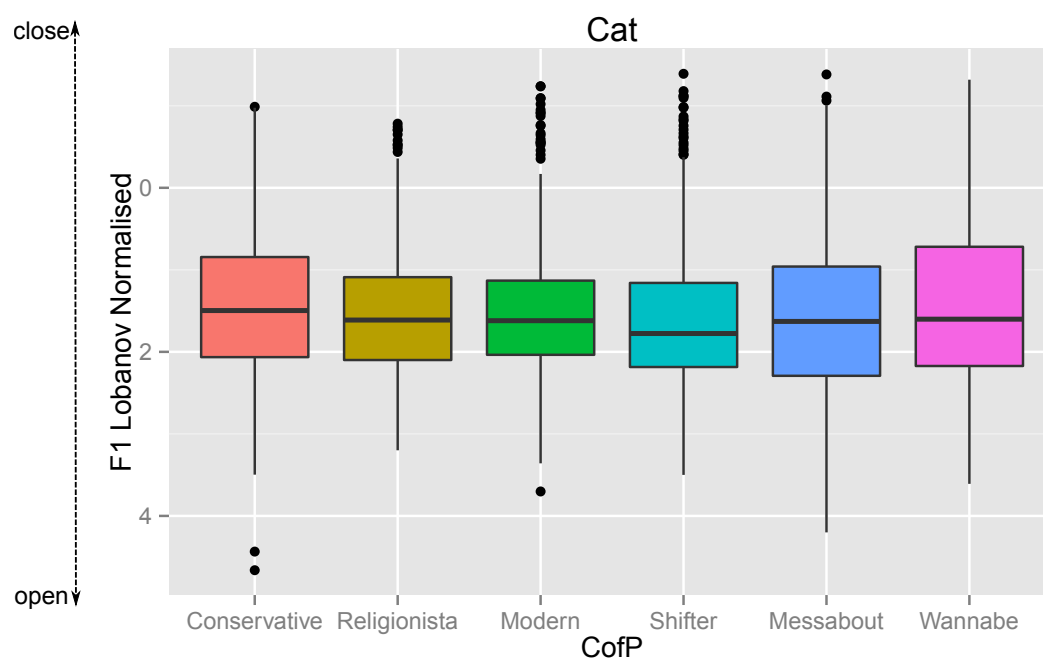
**Figure 7.26:** CAT F2 by CofP
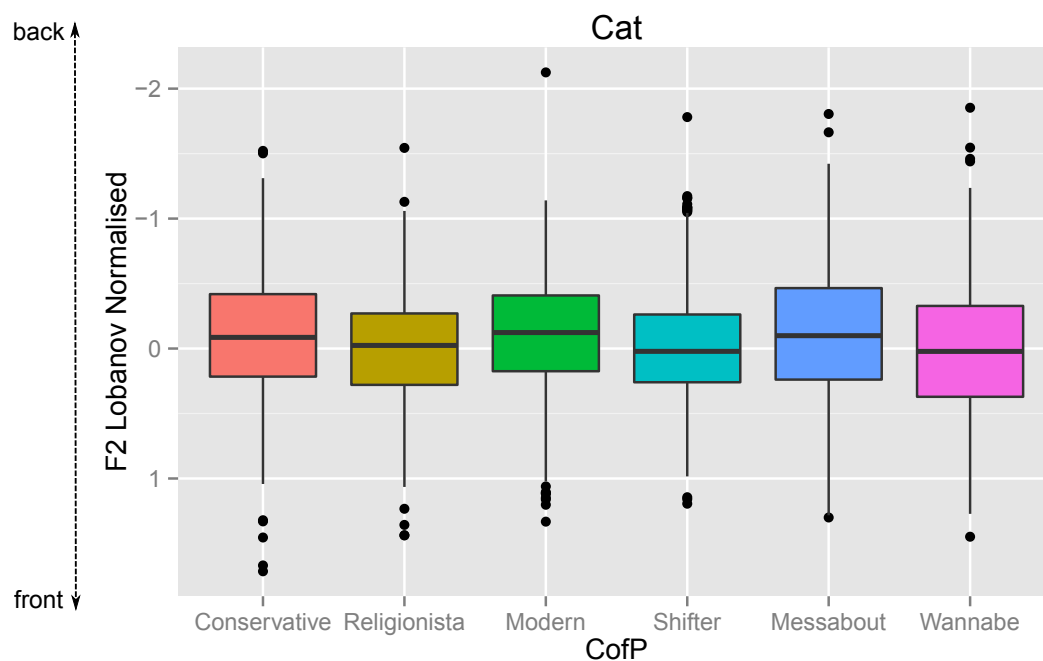


**Figure 7.27:** Vowel Spaces for each CofP combining linguistic contexts
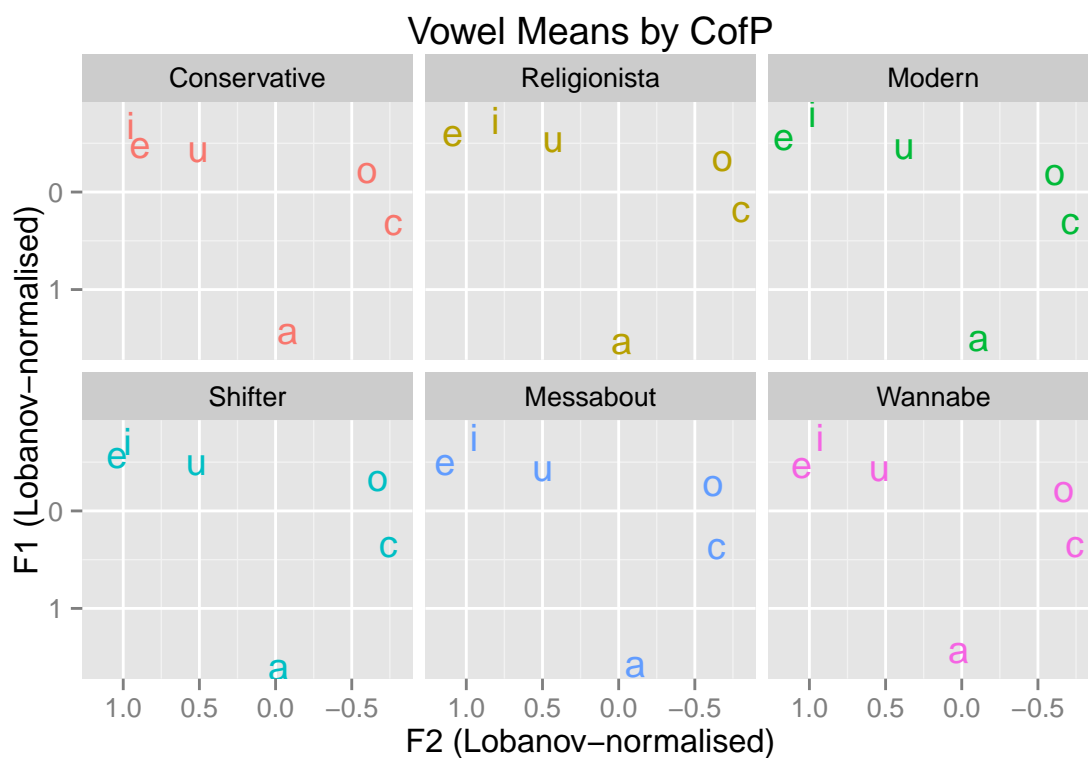
**Table 7.15:** Non-Significant Vowel Comparisons Within CofP

| CofP | Formant | Non-Sig Vowels | df | t | pr |
|---|---|---|---|---|---|
| Conservative | F1 | face-boot | 294.9 | -0.75 | 0.45 |
| | | boot-goat | 124.8 | -1.90 | 0.06. |
| | F2 | fleece-face | 289.4 | 0.61 | 0.5 |
| | | goat-cot | 195.6 | 1.15 | 0.4 |
| Religionista | F1 | face-boot | 260.7 | -0.63 | 0.53 |
| | | fleece-face | 218.7 | -1.04 | 0.29 |
| | | fleece-boot | 166.7 | -1.71 | 0.08. |
| | F2 | goat-cot | 233.9 | 0.34 | 0.73 |
| Modern | F1 | face-boot | 265.6 | -1.22 | 0.22 |
| | | boot-goat | 184.5 | -1.57 | 0.12 |
| | F2 | goat-cot | 197.3 | -0.03 | 0.98 |
| Shifter | F1 | face-boot | 375.7 | -.064 | 0.51 |
| | F2 | fleece-face | 444.2 | -1.26 | 0.2 |
| | | goat-cot | 370.6 | 0.77 | 0.4 |
| Messabout | F1 | face-boot | 306.6 | -0.36 | 0.71 |
| | F2 | goat-cot | 257.7 | 0.28 | 0.78 |
| Wannabe | F1 | face-boot | 392.2 | -0.29 | 0.8 |
| | | face-goat | 287.0 | -1.63 | 0.1 |
| | | boot-goat | 210.8 | -1.47 | 0.1 |
| | F2 | goat-cot | 221.7 | 0.07 | 0.9 |
| | | fleece-face | 317.3 | -0.56 | 0.6 |

- **F2:** COT and GOAT did not differ on the front-back dimension (F2) across all CofPs where one might expect GOAT to be more backed in comparison to COT.

Non-significant statistical patterns within particular CofPs were also apparent. These were:

- FLEECE and FACE showed no difference for the Conservatives, Shifters and Wannabes on the front-back dimension (F2). One might expect FLEECE to be more fronted than the FACE vowel, but this confirms findings by José et al. (2013) which shows some evidence of a flip between FLEECE and FACE on the the F2 axis. Interestingly, of all the CofPs it is only the Conservatives who have a more fronted mean for /i/ than /e/ as seen on Figure 7.27. These vowels seem to be very close together in the Glasgow-Asian vowel space for every CofP, but particularly for the Conservatives, Shifters and Wannabes who have no significant differentiation on the front-back dimension (F2).

- There was no difference between the BOOT and GOAT vowel for the Conservatives, Moderns and Wannabes for vowel height (F1) where one might expect GOAT to be lower than BOOT. So relatively speaking, /o/ is a higher/closer vowel in these CofPs' vowel spaces.

## 7.7.5 Analysis C: Across Ethnicity Asian/Non-Asian Corpus Comparison

The final analysis compared two different corpora, Glasgow-Asian and Glasgow Non-Asian speakers, in order to ascertain whether there were any cross-ethnic differences in speech and not just within ethnicity differences relating to social practices.

The Glasgow Non-Asian speakers were taken from the *Sounds of the City* project on real-time Glaswegian vernacular speech (José et al. 2013) which focussed on fine phonetic variation and sound change in Glasgow. This data was stratified for age and sex and analysed only working class speakers. For the corpus comparison, six young female speakers were taken from the *Sounds of the City* project who were born in the 2000s from a working class background in the West-End Glasgow area of Maryhill, yielding a total of 1597 tokens which was far less than the 15,478 tokens for the Asian speakers. The sample comparison of the two corpora are given in Table 7.16 and includes some basic demographic information.

A cross-tabulation of the data by phonetic context is shown in Table 7.17 and Table 7.18. Whilst there are some low Ns for the Glasgow Non-Asian speakers in some cells, this is necessarily a remnant of the opportunistic sample and cannot be avoided, so all significant results are considered.

The overall means for the vowels of both corpora combining all phonetic contexts are presented in Figure 7.28. Descriptively, we can see that the Asian and Non-Asian speakers show some separation for vowels in both height and front/backness. For vowel

**Table 7.16:** Corpus Comparison

| Glasgow-Asian | Glasgow Non-Asian |
|---|---|
| 41 Speakers | 6 Speakers |
| 15,478 vowel tokens | 1597 vowel tokens |
| Age 15-18 | Age 14-15 |
| Lower Middle Class | Working Class |
| South Glasgow: Riverburn | West Glasgow: Maryhill |

**Table 7.17:** Crosstabs: Corpus by Preceding Segment

| Vowel | Corpus | **PreSeg** labial | coronal | dorsal | otherNA |
|---|---|---|---|---|---|
| FLEECE | Asian | 1026 | 424 | 26 | 567 |
| | Non-Asian | 108 | 113 | 8 | 42 |
| FACE | Asian | 332 | 772 | 65 | 473 |
| | Non-Asian | 27 | 175 | 17 | 38 |
| CAT | Asian | 379 | 625 | 164 | 1125 |
| | Non-Asian | 162 | 108 | 14 | 49 |
| COT | Asian | 107 | 951 | 783 | 1662 |
| | Non-Asian | 6 | 65 | 66 | 74 |
| GOAT | Asian | 144 | 2285 | 659 | 407 |
| | Non-Asian | 41 | 129 | 102 | 28 |
| BOOT | Asian | 183 | 1066 | 203 | 1050 |
| | Non-Asian | 44 | 79 | 59 | 42 |

**Table 7.18:** Crosstabs: Corpus by Following Segment

| ScotVowel | Corpus | **FollSeg** labial | coronal | dorsal | otherNA |
|---|---|---|---|---|---|
| FLEECE | Asian | 425 | 576 | 145 | 897 |
| | NonAsian | 43 | 66 | 8 | 154 |
| FACE | Asian | 266 | 652 | 161 | 563 |
| | NonAsian | 35 | 101 | 24 | 97 |
| CAT | Asian | 714 | 1177 | 379 | 23 |
| | NonAsian | 43 | 217 | 67 | 6 |
| COT | Asian | 353 | 2690 | 434 | 26 |
| | NonAsian | 23 | 166 | 22 | 0 |
| GOAT | Asian | 95 | 1323 | 54 | 2023 |
| | NonAsian | 10 | 138 | 10 | 142 |
| BOOT | Asian | 152 | 994 | 170 | 1186 |
| | NonAsian | 16 | 137 | 24 | 47 |

**Figure 7.28:** Corpus Comparison: Vowel Means for all combined linguistic contexts
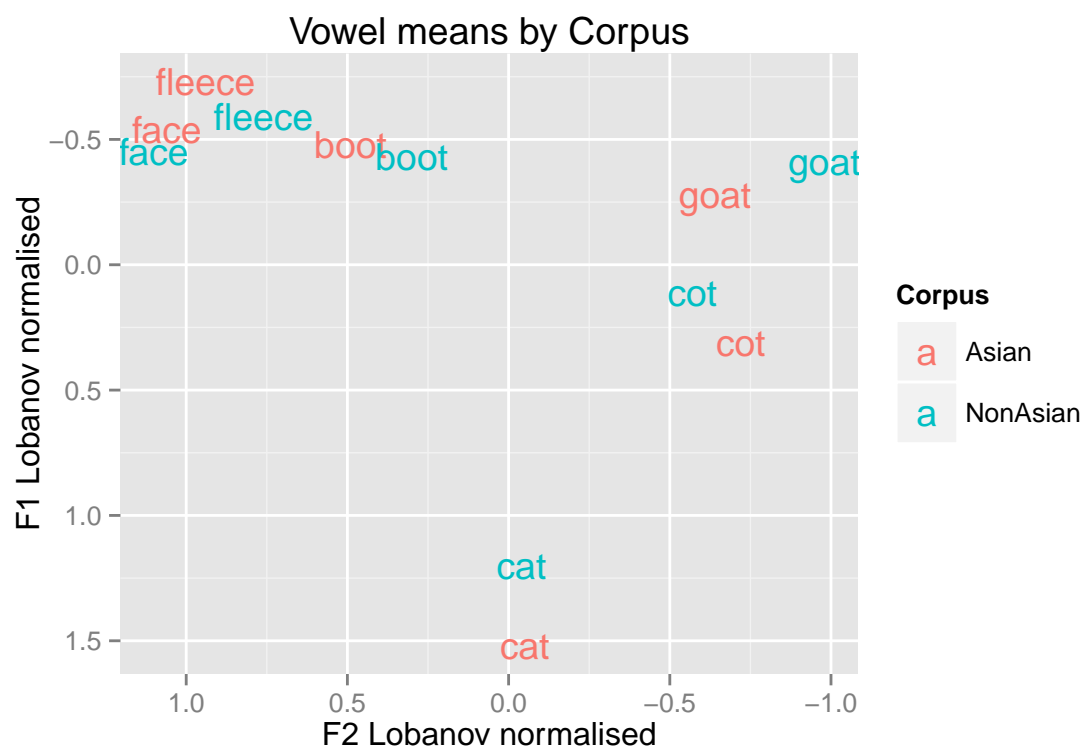


height (F1) Asians have a closer vowel for FLEECE, FACE and BOOT and a more open GOAT, COT, CAT compared with Non-Asians. For vowel front/backness (F2), Asians appear to have a more fronted FLEECE, BOOT and GOAT and more backed FACE and COT compared with Non-Asians with no clear F2 difference for CAT. A finer grained graphic representation of the vowel means according to preceding or following place of articulation is given in Figure 7.29 and Figure 7.30.

