SOCIOLINGUISTIC CONSTRUCTIONS OF IDENTITY AMONG ADOLESCENT MALES IN GLASGOW

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Abstract

The city of Glasgow, Scotland, is typically associated with violence, criminality, and aggression, and these negative associations impact on the social meaning of Glaswegian Vernacular as used by working-class adolescent males. There have been, however, no studies which have made a systematic attempt to uncover the role fine-grained phonetic variation plays in indexing these associations. Moreover, there have been no studies of Glaswegian which have examined locally constituted groups of adolescent male speakers, and how such speakers use a range of linguistic and social practices in their construction of particular social identities.

This study is an ethnographically informed sociolinguistic account of Glaswegian Vernacular which examines the nexus of language, identity, and violence using data collected from a group of working-class adolescent males from a high school in the south side of the city between 2005 – 2008, and aims to uncover whether adolescent males who identified as ‘neds’ or who engaged in social practices considered ‘neddy’ have quantitative linguistic differences from those adolescent males who do not. Through the fine-grained phonetic analysis of the linguistic variables BIT, CAT and (0), coupled with ethnographic observations, this thesis shows how an apparently homogenous group of speakers use linguistic and social resources to differentiate themselves from one another.
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Chapter One:
‘The Adolescent Problem’

1. Introduction

This thesis examines language and its association with violence in Glasgow through an ethnographically informed linguistic analysis of four groups of adolescent males. In data collected in three separate periods of ethnographic fieldwork between 2005 – 2007 (named Year 1, Year 2, and Year 3), I show how patterns of linguistic variation map on to group membership, how linguistic variation is deployed according to discourse type, and how speakers use linguistic resources to construct particular social identities.

The thesis draws together two distinct threads of urban adolescent research: research on adolescent language, and research on adolescent violence and anti-social behaviour. The nature and direction of this research is timely with regards to the concern of the apparent rise in adolescent criminality and deviancy (Krug, Dahlberg, Mercy, Zwi and Lozano 2002) and is primarily motivated by the widespread negative stereotype of working-class urban adolescent males and their language use in Glasgow. To this end, the main research question for this project was:

1) How and why are specific varieties of Glaswegian associated with violence and adolescent males?

Before we can answer this question, however, we need to address some fundamental assumptions. Do adolescent males in Glasgow have different social identities, or do they all identify in the same way? Are there specific social practices which identify particular groups of adolescent males (i.e. do different groups of adolescent males have different social practices)? If there are different groups of adolescent males, are
there quantitative differences in their language use? And within these groups, are there quantitative differences between ‘violent’ and ‘non-violent’ talk? To summarise, the secondary research questions are:

1) What are the main social categories for adolescent males in Glasgow?
2) How do urban adolescent males in Glasgow mark their membership to different social categories?
3) Is linguistic variation used to mark membership of particular social groups?
5) Are there quantitative differences between ‘violent’ and ‘non-violent’ talk?

Using conversational data collected through ethnographic fieldwork from adolescent males speakers in a Glasgow high school called Banister Academy¹, I offer a quantitative analysis of three linguistic variables CAT, BIT, and (0). High schools are excellent sites for obtaining sociolinguistic data from a large number of speakers, as shown by the proliferation of sociolinguistic studies which have relied on data collected from high school students (e.g. Eckert 2000; Moore 2003; Alam 2007; Mendoza-Denton 2008; Wagner 2008). But rather than taking a traditionally Labovian approach and using survey type methodology (e.g. Labov 1972), these studies utilise an ethnographic approach which allows the processes of adolescent identity construction to emerge at the local level. By drawing on a speaker’s own sense of how they view their place in the social world (Hall and Bucholtz 2005), we are able to observe the important social categories within a particular community, and the resources used by participants within that community to mark their alignment with specific groups. We then have more textured social data onto which quantitative

¹ In order to protect the anonymity of the adolescents involved in this research project, the name ‘Banister Academy’, the names of the adolescents, and the areas around Banister Academy, are all pseudonyms.
data can be mapped, allowing a better understanding of the social function of linguistic variation. The research presented in this thesis follows similar paths as other ethnographically informed sociolinguistic studies, but it also treads some new ones. Firstly, the research focus is on male speakers, a group which is typically under-reported in the sociolinguistic literature (cf. Kiesling 1997; Johnson and Meinhof 1997). Secondly, in addition to providing a quantitative analysis of adolescent male language use, this thesis contributes to the existing literature on language and emotion (e.g. Sobin and Alpert 1999), but using conversational rather than experimental data. Lastly, it complements existing work on language variation and change in Glasgow by offering a fine-grained analysis of locally constituted categories rather than the broadly-defined social categories of age, gender, and class (cf. Macaulay 1977; Stuart-Smith 1999a).

The structure of this thesis is as follows. The remainder of this chapter discusses Glaswegian adolescents and how language use relates to the negative reputation of Glasgow and its inhabitants. In Chapter Two, I open with a critical discussion of ‘the city’ and its ecological and sociological underpinnings, before turning to urban adolescents and general theories of urban adolescent criminality and deviance. Chapter Three discusses the notion of ‘linguistic style’, the importance of ‘speaker design’, and major studies of adolescent language use in sociolinguistics, and concludes with a discussion on the growing field of language and masculinity. The methodology of the study makes up Chapter Four. Chapter Five constitutes the ethnographic section of the thesis. Chapter Six presents the overall quantitative results for the linguistic variables CAT, BIT, and (θ), a longitudinal analysis of a select group of speakers, and a quantitative analysis of CAT tokens according to discourse type. Chapter Seven discusses the linguistic results and explains these findings in light of
the ethnographic data. Finally, Chapter Eight summarises the research, discusses its limitations, and offers potential directions for future research.

1.1. ‘Young People These Days’….

You see us as you want to see us, in the simplest terms and the most convenient definitions. You see us as a brain, an athlete, a basket case, a princess, and a criminal (*The Breakfast Club*: 1985).

The opening lines of the 1985 movie *The Breakfast Club* establish a common articulation of the relationship between adults and adolescents: that adults see adolescents not as they are, but how they want to see them. The excerpt draws on an ideology of how adults, particularly those in positions of power, pigeonhole adolescents into static categories and expect particular configurations of behaviour dependent on this categorisation. The characters in *The Breakfast Club* are variously viewed as ‘a brain, an athlete, a basket case, a princess, and a criminal’ by the school, yet despite attempts to challenge these widely held beliefs, the characters find it almost impossible to break out of the roles they have been assigned by the school and by society. Indeed, by the end of the movie they are no further forward in establishing themselves as multi-faceted individuals. In the 21st century, these problems are still faced by adolescents in cities across the world, most particularly working-class urban adolescent males, and Glasgow is no exception.

In many areas, adolescents are treated with mistrust, suspicion, and fear by society, resulting in widespread marginalisation and stigmatisation. Adolescent behaviour is often defined as ‘barbaric’, ‘deviant’ and ‘evil’, and distinct groups of adolescents are typically clustered in a homogenous group simply by virtue of the fact they share the same age, even though their interests, experiences, opinions, social practices and so on, might be very different. It is not too difficult to find
iterations of this in the published and televised media, public opinion, or comedic representations of adolescents in Glasgow (for example, *Chewin’ the Fat*, a BBC comedy show with a range of Scottish characters).

It is clear that the published media plays an influential role in substantiating moral panics (Cohen 1972, 2002), playing on societal fears about adolescents. For example, *The Herald Sun* (Australia) reports that:

> Mindless violence is becoming a fact of life for the young in our schools and suburbs as knife-wielding, pre-pubescent thugs, terrorise pupils, teachers and parents (*Herald Sun*: 9/09/07).

The articles then describes how parents are purchasing knife-resistant Kevlar school uniforms, colour-coded alert systems are being trialled in schools, and that the next breed of adolescent thug will have a ‘body and physical strength [which will] have outgrown his brain… an armoury of communication aids, access to weaponry and money and time to indulge his lust for crime’ (*Herald Sun*: 9/09/07).

In the United States, ‘problem’ adolescents have been a central focus for law enforcement agencies across the country. In Washington D.C., transport police set up a dedicated police unit which patrolled inappropriate juvenile behaviour on trains and subways. *The Washington Post*’s coverage of this unit, and subsequently on the rising incidence of juvenile delinquency on the transport system, particularly during rush hour, focuses primarily on adults’ perception of adolescents, with additional commentary from members of the special transport unit and Washington D.C. school officials. Indeed, many of the comments focus on how adolescents evoke fear in adult passengers who travel at the same time, while downplaying the frustration of those adolescents who do not participate in ‘horseplay’ at how the new policies affect them.
More dramatically, a recent law passed in Louisiana made it illegal to wear jeans past a certain point on the waist. This law was a direct response to urban adolescents who wore low-slung jeans which exposed their underwear. This new law, however, did not appear to be an attempt at lowering rates of indecent exposure, but rather a censure of those adolescents who might be involved in gang related activity. In the eyes of the ‘establishment’, the wearing of low-slung jeans is viewed as a sign that an adolescent might be involved in such activities.

Behind the indecency laws may be the real issue — the hip-hop style itself, which critics say is worn as a badge of delinquency, with its distinctive walk conveying thuggish swagger and a disrespect for authority. Also at work is the larger issue of freedom of expression and the questions raised when fashion moves from being merely objectionable to illegal (The New York Times: 30/08/07).

So not only are adolescents who wear low-slung jeans arrested for indulging in particular fashion trends, but these trends also implicate them in activities in which they might not even be participating (see Mendoza-Denton 1997 for a discussion of the use of gang-related paraphernalia implicating adolescents).

In Scotland, this profile of deviant adolescent behaviour has increased over the years, becoming a major socio-political issue (McDowell 2002). The introduction of Anti-Social Behaviour Orders (ASBOS) in 1998 in England and Wales under the Crime and Disorder Act 1998, and later introduced in Scotland in 2004 under the Anti-Social Behaviour Act (Scotland) 2004, were seen as a direct response against the rising levels of adolescent crime and deviance, although the efficacy of ASBOs has been called into question (Squires and Stephen 2005). Since an ASBO is a civic order, an individual is not sentenced unless the conditions of the ASBO are breached, meaning that an ASBO ideally functions as a deterrent, although recently it has been seen as a ‘badge of honour’ among certain adolescent groups (Youth Justice Board
2006: 15). The perceived role of the adolescent (and specifically adolescent males) in Scotland is now very much limited to that of a criminal nuisance. In Glasgow most particularly, there is a great degree of suspicion levelled at most adolescent males, and this has had major repercussions on Governmental and Police responses to adolescent behaviour.