The significant fixed effects kept in the LMEMs for each vowel are shown in Table 7.19. Corpus appears as a main effect for F1: COT, F2: GOAT, BOOT, CAT. Corpus is involved in interactions with preceding segment for all vowels bar FACE, GOAT. Following Segment is involved in an interaction with Corpus for CAT only.

The statistical results of all possible combinations of the fixed effects showed there was a significant effect of corpus (Asian/Non-Asian) and preceding segment on FLEECE, CAT, COT, BOOT; and corpus and following segment on CAT. Directly comparable results of the interactions are noted in Table 7.20 as interaction effects override the single main effect of corpus alone. Note that non-direct significant effects are not included in this table despite many other significant differences, (e.g. Asian precoronal with Non-Asian predorsal for the COT vowel). These results confirm the observations shown in Figure 7.28.

Direct cross-ethnic significant differences without interaction arise for the **GOAT** vowel on F2 where Asians have overall a more fronted vowel (higher F2) compared to

**Figure 7.29:** Corpus Comparison: Vowel Means by Preceding Segment
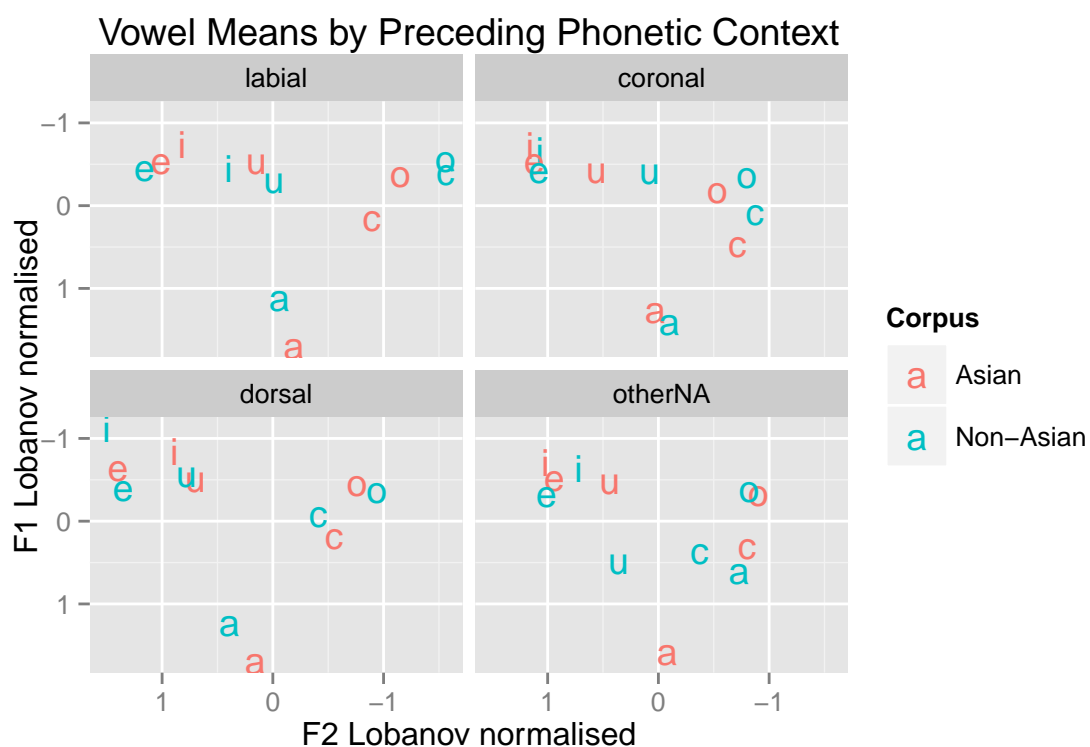


**Figure 7.30:** Corpus Comparison: Vowel Means by Following Segment
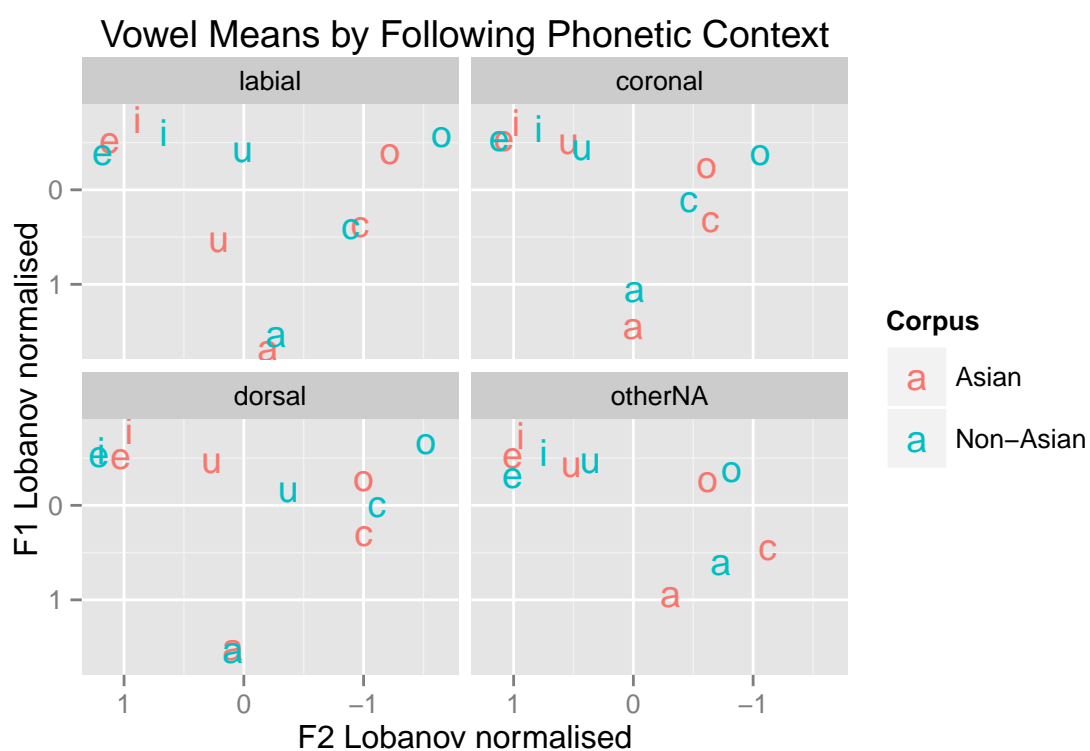
**Table 7.19:** Significant Fixed Effects kept in LMEMs for Asian and Non-Asian Vowels

| Vowel | Formant | Fixed Effect | df | f | pr |
|---|---|---|---|---|---|
| FLEECE | F1 | PreSeg | 3 | 3.16 | 0.03 |
| | | Corpus:PreSeg | 3 | 2.68 | 0.05 |
| | F2 | PreSeg | 3 | 8.40 | 0.00 |
| | | Corpus:PreSeg | 3 | 3.73 | 0.01 |
| FACE | F1 | - | - | - | - |
| | F2 | PreSeg | 3 | 10.45 | 0.00 |
| | | FollSeg | 3 | 3.62 | 0.02 |
| CAT | F1 | FollSeg | 3 | 7.24 | 0.00 |
| | | Corpus: PreSeg | 3 | 4.75 | 0.00 |
| | | Corpus: FollSeg | 3 | 3.20 | 0.02 |
| | F2 | Corpus | 1 | 5.55 | 0.02 |
| | | PreSeg | 3 | 14.91 | 0.00 |
| | | FollSeg | 3 | 27.51 | 0.00 |
| | | Corpus: FollSeg | 3 | 4.47 | 0.00 |
| COT | F1 | Corpus | 1 | 9.73 | 0.02 |
| | | PreSeg | 3 | 10.82 | 0.00 |
| | | Corpus: PreSeg | 3 | 5.67 | 0.00 |
| | F2 | PreSeg | 3 | 5.61 | 0.00 |
| | | FollSeg | 3 | 14.04 | 0.00 |
| | | Corpus: PreSeg | 3 | 7.55 | 0.00 |
| GOAT | F1 | PreSeg | 3 | 3.88 | 0.01 |
| | F2 | PreSeg | 1 | 9.81 | 0.00 |
| | | FollSeg | 3 | 10.60 | 0.00 |
| | | Corpus | 3 | 9.73 | 0.00 |
| BOOT | F1 | - | - | - | - |
| | F2 | Corpus | 1 | 3.62 | 0.06 |
| | | PreSeg | 3 | 15.43 | 0.00 |
| | | FollSeg | 3 | 6.68 | 0.00 |
| | | Corpus:PreSeg | 3 | 5.00 | 0.00 |

**Table 7.20:** Significant Differences in Fixed Effects: Direct Comparisons Only by Corpus

| Vowel | Formant | Effect 1 | Effect 2 | df | t | pr |
|---|---|---|---|---|---|---|
| FLEECE | F1 | Asian prelabial | Non-Asian prelabial | 79.1 | -3.25 | 0.00 |
| | F2 | Asian prelabial | Non-Asian prelabial | 58.9 | 2.77 | 0.00 |
| CAT | F1 | Asian preotherNA | Non-Asian preotherNA | 213 | 1.98 | 0.05 |
| | | Asian follcoronal | Non-Asian follcoronal | 60.4 | 2.69 | 0.00 |
| COT | F1 | Asian precoronal | Non-Asian precoronal | 269.3 | 2.58 | 0.01 |
| | | Asian predorsal | Non-Asian predorsal | 255.5 | 4.01 | 0.00 |
| | F2 | Asian predorsal | Non-Asian predorsal | 133.2 | -2.69 | 0.00 |
| | | Asian preotherNA | Non-Asian preotherNA | 116.7 | -4.24 | 0.00 |
| **GOAT** | F2 | Asian | Non-Asian | 37.4 | 3.13 | 0.00 |
| BOOT | F2 | Asian precoronal | Non-Asian precoronal | 89.8 | 4.00 | 1e-04 |

**Figure 7.31:** Estimate Plot for the GOAT vowel
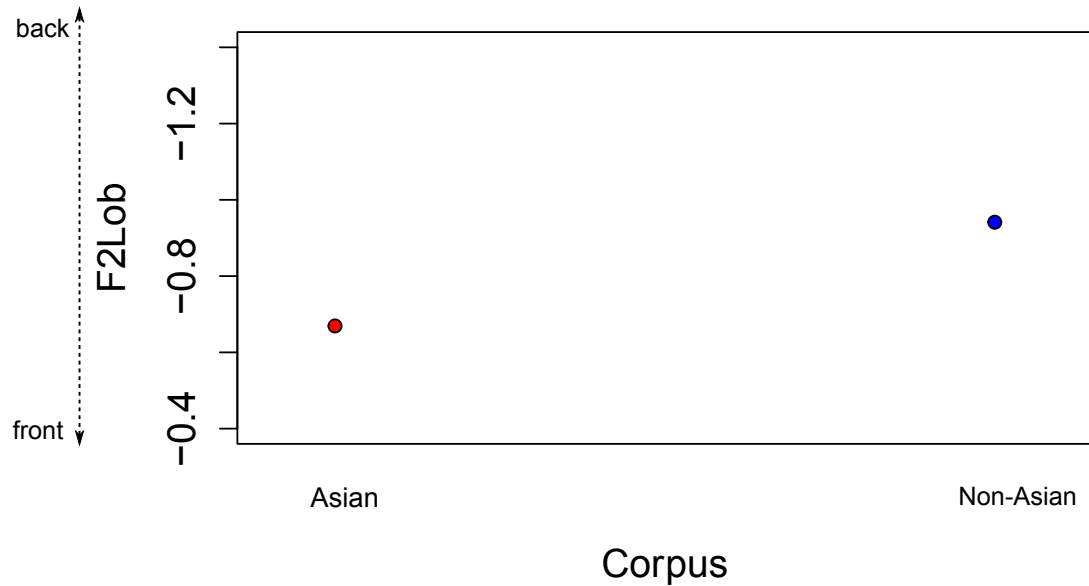


Non-Asians. This is confirmed by plotting the estimates (in Figure 7.31) as well as the overall means shown in Figure 7.28 thereby supporting previous findings (Stuart-Smith et al. 2011). Whilst it is important to note that both datasets were varied in their demographic make-up and sample size, such a result indicates that ethnicity is marked to some extent by the /o/ vowel on the front/back parameter.

The four vowels /i, a, ɔ, o/ also show cross-ethnic differences in interaction effects with adjacent phonetic segment for both F1 and F2, revealing more significant differences according to speaker ethnicity. Contrary to prior research by Stuart-Smith et al. (2011) no direct significant differences arise for the two ethnic groups for the FACE vowel; only a tendency for FACE to be closer. This is not surprising as the data shows the direction of difference changes from phonetic context to phonetic context, so clearly an LMEM cannot locate a 'general' difference, even for an interaction.

## 7.8 Discussion

### 7.8.1 Summary

This chapter has outlined a large scale automated formant analysis of six vowels /i, e, a, ɔ, o, ʉ/ in Glasgow Asian adolescent girls. It has used distinct forms of analysis in order to view the data in different ways: within ethnicity and across ethnicity. A) Within vowel according to engagement with social practices (CofP membership); B) Within CofP and across vowel; and C) Across ethnicity by comparing Asian and Non-Asian vowels. The main research question examines whether engagement in certain

social practices (CofP) affects the acoustic characteristics of the six chosen vowels and results did reveal a number of differences as well as some inter-ethnic variation.

**Analysis A - Within Vowel Across CofPs:**　shows there was patterning for two vowels /i/ and /ʉ/, according to an interaction of engagement in specific social practices (CofP membership) and adjacent phonetic context. For /i/, vowel height was significantly different (F1). Conservatives had a lower /i/ vowel than Shifters when preceded by coronals, e.g. *seen*, and also had lower /i/ vowels compared to Moderns in pre-labial contexts e.g. *been*. Moderns and Messabouts produced higher /i/ vowels than Shifters, and Moderns also had a higher /i/ than Wannabes in pre-labial contexts. For /ʉ/, the front/back dimension was important (F2). When the following segment was a labial or dorsal, e.g. *group, look*, on F2 the Moderns were more backed compared to Shifters, Messabouts and Wannabes. From these findings, it appears the Modern CofP uses the most vocalic variation in stylistic practice, at least for these two vowels.

**Analysis B - Within CofP Across Vowel:**　shows evidence of intra-CofP vowel variation. Specifically, all six vowels show significant differences except on F1 for /e, ʉ/ and on F2 for /ɔ, o/. Within CofPs, subtle variation was apparent, with Conservatives, Wannabes and Shifters all having no significant different for the /i, e/ vowels on F2, indicating no differentiation on the front-back dimension; and Conservatives, Wannabes and Moderns had no significant differences for /o, ʉ/ on F1 suggesting differentiation only on the F2 axis for these vowels.

**Analysis C - Across Ethnicity:**　suggests the presence of inter-ethnic differences in vowel quality mainly in relation to interaction effects with adjacent segment for the vowels /i, a, ɔ, ʉ/. There is also a direct ethnic difference for the /o/ vowel, with ethnicity alone as a main fixed effect. Glasgow Asian speakers were found to have significantly higher on F2 for /o/ than Non Glasgow-Asian speakers in all linguistic contexts and confirms findings by Stuart-Smith et al. (2011). Strikingly, no significant ethnic differences arise for the /e/ vowel, though there is evidence for trends in this data.

## 7.8.2　Within Ethnicity: Community of Practice and Vowel Realisation

Results show that whilst linguistic factors contribute the most to the variation in the girls' vowels, the social factor of CofP also explains some vowel variation, albeit more subtly. Specifically CofP was found to affect the realisation of FLEECE height (F1) and BOOT fronting/backing (F2).

　　Figure 7.32 provides a schematic representation of the significant comparisons between CofPs for both vowels /i, ʉ/. Note: the coloured lines represent significant differences between CofPs.