1.2. Glasgow: ‘Dear Green Place’?

Located on the west coast of Scotland, Glasgow is Scotland’s largest city with a population of approximately 600,000 inhabitants (Glasgow City Council 2008: 6) and has been a major social and economic hub since the 14\textsuperscript{th} century, exporting a wide variety of products, services, and knowledge throughout the world. Glasgow is now one of Europe’s top financial centres (Beaverstock, Taylor and Smith 1999: 454) and a major provider of call centre employment and technical support in the UK (Bristow, Munday and Gripaios 2000: 527 – 528). The development of Glasgow’s economic fortune was closely tied to two major developments (both of which are now greatly reduced): merchant trade (Gibb 1983: 36) and heavy industry (Macaulay 1977: 10), but these developments led to massive overcrowding in the city centre where a range of social and health problems thrived (Cheeseman, Martin, and Russell 1939). Part of the Glasgow Corporation’s solution to reduce the population was to forcibly move the urban poor to the outer edges of the city into low quality tenement blocks (Pacione 1999: 159). The second part of the redevelopment plan included the construction of ‘New Towns’ on the periphery of the city (Henderson 1974: 62; Seo 2002: 113), to which middle-class and skilled workers moved (Stuart-Smith, Timmins and Tweedie 2007: 226). While this had the desired effect of clearing space for new developments

\footnote{From the Gaelic word Glaschu: lit. ‘dear green place’.}
in the city centre, it also caused damaging social segregation between ‘rich’ and ‘poor’ areas, creating deep-seated territorial divides (cf. Checkland 1964: 41; McGregor and McConnachie 1995)). The net result of this is a ‘twin track’ or ‘two tier’ city: ‘a place of entrepreneurial vitality, tourism, retail activity and cultural festivals amidst the large-scale poverty and decay that characterises large peripheral estates of the City today’ (Mooney 2004: 334).

One of the most stable characterisations of Glasgow, in both the arts and the media, is a city of crime, violence, anti-social behaviour, poverty, and urban squalor. Such a characterisation often blights many of the most deprived areas of Glasgow, perpetuating a climate of fear, suspicion, and mistrust, most particularly in the south and east of the city. While some of these negative opinions of Glasgow are based on rumour and urban myth, some of them have a basis in fact. Glasgow has the highest murder rate in Europe (Seenan 2005), one of the highest stabbing rates in Europe, and one of the lowest life expectancies (in both Scotland and the UK, Gillian 2006; General Register Office for Scotland 2007; National Statistics Report 2007). A recent Reform Scotland report suggested that crime rates in Glasgow were higher than that of New York City (Thomson, Mawdsley, and Payne 2008: 36), while many of the poorest areas of the UK are found in Glasgow (Brown, Scott, Mooney, and Duncan 2002; Flaherty, Veit-Wilson, and Dornan 2004; Scottish Executive General Report 2006), with the link between poverty and crime well reported in the sociological literature (Mincy, Sawhill, and Wolf 1990; Bursik and Grasmick 1993; Hsieh and Pugh 1993).

One of the more pressing issues within Glasgow, however, has been that of gang and interpersonal violence, an issue which is continually reported as a major problem in many of the areas of Glasgow (Patrick 1973; Davies 1998, 2007). Reports
of gang violence in Glasgow can be traced back as far as 1855, with a report by A.K. M’Callum on juvenile delinquency within a reform school in Glasgow who argued that one of the influences on juvenile delinquency was ‘corrupting influences’:

[The author] stated that there are hundreds of adepts in vice throughout the city who make it their business to inveigle young persons and compel them by threats, or encourage them by rewards, to steal. That these young victims, however, soon set up for themselves, and carry on their depredations on their own account. That the number of youths corrupted in this way annually, is very great, and that all public works, and society in general, are heavy sufferers. That these are chiefly young persons inured to crime by repeated recommittals to our gaols, and that among the boys of the House of Refu
g[e] there were 152 who trace their ruin principally to these bad companions (M’Callum 1855: 356).

This excerpt from M’Callum’s report highlights one of the earliest moral panics surrounding semi-structured groups of adolescents within an urban environment, and the report continues with recommendations to curb the rise of such juvenile delinquency and the impact it has on society. Gang activity in Glasgow has always been a concern, from the infamous ‘razor gangs’ popularised in No Mean City (McArthur and Long 1984), to the ‘Ice Cream Wars’ of the eighties where territorial gangs vied for control of lucrative routes through working-class neighbourhoods, using ice cream vans as a legitimate front for illegal transactions in drugs, contraband, and stolen goods (Skelton and Brownlie 1992).

In modern day Glasgow, reports in televised and printed media outlets would suggest that the situation has worsened, with Glasgow being described as ‘the hardest town in Britain’ (Front Magazine May 2007). The Evening Times published a weeklong report on gang activity in Glasgow, focusing on 110 active gangs and highlighting the dangers gang members posed to society (The Evening Times: 06/02/06). The Daily Record dedicated nine pages and twenty five explicit photographs to the ‘epidemic’ of knife crime (The Daily Record 22/05/07), utilising
the shock value of many of the photographs showing individuals suffering from stab wounds, police arresting individuals suspected of violent crime, and dedicated doctors and paramedics treating stab victims, to invoke an immediate emotional response and focus the debate on the consequences of knife crime rather than on the socioeconomic underpinnings which influence the rate of knife crime in Glasgow. The Herald also published an article which stated Scotland had over 300 active gangs, 50% of which were active in Glasgow alone (The Herald 04/03/08). Through published media reports, there is the sense that all adolescent males are involved in some type of deviant or illegal criminal enterprise.

In order to answer calls by the general public to reduce the number of adolescents involved in gangs and gang violence, Strathclyde Police have launched numerous initiatives over the years, both at grass roots and governmental levels, including Operation Blade (1997), Operation Magnet (2003), Violence Reduction Strategy (2004), Safer Scotland Campaign (2007), Operation Phoenix (2007), and the ‘Break the Circle of Violence’ campaign (2008). More dramatically, Strathclyde Police has intensified its efforts to reduce the levels of gang violence by forming a dedicated ‘gang taskforce’, a team which has been involved in ‘dawn raids’ across Scotland in an attempt to arrest suspected gang members.

Due to the high visibility of adolescent crime, societal concern about adolescents, and particularly working-class, adolescent males (the focus of this research project), are at an all time high. In Glasgow, the majority of adolescent males are pigeonholed as criminal, deviant, and anti-social, simply because they share some of the same symbolic practices as other adolescent males who are involved in anti-social or violent social practices. In turn, working-class adolescent males are regarded with suspicion and dislike. Such a situation is compounded by the
reputation of particular subset of adolescent males known pejoratively as ‘neds’, by
both wider society and their peer-group.

1.3. Neds in Glasgow

Although a commonly accepted label in Glasgow today, the first use of the term ned
to appear in relation to Glasgow can be traced back to 1959, where an article in The
Times writes:

He can give gloriously funny imitations of Glasgow charwomen, tram drivers
and neds (The Times, 5/3/59)

It is only in 1973 that Peter Malloch offers us a sense of the modern-day meaning of
the word in his book Kickback, where he describes a ‘ned’ as ‘[someone] that no
trained policeman would ever miss’. Here, we get one of the first reference to the
criminal aspect of ‘neds’ which extends to modern-day Glasgow, formalised by the
Oxford English Dictionary which has the following definition:

ned (Scottish Informal): 1. A hooligan or petty criminal; 2. a stupid or
loutish boy or man (Concise Oxford Dictionary 2001)

‘Neds’ are generally assumed to have a stereotypical range of social practices
which are generally of a criminal or deviant nature, including harassing passers-by,
drinking and smoking on street corners, engaging in underage sex, drawing graffiti
on bus stands and in other public places, fighting, and general anti-social behaviour
(Macafee 1994: 139). With regards to appearance, neds are described as wearing
inexpensive Lacoste tracksuits, Burberry branded clothing, tracksuit trousers tucked
into white sports socks, flat-foot designer trainers, sports jumpers, brightly coloured

3 While the term ‘nedette’ is used exclusively to refer to females, ‘neds’ is used as a blanket term to
refer to both male and female adolescents who are assumed to engage in deviant social practices.
Berghaus jackets (and a particular model of Berghaus jackets known as ‘merapeaks’), sports caps (or ‘skip cap’) worn pointing upwards at an extreme angle, and (usually fake) gold chains and rings.

In Glaswegian society, the reputation of neds has spread to other adolescent males, effectively causing any adolescent who engages in social practices deemed ‘ned’ to be potentially viewed as one. This is parallel to the case of adolescents in Californian high schools being reprimanded for wearing gang colours, regardless of the fact the adolescent might a) not know the relevance of gang colours or b) might not be involved in gang activities in any way (Mendoza-Denton 1997). Thus, when a Glaswegian adolescent who, for whatever purpose, decides to engage in a limited selection of social practices attributed to neds, there is the danger that this adolescent may be viewed by his peers and wider society as a ned. More disturbingly, there exists a situation in Glasgow whereby those adolescents who do not engage in any ‘ned’ related social practices are still viewed with some degree of suspicion. Working-class male adolescents who do not self-identify as neds, who do not engage (and sometimes explicitly condemn) the kinds of social practice in which neds engage, and who actively avoid any association with the ned identity, face a precarious uphill struggle against the negative reputation surrounding neds/working-class adolescent males.

1.4. Language and Violence in Glasgow

The ‘subculture of violence’ (Wolfgang and Ferracuti 1976: Wolfgang 2001) outlined above has real implications for the social meaning of language within Glasgow. The associations of violence and criminality in Glasgow have long been a part of the variety of Glaswegian known as Glaswegian Vernacular (GV). This variety has
consistently been identified as being associated with violent and anti-social behaviour (Stuart-Smith 1999b: 211). Such an identification is perhaps most strikingly illustrated in a quote collected from a middle-class university lecturer during Macaulay’s research in Glasgow who comments:

The accent of the lowest state of Glaswegians is the ugliest accent one can encounter, but that is partly because it is associated with the unwashed and the violent. (Macaulay 1977: 94)

More contemporary views on Glaswegian include an observation from Dr Hannah Bradby who conducted research with Punjabi communities in Glasgow. In an interview with *The Guardian*, Dr Bradby reportedly stated that ‘there’s a lot of violence in Glaswegian language, and that’s not just an Asian thing’ (Arnot 2006), in addition to comments that Glaswegian is imbued with a certain degree of illocutional force (Bradby 2002: 847).

These quotes emphasise the metapragmatic discourse which exists with regards to Glaswegian Vernacular, drawing on aspects of first-order indexicality (Silverstein 1992) in which there exists an association between a linguistic feature and a particular social group. When people actively engage with these discourses and begin ‘describing the noticing, discussion, and rationalisation of first order indexicality’ (termed *second-order indexicality*, Milroy 2004: 167), this indexicality develops into particular ideologies about Glaswegian. These ideologies become clear when characters such as Rab C. Nesbitt⁴ and *Chewin’ the Fat*’s ‘The Big Man’⁵ make effective use of physicality, aggression, toughness, willingness to fight, excessive alcohol consumption, knife crime, and specific linguistic resources (such as creaky

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⁴ A working-class television character popular during the nineties in Scotland.
⁵ A comedy show character who typically espouses violent means to solve civil disputes.
voice, harsh voice, non-standard phonology, lexis, syntax, and low pitch range) to effectively portray the ‘hard man’.

Within Glasgow, however, there appears to have been a paradigm shift, with the ‘hard man’ becoming less of a central figure within the culture of violence of Glasgow. While such figures are reported to control aspects of Glasgow’s criminal activities (as detailed in Donal MacIntyre’s the 2005 exposé of the Glasgow criminal underworld, *MacIntyre Underworld: Vendetta*), including drug selling and extortion, it is now neds who are the focus of media and societal vendettas. While many ‘gangsters’ have streamlined into legal activities as a front for more organised crime, neds appear to be at the forefront of a scourge of ‘feral youngsters’ (*The Sun* 21/01/08). This void left by the ‘hard man’ appears now to have been filled by the ‘ned’, with this identity catapulting to local and national consciousness within the past ten years. Indeed, the associations of language and violence manifest in the image of the ‘hard man’ appears to have been reappropriated by the ‘ned’, along with an associated reconfiguration of the linguistic practices associated with specific actors of violence and violent social practice in the minds of the Glaswegian public.

As Foulkes and Docherty (2007: 74) point out, language is a powerful tool in how people are judged, and this is especially true for adolescent males in Glasgow. While Milroy (2004: 167) argues that the ideologies surrounding many non-standard dialects are ‘strongly held but palpably counterfactual’, it is clear that within Glasgow particular cultural stereotypes are pervasive and powerful, but crucially there have been no fine-grained empirically based and ethnographically informed studies which have critically examined many of these widely held assumptions regarding the language of ‘neds’ (or indeed the language of other locally constituted groups of adolescent males). This thesis aims to address this deficiency through a combination
of the quantitative analysis of linguistic variation with an ethnographic description of a group of speakers who are very often denied a voice through mainstream outlets.
Chapter Two: 
Urban Life, Violence, and Masculinity

2. Introduction

Sociolinguistic studies of urban adolescent language use tend not to discuss in any depth the sociological literature of urban development or urban adolescents. Given the negative reputation surrounding urban adolescents, it would seem that the theoretical frameworks in sociology and anthropology regarding the development of the urban environment and the impact it has on urban adolescents is both relevant and necessary. This chapter opens with a discussion of these frameworks, tracing the developmental history of the main theoretical approaches to urban life. This section concludes with a brief discussion on urban adolescents, and how researchers have attempted to explain adolescent orientations towards deviancy and criminality.

The second part of this chapter develops the relationship between sex and gender, before arguing that the social constructionist approach to gender has particular ramifications with regards to a specific form of gender: masculinity. There then follows a discussion of hegemonic masculinity and how masculinity relates to patterns of violence. The chapter concludes with a section on language and violence, grounding the current research project in existing research.

2.1. Theories of Urban Life

Throughout the 20th century there have been considerable changes in world lifestyle and demographic patterns, perhaps the most significant of which has been the dramatic rise in the world’s population (Thorns 2002: 42). This population explosion has naturally led to significant alterations in the demographic placement of the population, and with the increase in industrialisation throughout the 19th and 20th
centuries, and the consequent move from an agrarian culture to a mechanised one (Thorn 2002: 3 – 5), the rise has been typified by the mass relocation of populations from rural villages to one of the most predominant features of modern living: the city (Todaro 1971: 425 – 426). Scotland is no exception to this pattern, and the growth of the city in Scotland was a significant event in the history of the country (Lynch 1991).

The city as a modern phenomenon has been the focus of much academic interest, most particularly due to the large amount of socio-economic variation present in one locale. Peoples of differing cultures, backgrounds, ages, classes, and educational levels can all be found within relatively recognisable and limited geographical boundaries, and it is the potential availability of such a large sample that has caused cities to become a prime sites for sociological research. The sociological study of cities, however, has undergone a great deal of change over the years, from the initial contrast theories of Weber (trans. 1921), Toennies (1887), and Durkheim (1897), to the urban sociologists Park (1952), Burgess (1967) and Sampson (2000).

One of the first theories concerning the city was that of contrast theory (Toennies 1887, translated 1956), where the focus is on the differentiation between rural and urban industrial life. In this conceptualisation, the city is viewed as a place where social decay, competition, domination and individualism are the key driving forces, while the village occupies a polar opposite position. Toennies hypothesised that the characteristics of the rural/urban dichotomy was divided into two stages: *Gemeinschaft* (lit. ‘community’) and *Gesellschaft* (lit. ‘business’).

The first of these stages, *Gemeinschaft*, focussed on the notion of community, where individuals were oriented towards the group and traditions, while dense and multiplex social ties ensured that individual wishes were subordinate to the wishes of

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6 ‘Contrast theory’ can also be equated with the more common terms ‘social evolutionism’ and ‘functionalist theory’.
the community. In *Gemeinschaft*, value and status is ascribed to individuals, rather than gained through their achievements. The main characteristic of *Gemeinschaft* is homogeneity, where, due to the collective nature of the community, specialisation is not possible. In this way every individual is able to fulfil a number of different roles within the community, rather than be a specialist at any one activity.

In *Gesellschaft*, however, the key driving forces are individualism and heterogeneity. In this case, individuals are motivated by self-improvement and self-interest, rather than by the wishes of the community. Specialisation takes on a more central role, requiring individuals to co-operate in order to fulfil tasks. The result is that the relations built around tasks are transitory, being more dynamic and brief than those created in *Gemeinschaft*.

<table>
<thead>
<tr>
<th>Gemeinschaft</th>
<th>Gesellschaft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homogeneity</td>
<td>Heterogeneity</td>
</tr>
<tr>
<td>Group oriented</td>
<td>Individual oriented</td>
</tr>
<tr>
<td>Tradition dominates</td>
<td>Business and commerce dominates</td>
</tr>
<tr>
<td>Individual guided by sentiment</td>
<td>Individual guided by rationality</td>
</tr>
<tr>
<td>Each person part of the overall culture</td>
<td>Preponderance of subcultures</td>
</tr>
<tr>
<td>Each person is a jack-of-all-trades</td>
<td>Job specialisation</td>
</tr>
<tr>
<td>Relationships among people valuable in and of themselves</td>
<td>Relationships transitory, superficial</td>
</tr>
<tr>
<td>Primary relations predominate</td>
<td>Secondary relations predominate</td>
</tr>
</tbody>
</table>

Table 2.1. Thorns 2002: 25

Contrast theory has several disadvantages, the first of which is that it is a dichotomous representation of an effective continuum. It does not consider the social changes or the economic driving forces that have to occur for the change from *Gemeinschaft* to *Gesellschaft*, and thus it is not an ideal theory to deal with the widespread socioeconomic shifts that occur to create cities. The main focus of contrast theory is to iterate the social and cultural differences between two well-defined social situations. Contrast theory is also biased towards the rural, neglecting
the negative aspects of rural life and concentrating on the negative aspects of city life. This bias places the rural in a particularly positive light, while presenting the city as a place where ‘innocence is lost’. Such a romantic and unrealistic view of life is roundly criticised in favour of more holistic and balanced perspectives on city life (e.g. Dempsey 1990, Thorns 2002).

The next major development in sociological approaches to the city was Urban Ecology, characterised by Robert Park’s (1967) study of patterns of urban growth and settlement in 1920s Chicago (and further developed in his collaboration with Ernest Burgess). This framework focused on the use of space by different subcultures within the city, and how the ‘social and spatial structure of the city’ influenced such patterns of residential segregation (Thorns 2002: 26). Park used three main characterisations in his analysis of Chicago: the Darwinian concept of competitive evolution, the importance of land, and the importance of communication. Taken together, urban ecology attempted to explain how distinctive subcultures were established throughout the city.

Competitive evolution – survival of the fittest – was used to explain how groups clustered around particular areas. The idea of invasion, succession, and domination, taken from plant ecology (Burgess 1967: 63), was applied to the numerous migrant groups who travelled to Chicago, settled in a ‘transitional zone’, and eventually moved to areas outside this to set up homogenous neighbourhoods with other migrants from the same ethnic groups. This had the effect of forcing minority ethnic groups out of the area, and establishing a majority ethnic area. The importance of the land market was used to explain how issues such as rent and land use would impact on the activities that occurred within the area, and subsequently how these activities would affect the inhabitants. Lastly, Park was aware that the
inherent need for communication between humans would influence the social organisation of the inhabitants in Chicago. The interpersonal interactions inhabitants took part in every day were important in structuring the different ways of life in each area.

Park’s analysis of Chicago was important because of the multi-level approach it took, leading to the development of a graphical representation of city life as a series of concentric circles emanating from a central core which represented the central business area (Burgess 1967). The central core is the destination of the majority of commuting traffic, and is also where the main transport links are located. The second zone was the ‘transition zone’, which was characterised by a dynamic and fluid land market. This zone was affected by changing land prices and the use of the land, as well as being the main point of entry for migrant workers due to the high levels of housing provided. The next zone was considered the ‘working class zone’ where more affluent workers and the mobile working class entered the property market. The next zone was considered the ‘middle class zone’ which consisted of more substantial and affluent housing developments. The last zone was considered the commuting zone, and this stretched out indefinitely as the transport available for commuting became more efficient and improved.