**Figure 7.32:** Sociophonetic Dimensions: Significant Differences between CofPs for Vowels for Glaswasian
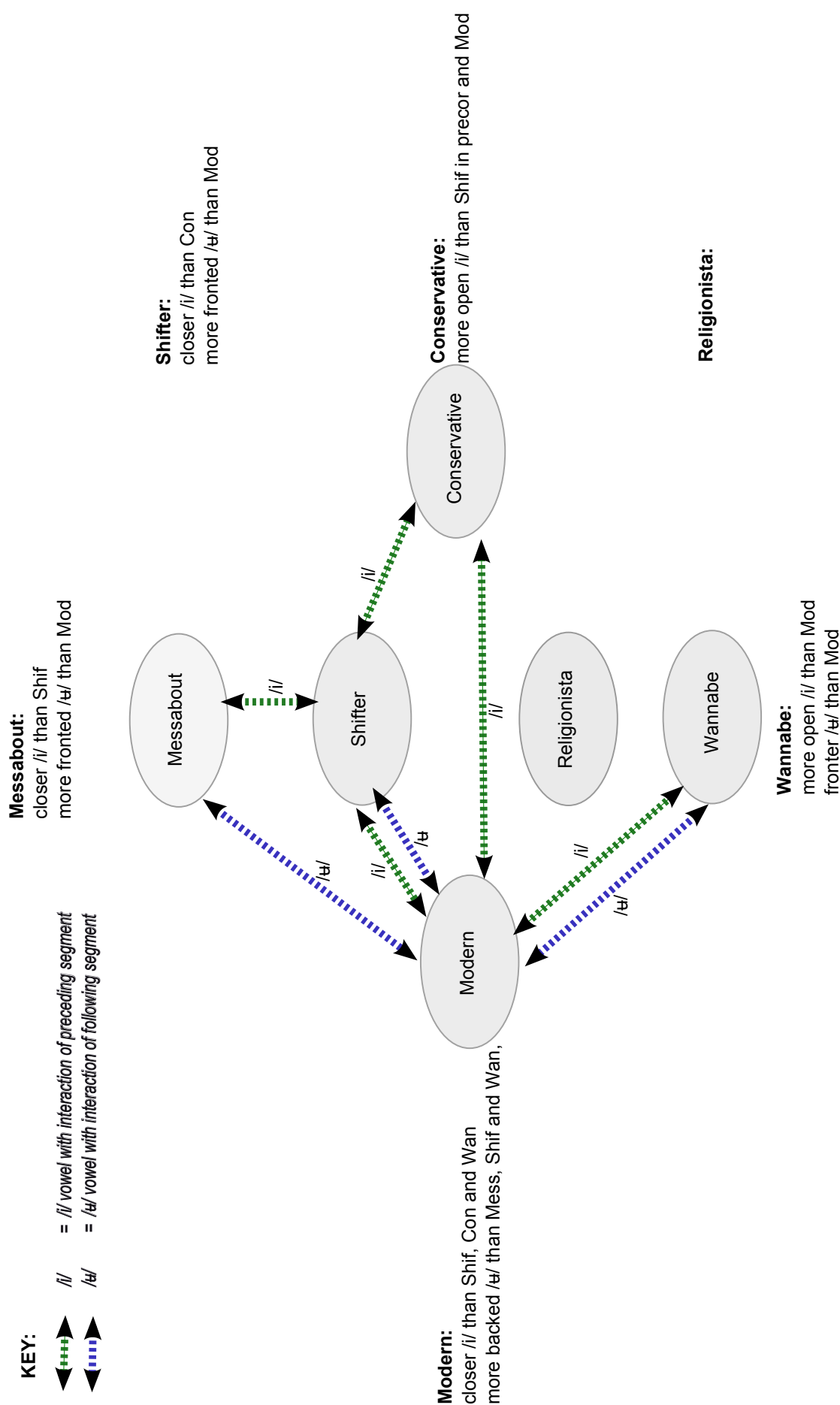
Previous linguistic research has indicated that CofP membership may affect realisation of front close vowels but depends on the social context and perceived prestigious variants within the community (Mendoza-Denton 2008, Kirkham 2013, Stuart-Smith et al. 2011). Mendoza-Denton's research on Latina-Chicano gangs using the CofP framework in the USA suggests that the most prevalent /ɪ/ raising occurs to sound more like /i/ when followed by /ŋ/ by the Nortena CofP as a marker of ethnic and socialinguistic identity contrary to US norms. This is in comparison to the Jocks who are the most standard in their use of /ɪ/. This was particularly in the 'Th-Pro' discourse marker, in words like *something* which had some pronominal use and was used symbolically as an anti-authority stance. Even though /i/ and /I/ are different vowels, they may share some similarities in terms of linguistic variation and social practices across studies/vowels.

Interestingly in the present data, preceding place of articulation, namely labials and coronals in words like e.g. *been, keep* combined with CofP have a significant effect on the realisation of /i/. The Moderns and Messabouts use this linguistic feature for identity construction by using the most raised variants. Moderns and Messabouts may align in some of their practices, e.g. dating boys, thus sharing an anti Pakistani-Muslim stance which is then permeated through their language. In contrast however, Kirkham (2013) reports CofP differences with pro-school groups favouring more close and tense realisations as opposed to the local, less prestigious variant /ɪ/ in Sheffield favoured by the anti-school groups. Generally then it is not the raising that is important but the raised /i/ might mean something in its specific sociolinguistic context. Such polarity exemplifies the importance of social context in understanding linguistic variation at a more general level, as well as the salience of certain speech features in a community.

So even though Stuart-Smith et al. (2011) find separation for /e, o/ according to CofP and these are considered marked vowels in many Asian Englishes, this is not corroborated in the present analysis. Differentiation across CofPs occurs in other vowels, namely /i/ and /ʉ/, and only in specific linguistic contexts which are not always analysed together (in interactions) as allowed by the use of linear mixed models.

Useful future work might examine the notion of stance (e.g. Drager 2009) by collapsing CofP categories in different ways in order to shed more light on the factors at play in linguistic variaton and allow different views of the data. For example, through psycho-social orientation such as western-oriented girls (Religionistas, Moderns, Wannabes) versus eastern-oriented girls (Conservatives, Messabouts, Moderns); or 'good' girls (Religionistas, Shifters, Conservatives) versus 'bad' girls (Moderns, Messabouts, Wannabe). Such analyses might yield more robust and greater numbers of significant results across the vowels due to fewer categories.

### 7.8.3   Across Ethnicity: Asian and Non-Asian Vowels in Glasgow

Statistically, results have shown that the /o/ vowel reveals separation according to ethnicity across all phonetic contexts; and particular vowels in specific linguistic contexts also reveal ethnic differences with working class Non Glasgow-Asians. In this way, ethnicity is reflected in the acoustic characteristics of accent features, and may intersect with identity at this level alongside more local social identities. However as alluded to earlier, equating such class-based divisions from one ethnic community to another in the UK context, here the native White Scottish and British Pakistani community, is duly problematic based on diverse social and cultural differences. Moreover, differences in age and number between the two samples makes such comparisons even more complex and necessarily tentative.

Historically most work on British Asian vowels has focussed on /e/ and /o/. The characteristic pattern of Asian - and multi-cultural British Englishes in London and Manchester respectively (Cheshire et al. 2011, Drummond 2014) - is typically monophthongal closer realisations of /e/ and /o/, which are considered to index an ethnic and regional identity. Acoustic phonetic research in Yorkshire by Wormald (2014, 2015) on lab speech in Punjabi-English female speakers also finds ethnic differences with Anglo-English speakers. In her data, she finds Asian speakers have lower F1 (closer vowels) for both /e, o/, though younger Asian speakers (aged 18-25) had comparatively more open realisations than the older speakers in her 2014 sample (aged 35-45) especially with respect to qualitative distinctions for the KIT/FOOT vowels. Wormald (2015) also reports significant differences according to gender, region and language background when comparing Bradford Pakistani, Leicester Indian Punjabi-English and Anglo speakers' vowels. However Pakistani Muslim and Indian Sikh communities are very different so these findings can be cautiously considered. Her results better align with work on Multicultural English vowels in the UK (Cheshire et al. 2011) which show retracted and closer /o/. This is rather different to what is found in the present Glasgow study where /o/ is significantly fronted and qualitatively lower in Asian speakers. Such differences may lie in the specific Anglo-English dialect differences, as much as ethnic differences. Moreover, in the present study, there is actually ethnic separation for /o/ on the F2 domain, not F1 as reported by Wormald (2014) again indicating the complexity of determining socially and contextually relevant speech features in different English accents.

Contrary to the work on /e, o/, Kirkham (2013) finds no ethnic differences in the /ɪ/ vowel in his Punjabi-English Sheffield speakers, but finds CofP differences only, suggesting more social contextual factors at play rather than ethnicity-related factors.

A widespread and co-ordinated study of the British Asian accent in Pakistani Muslim speakers (as well as other South-Asian groups) would be extremely beneficial in determining idiosyncratic features, local and regional features and more broad ethnic

and cultural features. A useful further study in order to assess degree of 'Scottish-isation' and regional dialect use by Asians would be to assess the degree of acquisition and use of the Scottish Vowel Length Rule. By taking vowel duration measurements which would confirm long-short contrasts, these could be compared to SVLR as well as confirm any substrate effects from Punjabi and Urdu long-short vowel contrasts.

Another useful study would take Analysis C and split the 'Asian' group into their respective CofPs before comparison with the non-Asian group. In this way, it would be possible to identify the salience of ethnicity versus other considerations.

### 7.8.4 Conclusion

There is evidence for CofP effects within ethnicity and across ethnicity. To conclude, young female Glasgow-Asians use a variety of vowel realisations in order to portray elements of a particular social identity, which combines a personal, social, local, cultural and ethnic identity. Through the acoustic features of their vowels they situate themselves strongly within the Scottish-Glasgow context, and use less 'ethnically marked' features than might be expected from their substrate languages but still show cross-ethnic differences. Such results might allude to the continuing erosion of cultural heritage and language, alongside a more integrated British identity. Asians differentiate themselves from one another on the basis of their social practices defying homoegenity and stereotypical perceptions of Pakistani-Muslims; whilst equally using particular vowel realisations to demarcate their ethnicity in extremely subtle and fine-grained ways. There is clearly ongoing identity work under way whereby adolescents are able to fuse young British, Scottish and Asian ways of being into language for stylistic effects - essentially embodying the concept of *Glaswasian*.

# Part III

# Conclusions

# Chapter 8

# Discussion

## 8.1 Overview

This chapter will summarise the overall findings of the study and present a discussion of the main themes with reference to the research questions at the outset. The main research questions are:

- What are the social and linguistic patterns of second/third generation Scottish-Asian girls as evidenced through speech and social practices?

- How is ethnicity reflected in the auditory and acoustic characteristics of accent features? Specifically, how are /t/ and six vowels /i, e, a, ɔ, o, ʉ/ realised across Glasgow-Asian girls of similar age with varying social practices?

- How are phonetic realisations conditioned by internal and external factors?

## 8.2 Summary of the Study

This study has examined how linguistic variation relates to social practices, social meaning and identity within an ethnic minority group of young Scottish Pakistani girls. In the tradition of linguistic ethnography and variationist sociolinguistics, it has analysed their broad social patterns using the Community of Practice framework and subtle fine-grained phonetic variation in accent features of their spoken English, namely /t/ and six vowels /i, e, a, ɔ, o, ʉ/. It particularly considers variation within ethnicity, and partly across ethnicity.

Social ethnographic results reveal that the girls are not homogenous. They engage in varying social practices in differing degrees, drawing from both Scottish and Pakistani Muslim culture forming particular CofPs. They lie on a sort of schematic spectrum which relates to aspects such as psychological orientation towards Pakistani culture, religion, teenage and British norms. Six Communities of Practice emerged in the course of the fieldwork at Riverburn High ranging on this schematic continuum in terms of their social practices. These were identified as: Conservative, Religionista,

Modern, Shifter, Messabout and Wannabe. However, their social practices are not simple, clear-cut or linear in terms of a British or Pakistani Muslim identity. Crucially, the ethnography has revealed much granularity, complexity and hybridity in the girls' daily practices where 'new' ethnicites may be at play (cf. Harris 2006).

Ethnicity as a concept might also be more ideological for these girls, rather than a concrete fixed term linked purely to factors like race and skin colour (cf. Harris 2006). This is because they are part of many cultures, nationalities and social demographic categories - e.g. in this case they are simultaneously British, Scottish, Pakistani, Muslim, ethnic, teenage and female. Gendered ethnic identities are also different in Pakistani culture where girls are more likely to be 'watched' by their community. Bearing this in mind, the school environment and membership in particular CofPs allows the creation of different social identities which are not stereotypically linked to the home domain. In this way, linguistic choices and fine-grained variation in speech may allow for some extra expressions of social identity.

Auditory and acoustic analyses of phonetic variables using complementary linguistic approaches yields different types of results which together offer a broader picture of the Glasgow Asian socio-phonological system. For phonetic analysis of /t/, small scale, hand measured, auditory and acoustic analysis was conducted; for vowels, large scale and automated formant measures were taken. Analysing consonantal and vocalic variables also allows a perspective on how different features might work differently and independently to construct social meanings, whilst simultaneously highlighting the connections between the two.

The main findings reveal that phonetic variation in the girls' English patterns with linguistic constraints as might be expected, but also more subtly with the social constraint of CofP. For /t/, there were single main effects of adjacent phonetic context and of CofP for both auditory analysis (Tongue Shape) and acoustic analyses (spectral moments); and for vowel acoustic analysis there were main effects of adjacent segment and interaction effects for adjacent phonetic context and CofP. This shows that there are social effects for both the stop and vowels.

The four significant variables which showed an effect of CofP and relate to identity were: Tongue Shape for /t/, Centre of Gravity for /t/, /i/ F1 and /ʉ/ F2. Importantly each variable patterned differently. This suggests that different features function symbolically in different ways in particular contexts for different social groups and individuals in constructing ethnic identities. This shows that these are not just Glasgow-Asian girls, but particular types of Glasgow Asian girls.

## 8.3 Internal Factors: Adjacent Phonetic Context

Internal factors were very important in phonetic variation in this data sample. Adjacent phonetic context was pervasive, with strong effects, exemplified by the fact both preceding and following context occur as main effects in all the linguistic variables

along with involvement in interactions with CofP and ethnic group where relevant.

For example, in the analysis of /t/ there were significant main effects of adjacent phonetic context for Tongue Place, Tongue Shape and Centre of Gravity (CoG). Approximant contexts showed lower CoG values overall which might be expected due to the rounding of the lips.

For the vowel data, adjacent phonetic context affected all vowel realisations in Analysis A (across CofPs), Analysis B (within CofP) and in Analysis C (across ethnic group). Linguistic constraints have a fundamental impact on phonetic variation, but importantly social constraints also play a part, albeit more subtly; these are considered in Section 8.5.

## 8.4   Significant Phonetic Variables for CofP

### 8.4.1   Realisation of /t/: Tongue Shape and CoG

The realisation of /t/ as an enregistered feature in Asian Englishes, it is easy to suggest that retroflex and dental realisations are indexical of 'Asianness', whilst more local denti-alveolar Glasgow articulations are indexical of 'Scottishness'. However the results are not that straightforward.

Previous auditory work on /t/ in a small sample by Alam (2006) suggested that social identity was signalled through place of articulation for /t/. Here it is in fact Tongue Shape which links significantly to social factors, in terms of apical or laminal tongue gestures in stop production. For Tongue Shape, Conservatives and Messabouts have the most laminal realisations but these still only comprise around 25% of their total tokens with the remainder being apical.

For Centre of Gravity, Conservatives significantly varied to three other CofPs (Messabouts, Religionistas and Wannabes), having a higher CoG mean. This suggests a socio-phonetic continuum of front/backness, along the small alveolar area. No instances of retroflex /ʈ/ were produced in the girls' English utterances, so even though Conservatives may be heard as more auditorily retracted, they are but only relatively with respect to the other CofPS. It may be CoG that is actually picking up their retraction and their difference to the Messabout CofP (who share more laminal tokens overall). These results for /t/ are different to other work on British Asian English, where retraction or post-alveolar is much more subtle (Sharma & Sankaran 2011).

### 8.4.2   Vowels: /i, ʉ/

Vowel data also shows separation according to social practices but only when involved in an interaction with adjacent phonetic context for two vowels. This is for /i/ on the F1 dimension (vowel height) with preceding context, and /ʉ/ on the F2 dimension (front-backness) with following context. The remaining four vowels /e, a, o, ɔ/ are not affected by CofP and only have significant comparisons in relation to linguistic context.