Researchers such as Hawley (1950) took urban ecology forward by demonstrating how the development of cities was influenced by the development of its transport links. Instead of the ‘concentric circles’ model of Burgess, Hawley incorporated transport links as dividing the city into wedges or sectors of development, but the result was much the same. Essentially, the focus of urban ecology was the ‘internal characteristics of the city and the process of residential segregation of the population’ (Thorns 2002: 28). Later work took the ecological
model as a point of departure in discussing how society affected and influenced the individual, discussing how individuals living in a city had a loss of personal freedom and the difficulty in establishing meaningful social relations. In a way, the latter end of urban ecology can be seen as a development of contrast theory with regards to the nature of interpersonal relations within an ecological space.

Early work on urban ecology, however, gave little consideration to the influence of land developers, city planners, industrial developers, and political parties. It also lacked an analysis of how the use of particular plots of land changed according to social changes, or how disputes over land value and rent influenced city landscapes. Urban ecology was a primarily a framework which successfully described the activities and the population distribution across the city, but neglected to explain the factors influencing such patterning, and consequently the approach fell out of favour.

As far as Glasgow is concerned the urban ecology model is too focussed on a hierarchical model of city geography. With regards to the area in which Banister Academy is located, the theory has limited application due to the mixture of working-class and middle-class resources being developed. Of particular concern is the rise in shopping centres and middle-class housing developments which are beginning to alter the economic landscape of Parkton. As a result it is difficult to reconcile Park’s model of hierarchical concentric circles emanating from a core with the mixing and interplay of different economic concerns in Parkton. The fact that the social aspects of land patterns are mostly neglected in urban ecology is also of concern, since it does not address how resources are distributed in the city. This fact is particularly important in Glasgow, especially from a historical viewpoint where resources were extremely limited in the aftermath of World War 2. So while aspects of traditional urban ecology
are useful, it has limited application in modern-day Glasgow. The theory, however, witnessed a re-emergence in urban sociology, where more importance is placed on the use of space and land.

More recently, this redeveloped (or contemporary) urban ecology has come to the forefront of sociological research, examining the ecological concentration of resources, the impact of local government policy and decision-making, the importance of the use of space and how all these factors impinge on the opportunities open to urban dwellers (Sampson 2000). The concentration of negative ecological effects is one of the major concerns of contemporary urban ecology, and refers to the existence of a number of negative environmental factors which impact on the well-being of the inhabitants of particular areas of the city. The concentration of negative ecological effects is closely tied to the distribution of a finite amount of resources (e.g. jobs, hospitals, shops, health care provision, Thorns 2002: 31), leading to neighbourhood clusters of poverty (Sampson, Morenoff and Earls 1999; Sampson 2000).

That the differential distribution of social resources has an effect at the local level is clearly visible when it is common that poor urban areas have characteristically higher crime rates (Krivo and Peterson 1996), lower educational achievement by children (Blanden and Gregg 2004), higher rates of substance abuse (Bradshaw 2001), and high levels of underage sex and teenage pregnancy (Thorns 2002: 149 – 175). Ecological factors tend not to be independent of one another, and must be viewed as collectively affecting urban poverty. For example, the streamlining of the non-skilled and manual industry in Glasgow (e.g. shipbuilding), and a move towards a more skilled and technical employment sector (e.g. call centres and information services), has resulted in high levels of unemployment in Glasgow (cf. McGregor and
McConnachie 1995: 1588), particularly chronic long-term unemployment (cf. Machin and Manning 1998). It is sensible to suggest, then, that this unemployment rate affects welfare and state benefits claims (Thorns 2002: 126), which then can potentially impact on other ecological factors.

Poor urban areas are also typically affected by low social control or low ‘collective efficacy’ (‘the concept of mutual trust and the shared willingness to intervene for the common good’, Sampson 2000: 10), defined as the ability of a community to organise and orient itself to shared goals for the area (Sampson 2000: 10). A lack of social control (closely related to Durkheim’s concept of ‘anomie’) reduces the ability of an urban neighbourhood community to organise itself and provide coherent goals which are shared by all individuals in the community (Sampson, Morenoff, and Earls 1999: 635). It is through a collective monitoring of the environment that high levels of social control and collective efficacy are achieved, resulting in more positive ecological effect, improving the inhabitants’ quality of life (e.g. a reduction in neighbourhood crime). This is not to suggest that there is a causal link between ‘order’ and social resources, but rather that there is a tendency for structural conditions to impact to potential life chances, resulting in prime conditions where anomie is likely to develop.

The lack of collective efficacy and shared paths of supervision are potential explanations as to why urban adolescents are more likely to seek and engage in risk-taking behaviour and age-restricted activities. Sampson (2000) argues that juvenile delinquency is closely tied to a lack of network ties (and hence low social control), since where network ties are both dense and multiplex, the social control of children and adolescents is facilitated by a wide network of parents and caregivers. Any disciplinary action taken against children or adolescents is likely to be considered as
warranted and supported by parents, limiting the potential for adolescents to ‘cause trouble’. The network ties of smaller communities is generally absent in larger cities (Park 1967: 25), and the collective monitoring of the adolescent behaviour becomes difficult, allowing problematic or questionable behaviour to go unchecked (Sampson, Morenoff and Earls 1999; Li, Feigelman, and Stanton 2000; Sampson, Morenoff, and Raudenbush 2001). But these patterns of risk-taking behaviour are not only influenced by low collective efficacy and social control. It is important to note that ecological issues significantly impact on the lives of urban adolescents. Many urban neighbourhoods throughout the world in the most need of social resources are those areas which are overlooked or ignored by council planning committees (Heitmeyer 2002: 96). For example, overcrowding in Glasgow was endemic until a few years after World War 2 (Cage and Foster 1999: 2), and the measures taken to provide adequate housing meant that low-income families were moved to the poor-quality estate developments on the periphery of the city centre while higher-earners moved to ‘New Towns’ such as East Kilbride and Coatbridge. The dense social networks which characterised the slums of Glasgow were dissolved and broken down by the Glasgow Corporation’s policies (Markus 1999: 161), facilitating the development of ‘anomie’. Prioritising quality suburban housing development over inner-city housing also worked against improving the overall living conditions for areas of extreme poverty, and such policies have caused the perpetuation of inequalities and severe social segregation. Differential access to places, property, social resources, as well as social isolation from mainstream establishment values and norms has meant that opportunities for social mobility in deprived parts of Glasgow are limited (Pacione 1995: 160; cf. Heitmeyer 2002: 95; cf. Tienda and Wilson 2002: 9), and these social
inequalities have created deep-seated hostility and territorial divide between different areas of Glasgow (Stuart-Smith, Timmins, and Tweedie 2007: 226 – 227).

2.2. Urban Adolescents and Delinquency

Throughout the world, urban and inner city areas are often identified as ‘dens of iniquity’, with the associated issues of widespread deprivation, violence, and criminality. It is clear that there is a greater potential for long-term negative implications to impact the life chances of an adolescent who is surrounded by such structural barriers. In addition to the difficulties a working-class urban adolescent faces, it is often the case that simply through association with a deprived area, adolescents become negatively stereotyped as personifying the qualities of violence and criminality which typify that area.

The multitude of physical, emotional, and psychosocial developmental processes an individual undergoes makes adolescence a time where individuals attempt to understand both themselves and their place in the social world in which they exist (Petersen 1988; Violato and Wiley 1990; Dusek 1991; Prothrow-Stith and Weissman 1991: 48). Indeed, Prothrow-Stith and Weissman (1991: 48 - 63) suggest that the multitude of developmental challenges that adolescents face is a potential factor in adolescent involvement with violence and delinquency. Adolescence is a time where one’s identity is forged, where the individual moves away from parental supervision, and where they position themselves in a complex social world. Being an adolescent living in an urban environment, however, brings its own set of unique developmental and cultural challenges. While many adolescents successfully achieve the transition from teenager to adult (Masten 1991), establishment views of adolescents are generally coloured by negative images of teenagers as lazy, rebellious,
promiscuous, substance-abusing delinquents (Petersen 1988: 584; Gottfredson and Hirschi 1994).

Within the dominant hegemonic society, individuals who reject middle-class establishment values (such a high standard of education and the use of standard language), values which are often typified in the middle-class institutions of the school and the workplace (Willis 1977), can often disadvantage the working-class urban adolescent as they move into adulthood, especially if there is any attempt to move into middle-class employment markets. Patrick (1973) found that the informants in his ethnography of working-class Glaswegian adolescents often had to turn to crime in order to finance their lifestyle since alternative and legitimate means of employment were denied to them. In a more systematic examination of the role of language in determining employability in working-class adolescents, Macaulay’s (1977) study in Glasgow found that interviewers were less likely to hire adolescents who spoke broad varieties of Glaswegian due to negative associations and stereotypes with which such speakers were imbued.

While it is certainly not the case that all working-class adolescents would want to align themselves with middle-class values, it would be naïve to suggest that their life chances are not affected by full engagement in the social values characterised in the ethnographies of working-class groups by Patrick (1973), Parker (1977), Bourgois (2003), and Quinn (2004). With regards to legitimate financial security, longer life expectancy, higher standards of education, and better access to the institutions of power, the middle-class is likely to be more positively aligned to these aspects of life. An engagement by working-class adolescents with middle-class values, such as

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7 This is not to suggest that there is a simple demarcation between working-class as criminal and deviant and middle-class as prestigious and law-abiding. See Levi (1994) for a discussion of ‘white-collar crime’. What I am arguing here is that access to ‘middle-class’ institutions is more difficult from a working-class orientation, and these institutions have a large impact on the welfare of the individual.
succeeding in school, having ambitions to leave the traditional enclave of their upbringing, or not wishing to fight, smoke, or drink, brings into question their legitimacy as working-class (since these values are simultaneously related to both class and instantiations of a specific type of masculinity). Moreover, this places working-class adolescents in the precarious position of being rejected by their peers (by virtue of their orientation to middle-class ‘ness’), and by the middle-class environment they may be aspiring to enter (by virtue of their association with working-class ‘ness’). There is obviously the danger of naturalising the link between poverty, class, and delinquency versus wealth and societal productivity, and while this is clearly not the case, there is an indexical relationship between social class and presumed levels of delinquent activity.

In Glasgow, stereotypical presentations of adolescents (including particular forms of dress, speech, and behaviour as outlined in Chapter One) have a significant impact on the adolescent population in general. Such stereotypes, often presented by the press and the media, are damaging to adolescents as the general public comes to believe the stereotypes, particularly with regards to violence (Heaven 1994: 2; White 2002: 144). The result is that adolescents are marginalised, stigmatised, and sometimes feared, by wider society, instigating so-called ‘moral panics’ (Cohen 2002). Despite the stereotypes created by the press and the media, research has suggested that there are a small number of criminal activities carried out by relatively small numbers of young offenders (West and Farrington 1977; Prothrow-Stith and Weissman 1991: 50; Downing, Stepney and Jordon 2000). Such stereotyping appears to have a broadcasting effect, whereby the actions of a small group have larger repercussions on the majority group, resulting in widespread exclusion and marginalisation of adolescents.
Tienda and Wilson (2002: 13) argue that this exclusion and marginalisation leads to adolescents developing ‘maladaptive [coping] strategies as they negotiate the developmental challenges of adolescence’, further excluding them from mainstream society. Some researchers have suggested that the removal of adolescents from mainstream values and norms leads to the development of violence as a method by which youth improve their socio-cultural status and recognition (Heitmeyer 2002: 87; White 2002: 147). Ransford (1968) suggests that groups of individuals who are less integrated into mainstream society are more prone to use violence, while Horton and Thomson (1962) found that members of society who felt they were excluded from the political process were more likely to be dissatisfied with their position in society. Chavez and Dorfman (2003: 198) suggest that ‘violence is often an adaptation to stress produced by structural inequalities’, a point also stressed by Spencer (2000: 53).

While the press and media portray adolescents in a negative light, it is often without foundation (Cohen 1971). Indeed, Parker (1974, reprinted 1992) comments on the inadequacy of representations of adolescents by the establishment:

[M]ost of the academics and researchers, whom society inadvertently selects to study its chosen social problems, are distant from and unappreciative of the adolescent who sometimes commits specific delinquent acts. The student of deviance often never meets his subjects of study, only his objects of study. (Parker 1992: 14)

Parker’s ethnographic study of a group of inner-city boys living in an area of Liverpool known as ‘Roundhouse’ is particularly interesting because of the steps the researcher took in order to understand the unique social world of ‘The Boys’. While Parker was aware of the stereotypes surrounding The Boys, his work directly addresses establishment views, focussing not only on the delinquent aspects of The Boys’ behaviour, but also the more positive aspects, such as socialising and familial
relations. The explanatory power of Parker’s work comes from the fact that he attempts to explain delinquent behaviour from the perspective of The Boys’ values and reasoning, as opposed to academic and establishment values. Parker advocates a ‘bottom-up’ approach, attempting to understand how grounded ideologies and worldviews impact on the development of the urban adolescent. He also attempts to explain the sociological impact urban dwelling has on adolescents, explaining how deteriorating housing and low investment in the neighbourhood make The Boys feel rejected by mainstream society (Parker 1992: 21 – 30). While investment was made in improving the business sector and non-residential businesses surrounding Roundhouse, the area itself was neglected by town-planners, facilitating the exclusion and marginalisation of the youth of Roundhouse. Such a pattern led to The Boys participating in various delinquent activities which, while minor, led to further marginalisation through prison and approved schools.

In Prothrow-Stith’s analysis of urban poverty and violence, she states that one of the factors implicit in adolescent delinquency is the ‘anger and frustration felt with not having money and the essential commodities relative to others’ (Prothrow-Stith 2002: 171 – 172). This supports the argument that a lack of social resources exerts an influence on delinquent behaviour in adolescents. The Boys in Parker’s study are a typical example of this frustration. Denied access to well-paid employment, The Boys resorted to stealing car radios and selling them. Yet despite such theft being illegal, Parker argues:

The evidence is before [The Boys’] eyes – they are dispensable, there are no decent jobs and no prospects of a secure future. They see affluence about them but they cannot reach it... The Boys aren’t and don’t want to be heroes, for starters they just want their share (Parker 1992: 107 – 108).
The Boys themselves often admitted that if they were employed and earning a sufficient wage, the need to steal car radios would be diminished. The reality of a lack of well-paid employment meant that in order to earn money, The Boys stole. In addition to this there were several other factors which supported their rational decision to steal car radios: the plentiful supply of radios, the availability of a ‘middle-man’ to buy the radios, that their neighbourhood often ignored the action, and the theft was overall encouraged by the ‘street corner milieu’ (Parker 1992: 108 – 109). Bourgois (2003) also noted similar socio-economic reasons as to why the informants in his study decided to sell drugs in order to obtain money. The simple fact is that urban adolescents have far fewer resources available to them through which they can make money. The studies discussed above show that while urban adolescents make the most of the resources which are available to them, they often took the view that they were offered little choice in engaging with such illegal activities.

Gottfredson and Hirschi (1994) offer an alternative explanation as to the motivations behind deviant activities, suggesting that adolescents take part in these activities because of the immediate benefit to be accrued, the low ‘skill level’ involved in taking part in deviant and delinquent activities, and no regard for the potentially negative long-term consequences of their actions. While activities such as fighting, petty theft, underage sex, and substance abuse could be considered ‘low skill’, carrying a potentially negative long-term impact on life-chances, Parker (1992) suggests that his study of The Boys’ delinquent behaviour, while opportunistic, involved a high degree of skill as well as an awareness of the problems involvement could cause in the future. While Gottfredson and Hirschi’s approach is attractive in the realisation of immediate benefit, their interpretation of adolescent delinquent behaviour could be considered simplistic given Parker’s data. In addition, Parker’s
informants show a great deal of sophistication in ‘upgrading’ their skills as car protection devices and police awareness of their activities in robbing car radios also became more advanced. Gottfredson and Hirschi’s position would appear to be in alignment with prototypical establishment values which approach delinquency as ‘the easy way out’, but a knowledgeable background of the social context of adolescent delinquency (as Parker demonstrates) refutes this.

It is important to be aware of the importance of the cultural reality in which urban adolescents exist, since, without such knowledge, it is difficult, if not impossible, to fully appreciate and understand the complex and multi-faceted character of urban life. Spencer (2000: 53) elaborates on how a lack of knowledge of urban adolescents’ cultural values and norms can lead to a misunderstanding of their behaviour and development. Similarly, Parker (1992: 103) argues that if urban adolescents are divorced from mainstream middle-class cultural values, then it is difficult to expect such adolescents to relate to establishment values in the same way as individuals from the middle-class. If urban adolescents are conditioned to different cultural norms in the inner city, Parker (1992) and Sampson (2000) argue that simply living in structurally deprived urban areas is partly to blame for problem adolescent behaviour.

Ultimately, a problem as complex as juvenile delinquency must be viewed from different perspectives, and no one theory will be able to account or explain all adolescent criminality. One common theme, however, in much of the research on adolescent deviance and criminality is the overriding focus on male offenders. Indeed, the nexus of masculinity and violence has been well documented in the literature (Messner 1990; Hong 2000), and it is necessary to trace how violence is seen as a
core component in particular forms of masculinity. The next section moves on to develop the concept of masculinity and its relationship to violent social practices.

2.3. Theories of Masculinity

What is masculinity? Such a question has only recently come to the forefront of anthropological studies, partly in response to the wide-reaching impact of feminism and partly as an attempt at problematising the concept of ‘man’. Although an often under-researched area, masculinities scholars argue that it is necessary to critically examine men so as to better understand the impact they have on the wider world (Whitehead and Barrett 2001: 3).

The area of masculinities studies has only become a fully-fledged field in the past few decades, but it has a historical lineage which can be traced back to Freud and psychoanalytic theory, particularly the Oedipus and Pre-Oedipus Complex (Freud 1927). Freud argued that during middle-childhood a boy would develop a hatred of the father and a desire for the mother, but recognising the physical strength of the father caused a conflict in the child in the form of the ‘fear of castration’. In order to avoid castration by the father, the child internalises the rules set out by father and move desire from the mother to other women. Freud argued that the basic foundations of masculinity were laid during early childhood, and that the Oedipus Complex was a significant component to this development.

The next major development in a theory of masculinity was Carl Jung, who developed the concepts of the persona (the self constructed in transactions with the social environment), and the anima (the self constructed in the unconscious out of repressed elements, Jung 1989)). For Jung, the persona and the anima were in gendered opposition to one another, and in males the anima was the sum of the
unconscious feminine qualities. The usefulness of the persona/anima divide was more diagnostic, with Jung arguing that an imbalance between the persona and the anima was the cause of psychological problems, particularly in men.

In the mid-20th century, a significant body of research focusing on the ‘inherent’ differences between men and women coincided with ‘social role theory’, leading to the development of ‘sex role theory’, where men and women were expected to enact particular configurations of behaviour based on their biological sex. The most prominent scholar in this field is Talcott Parsons (1942) who argued that the dividing line between male and female sex roles was based on ‘expressive’ and ‘instrumental’ roles. The purpose of the female expressive role was to facilitate the internal functions of the family, including strengthening the ties between family members. The purpose of the male instrumental role, by contrast, was to fulfil the external functions of the family, including monetary support and home protection. What Parsons was drawing from in his conceptualisation of sex roles was the general sociological rule that in a diverse society each individual had a specific skill set which was used to better the society (this can be related back to the skill specificity highlighted in Gesellschaft).

Part of the problem with sex role theory is that such a theory assumes that the roles are well defined and easily learned by individuals, that socialisation is a straightforward process, and that sex roles lead to social stability and good mental health (Connell 2005). Sex role theory is also predicated on the basis that biological differences result in differentiated social roles. Ultimately, sex role theory argues that there is coherent agreement between social institutions such as the home and the school, sex role norms, and actual real-life people, omitting the complexity which homosexual/transgender/transsexual individuals bring to the theory.
In her appraisal of the historical trends surrounding definitions of masculinity across the literature, Connell (2005: 68 – 71) discusses a number of approaches theorists have taken in defining the term ‘masculinity’, definitions she labels essentialist, positivist, normative, and semiotic.

1) Essentialist

An essentialist definition takes a feature (for example, physical toughness), and argues that the presence of this feature is ‘what makes a man a man’. The essentialist definition is typically the one used as the basis of many books about men, and as a focal point in mass media. The major disadvantage of essentialist definitions is that the choice of feature is arbitrary, and that the presence of a particular feature in women complicates the notion that there is a one-to-one correlation such that feature \( x \) = masculinity.