Interestingly, these two vowels have been shown to participate in social work: /i/ in ethnic communities (e.g. Mendoza-Denton 2008), and /ʉ/ in Scottish communities (e.g. José et al. 2013). Compared to other studies of vowels in British Asian English, Glasgow Asian vowels show similar patterns such as monophthongal realisations characteristic of Scottish and Asian varieties for /e, o/, and a fronter /o/ (cf. Wormald 2014, 2015).

# 8.5   Within Ethnicity: CofP and Phonetic Variation

All CofPs significantly varied in one or more variable usually in a specific linguistic context. Notably, two CofPs, the Conservative and Moderns, overall showed the most separation for the four phonetic features under consideration but in differing ways (namely, Tongue Shape, /t/ CoG, /i/ and /ʉ/). Results show that Conservatives differed mainly in respect to /t/ realisation whereas Moderns showed vocalic differences to other CofPs.

Figure 8.1 provides an overview of all significant comparisons between CofPs across the four phonetic variables that showed a social as well as linguistic effect. Note: the coloured lines represent significant differences between CofPs. This diagram shows a complex set of socio-phonetic dimensions which to my knowledge have not been mapped in this way. This shows what a small corner of this 'ethnic group' really looks like providing a partial sketch of the sociophonetics of being 'Glaswasian' - it might even be considered ethnicity in action or 'doing ethnicity'.

## 8.5.1   Conservatives

To recap, socially Conservatives were the most traditional girls in terms of allegiance to Pakistani culture, language and customs. For example, they often visited Pakistan, listened to Asian music and code-switched the most in daily speech. They were often the least popular girls in the school community, appearing less fashionable and more modest in their overall demeanour than the other Asian girls. Importantly they often viewed Pakistani and Islamic culture as one and the same.

Linguistically, results show that Conservative CofP have the most polarity from other CofPs revealing significant differences for Tongue Shape, CoG and the /i/ vowel. Broadly, they use more laminal stops when analysed auditorily; and they also differ acoustically in terms of Centre of Gravity values for the stop. Specifically for /t/, the auditory data for Tongue Shape shows separation from the Moderns, Shifters and Wannabes where they use a greater proportion of laminal versus apical stops. In terms of Tongue Place they show no fronted variants - they are laminal and non-front. For the spectral moment analysis, Conservatives also had significantly different results for the Centre of Gravity measures compared to Messabout, Religionista and Wannabe CofPs with higher CoG overall. This may reflect non-front or retracted (post-alveolar)

**Figure 8.1:** Sociophonetic Dimensions: Significant Differences between CofPs in Four Phonetic Variables for Glaswasian

**KEY:**

tShape = *Tongue Shape for /t/*
tCoG = *Centre of Gravity for /t/*
/i/ = */i/ vowel with interaction of preceding segment*
/u/ = */u/ vowel with interaction of following segment*

**Messabout:**
more laminal than Mod and Shif
lower CoG than Con
closer /i/ than Shif
more fronted /u/ than Mod

**Shifter:**
more apical than Con and Mess
more open /i/ than Mod and Mess
closer /i/ than Con
more fronted /u/ than Mod

**Conservative:**
more laminal than Shif, Mod and Wan
higher CoG than Rel, Mess and Wan
more open /i/ than Shif in precor and Mod

**Religionista**
lower CoG than Con

**Wannabe:**
more apical than Con
lower CoG than Con
more open /i/ than Mod
fronter /u/ than Mod

**Modern:**
more apical than Mess and Con
closer /i/ than Shif, Con and Wan
more backed /u/ than Mess, Shif and Wan,

stops. Combining these results alone shows their polarity with all other five CofPs across different aspects of the stop - both for auditory Tongue Shape and acoustic CoG values. Therefore it appears that /t/ is an indexical variable for this CofP.

Additionally Conservatives also showed separation for vowels in interactions with preceding segment: lower /i/ realisation compared to Moderns in pre-labial contexts (e.g. *been*) and to Shifters in pre-coronal contexts (e.g. *team*). The more open /i/ does not appear to be Punjabi/Urdu and no retroflex /ʈ/ was heard, therefore these realisations are not indicative of language interference. There is some retraction in the context of the Scottish stop, where the girls have developed indexical variants which might be reminiscent of heritage language.

### 8.5.2 Religionistas

Religionistas were girls who were most attuned to their Islamic faith and did not confuse this with their Pakistani heritage. They were fashion-forward yet modest often donning the hijab and enjoyed mixing with different social groups across the school. Crucially, they were proud of their British and Scottish identity but did not compromise their personal values, e.g. they did not engage in forbidden practices in their faith such as pre-marital relationships.

Perhaps the most unusual result from a linguistic perspective was that they showed no separation for any feature, bar one. They only had lower CoG values for /t/ compared to the Conservatives, signalling their greater similarity and not difference with all the CofPs. This comparison with the Conservatives for CoG would be consistent with the interpretation that /t/ has indexical value for these girls, as neither use fully retroflex realistions of /t/. Yet Religionistas avoid retraction picked up subtly by CoG which might align them with a more Pakistani identity. Their similarities to all other CofPs is surprising given how overtly they discussed and presented their Islamic identities on a daily basis. Such an identity is actually more cohesive as they are 'living Islam', and not divisive which is interesting especially given the anti-Islamic climate that focuses on difference.

### 8.5.3 Moderns

Moderns were fashionable, career-oriented and were considered the 'popular' girls in school. They were strongly interested in their appearance, money and accessories but were also focused on further education and careers. In this way they rejected many Pakistani female stereotypes linked to domestic lifestyles as well as dating boys, but importantly more with a view to marriage and commitment rather than casual relationships. They were quite similar to the Religionistas but importantly without Islam as a focal point.

Moderns varied for three variables: Tongue Shape, /i/ and /ʉ/. They are an important CofP in terms of vocalic variation having five significant differences with four

other CofPs. As consonantal features are considered more marked in Asian Englishes, these may be avoided in terms of identity construction by Moderns as it is not coherent with their overtly current and British identity. But unexpectedly they pattern with the Conservatives for CoG which could be indexical of an 'Asian/Pakistani' identity, e.g. exemplified through the fact that they take interest in more westernised Pakistani fashions outside school and are still very much part of the Pakistani community. So perhaps it can be said they have an inherent and not an overt Pakistani stance.

Moderns showed separation to other CofPs for both the significant vowels when involved in interactions, /i, ʉ/. For /i/ when preceded by a labial (e.g. *peak*), they have a closer vowel compared to Shifters, Wannabes and Conservatives. For /ʉ/, when followed by a labial or a dorsal (e.g. *group, look*), they were significantly different to Messabouts, Wannabes and Shifters showing more backed realisations.

Differences like these might be somewhat unexpected as Wannabes too align more with Scottish norms from a stance perspective, so more similarity with this group would be expected. Yet they do align with Wannabes for /t/ CoG and Tongue Shape for /t/. However, using more backed /ʉ/ is not the only feature which Moderns use to differentiate themselves from other CofPs (Sharma & Sankaran 2011, Kirkham 2013). They also differ from the Messabouts in Tongue Shape using more apical articulations, and with /i/. In this way, not one feature is being used in identity construction but several axes of differentiation in relation to other CofPs. This supports research which shows that phonological features may vary in terms of their social work (e.g. Kerswill & Williams 2000), as well as other lexical and grammatical aspects of language (e.g. Smith 2015).

It is interesting that Moderns show clear separation from the Messabouts and Wannabes linguistically, especially given that these CofPs share some of their social practices albeit in different ways. For instance, the Messabouts dated boys but more fleetingly, and Wannabes too have similar career aspirations but are part of more ethnically diverse friendship groups than the Moderns who remained firmly within the Asian community. Therefore it seems that Moderns signal their separate social identity to these other girls through subtle phonetic variation, and not only through their social practices. Moderns are with Wannabes for /t/ (Tongue Shape) but not for vowels; they are with Messabouts for /t/ CoG and /ʉ/ but not for Tongue Shape and /i/. This tells us about Glasgow Asian but tells us much more about how speech variation functions to construct social identities.

## 8.5.4 Shifters

Shifters are characterised by their range of practices depending on their social context and interlocutors. They engaged in Pakistani practices such as listening to Asian musical styles, code-switching to Punjabi, were interested in boys, wore hijab and traditional 'shalwar kameez', and experimented with make-up; but equally they wore British styles of clothing and were flexible with aspects like hijab. They are categorised by their lack

of conviction to any one social practice, mixing and matching in a changeable way taking elements of their Pakistani and British heritage.

Linguistically, they differ on three variables: Tongue Shape, /i/ and /ʉ/. For Tongue Shape they differ to the Messabouts and Conservatives, using more apical tongue tip gestures overall. For /ʉ/, Shifters vary significantly to the Moderns in following dorsal contexts (e.g. *book*) where Shifters used more fronted realisation.

The realisation of /i/ is a significant comparison for the Shifters in three instances. In pre-labial contexts, e.g. *peak*, they have more open realisations of /i/ compared to Modern and Messabout CofPs; whereas in pre-coronal contexts (e.g. *beat*) they have closer /i/ articulation compared to Conservatives. Simultaneously, they also have a more fronted /ʉ/ compared to Moderns in following dorsal contexts (e.g. *seek*). They also have more apical Tongue Shape than Conservatives. Overall, they vary on six dimensions as shown in Figure 8.1, closely following Conservatives and Moderns who have eight axes of differentiation. They might be 'with' the Conservatives for CoG because they show a broad range of values and this is perhaps like their practices. It seems there is little in the general sociolinguistic literature about the 'Shifter' group, with much work focusing on individuals at the extremes, and not the generally larger 'in-between' group who may play a role in linguistic innovation (cf. Eckert 1989*a*, 2000, Lawson 2009).

## 8.5.5   Messabouts

Messabouts were the most daring girls in terms of their social practices, and might be considered the 'naughty' girls. They were often loud, boisterous, typically smoked and had casual relationships with boys. Messabouts were characterised by their rebellion against school, authority and Pakistani norms. This was ironic because some of them wore hijab in school, perhaps due to familial pressures, and so they sort of lived a double life where on the face of it, they appeared to be model pupils, but were in fact the complete opposite. Not all donned the hijab, and many were overtly obsessed with their appearance, e.g. wearing heavy make-up and dyeing and styling their hair meticulously.

Messabouts varied across all the four variables: Tongue Shape, CoG, /i/ and /ʉ/. For Tongue Shape, they differed to Shifters and Moderns having more laminal tokens, and only differed to Conservatives for CoG having lower values. This seems to be laminal and front, i.e. like Glaswegian. It shows that 'laminal' has different meanings when with different features - i.e. the 'same' variant itself is an axis of commonality but also difference. For /i/ when preceded by a labial (e.g. *peak*), they had closer vowels than Shifters; and for /ʉ/ in following dorsal contexts when compared to Moderns, they had a more fronted vowel.

### 8.5.6 Wannabes

Wannabes were the most 'British' in their social practices and rejected many aspects of their cultural and religious heritage which was often viewed negatively. They had few Asian friends mixing mainly with Anglo-White students, and were involved in similar social practices such as drinking alcohol and 'going out'.

From a linguistic standpoint, Wannabes had four significant differences. Not surprisingly they were different for Tongue Shape and CoG to the Conservatives, but also for /i/ and /ʉ/ to the Moderns. Again like the Moderns, they differentiated themselves from the most 'Asian' group (Conservatives) through the marked consonantal feature, having lower CoG and more apical /t/. With the Moderns who were similar in terms of career aspirations and rejection of cultural norms to some level, they used more subtle vowel variation, having more open /i/ in pre-labial contexts and fronter /ʉ/. It is interesting that they had apical /t/ unlike the Messabouts who were more laminal, but both had low CoG. So here it is Tongue Shape that differentiates the two most overtly non-conformist Pakistani groups. They may have more fronted /t/ similar to Glasgow speech, unlike the Conservatives who are more culturally attuned to Pakistani norms with a higher CoG suggestive of a retracted articulation.

Looking ahead to Section 8.6, the non-Asian speakers showed more open /i/ vowels across all contexts, so this aligns well in terms of how they perceive their social identity, i.e. 'wanting to be White'. For /ʉ/ however they have more fronted realisations unlike the non-Asians, perhaps too signalling their 'Asian' identity but at a finer level.

### 8.5.7 Further Discussion

As seen, the relationships within ethnicity between the CofPs are complex. There are both differences and overlapping features, both social and linguistic, within this group of Pakistani Muslim girls. The lack of overall homogeneity within the individual girls and the social grouping of CofP, highlights the role that fine-grained linguistic variation plays within an ethnic group. It would be interesting to see if similar processes are occurring in other ethnic minority groups at large (cf. Kirkham 2013), and also if similar or different phonetic features are associated with any social meaning. There are key results with regards to three specific CofPs who all have their own profile, namely Conservatives, Moderns and Religionistas.

Combining Tongue Shape and CoG results for /t/, Conservatives have reported significant differences to all other CofPs. Conservatives have the most laminal tokens with Messabouts but differ to Wannabes, Moderns and Shifters. Importantly, they also vary qualitatively for Tongue Place where Conservatives show hardly any fronted tokens whereas Messabouts show the most fronted tokens. They also vary between each other significantly in their acoustic results for /t/ (CoG) and this becomes an axis of differentiation. Conservatives have a much higher CoG compared to the Messabouts. This suggests a more peaked spectral shape with a louder burst indicative of a more

alveolar or retracted stop. In contrast the lower CoG value of the Messabouts suggests a flatter spectral shape which may signal a more fronted Glasgow denti-alveolar realisation of /t/ (Stuart-Smith 1999). For the Centre of Gravity (CoG), Conservatives who have the highest CoG values of all the CofPs also significantly differ to Religionistas and Wannabes with much lower measures. It seems from this that CoG here captures the British Asian English /t/ quality of 'Asianness' at least for these speakers.

Directly correlating auditory and acoustic measures with place of articulation is tricky without further articulatory work linked to the dynamic and static qualities of the stop. It is also important to note that Tongue Shape does not map easily onto place of articulation, e.g. it might be expected that laminal tokens are more likely to be dental, but they can also be alveolar or retracted, e.g. French or Punjabi. In the same way, apical tongue gestures do not imply retracted or alveolar realisations. This manipulation of gesture to such a fine yet socially systematic degree is impressive, demonstrating fine-grained social-indexical variation in action.

Another key result reveals that both Moderns and Religionistas, who share values related to British heritage, such as career aspirations and contemporary UK fashions, still diverge linguistically at some levels with other CofPs but not to each other. Moderns use the most inter-CofP vocalic variation, with six significant differences in particular contexts. Strikingly, on the other hand, Religionistas are the most similar to all of the CofPs, with only one significant difference with the Conservatives for CoG in /t/. It might be that Moderns and Religionistas differentiate from each other on another linguistic variable, but equally social differences may suffice for these groups. Therefore even from a stance perspective, of Pakistani/non-Pakistani, it is clear that CofPs still vary between themselves forging unique places for identity construction. Furthermore, there is a need to understand that social and linguistic factors are not easily separable. It is easier to suggest that social practices alone are performing social differentiation between the girls, and linguistic features do not work in the same way but there may be more going on.

However, results of this study do show subtle linguistic disambiguation at a phonetic level, though it is yet to be seen how this might apply to other phonological, lexical or grammatical elements of speech within this same community (e.g. Cheshire et al. 2011). Moreover, it is difficult to account for the wider social networks that these girls might participate in, as the fieldwork is inevitably a snapshot of their daily life. The girls may choose or need to have different social, stylistic and linguistic personas in different situational contexts (e.g. Sharma 2011). This seems very plausible as Pakistani Muslim-only domains may necessitate different types of identities. So while inference from these findings cannot be overly general as the results are a product of the girls' sociolinguistic context, it can be said that identity work for ethnic groups is very complex, both socially as well as linguistically. This is heightened in the adolescent life phase, where identities are more malleable and are being established.

Variables may cluster together participating in 'identity work' together which is a

basic premise of the style approach (e.g. Coupland 2007, Eckert & Rickford 2001), as well as singular features. However, without a more comprehensive study with more phonological variables that exhibit salience and non-salience in the community, it is uncertain how these might be functioning for different linguistic disambiguation (cf. Sharma 2011). Moreover, detailed work on interactions of variables would also be useful. Whilst some work has examined cross-ethnic differences in other Pakistani heritage features (e.g. Kirkham & Wormald 2015), little is known about how a greater variety of linguistic features together might function within this ethnic group.