2) Positivist

Positivist definitions are based on what men actually are, and are typically the basis of masculinity/femininity scales in psychology (such as Bem’s sex role theory scale). Problems with this include the non-neutral stance adopted in these scales, and it denies any usage of the terms ‘masculine’ and ‘feminine’ beyond their referents, in that some men can be described as ‘feminine’ or that some women can be described as ‘masculine’.

3) Normative

Normative definitions recognise gender difference but offer a viewpoint of what men ought to be. This kind of definition is often found in mainstream society, with media exemplars such as James Bond, Jason Bourne, and Dirty Harry being the blueprint for masculinity. Since few men ever actually reach this ideal (and attempts to do so often causes health problems in young men who are faced with the ideal of the ‘perfect man’), it is difficult to accept a normative definition of masculinity which very few men reach.

4) Semiotic

Semiotic approaches are not based on personality, but instead define masculinity through a system of symbolic differences where men and women are contrasted with one another.
Connell argues that these approaches view the concept of masculinity as an object, and that instead, researchers ‘need to focus on the processes and relationships through which men and women conduct gendered lives’ (Connell 2005: 71). Connell, therefore, takes a social constructionist approach where gender is viewed as a ‘project’. She does not, however, subscribe to the *tabula rasa* (blank slate) theory which characterises much of the social constructionist theory. Connell argues that the body plays a specific role in the gender identities individuals construct, and that bodies limit some of the social practices individuals are able to do. Connell brings together the threads of both body and practice in the term ‘body-reflexive practice’, where bodies are both the object and agent of social practice. Body-reflexive practices constitute a world which has a bodily dimension, but is not biologically determined. When Connell speaks of masculinity and femininity, she is talking about particular configurations of gender projects, where gender is viewed as a dynamic construction in which the body plays a central role.

Of particular importance in Connell’s explication of masculinity is the concept of ‘hegemonic masculinity’, a theory developed from Gramsci’s theory of hegemony which refers to the cultural dynamic by which ‘a group claims and sustains a leading position in social life’ (Connell 2005: 77), often without any direct challenge to its dominance. Taking this a step further, Connell argues that hegemonic masculinity is ‘the configuration of gender practice which embodies the currently accepted answer to the problem of the legitimacy of patriarchy, which guarantees (or is taken to guarantee) the dominant position of men and the subordination of women’ (Connell 2005: 77). Thus, particular forms of masculinity are exalted above others, and at any one particular time, certain modes of masculinity are valued, reified, and performed more than other modes of masculinity. It is this ‘ebb and flow’ of masculinity which
explains the change from the culturally accepted and culturally valuable ‘beef-cake’ images of men in the eighties (exemplified by Arnold Schwarzenegger and Sylvester Stallone) to the ‘metrosexual’ in the 21st century (Tuncay 2004).

Important in this discussion of hegemonic masculinity, Connell argues that one way in which the dominant ideal of masculinity maintains its position at the top of the social hierarchy is through violence (Connell 2005: 83). Although Bucholtz (1999: 444) argues that physical masculinity is becoming subordinated (that is, socially less valued than technical masculinity), it remains a fact that not only is violence used against women in an attempt to maintain the social status quo, but violence is also used instrumentally within all-male groups, either as a method through which individuals can lay claim to a particular type of masculinity, or as a means by which specific groups of ‘marginalised men’ can assert their identities within the wider social sphere. Indeed, violence can be viewed as one of the primary components of the hegemonic masculine endeavour, but more than this, violence is stereotypically considered to be a hallmark of male behaviour, and as such, it is important to consider how physical violence and masculinity interact with one another. While it is clear that not all men are engaged in violence or violent acts (and that naturally there are multiple ways of constructing oneself as ‘masculine’), there is the assumption that most men (and particularly men who are engaged in establishing an affiliation to hegemonic masculinity) have the ability to wield violence, and it is to this point I now turn.

2.4. Masculinity and Violence

The concept of masculinity has typically included a consideration of violence (Lefkowitz 1977; Lewis 1983; Krohn-Hansen 1996; Stølen 1997). Lewis opens his
study on masculinity and violence in Australia with the bold statement; ‘is there a link between masculinity and violence? the [sic] answer is – probably, yes’ (Lewis 1983: 9). While no medical evidence has shown a biological link between men and physical violence or aggression (Björkqvist 1994: 180; Archer, Birring, and Wu 1998), traditional notions of masculinity have always been imbued with the potentiality of violence; that men are, somehow, naturally violent and aggressive (Gilmore 1990; Krohn-Hansen 1996; Stølen 1997). Such a concept appears to have cross-cultural relevance, as evidenced by Gilmore (1990). His review of numerous indigenous tribes across the world demonstrates that men from disparate cultural backgrounds have similar masculine ideals, of which violence is one. The title of Lewis (1983), *Real Men Like Violence*, offers a more explicit appraisal of what is needed to be viewed as a ‘real man’, and violence (or a propensity towards violence) appears to be a core component. Moreover, it is young men who are likely to be victims of violent crime (Wilson and Daly 1985; British Crime Survey 2000).

Violence and the ability to wield it effectively becomes a commodity in urban areas, particularly among working-class adolescent males (Anderson 1997), where being violent is an essential characteristic of being a man (and of asserting one’s masculinity as an adolescent). The power and allure of violence and violent behaviour can be seen in the proliferation of the media representations of men as violent, aggressive, gung-ho individuals with little regard for their own safety. This is particularly noticeable in the number of movies which have male protagonists who become involved in or instigate violent altercations, often as the only recourse to problem solving. Such characterisations of masculinity permeate through popular Western music and computer games, where again the typical focus is on men who use violence to further their own agenda.
Lefkowitz (1977: 27) follows Bandura (1973: 8) in suggesting that the ready availability of such representations is part of the learning process of violent children. Such a tradition of violence can be found in real-life, where boys are typically told to meet ‘violence with violence’. Thus, the notion of ‘being a man’ is in many ways heavily reliant on the notion of ‘being violent’ (Gilmore 1990: 14).

Notions of masculinity are complicated and bound up with ideas of visibility, respect, and acceptance, and for the males who engaged in violent acts in Quinn’s study (2004) of Glaswegian males, one of the main reasons for becoming involved in violence and being viewed as a ‘real man’ was to gain respect from his peers. The use of violence by males is often considered as a legitimate resource across cultures to develop and maintain respect from other males and females (Gilmore 1990).

While constructions of masculinity are bound up with concepts of violence, it is clear that individuals who do not conform to such a dominant norm can potentially face peer-group censure. Individuals who do not conform to the dominant mode of masculinity (an important factor in many working-class areas of Glasgow), in which violence is generally considered an integral aspect, face the possibility that they are placed outside the group. Such peer-group influence can have a powerful and influential effect on male adolescents looking to gain acceptance. There is also the possibility of the attractiveness of violence, where individuals with high physicality and violent tendencies gain status through the application of these abilities, often at the disadvantage of others. Despite the potential attractiveness of violence, such acts have inherent disadvantages, most obvious of which is the normal illegality of extreme violence and the repercussions such acts entail from other parties. Many men orient themselves to numerous other ways of constructions of masculinity, where violence is not considered a crucial social practice. For example, technical excellence
and organisational skill are often considered hallmarks of masculinity (Barrett 2000), although this would be generally regarded as a hallmark of middle-class masculinity.

Ultimately, while most men are engaged and concerned with ‘masculinities’ (in the very broad sense of the word), it is clear that there are different ways of being ‘a man’, some of which are culturally valued and accepted, some of which are not. Moreover, while some men use violence as a way to engage in a hegemonically masculine endeavour, other men eschew violence. Throughout this thesis, I attempt to show how the adolescent males in Banister Academy orientate themselves towards multiple modes of masculine expression, and suggest that while violence is an important part of urban life in Banister Academy, it is not the only way in which the informants can establish their identities as men.

2.5. Masculinity and Language

While most of the work on language and gender has focused on women’s use of language, Johnson (1997) argues that very little progress has been made with regards to theorising how language and masculinity are related. The problem with neglecting language and masculinity is that the language of males (if there is such a thing) remains unproblematised and, by extension, so are men. In Lakoff’s (1973) work on the ‘dominance’ or ‘difference’ paradigms, women are viewed as the outliers in the successful deployment of language, while men are viewed as the default target. This is made apparent by the view that women’s language is ‘powerless’ while men’s language is ‘powerful’. Not only is such a statement inaccurate in light of recent research (e.g. Chambers 1995; Eckert 2000), but it also accepts the position of men as the status quo. The rest of this section outlines some of the most important work in this field, before turning to issues of language and violence.
In one of the first articles on language and masculinity, Sattel (1983) focused on men’s inexpressiveness in language. In this article, Sattel argues that the inexpressiveness men demonstrate is a result of their specific involvement in the labour markets of power and prestige, a fact Connell (2003) also argues. Labov (1972, see section 3.7.1) focused on the insult strategies utilised by black adolescent males, noting that the purpose of such insults was to create an environment of camaraderie among the adolescents. One of the main findings to come out of Labov’s work was the prevalence of non-standard features in the language of men, and this was a particularly important finding in Milroy’s (1980) study of Belfast English and network structure which showed that male speakers were typically more non-standard than their female counterparts.

Kiesling’s (1996a, 1996b, 1997) study of American fraternity members showed how their linguistic usage, specifically the variable (ING), related to differing orientations to physical power and masculinity depending on the frequency of use by the informants. For Kiesling, the concept of power is differentially realised by each member of the fraternity depending on the social identity the member wished to portray (Kiesling 1997: 65). One of the aspects of power was violence (or coercive physical power), which Kiesling suggests is a substrate effect of the overriding concept of male power. While this is a useful distinction to make, a case can be argued that for many men (particularly inner-city and urban males) access to different ways of realising power (in the form of an administrative or managerial role for example) can be limited due to prevailing social stereotypes which prevent working class males from accessing these types of institutions.

Cameron (1997) investigated the linguistic strategies of a group of male university students who engaged in ‘gossip’ behaviour, behaviour which traditionally
would be considered ‘female’ behaviour. By invoking gender as a social practice, Cameron is able to explain why the males in her study use the gendered concept of gossip to identify other males in their social environment as ‘lesser men’. As such, gender as a social practice is a powerful way to explain that speakers ‘are who they are because of the way (among other things) they talk’ (Cameron 1997: 49).