## 8.6   Discussion Across Ethnicity in Glasgow

A general baseline of the Glasgow-Asian vowel system using the six vowels has also been provided by this research, of which there was no prior information except for preliminary findings for /e/ and /o/ (c.f. Stuart-Smith et al. 2011). This provides a good reference point for future studies on the Glasgow-Asian vowel system as well as other Asian and ethnic minority Englishes in the UK and further afield. Results also show there were inter-ethnic vowel differences when comparing female Asian with female Non-Asian speakers. However, it is possible that social class and sample size difference may confound the data compared here, e.g. here a larger sample of middle-class Asian girls versus smaller sample of working class Non-Asian speakers. In this way direct comparisons are difficult, but even more complicated by the fact that class-based categories in Scottish and Pakistani communities do not equate easily (e.g. 'middle class' Asians may be the same as working class non-Asians in terms of occupations).

A key finding shows that the /o/ vowel was significantly different, with only a main effect of ethnicity. It differed between the ethnic groups and was more fronted in Asian speakers than in Non-Asians. This is consistent with previous work by Stuart-Smith et al. (2011), Kirkham (2013), Wormald (2014, 2015) which suggests fronter and closer realisations of this vowel. Notably, there were no significant cross-ethnic differences for /e/ which was surprising as the FACE vowel has been shown to have closer and fronter realisations when compared across ethnic groups. It might be that there are pan-ethnic British Asian English features such as monophthong front/close GOAT, but at the same time all features, and especially vowels, are subject to regional accent. For instance, Scottish Glaswasian may well not show the 'same' qualities as e.g. Bradford Asian. In addition a different social context is apparent in English Asian communities compared to Scottish ones, heightening potential differences.

There were also interaction effects with mainly preceding segment only across four vowels between the two ethnic groups: /i, a, ɔ, ʉ/. These might be seen as more subtle changes across ethnicity.

For /ʉ/, in pre-coronal contexts, Asians were significantly more fronted on F2. In Scottish English, the /ʉ/ or BOOT vowel is typically a mid high vowel and has been shown to be lowering on F1 over the decades having classed and regional associations

(José et al. 2013). However, for the Scottish Asian girls in this study, BOOT varies according to CofP on vowel front-backness (F2) with respect to following phonetic context, not vowel height. This is intriguing as Asian speakers may be using this vowel in order to signal ethnic differences, whilst simultaneously showing separation within ethnicity, unlike in Glaswegian non-Asian speakers' differences on F1.

## 8.7 Explanations For Variation other than CofP

### 8.7.1 Role of Bilingualism

Cross-linguistic influence is one potential source of speech variation in the Glasgow Asian girls, and and perhaps most likely for the Conservative CofP, who are more attuned to all aspects of their Pakistani heritage, including their languages of Punjabi and Urdu. It is also a well-known fact that bilinguals have different phonetic systems compared with monolinguals and these can affect one language system, especially if they are similar in phonology (Matras 2009). Processes of language contact mean that variation that might originate in a speaker's heritage language may be used variably by different individuals, and may imbue different social meanings (e.g. Hirson & Sohail 2007). However, as noted in Chapter 5, language choice/use data was not collected as it was deemed inappropriate for this study. So even people who are seemingly demographically 'similar', may be variable in their social and linguistic practices.

Exemplar theory also predicts that prior usage and perception affects current productions in terms of frequency and recency effects of particular phonetic variants (Pierrehumbert 2003). For instance, how often would girls be exposed to retroflex /ʈ/ or other features specific to Punjabi and Urdu? All the girls can speak their heritage language to some level, so a degree of interference might be present.

However, they choose to speak English in the recordings and between themselves, indicative of gradual language shift in younger Pakistanis at large (see Chapter 3). Also young Pakistanis may use ethnically derived features differently to the older generations, appropriating accent features in novel ways for identity work. For example, the complete lack of retroflex /ʈ/ - the canonical Indic stop - in the girls' English but their subtle retraction in the stop, marks them as different to the older generation.

It is plausible that receptive bilingualism more so than active bilingualism is functioning in the home domain at least, and especially for Conservatives who are potentially more exposed to their heritage languages. Yet circumstantial variation in exposure to bilingual settings/contexts does not easily equate to production of those same or similar speech forms. One may hear more heritage language but this does not necessarily mean they speak in the same way. Anecdotally, many young Pakistanis report the use of Punjabi and Urdu by parental generations, but their own responses in conversation with them are typically in English. Certainly, any degree of conscious volition in producing speech features reminiscent of heritage languages is unlikely in

the young Scottish Asian community. This contrasts greatly from other much larger Punjabi communities in the UK (such as the Southall community) where the community languages are used much more regularly in day-to-day life with peers as well as family.

### 8.7.2   Role of Ethnicity and Social Class

The girls in this study may also be representing different identities through their speech, which are actually just diverse ways of 'being' and not simply 'doing ethnicity'. 'Ethnic' features may not always signal ethnicity, but could index other moves, e.g. local distinctions between groups, or contextually specific stances or class differentiation (e.g. Eckert 2008*b*, Mendoza-Denton 2008). It is interesting to note that Messabouts and Wannabes for instance both share anti-heritage practices to a greater extent than the other CofPs, but Messabouts' speech target appears to be working class speech forms whereas Wannabes' speech targets tend to be more middle class. This does not undermine the role of ethnicity per se, but highlights the fact that a number of co-existent factors may be at play.

However, social class itself is problematic as a concept as it is not easily equatable across Pakistani, Muslim and Scottish groups. Castes, denominations and parental background in Pakistani versus their social background and status in the UK are not applied easily to what social class represents in the UK context. Work by Kirkham (2013) in Sheffield has suggested that relative affluence plays a big part in speech variation, but differences in background appear less apparent in Glasgow and may be linked to the generally higher social status of Pakistanis living in Scotland. Anecdotally, through visiting relatives in England or shopping in Asian areas like Southall, many Scottish Pakistanis are perceived as more affluent by Anglo Asians. This may be linked to the second internal migration north for greater economic prosperity by South Asians in the UK. Pakistani role models (e.g. cricketers, Bollywood stars, bankers) are also less important for Scottish Asians than for communities in England who view them in a much more explicitly positive way (e.g. in Southall, London).

### 8.7.3   Other Aspects of Phonetic Quality

An alternative explanation that might be posited for the variation in the girls' speech are the physiological differences between them. In order to mitigate the effects of physiology in terms of shape and size of the girls' vocal tracts, normalisation of acoustic vowel data has been conducted. But normalisation is not usually carried out for stops as it is unclear as to how procedures devised for vowels might operate in consonants.

However, there may still be additional acoustic differences for vowels (e.g. involving duration, F3, formant dynamics or other factors) and other perceptual differences at an auditory level for vowel quality which have not been analysed here. It is difficult to ascertain exactly how the girls sound different in terms of vowel quality for the six

vowels analysed at the present moment, as no close auditory analysis was conducted and requires further analysis.

## 8.8 Generational Change

Younger Pakistanis have very different identities compared to the older generations of Pakistani Muslims in the UK (e.g. Sharma & Sankaran 2011, Sharma 2011). Older generations are often perceived as backward and 'stuck in their ways'. For example they may have little interest in modern urban youth culture and changing lifestyles, technology, British societal norms and hold confused ideas about culture and religion.

The erosion of Pakistani cultural identity in general, and the broader challenges facing western-born Pakistanis surrounding discourses on 'terror', necessitates greater integration and engagement at a local and more global level for the youth. For instance, this might partly account for Conservatives being different for /t/ on one hand, but also not using actual retroflex stops or actual Punjabi/Urdu qualities.

The separation of culture and religion has also become apparent for some young people with greater questioning of Pakistani culture and a re-surgence in the Islamic faith contributing to the generational divide. Younger generations have a real sense of 'Britishness' and belonging to the UK as well as their 'Muslim-ness', e.g. the Religionistas. This co-present British-Muslim identity may be misrecognised by society, and viewed negatively as only a Muslim one. Understanding that the ability to identify with any group is always in part contingent on members of that group recognizing and acknowledging an individual's belonging, raises questions about the complex social and psychological processes at work for young British Muslims at large. For instance, Religionistas and Moderns may not be accepted as British despite their own personal affiliations putting them in a precarious limbo situation. Yet, younger generations are marrying and continue to marry elements of their heritages with western culture, e.g. halal cosmetics and Islamic mobile phone apps and others (e.g. Conservatives) may also adhere to traditional Pakistani and Muslim ideologies. This highlights the heterogeneous nature of young Pakistanis in the UK in terms of social as well as linguistic practices.

## 8.9 Glasgow-Asian or 'Glaswasian'?

Following work by Harris (2006) and his notion of 'Brasian', it is clear that at a phonetic level here there is a similar construct - the hybrid concept of 'Glaswasian' which is linked to personal local identities (cf. Stuart-Smith et al. 2011, also see Chapter 3). The 'Glaswasian' accent is an integration or hybrid of local Glaswegian features and Pakistani heritage language features. This regional ethnic accent is important to Glasgow Pakistani speakers who have a strong sense of Scottish identity which is perhaps dissimilar to corresponding communities in England. It is a small, strong and close-

knit community with less divisions than its English counterparts. Generally-speaking, Scottish Pakistani speakers have widespread use of supralocal phonetic features like t-glottaling; but crucially they use more local phonological variants of the Glasgow area and more Scottish linguistic features too, e.g. rhoticity and use of common lexical items like 'aye' and 'wee'. In these girls, hybridity is apparent in realisation of /t/ and vowels across ethnicity, but importantly Glaswasian is not monolithic.

The girls in this study identify with both aspects of their heritage as second and third generation Pakistanis in the UK; and similar to Harris, more fundamentally by a low-key Britishness with new inflections. This aspect of their identity is often over-looked, with ethnic minority groups more likely to be categorised based on race and religion as Pakistani, Muslim etc, especially since the 'terror' discourse began. Crucially, primary cultural identifications for these younger generations appear to be with place of residence, rather than their ancestral groups of which they may have less knowledge and fewer transnational ties. For instance, even though the girls in this study reportedly use little of their heritage languages, the ideologies remain or at least the desire to distinguish themselves from others.

However authenticity is important in terms of who they are, where overstepping in either direction might be problematic both in social and linguistic practice. In language, they may mark their ethnicity through fine phonetic aspects like consonantal or vocalic realisations, but not to the extreme of sounding like their parents or counterparts in Pakistan; or similarly by not overstepping to a broad Glasgow dialect which might also sound inauthentic. Socially, they may participate in more extreme behaviours albeit in more under-cover fashion due to the cost of community rejection, e.g. the Messabouts or Wannabes, who do not always 'act' in accordance with Pakistani and Muslim norms, and this links with speech.

Anecdotally-speaking, with all the current media attention on Muslims, to be seen as having an obvious Asian or ethnic accent is not viewed positively. To this end, some Pakistanis might try to converge to local English accent norms. There is continual tension of pressures towards supralocalism and homogenisation, but simultaneously for speech communities to maintain their own distinctive social and linguistic identity through symbolic practices, e.g. with aspects of appearance like headscarves and customs. This is apparent from the girls in this study, who display a mixture of behaviours across various cultures, e.g. they all have differing degrees of 'Pakistani-ness' and 'Muslim-ness' and 'Scottish-ness', yet somehow retain their ethnolinguistic identity. This reveals a number of complex psychological and social factors at work for identity; both at a conscious and subconscious level.

Glaswasian might crudely be considered a type of ethnolect. According to Clyne (2000) ethnolects might be defined as linguistic varieties that are linked to ethnic groups who originally used another variety, e.g. AAVE, or Latina American-English. They are often considered fixed, and not fluid entities which is debatable in itself, as it does not recognise multiple identities. However, Eckert (2008*b*, p.26) suggests that

linguistic resources that have ethnic derivations may also be indexical and mark non-ethnic differences too. Even when 'ethnic linguistic features' are found in studies, these say little about the underlying behaviours, ideologies or social meanings that underlie such variation. They may actually be indirectly indexical, and not only understood as difference marking, or alternatively assimilation to majority culture if the 'ethnic feature' is absent. 'Ethnic' features may evolve in social meaning, having greater or lesser social capital in the 'linguistic marketplace' (Sankoff & Laberge 1978) and consequently come to have a greater indexical field through time (Silverstein 2003, Eckert 2008*a*). In this way, Glaswasian accent features may be much more broadly indexical than might be anticipated, e.g. indexing youth culture, generational difference and strongly Scottish identities.

## 8.10 Summary

Minority ethnic individuals may use a variety of linguistic resources in identity construction especially as they have access to a wider 'feature pool' (Cheshire et al. 2011). However, speakers can move beyond classifications such as ethnicity if given the opportunity and motivation to do so in order to generate new social meaning. One way of conceptualising these new identities is by using fused or blended terms like 'Brasian' (Harris 2006), or here 'Glaswasian'. These exclude singular dichotomous notions of being either British, Asian or Glaswegian and the associated polarised and binary notions of East and West; instead they imply co-presence of each at all times.

This might seem like an ethnolect and cross-ethnic differences may be found (as here). But importantly, this study demonstrates the essential existence of within ethnic sociolinguistic diversity. Specifically, at a finer phonetic level, we have seen how these speakers construct social identities in multi-dimensional ways, which can be examined from the viewpoint of a single variable as well as overall socio-phonetic patterns, in conjunction with differing arrays of social practices. This study has shown that CofPs may help predict speech variation amongst Pakistani Muslim girls, differentiated by fine-grained phonetic differences between CofPs.

The study has also raised a number of issues with respect to social and ethnic identity regarding: local, regional and national identity; the complexity of how different accent features may function; the need for articulatory, acoustic and auditory measures; and the need for further linguistic work; and more broadly generational changes in British Pakistani Muslims.

# Chapter 9

# Conclusion

## 9.1 Synopsis of Thesis

This research has examined language and identity in Scottish Asian female adolescents. It has analysed fine-grained phonetic variation in speech, specifically realisation of /t/ and six vowels /i, e, a, ɔ, o, ʉ/ in Glasgow high school girls of Pakistani Muslim background using the Community of Practice framework. Auditory and acoustic analyses of accent features reveals that these variables are influenced by social as well as linguistic constraints. The key finding shows that the girls engage in differential social practices forming CofPs and these relate systematically to linguistic variation. Thus 'Glaswasian' shows important subtle differences within ethnicity.

In the UK, the way ethnic minorities speak English may be distinctive and signal their ethnic background. This may be through aspects such as language choice, style-shifting, length of residence, regional context and peer group influence. Importantly, second and third generation ethnic minority youth appear more hybrid and fluid in their social identities compared to their parent generations appropriating elements from the heritage and native indigenous culture in particular social contexts (Harris 2006). In this way, language is used as an important tool to construct or deconstruct ethnic, cultural, religious, regional or more global identities (e.g. Khan 2006, Mendoza-Denton 2008, Cheshire et al. 2011, Drummond 2011, Kirkham 2011, 2013, Kirkham & Wormald 2015). This study extends previous work by providing clear evidence for construction of ethnic identities within the 'same' community.

## 9.2 Future Research Directions

This thesis has begun to shed light on some aspects of the sociolinguistics and phonological system of an under-researched minority ethnic group - Scottish Asians. It gives an overview of a few salient accent features with respect to social identity for one particular group of Pakistani Muslim girls from a larger corpus. However, it may foreground much more work in this area which is beyond the scope of this present study. Methodologically, there are many possibilities for further research on speech variation

in ethnic minority communities.

## 9.2.1   Using the Glaswasian Corpus

A large corpus of social and speech data was gathered during the fieldwork which comprises the *Glaswasian* Corpus. A total of 117 speakers were recorded who were mainly Pakistani Muslim but different ethnicities (e.g. Somali, White), ages (12-18yrs) and gender (male and female) are present. The corpus comprises: 97 Pakistani/20 non-Pakistani speakers, 83 girls/34 boys, and of the 97 Asian speakers, there are 77 Asian girls and 27 Asian boys.

This open up a range of possibilities for future research including across-gender and age-related studies as well as work on other linguistic variables. Comparing gendered patterns of speech would be interesting given the difference in Pakistani male/female social practices highlighted in this study.