Coates (2003) discusses the narrative strategies and structures which characterise men’s talk, arguing that men have very specific ways in which of ‘achieving, asserting and renegotiating the conflicting masculinities available to them’ (Coates 2003: 78). The findings offered by Coates are useful insofar as they demonstrate the numerous strategies deployed by men during their presentations of masculinity, but she discusses these strategies only from the perspective of heterosexual men.

This is a selective review of some of the work which has taken place in the field of language and masculinity, demonstrating the linguistic strategies men use to construct their sense of masculinity. The last section of this chapter turns to research which has focused on the concept of violence in language.

2.6. Language and Violence

The available literature on language and violence has generally focused on discourses of violent talk (Farver and Frosh 1997), verbal insults (Labov 1972; Leary 1980; Eder, Evan, and Parker 1997; Hall 1997; Kulick 1998; Eliasson 2007), or the acoustic correlates of anger (Sobin and Alpert 1999). Within the field of urban studies, Quinn’s (2004) ethnographic study of men’s use and refusal of violence in Easterhouse in Glasgow discusses language only in passing, recognising that there is importance to not only what is said, but also how it is said (Quinn 2004: 86). Parker
(1992) also briefly discusses the importance of language and social identity, commenting that by virtue of their ‘bad language’, the speech of his informants was generally associated with violence and aggression:

Toughness does not just become operational in fighting however. A whole ethos of being ‘hard’, being able to look after yourself like a man, is displayed by The Boys and other local working-class adolescents. Language is an important carrier of this identity. (Parker 1992: 146)

Farver and Frosch (1996) examined the tendency of young children exposed to the L.A riots in 1992 to use aggressive language and imagery in their story telling. The hypothesis proposed was that children who were directly exposed to the riots (children who lived in the immediate area of the riot zone) would show greater rates of violent and aggressive content, language and imagery in their stories than children who were not exposed to the violence of the riots at all. The control group was taken from several cities outside the riot zone including San Jose, Newark and Detroit. The study focuses on the number of aggressive words used, the content of the story, and the overall outcome of the story, and the results showed that children who were directly exposed to riots told more stories which had more aggressive words, used content which described physical aggression, and had negative outcomes where the conflict was not resolved, or uneven outcomes where some characters are not satisfied (Farver and Frosch 1996: 28). Such a result demonstrates that environmental factors have a significant influence on the development of children’s narrative content.

More recently, Eliasson (2007) examined the use of verbal abuse in high schools in Sweden, arguing that the deployment of verbal insults and abuse has a higher incidence rate among boys than among girls (Eliasson 2007: 25). She also argues that the use of verbal abuse among boys is due to their desire to demonstrate their hegemonic masculinity. In the course of doing so, such verbal abuse provides the
boys with a more developed sense of ‘linguistic power’ over others (Eliasson 2007: 48).

Much of the work in the field of language and ‘violence’, however, has been in the field of speech perception, using trained actors or ‘emotion inducing’ stories to determine the acoustic correlates of particular emotional states, including anger (Sobin and Alpert 1999; Chuenwattanapranithi, Xu, Thipakorn, and Maneewongvatana 2006; Toivanen, Waaramaa, Alku, Laukkanen, Seppanen, Vayrynen, and Airas 2006). These studies have in common their use of controlled laboratory speech, filtering out the visual and contextual information used in face-to-face interactions to determine the actual acoustic correlates of ‘emotional speech’. By eliminating the visual cues speakers usually transmit, these studies are able to show the individual acoustic characteristics of a range of emotional states, and how important different acoustic signals are in a listener’s interpretation of the emotional content of language.

While the studies outlined above are important in better understanding the relationship between violence (broadly defined) and language, they typically lack an analysis of ‘violence’ within conversational data. This is an important consideration given the widespread stereotypical associations of Glaswegian with violence, yet very little is known about how the two aspects inter-relate with one another. Consequently, it seems prudent to quantitatively investigate the acoustic patterns of linguistic variation in different types of speech events, particularly those types consider ‘violent’.
Chapter Three:  
‘We Just Talk Normal’: Adolescent Language Use

3. Introduction

Chapter Two outlined some of the pertinent theories of urban development, and how ecological effects impact on city life. The chapter then moved on to discuss theories of adolescent deviance and criminality, moving from environmental factors to agentive factors such as Routine Act Theory. The importance of masculinity as a factor in violence and deviancy among adolescent males was also considered, a particularly important factor in our understanding of the potential effect orientations towards different types of masculinity can have on adolescent male behaviour. The chapter then concluded with a brief section on language, masculinity, and violence.

This chapter moves away from a sociological/anthropological perspective and towards a linguistic perspective. The first section discusses the importance of linguistic style and how style relates to linguistic variation. Several key themes will emerge throughout this discussion, the first being the importance of speaker agency. That speakers can consciously manipulate fine-grained linguistic resources in order to achieve particular speaker goals is typically how style is viewed within the many studies which have the Community of Practice model at its centre (as outlined in Chapter 2). Indeed, this view is how style is conceptualised within this research project. The second major theme which will emerge from the discussion of style is the notion of bricolage (Levi-Strauss 1966; Hebdige 1979), in particular the ways in which speakers draw together a range of social semiotic resources and deploy them in a ‘new’ way. Consequently, the social meaning of linguistic variation is intimately tied to a range of social signs and features a speaker (or group of speakers) might use, and it is only in understanding how the clustering of such resources operates that we
can we begin to unpack the social meaning behind linguistic variation. The second section of Chapter 2 provides selected case studies of adolescent language use in the UK and the US, providing a historical foundation to the work presented here.

3.1. Style

Although a central tenet in our understanding of the patterning of sociolinguistic variation in speech, style continues to be a notoriously difficult concept to define, and sociolinguists are no closer to a unanimous decision on the question ‘What is style?’

One of the basic definitions of style is that under particular conditions speakers vary their production of linguistic variables, producing one particular variant instead of another (Bell 1997). Thus, an adolescent male speaker in Glasgow might say *I done it* rather than *I did it*, or produce an alveolar plosive [t] than a glottal plosive [?] in the phrase *a bottle of water*. Style then, for some researchers, is viewed as a specific way of ‘doing something’ (Coupland 2007: 1).

One of the major difficulties in defining style is due to determining whether it is a result of internal factors or external factors: do speakers actively create style (Eckert 2000), or are speakers simply responding to situational factors such as audience and environment (Bell 1997)? Since the inception of sociolinguistic enquiry, several approaches to style have been developed, from the earliest work of Labov’s Attention to Speech Model (1966), to more recent approaches such as Arnold et al. Speaker Design Model (1993), each bringing with it a particular set of advantages and disadvantages.

But defining style is only one part of sociolinguists’ understanding of what could potentially motivate speaker variation. As Schilling-Estes points out, style

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8 For a detailed discussion of style in sociolinguistics, see Schilling-Estes (2002).
occurs at the ‘intersection of the individual and the communal’ (2002: 376), and by gaining a better understanding of the processes which underpin stylistic variation sociolinguists can consequently gain a better understanding of the interrelation between global patterns of variation and how these are manipulated in more fine-grained local communities on the ground.

3.2.1. Style as ‘Attention to Speech’

One of the first attempts at defining style in sociolinguistics was made by Labov during his research on the English spoken in New York City (1966, 1972). Labov recognised that the more attention speakers paid to how they spoke, the less likely it would be for speakers to produce vernacular variants, and the less attention paid to speech the more likely it would be for speakers to produce vernacular variants (Schilling-Estes 2002: 379). In order to minimise the impact this would have on data collection (partly related to the ‘Observer’s Paradox’9) Labov developed the sociolinguistic interview, a methodological tool designed to a) obtain a variety of different speech styles through the types of questions that were asked of the interviewee and b) assist in identifying different speech styles through paralinguistic channel cues such as laughter, pitch alterations, volume, and tempo and c) reduce the impact of the observer during the collection ‘authentic’ data (even though the notion of ‘authenticity’ is problematic in sociolinguistics, see Bucholtz 2003; Coupland 2003; Eckert 2003). In addition to the spontaneous speech section, the interviewee would also complete a reading task, typically a reading passage and a word list, both of which would be formulated to maximise phonological contrasts made in the speaker’s variety.

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9 The Observer’s Paradox states that ‘the aim of linguistic research in the community must be to find out how people talk when they are not being systematically observed; yet we can only obtain this data by systematic observation’ (Labov 1973: 209). Labov argued that the more aware people were of being monitored, the less likely it was that they would produce speech that was un-monitored.
In designing the sociolinguistic interview, it was Labov’s aim to obtain speech which required the least amount of attention, the ‘vernacular’ which, in Labov’s formulation, is the style of speech acquired in pre-adolescence, free from overt and conscious monitoring, and provides ‘the most systematic data for linguistic analysis’ (Labov 1984: 29). Indeed, Labov’s work in NYC showed remarkable robustness with regards to the alignment of non-standard and standard features against a formal – vernacular continuum, with non-standard variants being used more in vernacular contexts and standard variants used more in formal contexts. In addition, Labov also found a similar effect of class, with higher social classes producing more standard variants and lower social classes producing more non-standard variants.

Although the Attention to Speech Model has been useful in broadening sociolinguistic understanding of speaker variation, there are several drawbacks which limit its explanatory power. One major problem is that it is difficult to quantify speaker’s attention to speech, even in an experimental setting (Wolfram 1969: 58 – 59). This means that researchers are limited in their ability to quantitatively demonstrate different scales of attention to speech. In addition to the quantification problem, the paralinguistic channel cues used to identify ‘casual’ speech can also be found in ‘careful’ speech, making it difficult to distinguish between these two styles. The link between ‘vernacular = non-standard’ is also fraught, since the model does not allow for the fact that a speaker might be deliberately producing any style for particular communicative purposes or for conversing with different groups interlocutors (Bell 1984: 150).