For the specific variables analysed in this research, further extensions could be to analyse burst intensity and voice onset time for stops (e.g. Kirkham 2013). Formant transitions, degree of aspiration and potential ejective realisations would also be helpful in understanding the salience of stops in British-Asian English. For vowels, analysis of aspects such as the degree of assimilation or divergence to the Scottish Vowel Length Rule by Asian speakers would also be helpful in understanding regional as well as substrate features. Further work might examine how the researcher (Alam) and the Pakistani girls accommodate or diverge in phonetic aspects like /t/ CoG and Tongue Shape, especially given that the researcher is not from Glasgow originally so has a different accent.

Different views of the speech data and alternative layers of categorisation in the auditory and acoustic analysis could also be explored. For example, examining the raw empirical linguistic data and seeing how it patterned onto the social data through methods like Cluster Analysis without preconceptions about the social information. Stance is another way of representing the speakers rather than the more granular CofP framework and may shed more light on individual and group variation, e.g. Pakistani/Non-Pakistani (e.g. Drager 2009). It is also possible that there were alternative groups which were less obvious, as well as other ways of viewing and analysing the groups that might reveal other differences between the girls.

Also different variables to the ones examined in this study may function in different ways for different CofPs in terms of social meaning (e.g. laterals, rhotics, ejectives). The nature and status of a linguistic feature might also vary between speakers so the same variable might work differently for individuals, e.g. phonetic, morphological or lexical, with different weight given to each with respect to identity.

### 9.2.2 Phonetic Work

Further articulatory work for phonetic features like /t/ would be useful in more fully understanding the auditory, acoustic and articulatory relationships. Methods like electropalatography (EPG) and ultrasound tongue imaging (UTI) would be highly beneficial (e.g. Lawson et al. 2014). Possible avenues might also examine a wider range of phonological features and prosodic aspects of speech. These might include stress, intonation and rhythm especially with respect to degree of substrate influence as well as consideration of aspects like voice quality. Another interesting area would be listener perceptions tested in some form of social perception/evaluation study in order to see which features listeners orient towards.

### 9.2.3 Stylistic Variation

Speakers vary their speech stylistically, so comparing results in this framework would be useful. For instance, across a range of different data collection techniques, e.g. cross-stylistic comparisons with systematic experimental studies such as word and reading list data (e.g. Lambert et al. 2007, Sharma 2011). Furthermore, utilising data from different domains and interlocutors would be more broadly informative, e.g. individuals' speech at home, with family, with other social networks outside the school (e.g. Cheshire 1982, Bell 1984).

### 9.2.4 Language Acquisition and Change

Studies from a lifespan development in ethnic groups with relation to speech variation would also be insightful, e.g. does speech alter when individuals move through transitional phases of life such as movement from childhood to adolescence to adulthood as well as through involvement in different social networks? Does it move towards heritage Punjabi/Urdu at any point? Will the girls use and retain these same features in 5-10 years time or move to other variants with alternative social meanings? The high school is like a microcosm of the world for adolescent and only for a very short part of one's life. Peer groups also change substantially throughout life so how are such changes reflected in language? Greater pressures towards marriage also means that Pakistani girls are expected to be more culturally conformist by young adulthood. How might social changes likes these map onto their language? Studies across different parts of society and different institutions such as universities and workplaces may elucidate theories regarding language use in potentially age-graded ethnic minority speech. This would be particularly interesting especially with the gradual erosion of ethnic minority heritages and languages in western contexts.

### 9.2.5 British-Asian English and Ethnic Minority Research

A co-ordinated, systematic and comparative approach to examining Asian varieties of English across the different regional areas of the UK would be extremely useful. Studies on degree of language shift and bilingual ability in younger generations would be equally valuable from a sociolinguistic perspective. Such work would ascertain whether similar or different linguistic variation is present across British-Asian communities and draw out potential reasons. Even a focus on speakers from different parts of urban areas like Glasgow, as well as broadly across Scotland itself would shed light on the speech of Scottish Pakistanis.

Cross-linguistic comparisons within speakers of Asian and other ethnic groups would also ascertain the degree of substrate language influence and/or the influence of regional accent features in speech. Such work might also help answer questions surrounding how linguistic features become embedded in Asian and other ethnic minority Englishes, e.g. what are their social meanings? Do they index ethnicity or something else? Does variation mark generational differences for younger individuals? Do substrate features take on newer social meanings over time? Explorations of other ethnic groups and more or less established communities might show if similar patterns hold across groups. Furthermore, it would give information regarding the processes of how quickly and why accents might shift, assimilate or diverge. Crucially, it may also shed light on how different phonetic and linguistic features work within and across communities with respect to social meaning.

Language analysed with respect to wider social networks, different social classes, national backgrounds, cultures and religions within the broader South Asian community may also be enlightening, e.g. Indians, Bangladeshi, Sikhs and Hindus (cf. Milroy 1980, 1987). Do South Asians vary the same given apparently similar social and language backgrounds, or systematically across contexts? What can this tell us about South Asian identities in the UK and other diasporic ethnic communities across the world?

### 9.2.6 Other Social Groups and Contexts

Interestingly, there is little work on non-white communities in variationist studies in general, and what there is, is focused on western contexts which have similar ideologies (Labov 1972*a*, though cf. Nagy 2014). More work in other cultures and societies would be very interesting in ascertaining whether linguistic variation patterns the same or differently yielding information about socialisation habits across communities. Work across different Muslim communities in the West would be interesting in order to see if there is a generic impact of islamophobia on language/s. Also, what about other under-researched minority groups such as Black British Muslims? Including diverse strategies, methods and data from a range of communities might improve generalisations, simultaneously providing a broader picture of variation within individuals and

social groups.

## 9.3   Relevance of the Study

This study has highlighted how individuals within the same community can have very different social and linguistic identities. From a personal perspective, it has allowed a broader understanding of the complexity of social influences on Pakistani Muslim identity. This research may help to develop a better understanding of the relationship between language and identity in ethnic minorities across the world. The persistence and even increasing degree of linguistic variation in these communities is of particular interest despite homogenising forces like education because it suggests that variation may have a deeper-rooted meaning. The research also has the potential to uncover broader information about supranational identities and social stability (or indeed instability) within these communities by analysing the attitudes, opinions and behaviours of the informants alongside linguistic variation.

At a theoretical and academic level, this research adds to the growing body of work in sub-fields of linguistics - particularly sociolinguistics, socio-phonetics, phonetics and forensic linguistics. Richer insights can be gained about language use by utilising a variety of data collection and linguistic analysis methods from more established methods (e.g. spectral moment analysis, auditory and acoustic phonetics) to more innovative ones (e.g. LMEMs, automated formant extraction using online databases like LaBB-CAT).

This work can also be used by linguists for comparative work across ethnicities and communities aiding understanding of how individuals, including ethnic minority individuals, can use language for specific social purposes and in creating greater social meaning. Particularly it contributes to work on the large South Asian community in the UK, adding to the limited linguistic work on British-Asian; especially Scottish-Asian and Scottish ethnic minority studies more generally. The research also includes the added dimension of religion in the mix of demographic factors which is salient to Muslim youth with the increasing global attention on Islam and media racial stereotyping, e.g. the Religionistas using less typically 'Asian' features in their speech.

At a broader level, this work will be of use to professionals in a wide range of areas. For instance, it sheds light on the complexities of teenage language and may help language planning and pupil support at local and national levels for those working in areas like education, government, policy makers and bilingual researchers. This work can also contribute to research in fields such as sociology, youth and cultural studies, anthropology and psychology by allowing broader insights into social and psychological factors affecting ethnic minority groups. For example, raising understanding of: emotional health and well-being; how and why particular social groups are formed and function; familial, cultural and political issues; and urban diversity and the effects of living in increasingly multicultural communities. More sociological work about identity

in British-Asians in lieu of rising islamophobia may be extremely enlightening through focus groups and questionnaires focusing on aspects like participants' perceived degree of religiosity, discrimination and their linguistic choices. Forensic linguistic researchers and the police may find this research valuable helping investigations of speech analysis and recognition, in conjunction with social and psychological profiling. Certainly this research shows that the notion of a homogeneous 'ethnic' accent needs serious challenging.

As shown, this thesis focusing on ethnicity and language in *Glaswasians* foregrounds many possibilities for further linguistic work and have an impact and use in diverse spheres of society. The future is certainly full of sociolinguistic opportunities for analysing similar social groups in today's increasingly multicultural world.

# Appendices

# Appendix A

# Stressed Syllable Initial /t Words

| Word | Frequency |
| --- | --- |
| to | 305 |
| time | 43 |
| talk | 36 |
| two | 19 |
| too | 18 |
| talking | 17 |
| tell | 12 |
| into | 11 |
| take | 11 |
| ten | 11 |
| told | 11 |
| totally | 11 |
| twenty | 10 |
| try | 9 |
| twice | 8 |
| taught | 6 |
| tv | 6 |
| taking | 5 |
| tension | 5 |
| taken | 4 |
| talks | 4 |
| teach | 4 |
| teapot | 4 |
| tend | 4 |
| together | 4 |
| took | 4 |
| teacher | 3 |

| Word | Frequency |
| --- | --- |
| teaching | 3 |
| telling | 3 |
| terms | 3 |
| texting | 3 |
| tight | 3 |
| times | 3 |
| town | 3 |
| travel | 3 |
| trust | 3 |
| type | 3 |
| talked | 2 |
| terrorist | 2 |
| text | 2 |
| texts | 2 |
| tie | 2 |
| today | 2 |
| tomboy | 2 |
| total | 2 |
| tracks | 2 |
| trousers | 2 |
| trying | 2 |
| between | 1 |
| entire | 1 |
| intended | 1 |
| starting | 1 |
| t-shirts | 1 |
| tabelcloth | 1 |
| table | 1 |
| takes | 1 |
| target | 1 |
| task | 1 |
| tea | 1 |
| teachers | 1 |
| tee | 1 |
| telesales | 1 |
| television | 1 |
| tells | 1 |
| tempted | 1 |

| Word | Frequency |
| --- | --- |
| tense | 1 |
| terrible | 1 |
| terrorists | 1 |
| test | 1 |
| texted | 1 |
| till | 1 |
| tiny | 1 |
| tired | 1 |
| tissue | 1 |
| title | 1 |
| tits | 1 |
| toe | 1 |
| toes | 1 |
| toilets | 1 |
| tomorrow | 1 |
| toned | 1 |
| tonnes | 1 |
| top | 1 |
| topics | 1 |
| tops | 1 |
| tortured | 1 |
| tourist | 1 |
| tourists | 1 |
| track | 1 |
| tracksuits | 1 |
| tradition | 1 |
| traditional | 1 |
| traditions | 1 |
| training | 1 |
| tran | 1 |
| translateraled | 1 |
| translaterales | 1 |
| translateralion | 1 |
| treat | 1 |
| trick | 1 |
| trigger | 1 |
| trip | 1 |
| trouser | 1 |

**Table A.1 – /t/ words continued from previous page**

| Word | Frequency |
|------|-----------|
| TRUE | 1 |
| Turkey | 1 |
| turning | 1 |
| twelve | 1 |
| typical | 1 |

# Appendix B

# FLEECE words and frequency

| Word | Frequency |
|---|---|
| be | 265 |
| see | 236 |
| me | 225 |
| people | 151 |
| even | 139 |
| mean | 89 |
| speak | 81 |
| been | 60 |
| need | 45 |
| seen | 43 |
| eat | 37 |
| we've | 34 |
| wee | 33 |
| three | 32 |
| each | 30 |
| maybe | 27 |
| being | 23 |
| reason | 20 |
| tv | 20 |
| leave | 17 |
| keep | 16 |
| speaking | 16 |
| means | 13 |
| sweet | 13 |
| weeks | 13 |
| reading | 12 |
| keeps | 11 |

| Word | Frequency |
| --- | --- |
| street | 11 |
| free | 10 |
| least | 10 |
| week | 10 |
| mm | 9 |
| read | 9 |
| sleep | 9 |
| please | 8 |
| freedom | 7 |
| meet | 7 |
| cream | 6 |
| decent | 6 |
| eats | 6 |
| jeans | 6 |
| speaks | 6 |
| we'd | 6 |
| easier | 5 |
| easy | 5 |
| green | 5 |
| leaving | 5 |
| recently | 5 |
| sleeves | 5 |
| beat | 4 |
| eating | 4 |
| needs | 4 |
| p | 4 |
| sea | 4 |
| sikhs | 4 |
| t | 4 |
| teach | 4 |
| teaching | 4 |
| teapot | 4 |
| deeper | 3 |
| equal | 3 |
| evil | 3 |
| feet | 3 |
| female | 3 |
| g | 3 |

| Word | Frequency |
|------|-----------|
| meaning | 3 |
| needle | 3 |
| nineteen | 3 |
| reads | 3 |
| seem | 3 |
| sees | 3 |
| b | 2 |
| beaten | 2 |
| cleaning | 2 |
| deep | 2 |
| easiest | 2 |
| easily | 2 |
| feeding | 2 |
| fifteen | 2 |
| freak | 2 |
| meat | 2 |
| needed | 2 |
| nieces | 2 |
| reasonable | 2 |
| screaming | 2 |
| seventeen | 2 |
| si | 2 |
| sleeveless | 2 |
| streets | 2 |
| treat | 2 |
| tweezer | 2 |
| beats | 1 |
| beings | 1 |
| bleach | 1 |
| bleed | 1 |
| breathing | 1 |
| c | 1 |
| cease | 1 |
| chief | 1 |
| chinese | 1 |
| clean | 1 |
| cleaner | 1 |
| cleaners | 1 |

| Word | Frequency |
| --- | --- |
| colleague | 1 |
| creepy | 1 |
| detail | 1 |
| details | 1 |
| dream | 1 |
| east | 1 |
| eastern | 1 |
| eaters | 1 |
| eighteen | 1 |
| evening | 1 |
| featuring | 1 |
| feed | 1 |
| freaked | 1 |
| freaky | 1 |
| freezing | 1 |
| g's | 1 |
| knee | 1 |
| lean | 1 |
| leaning | 1 |
| litre | 1 |
| meanings | 1 |
| meeting | 1 |
| meets | 1 |
| niece | 1 |
| nineteenth | 1 |
| penis | 1 |
| piece | 1 |
| policemen | 1 |
| queen | 1 |
| queens | 1 |
| reasons | 1 |
| scream | 1 |
| se | 1 |
| season | 1 |
| seats | 1 |
| seed | 1 |
| seeing | 1 |
| seekers | 1 |

**Table B.1 – FLEECE words continued from previous page**

| Word | Frequency |
| --- | --- |
| seems | 1 |
| sikh | 1 |
| sleeve | 1 |
| sneak | 1 |
| t-shirts | 1 |
| tea | 1 |
| teachings | 1 |
| team | 1 |
| teams | 1 |
| teamwork | 1 |
| teapots | 1 |
| teases | 1 |
| techniques | 1 |
| treatment | 1 |
| unbelievable | 1 |
| weak | 1 |
| weakened | 1 |
| weasel | 1 |
| weed | 1 |
| weekend | 1 |

# Appendix C

# FACE words and frequency

| Word | Frequency |
| --- | --- |
| say | 234 |
| way | 113 |
| basically | 79 |
| same | 71 |
| says | 66 |
| saying | 64 |
| make | 54 |
| day | 48 |
| take | 43 |
| name | 41 |
| place | 30 |
| hate | 28 |
| maybe | 27 |
| face | 26 |
| made | 23 |
| came | 22 |
| changed | 20 |
| later | 19 |
| baby | 18 |
| stay | 18 |
| days | 17 |
| gave | 17 |
| wait | 17 |
| mates | 16 |
| racist | 16 |
| crazy | 15 |
| places | 14 |

Table C.1 – FACE words continued from previous page

| Word | Frequency |
| --- | --- |
| nowadays | 12 |
| making | 10 |
| play | 10 |
| strange | 10 |
| babies | 9 |
| break | 9 |
| pray | 9 |
| shame | 9 |
| stayed | 9 |
| change | 8 |
| late | 8 |
| main | 8 |
| taking | 8 |
| playing | 7 |
| straight | 7 |
| ways | 7 |
| blame | 6 |
| holiday | 6 |
| lady | 6 |
| mainly | 6 |
| makes | 6 |
| mate | 6 |
| overweight | 6 |
| case | 5 |
| eight | 5 |
| great | 5 |
| ray | 5 |
| straightened | 5 |
| complicated | 4 |
| faith | 4 |
| gay | 4 |
| hey | 4 |
| jay | 4 |
| ladies | 4 |
| lazy | 4 |
| make-up | 4 |
| rangers | 4 |
| rape | 4 |

Table C.1 – FACE words continued from previous page

| Word | Frequency |
| --- | --- |
| sake | 4 |
| state | 4 |
| taken | 4 |
| taste | 4 |
| uk | 4 |
| waiting | 4 |
| weight | 4 |
| bay | 3 |
| birthday | 3 |
| brave | 3 |
| educated | 3 |
| eighteen | 3 |
| everyday | 3 |
| favourite | 3 |
| hated | 3 |
| hates | 3 |
| holidays | 3 |
| j | 3 |
| page | 3 |
| pain | 3 |
| plays | 3 |
| race | 3 |
| racism | 3 |
| shady | 3 |
| shape | 3 |
| shave | 3 |
| snake | 3 |
| station | 3 |
| subway | 3 |
| takes | 3 |
| changes | 2 |
| changing | 2 |
| chasing | 2 |
| date | 2 |
| dating | 2 |
| earthquake | 2 |
| earthquakes | 2 |
| faces | 2 |

**Table C.1 – FACE words continued from previous page**

| Word | Frequency |
| --- | --- |
| lay | 2 |
| named | 2 |
| names | 2 |
| neighbour | 2 |
| paid | 2 |
| paper | 2 |
| plane | 2 |
| prays | 2 |
| radio | 2 |
| raped | 2 |
| separate | 2 |
| space | 2 |
| stage | 2 |
| statement | 2 |
| staying | 2 |
| stays | 2 |
| table | 2 |
| wasted | 2 |
| babes | 1 |
| base | 1 |
| basis | 1 |
| blaming | 1 |
| brainwash | 1 |
| bravery | 1 |
| breaking | 1 |
| cake | 1 |
| celebrating | 1 |
| chains | 1 |
| concentrate | 1 |
| concentrated | 1 |
| crepe | 1 |
| dangerous | 1 |
| dominated | 1 |
| educate | 1 |
| eighties | 1 |
| eighty | 1 |
| facial | 1 |
| gain | 1 |

**Table C.1 – FACE words continued from previous page**

| Word | Frequency |
| --- | --- |
| gains | 1 |
| grades | 1 |
| greatest | 1 |
| grey | 1 |
| hallway | 1 |
| handshake | 1 |
| home-made | 1 |
| integrated | 1 |
| israel | 1 |
| jane | 1 |
| k | 1 |
| labelled | 1 |
| laden | 1 |
| laid | 1 |
| layer | 1 |
| layers | 1 |
| legislate | 1 |
| maintenance | 1 |
| may | 1 |
| microwave | 1 |
| middle-aged | 1 |
| motivated | 1 |
| nay | 1 |
| neighbours | 1 |
| newspaper | 1 |
| newspapers | 1 |
| nickname | 1 |
| nominated | 1 |
| painful | 1 |
| patience | 1 |
| pay | 1 |
| placement | 1 |
| plate | 1 |
| playboy | 1 |
| played | 1 |
| players | 1 |
| playground | 1 |

**Table C.1 – FACE words continued from previous page**

| Word | Frequency |
| --- | --- |
| praying | 1 |
| raided | 1 |
| raining | 1 |
| rainy | 1 |
| rate | 1 |
| rated | 1 |
| safe | 1 |
| safety | 1 |
| saved | 1 |
| separated | 1 |
| shake | 1 |
| shake-up | 1 |
| shakes | 1 |
| shaking | 1 |
| shaving | 1 |
| soirees | 1 |
| spain | 1 |
| stages | 1 |
| staples | 1 |
| strangers | 1 |
| stray | 1 |
| suitcase | 1 |

# Appendix D

# CAT words and frequency

| Word | Frequency |
| --- | --- |
| Word | Frequency |
| that's | 409 |
| have | 341 |
| actually | 123 |
| can't | 122 |
| had | 117 |
| bad | 78 |
| back | 76 |
| dad | 73 |
| family | 66 |
| exactly | 49 |
| after | 41 |
| last | 33 |
| accent | 25 |
| half | 24 |
| matter | 22 |
| ask | 21 |
| happened | 21 |
| happy | 21 |
| mad | 19 |
| rather | 19 |
| class | 17 |
| having | 17 |
| sad | 17 |
| asked | 15 |
| islam | 15 |
| am | 12 |

Continued on next page

**Table D.1 – CAT words continued from previous page**

| Word | Frequency |
| --- | --- |
| black | 12 |
| caste | 11 |
| dance | 11 |
| happening | 11 |
| crap | 10 |
| fast | 10 |
| happen | 10 |
| happens | 10 |
| afterwards | 9 |
| families | 9 |
| haven't | 9 |
| absolutely | 8 |
| actual | 8 |
| aunty | 8 |
| blah | 8 |
| la | 8 |
| matters | 8 |
| past | 8 |
| tablets | 8 |
| act | 7 |
| answer | 7 |
| asking | 7 |
| dancing | 6 |
| drama | 6 |
| jacket | 6 |
| basketball | 5 |
| calmed | 5 |
| chance | 5 |
| classes | 5 |
| daft | 5 |
| hadn't | 5 |
| khan | 5 |
| pass | 5 |
| passed | 5 |
| rap | 5 |
| wax | 5 |
| acting | 4 |
| glasses | 4 |

**Table D.1 – CAT words continued from previous page**

| Word | Frequency |
| --- | --- |
| maths | 4 |
| padded | 4 |
| practically | 4 |
| tracks | 4 |
| aunties | 3 |
| bastard | 3 |
| damn | 3 |
| fact | 3 |
| jackets | 3 |
| pads | 3 |
| programme | 3 |
| stab | 3 |
| whacked | 3 |
| action | 2 |
| actresses | 2 |
| add | 2 |
| aren't | 2 |
| asks | 2 |
| attitude | 2 |
| aunt | 2 |
| background | 2 |
| backgrounds | 2 |
| bag | 2 |
| baggy | 2 |
| blast | 2 |
| calm | 2 |
| camps | 2 |
| cap | 2 |
| contacts | 2 |
| crappy | 2 |
| dads | 2 |
| dragged | 2 |
| fasts | 2 |
| garden | 2 |
| grassed | 2 |
| hamlet | 2 |
| hath | 2 |
| mammy | 2 |

**Table D.1 – CAT words continued from previous page**

| Word | Frequency |
| --- | --- |
| natural | 2 |
| pack | 2 |
| pad | 2 |
| passes | 2 |
| practice | 2 |
| saturday | 2 |
| smart | 2 |
| stabbed | 2 |
| travel | 2 |
| travelling | 2 |
| wag | 2 |
| accents | 1 |
| accidents | 1 |
| acted | 1 |
| actress | 1 |
| advert | 1 |
| afro | 1 |
| answers | 1 |
| atmosphere | 1 |
| auntie | 1 |
| average | 1 |
| backbiting | 1 |
| backed | 1 |
| backing | 1 |
| backs | 1 |
| backward | 1 |
| badge | 1 |
| badly | 1 |
| badminton | 1 |
| basket | 1 |
| bastards | 1 |
| bath | 1 |
| batter | 1 |
| blasting | 1 |
| bra | 1 |
| branch | 1 |
| broadcast | 1 |
| broadcasting | 1 |

**Table D.1 – CAT words continued from previous page**

| Word | Frequency |
|---|---|
| cabin | 1 |
| calms | 1 |
| camera | 1 |
| caps | 1 |
| captured | 1 |
| catch | 1 |
| catches | 1 |
| cavern | 1 |
| charts | 1 |
| chatter | 1 |
| clamping | 1 |
| classed | 1 |
| classroom | 1 |
| classrooms | 1 |
| classy | 1 |
| daggers | 1 |
| danced | 1 |
| dancer | 1 |
| dancers | 1 |
| dramas | 1 |
| fa | 1 |
| factors | 1 |
| fags | 1 |
| faster | 1 |
| fasting | 1 |
| father | 1 |
| father-in-law | 1 |
| flapping | 1 |
| flats | 1 |
| flattered | 1 |
| france | 1 |
| gaga | 1 |
| garage | 1 |
| ghana | 1 |
| glad | 1 |
| grabbing | 1 |
| gradually | 1 |

**Table D.1 – CAT words continued from previous page**

| Word | Frequency |
| --- | --- |
| graduate | 1 |
| grandpa | 1 |
| grass | 1 |
| habit | 1 |
| hag | 1 |
| ham | 1 |
| hampden | 1 |
| happily | 1 |
| impact | 1 |
| impacts | 1 |
| jack | 1 |
| jazz | 1 |
| ma | 1 |
| match | 1 |
| maximum | 1 |
| nappy | 1 |
| nasty | 1 |
| packed | 1 |
| pappy | 1 |
| passing | 1 |
| passport | 1 |
| pharmacy | 1 |
| practical | 1 |

# Appendix E

# COT words and frequency

| Word | Frequency |
|------|-----------|
| not | 511 |
| what | 459 |
| got | 309 |
| on | 272 |
| cause | 199 |
| want | 163 |
| talk | 145 |
| lot | 95 |
| god | 88 |
| gonna | 68 |
| talking | 60 |
| off | 54 |
| probably | 53 |
| what's | 42 |
| obviously | 40 |
| wrong | 39 |
| wanna | 35 |
| watch | 34 |
| thought | 32 |
| long | 31 |
| song | 23 |
| walking | 22 |
| wanted | 22 |
| wants | 22 |
| everybody | 21 |
| gone | 19 |
| honest | 16 |

| Word | Frequency |
| --- | --- |
| properly | 15 |
| top | 15 |
| proper | 14 |
| talks | 14 |
| walk | 14 |
| cough | 13 |
| odd | 13 |
| problem | 13 |
| songs | 13 |
| water | 13 |
| saw | 12 |
| honestly | 11 |
| hot | 11 |
| stopped | 11 |
| watching | 11 |
| bothered | 10 |
| law | 10 |
| stop | 10 |
| daughter | 9 |
| problems | 9 |
| rock | 9 |
| walks | 9 |
| watched | 9 |
| caught | 8 |
| mosque | 8 |
| brought | 7 |
| doctor | 7 |
| shop | 7 |
| shops | 7 |
| bomb | 6 |
| gossip | 6 |
| job | 6 |
| lost | 6 |
| lots | 6 |
| posh | 6 |
| scottish | 6 |
| anybody | 5 |
| body | 5 |

**Table E.1 – COT words continued from previous page**

| Word | Frequency |
| --- | --- |
| comments | 5 |
| modern | 5 |
| pop | 5 |
| strong | 5 |
| taught | 5 |
| cannot | 4 |
| copy | 4 |
| dog | 4 |
| gosh | 4 |
| goths | 4 |
| hop | 4 |
| knockout | 4 |
| shocking | 4 |
| shopping | 4 |
| walked | 4 |
| watches | 4 |
| bottle | 3 |
| common | 3 |
| complicated | 3 |
| daughters | 3 |
| dodgy | 3 |
| dot | 3 |
| gloss | 3 |
| hospital | 3 |
| models | 3 |
| prophet | 3 |
| record | 3 |
| stops | 3 |
| swap | 3 |
| talked | 3 |
| teapot | 3 |
| topic | 3 |
| bottled | 2 |
| caused | 2 |
| combats | 2 |
| concept | 2 |
| concerts | 2 |
| conference | 2 |

**Table E.1 – COT words continued from previous page**

| Word | Frequency |
| --- | --- |
| confident | 2 |
| conscious | 2 |
| contacts | 2 |
| cos | 2 |
| costs | 2 |
| coughing | 2 |
| cross | 2 |
| doctors | 2 |
| dogging | 2 |
| drop | 2 |
| foster | 2 |
| gossipy | 2 |
| honour | 2 |
| laws | 2 |
| lock | 2 |
| logical | 2 |
| offer | 2 |
| office | 2 |
| onto | 2 |
| pause | 2 |
| sister-in-law | 2 |
| thoughts | 2 |
| wan | 2 |
| awesome | 1 |
| block | 1 |
| blocked | 1 |
| bobs | 1 |
| bodily | 1 |
| bomber | 1 |
| bombing | 1 |
| bought | 1 |
| brainwash | 1 |
| broad | 1 |
| broadcast | 1 |
| broadcasting | 1 |
| chocolate | 1 |
| co-op | 1 |
| comment | 1 |

**Table E.1 – COT words continued from previous page**

| Word | Frequency |
| --- | --- |
| compliment | 1 |
| compromise | 1 |
| con | 1 |
| concentrate | 1 |
| concentrated | 1 |
| constantly | 1 |
| contract | 1 |
| convert | 1 |
| copies | 1 |
| copying | 1 |
| cot | 1 |
| coughed | 1 |
| coughs | 1 |
| dogged | 1 |
| dominated | 1 |
| dropped | 1 |
| drops | 1 |
| father-in-law | 1 |
| frocks | 1 |
| gossiping | 1 |
| helicopters | 1 |
| hospitals | 1 |
| in-laws | 1 |
| jogging | 1 |
| knock | 1 |
| knockouts | 1 |
| kw | 1 |
| landlocked | 1 |
| logged | 1 |
| logic | 1 |
| logically | 1 |
| lollipop | 1 |
| longer | 1 |
| mockery | 1 |
| model | 1 |
| modelling | 1 |
| modernised | 1 |

**Table E.1 – COT words continued from previous page**

| Word | Frequency |
| --- | --- |
| mosques | 1 |
| mother-in-law | 1 |
| naughtiness | 1 |
| naughty | 1 |
| nodding | 1 |
| nosh | 1 |
| obvious | 1 |
| offered | 1 |
| often | 1 |
| opposite | 1 |
| pops | 1 |
| popular | 1 |
| possible | 1 |
| prom | 1 |
| property | 1 |
| rob | 1 |
| robin | 1 |
| robot | 1 |
| robots | 1 |
| scot | 1 |
| shocked | 1 |
| snog | 1 |

# Appendix F

# GOAT words and frequency

| Word | Frequency |
| --- | --- |
| know | 734 |
| so | 688 |
| don't | 656 |
| go | 291 |
| goes | 200 |
| going | 163 |
| only | 89 |
| though | 40 |
| home | 37 |
| own | 36 |
| totally | 32 |
| over | 30 |
| phone | 26 |
| clothes | 23 |
| won't | 23 |
| both | 22 |
| knows | 22 |
| most | 22 |
| show | 14 |
| no | 13 |
| those | 13 |
| road | 12 |
| social | 11 |
| close | 10 |
| known | 10 |
| broke | 8 |
| closer | 8 |

| Word | Frequency |
| --- | --- |
| grow | 7 |
| joking | 7 |
| mostly | 7 |
| overweight | 7 |
| showing | 7 |
| broken | 6 |
| follow | 6 |
| hopefully | 6 |
| smoke | 6 |
| supposed | 6 |
| video | 6 |
| also | 5 |
| grown | 5 |
| ho | 5 |
| joke | 5 |
| open | 5 |
| slow | 5 |
| spoke | 5 |
| videos | 5 |
| bonus | 4 |
| phoned | 4 |
| showed | 4 |
| spoken | 4 |
| suppose | 4 |
| wrote | 4 |
| growing | 3 |
| load | 3 |
| loads | 3 |
| programme | 3 |
| smoking | 3 |
| vote | 3 |
| bone | 2 |
| closest | 2 |
| drove | 2 |
| following | 2 |
| loner | 2 |
| microphone | 2 |
| moment | 2 |

| Word | Frequency |
| --- | --- |
| motorbike | 2 |
| o | 2 |
| opened | 2 |
| phoning | 2 |
| photos | 2 |
| poem | 2 |
| ponies | 2 |
| shown | 2 |
| snow | 2 |
| throat | 2 |
| total | 2 |
| woke | 2 |
| wont | 2 |
| almost | 1 |
| blow | 1 |
| bo | 1 |
| bones | 1 |
| bow | 1 |
| choking | 1 |
| cloak | 1 |
| closed | 1 |
| co-op | 1 |
| coconuts | 1 |
| code | 1 |
| cope | 1 |
| crow | 1 |
| elbow | 1 |
| episode | 1 |
| float | 1 |
| flows | 1 |
| focusing | 1 |
| ghetto | 1 |
| ghost | 1 |
| hoes | 1 |
| hostess | 1 |
| knowing | 1 |
| kw | 1 |
| lo | 1 |

**Table F.1 – GOAT words continued from previous page**

| Word | Frequency |
| --- | --- |
| lonely | 1 |
| lotion | 1 |
| low | 1 |
| lower | 1 |
| mo | 1 |
| moaning | 1 |
| moans | 1 |
| mode | 1 |
| owes | 1 |
| ownership | 1 |
| photo | 1 |
| pillows | 1 |
| poems | 1 |
| poetry | 1 |
| pony | 1 |
| prone | 1 |
| protein | 1 |
| radio | 1 |
| roasted | 1 |
| robot | 1 |
| robots | 1 |
| shallow | 1 |
| shows | 1 |
| smoked | 1 |
| soaps | 1 |
| sparrow | 1 |
| swallow | 1 |
| swallowed | 1 |
| swallows | 1 |
| tho | 1 |
| throw | 1 |
| thrown | 1 |
| toast | 1 |
| toe | 1 |
| toes | 1 |
| tone | 1 |
| toned | 1 |
| weirdo | 1 |

**Table F.1 – GOAT words continued from previous page**

| Word | Frequency |
|---|---|
| whoa | 1 |
| widowed | 1 |
| window | 1 |
| wo | 1 |
| yellow | 1 |
| zone | 1 |

# Appendix G

# BOOT words and frequency

| Word | Frequency |
| --- | --- |
| to | 395 |
| would | 184 |
| do | 175 |
| good | 145 |
| used | 128 |
| who | 93 |
| urdu | 83 |
| doing | 76 |
| two | 75 |
| wouldn't | 73 |
| look | 70 |
| into | 65 |
| too | 58 |
| should | 53 |
| put | 49 |
| music | 38 |
| could | 35 |
| TRUE | 31 |
| who's | 29 |
| looks | 27 |
| new | 26 |
| knew | 25 |
| woman | 20 |
| stupid | 19 |
| use | 19 |
| few | 18 |
| shouldn't | 18 |

| Word | Frequency |
| --- | --- |
| looking | 17 |
| muslim | 16 |
| group | 15 |
| room | 15 |
| looked | 14 |
| move | 14 |
| through | 14 |
| took | 13 |
| muslims | 12 |
| couldn't | 11 |
| moved | 11 |
| beautiful | 9 |
| cute | 9 |
| movies | 9 |
| shoes | 9 |
| soon | 9 |
| food | 8 |
| groups | 8 |
| movie | 8 |
| putting | 8 |
| usually | 8 |
| books | 7 |
| news | 7 |
| views | 7 |
| beauty | 6 |
| onto | 6 |
| whose | 6 |
| absolutely | 5 |
| cook | 5 |
| cube | 5 |
| truth | 5 |
| book | 4 |
| clue | 4 |
| educated | 4 |
| football | 4 |
| huge | 4 |
| nephew | 4 |
| using | 4 |

**Table G.1 – BOOT words continued from previous page**

| Word | Frequency |
| --- | --- |
| bedroom | 3 |
| bush | 3 |
| choose | 3 |
| d'you | 3 |
| fluently | 3 |
| future | 3 |
| goody | 3 |
| hooked | 3 |
| humans | 3 |
| interview | 3 |
| interviewed | 3 |
| mood | 3 |
| push | 3 |
| tube | 3 |
| view | 3 |
| blue | 2 |
| butch | 2 |
| crew | 2 |
| drew | 2 |
| fluent | 2 |
| foot | 2 |
| footballer | 2 |
| fruit | 2 |
| hollywood | 2 |
| human | 2 |
| juice | 2 |
| musical | 2 |
| newspaper | 2 |
| pushed | 2 |
| pussy | 2 |
| roof | 2 |
| ruined | 2 |
| stood | 2 |
| suitcase | 2 |
| tissue | 2 |
| tooth | 2 |
| u | 2 |
| uk | 2 |

| Word | Frequency |
| --- | --- |
| useless | 2 |
| uses | 2 |
| voodoo | 2 |
| attitude | 1 |
| blew | 1 |
| booby | 1 |
| booed | 1 |
| boots | 1 |
| bushes | 1 |
| bushiest | 1 |
| bushy | 1 |
| childhood | 1 |
| choosy | 1 |
| classroom | 1 |
| classrooms | 1 |
| cooks | 1 |
| cuckoo | 1 |
| dude | 1 |
| due | 1 |
| educate | 1 |
| goodness | 1 |
| graduated | 1 |
| hooped | 1 |
| issue | 1 |
| issues | 1 |
| jewellery | 1 |
| loses | 1 |
| losing | 1 |
| moon | 1 |
| movement | 1 |
| moving | 1 |
| mu | 1 |
| newest | 1 |
| poof | 1 |
| poop | 1 |
| prove | 1 |
| proves | 1 |
| puked | 1 |

**Table G.1 – BOOT words continued from previous page**

| Word | Frequency |
| --- | --- |
| pupils | 1 |
| puts | 1 |
| rude | 1 |
| ruin | 1 |
| ruins | 1 |
| screwed | 1 |
| soothing | 1 |
| spoof | 1 |
| spoofs | 1 |
| stupidest | 1 |
| sugar | 1 |
| suicide | 1 |
| suit | 1 |
| suits | 1 |
| tissues | 1 |
| tracksuits | 1 |
| user | 1 |
| values | 1 |
| womanly | 1 |

# Appendix H

# Crosstabs: Vowel, Preceding Context and Following Context

**Table H.7:** Crosstabs: Vowel, Preceding Segment and CofP

| Vowel | CoP / PreSeg | Conservative | Messabout | Modern | Religionista | Shifter | Wannabe | Total |
|---|---|---|---|---|---|---|---|---|
| **Vowel** | **PreSeg** | | | | | | | |
| fleece | *labial* | 165 | 196 | 170 | 93 | 267 | 135 | 1026 |
| | *coronal* | 71 | 97 | 53 | 37 | 120 | 46 | 424 |
| | *dorsal* | 7 | 9 | 2 | 3 | 4 | 1 | 26 |
| | *otherNA* | 67 | 102 | 71 | 59 | 189 | 79 | 567 |
| face | *labial* | 78 | 61 | 39 | 49 | 78 | 27 | 332 |
| | *coronal* | 102 | 122 | 117 | 69 | 273 | 89 | 772 |
| | *dorsal* | 12 | 18 | 8 | 5 | 11 | 11 | 65 |
| | *otherNA* | 73 | 56 | 94 | 44 | 145 | 61 | 473 |
| boot | *labial* | 22 | 33 | 20 | 27 | 50 | 31 | 183 |
| | *coronal* | 129 | 274 | 12 | 73 | 262 | 203 | 1066 |
| | *dorsal* | 28 | 24 | 26 | 19 | 58 | 48 | 203 |
| | *otherNA* | 173 | 174 | 153 | 121 | 290 | 139 | 1050 |
| goat | *labial* | 24 | 38 | 17 | 11 | 34 | 20 | 144 |
| | coronal | 324 | 407 | 421 | 160 | 616 | 357 | 2285 |
| | dorsal | 108 | 177 | 80 | 41 | 194 | 59 | 659 |
| | *otherNA* | 66 | 71 | 63 | 45 | 116 | 46 | 407 |
| cot | *labial* | 6 | 23 | 9 | 17 | 38 | 14 | 107 |
| | *coronal* | 130 | 210 | 118 | 67 | 292 | 134 | 951 |
| | *dorsal* | 80 | 141 | 80 | 100 | 269 | 113 | 783 |
| | *otherNA* | 259 | 340 | 256 | 147 | 446 | 214 | 1662 |
| cat | *labial* | 48 | 69 | 75 | 34 | 106 | 47 | 379 |
| | *coronal* | 118 | 107 | 81 | 61 | 155 | 103 | 625 |
| | *dorsal* | 13 | 37 | 25 | 18 | 45 | 26 | 164 |
| | *otherNA* | 159 | 180 | 174 | 158 | 328 | 126 | 1125 |
| Total | | 2262 | 2966 | 2277 | 1458 | 4386 | 2129 | 15478 |

# Appendix I

# Crosstabs: Vowel, Preceding Context, Following Context and CofP

| Vowel | PreSeg | CofP FollSeg | Cons | Mess | Mod | Rel | Shif | Wan | Total |
|-------|--------|--------------|------|------|-----|-----|------|-----|-------|
| fleece | labial | labial | 28 | 7 | 17 | 21 | 52 | 29 | 154 |
| | | coronal | 40 | 33 | 41 | 14 | 48 | 26 | 202 |
| | | dorsal | 20 | 16 | 28 | 3 | 26 | 10 | 103 |
| | | otherNA | 77 | 140 | 84 | 55 | 141 | 70 | 567 |
| | coronal | labial | 6 | 5 | 2 | 1 | 4 | 0 | 18 |
| | | coronal | 22 | 34 | 10 | 13 | 48 | 17 | 144 |
| | | dorsal | 0 | 1 | 1 | 0 | 6 | 0 | 8 |
| | | otherNA | 43 | 57 | 40 | 23 | 62 | 29 | 254 |
| | dorsal | labial | 7 | 9 | 2 | 3 | 4 | 1 | 26 |
| | | coronal | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | dorsal | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | otherNA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | otherNA | labial | 33 | 47 | 29 | 30 | 63 | 25 | 227 |
| | | coronal | 16 | 39 | 36 | 19 | 91 | 29 | 230 |
| | | dorsal | 11 | 6 | 1 | 5 | 10 | 1 | 34 |
| | | otherNA | 7 | 10 | 5 | 5 | 25 | 24 | 76 |
| face | labial | labial | 9 | 10 | 16 | 11 | 13 | 3 | 62 |
| | | coronal | 58 | 32 | 12 | 27 | 44 | 17 | 190 |
| | | dorsal | 10 | 18 | 11 | 9 | 20 | 6 | 74 |
| | | otherNA | 1 | 1 | 0 | 2 | 1 | 1 | 6 |
| | coronal | labial | 26 | 24 | 18 | 13 | 36 | 26 | 143 |

Table I.8 – continued from previous page

| Vowel | PreSeg | CoP FollSeg | Con | Mess | Mod | Rel | Shif | Wan | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | coronal | 30 | 23 | 24 | 22 | 55 | 18 | 172 |
| | | dorsal | 6 | 16 | 13 | 5 | 22 | 8 | 70 |
| | | otherNA | 40 | 59 | 62 | 29 | 160 | 37 | 387 |
| | dorsal | labial | 6 | 13 | 1 | 2 | 9 | 8 | 39 |
| | | coronal | 6 | 2 | 5 | 0 | 1 | 2 | 16 |
| | | dorsal | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| | | otherNA | 0 | 3 | 2 | 3 | 0 | 1 | 9 |
| | otherNA | labial | 6 | 3 | 3 | 6 | 3 | 1 | 22 |
| | | coronal | 39 | 37 | 46 | 24 | 87 | 41 | 274 |
| | | dorsal | 6 | 2 | 1 | 1 | 4 | 2 | 16 |
| | | otherNA | 22 | 14 | 44 | 13 | 51 | 17 | 161 |
| boot | labial | labial | 5 | 6 | 5 | 5 | 12 | 16 | 49 |
| | | coronal | 16 | 26 | 13 | 21 | 32 | 15 | 123 |
| | | dorsal | 1 | 1 | 2 | 1 | 6 | 0 | 11 |
| | | otherNA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | coronal | labial | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | coronal | 30 | 24 | 13 | 14 | 20 | 6 | 107 |
| | | dorsal | 6 | 3 | 0 | 5 | 2 | 3 | 19 |
| | | otherNA | 93 | 247 | 112 | 54 | 240 | 194 | 940 |
| | dorsal | labial | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | coronal | 28 | 24 | 26 | 16 | 56 | 46 | 196 |
| | | dorsal | 0 | 0 | 0 | 3 | 2 | 2 | 7 |
| | | otherNA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | otherNA | labial | 13 | 15 | 19 | 21 | 28 | 7 | 103 |
| | | coronal | 95 | 82 | 97 | 54 | 160 | 80 | 568 |
| | | dorsal | 23 | 39 | 13 | 14 | 33 | 11 | 133 |
| | | otherNA | 42 | 38 | 24 | 32 | 69 | 41 | 246 |
| caught | labial | labial | 0 | 3 | 3 | 4 | 4 | 4 | 18 |
| | | coronal | 6 | 20 | 6 | 12 | 34 | 10 | 88 |
| | | dorsal | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| | | otherNA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | coronal | labial | 14 | 11 | 7 | 6 | 18 | 14 | 70 |
| | | coronal | 78 | 139 | 87 | 49 | 134 | 91 | 578 |
| | | dorsal | 36 | 59 | 22 | 10 | 136 | 28 | 291 |
| | | otherNA | 2 | 1 | 2 | 2 | 4 | 1 | 12 |
| | dorsal | labial | 5 | 7 | 9 | 3 | 8 | 8 | 40 |

Table I.8 – continued from previous page

| Vowel | PreSeg | CoP FollSeg | Con | Mess | Mod | Rel | Shif | Wan | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | coronal | 75 | 134 | 71 | 97 | 261 | 105 | 743 |
| | | dorsal | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | otherNA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | otherNA | labial | 35 | 40 | 40 | 17 | 72 | 21 | 225 |
| | | coronal | 196 | 267 | 197 | 113 | 327 | 181 | 1281 |
| | | dorsal | 27 | 33 | 19 | 13 | 38 | 12 | 142 |
| | | otherNA | 1 | 0 | 0 | 4 | 9 | 0 | 14 |
| goat | labial | labial | 1 | 0 | 0 | 0 | 1 | 0 | 2 |
| | | coronal | 17 | 29 | 13 | 11 | 28 | 16 | 114 |
| | | dorsal | 6 | 6 | 3 | 0 | 5 | 0 | 20 |
| | | otherNA | 0 | 3 | 1 | 0 | 0 | 4 | 8 |
| | coronal | labial | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| | | coronal | 123 | 119 | 147 | 45 | 229 | 99 | 762 |
| | | dorsal | 1 | 7 | 3 | 0 | 1 | 1 | 13 |
| | | otherNA | 200 | 281 | 271 | 114 | 386 | 257 | 1509 |
| | dorsal | labial | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| | | coronal | 18 | 65 | 14 | 9 | 80 | 16 | 202 |
| | | dorsal | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| | | otherNA | 90 | 111 | 65 | 32 | 114 | 43 | 455 |
| | otherNA | labial | 16 | 17 | 16 | 10 | 22 | 10 | 91 |
| | | coronal | 45 | 39 | 34 | 21 | 77 | 29 | 245 |
| | | dorsal | 2 | 3 | 1 | 5 | 4 | 5 | 20 |
| | | otherNA | 3 | 12 | 12 | 9 | 13 | 2 | 51 |
| cat | labial | labial | 13 | 14 | 17 | 10 | 17 | 8 | 79 |
| | | coronal | 26 | 30 | 36 | 11 | 68 | 25 | 196 |
| | | dorsal | 9 | 23 | 22 | 13 | 20 | 14 | 101 |
| | | otherNA | 0 | 2 | 0 | 0 | 1 | 0 | 3 |
| | coronal | labial | 2 | 4 | 4 | 2 | 7 | 3 | 22 |
| | | coronal | 100 | 87 | 72 | 50 | 138 | 90 | 537 |
| | | dorsal | 16 | 15 | 5 | 9 | 10 | 10 | 65 |
| | | otherNA | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| | dorsal | labial | 2 | 3 | 6 | 2 | 3 | 1 | 17 |
| | | coronal | 11 | 34 | 19 | 16 | 42 | 24 | 146 |
| | | dorsal | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | otherNA | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | otherNA | labial | 86 | 98 | 91 | 87 | 166 | 68 | 596 |
| | | coronal | 41 | 49 | 44 | 46 | 87 | 31 | 298 |

Table I.8 – continued from previous page

| Vowel | PreSeg | CoP FollSeg | Con | Mess | Mod | Rel | Shif | Wan | Total |
|-------|--------|-------------|-----|------|-----|-----|------|-----|-------|
| | | dorsal | 32 | 31 | 30 | 24 | 69 | 27 | 213 |
| | | otherNA | 0 | 2 | 9 | 1 | 6 | 0 | 18 |
| Total | | | 2262 | 2966 | 2277 | 1458 | 4386 | 2129 | 15478 |

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