More critical is the assumption that attention to speech can be measured by reading aloud (Macaulay 1999: 20). With regards to obtaining spoken data by means of word lists and reading passages, how can the influence of a standard orthography
be measured? Moreover, can we reasonably expect non-standard variants using word list methodology? This is an important point, particularly since recent research in Glasgow has cast doubt on the efficacy of word-lists to elicit the standard variety (Stuart-Smith et al. 2007). Although the word *think* has three distinct allophonic realisations in Glasgow ([0], [f] and [h], Stuart-Smith and Timmins 2006), in reading list and reading passage data, *think* will be written as <think>, potentially eliciting more tokens of [0]. A Labovian approach to this data would suggest that the more attention is paid to speech, the more standard variants a speaker will produce. Stuart-Smith et al. (2007), however, reports that despite using spoken data collected from word lists, working-class adolescent informants actually produced *more* instances of [f] than in spontaneous speech. This process is taken to be a substantiation of identity which is non-standard, non-traditional, non-local, nor non-standard, traditional, local, but rather non-standard and non-traditional. By using [f], working-class adolescent speakers in Glasgow distance themselves from a) the sociolinguistic norms of their parents invoked by [h] and b) the sociolinguistic ideology of ‘poshness’ invoked by [0].

Lastly, the overriding assumption of Attention to Speech model is that it is a reactive model, where speakers have little or no agency in determining stylistic choices which might be meaningful to them and their interlocutors. This may be derived from the fact that quantitative studies tend to view linguistic variation as reflective of social structures rather than constitutive of them, which has important implications when style is considered (Schilling-Estes 2002: 383). Under such a framework, style is viewed as being of secondary importance to the canonical social variables of age, class, and sex (Coupland 2007: 9).
3.2.2. Style as ‘Audience Design’

One of the approaches designed to promote a more active component to speaker style was the Audience Design Model (although the framework had precursors in Speech Accommodation Theory (Giles 1973), the term ‘audience design’ was formalised by Bell 1984). In this model, Bell proposed that ‘persons respond mainly to other persons, speakers take most account of hearers in designing their speech… Speakers design their style for their audience’ (Bell 1984: 159). Bell argues that speakers alter their linguistic variation in response to situational factors, the most salient of which is the speaker’s audience (intended or otherwise). The model grew out of Bell’s research on a prestigious public corporation radio show in New Zealand, where the same newsreader in the same studio broadcasting (and sometimes reading the same news bulletins) to two different demographic groups (high and low social status) produced different rates of intervocalic /t/ voicing. In New Zealand, higher rates of intervocalic /t/ voicing (where writer sounds like rider) are associated with lower social classes, while lower rates of intervocalic /t/ voicing are associated with higher social classes. In Bell’s original research the only variable which altered during the broadcast was the intended audience, leading him to propose that it was the intended audience which was the primary influence on the variation in the rates of intervocalic /t/ voicing. It also led him to argue that while Audience Design incorporated more speaker agency than Attention to Speech, speaker style was essentially a responsive model (Schilling-Estes 2002: 385).

Research by Coupland (1980) in the domain of SAT found a female travel assistant in Cardiff (Sue) varied her speech according to her interlocutor and the topic of the conversation. More importantly, however, Coupland found that the travel assistant varied her speech according to the intended purpose of the conversation. For
example, during one conversation she moved into a more vernacular domain so as to appear more helpful to her customers (Coupland 1980: 11). Bell incorporated this ‘initiative’ aspect of Coupland’s research, where speakers, in addition to responding to shifts in situational contexts, could also be seen to initiate their own stylistic shifts in order to achieve communicative goals (Coupland 1980: 7–8).

Despite the more agentive approach that the Audience Design Model offers over the Attention to Speech Model, Bell still views the Audience Design as a responsive model (Bell 1984: 184). Although it may be a responsive (and arguably static) model, there are potentially several levels of personal and linguistic information to which speakers may be responding (Bell 1984: 167), and it can be unclear to which personal or linguistic factors speakers are responding (Schilling-Estes 2002: 387).

3.2.3. Style as ‘Speaker Design’

The most recent formulation of linguistic style was developed by in a conference paper by Arnold et al. (1993). Drawing on work on identity by le Page and Tabouret-Keller (1985), speakers are not viewed as passive reactors to situational factors, but as active producers in the construction of specific social identities. In this approach the view of language and society is markedly different to the Attention to Speech Model, in which language is viewed as reflective of social differences. In the Speaker Design Model, language is viewed as constitutive of society, where speakers actively construct their place in society through their use of language, and through this construction speakers imbue particular linguistic resources with social meaning. More importantly, it is the clustering of resources which provide social actors the means to construct social identities, rather than the deployment of one single social resource
(Eckert 1996: 185), Indeed, style is viewed as a process of *bricolage* (Levi-Strauss 1966; Clark 1975; Hebdige 1979: 102 - 106), whereby social resources are collected and appropriated by social agents and then redeployed in a characteristic and individual style with new social meanings:

Together, object and meaning constitute a sign, and, within any one culture, such signs are assembled, repeatedly, into characteristic forms of discourse. However, when the bricoleur re-locates the significant object in a different position within that discourse, using the same overall repertoire of signs, or when that object is placed within a different total ensemble, a new discourse is created, a different message conveyed. (Clark 1975: 177)

A similar concept to bricolage has existed in sociolinguistics for some time, although it has not been identified as such. Gumperz (1964) states:

Linguistic interaction...can be most fruitfully viewed as a process of decision-making, in which speakers select from a range of possible expressions. The verbal repertoire then contains all the accepted ways of formulating messages. It provides the weapons of everyday communication. Speakers choose among this arsenal in accordance with the meanings they wish to convey. (Gumperz 1964: 137 – 138)

While not explicitly invoking the idea of style, Gumperz makes clear that speakers have a choice in the linguistic resources they choose to deploy, and the meaning they wish to communicate to their interlocutors. Eckert takes this idea further, arguing that it is only in the *use* and *performance* of linguistic resources that they become connected to social meaning, that it is only when salient linguistic resources become embedded in particular social groups that they obtain their social meaning, and it is this social meaning which then becomes a marker of a particular style (Eckert 1996, 2002). In addition, it is only certain speakers who will have the social power to imbue linguistic variants with social meaning:

While any dyad or triad of girls can walk around and talk, only certain girls walking and talking will carry status. The crucial ingredient is the public knowledge that they have something important to talk about – that the social
relations they are exercising in their talks are important social relations. (Eckert 1996: 184)

The idea that speakers, particularly adolescents, pay little or no attention to the social meaning of linguistic variation has been criticised on several fronts (Romaine 1980; Eckert 2000). It is clear from recent research on pre-adolescent language variation in California (e.g. Eckert forthcoming) that there is no clear dividing line as to when the recognition of the social meaning of variation takes place. Eckert’s pre-adolescent informants (approximately 10 years-old at time of recording) showed systematic linguistic differences which correlated with a number of pre-existing Californian vowel patterns, such as Anglo raising and diphthongisation of /æ/ before nasals (Eckert 2005). In her study the informants of Steps Elementary, a poor multi-ethnic school located in Northern California, showed different patterns of /æ/ raising and diphthongisation. While some speakers’ vocalic shifting can be accounted for by ethnicity (Anglo speakers tend to raise and diphthongise /æ/ in pre-nasal position and lower /æ/ in all other positions, while Chicano speakers tend to lower /æ/ in all positions), the pattern of variation in Steps Elementary ‘cannot be explained solely in terms of ethnicity, but must be understood at the intersection between ethnicity and participation in the peer-based social order’ (Eckert 2005). Eckert’s study in this area is important because it demonstrates the mastery pre-adolescent speakers have of style and linguistic social meaning, and shows how even young speakers are finely attuned to the importance of not only what they say, but also how they say it.

Ultimately, the Speaker Design Model takes the position that speakers actively construct their social identities, manipulating their linguistic variation to produce specific communicative (and interpersonal) goals. Speakers are not viewed as passively reflecting linguistic practices, but actively deploy linguistic variation for
specific interactional goals. Since the Speaker Design Model views speakers as being able to manipulate linguistic resources for the purposes of constructing particular social identities, it is the framework used in this thesis.

3.3. Adolescents and Language

Labov (1966) argued that due to a relatively stable pattern of linguistic variation, adolescents in sociolinguistic studies provide a source of data which is generally less prone to short-term changes than adult speakers. Moreover, Labov suggested that adolescent speakers are less aware of the social significance of speech style, and are unable to correlate linguistic variables to particular social meanings. The fact that adolescent speakers are less aware of these issues results in a higher possibility that such speakers will use a more ‘vernacular’ speech style than adult speakers.

Macaulay’s (1977) study of Glaswegian adolescents, Romaine’s (1982) study on Edinburgh preadolescents, and more recently Eckert’s work (forthcoming) on preadolescents in California, however, all show that such speakers are able to identify and recognise the social significance of linguistic variables from as young as 10 years old. In recent sociolinguistic research, adolescents are not viewed as passive producers of the ‘vernacular’, but as active participants in the creating, negotiation, and maintenance of meaning linked to linguistic variation (Mendoza-Denton 2008; Eckert 2000).

In order to be able to discuss the pattern of linguistic variation in Glaswegian adolescents, it is first necessary to discuss some of the most important papers which have focused on adolescents from around the world.
3.3.1. Labov, New York

The first major sociolinguistic study of adolescents and vernacular language was Labov’s (1972) study of Black English Vernacular (BEV) as used by speakers aged 9 – 18 years old in New York. Labov focused on speakers who were fully integrated into the street culture of the inner-city, and by doing so was able to provide a systematic account of the grammar of these speakers. Labov’s work was also instrumental in altering educational policy towards BEV speakers by demonstrating the logic and grammaticality of BEV. One of the main research aims of the project was to detail how engagement in the vernacular culture affected the use of BEV by speakers.

Labov collected data from several gangs of African American adolescent males from across New York, representing a range of BEV speakers. The Jets and the Cobras were the two adolescent street gangs most firmly integrated into the vernacular culture, as well as being ideologically opposed on a religious dimension. The Cobras became involved in nationalist ideology and converted to Islam, while the Jets were hostile to Islam and other forms of religious thinking (Labov 1972: xxi). Both groups were hierarchical in structure, with a clearly defined core group of members, secondary members, and peripheral members. In the sociogram analysis, core members were defined as members who had between 2 - 8 reciprocal namings, secondary members had 1 or 2 reciprocal namings, while peripheral and ‘Lame’ members (defined below) had no reciprocal namings (Labov 1972: 276). Data from the Jets and the Cobras were used to detail the quantitative distribution of BEV features to demonstrate the systematic nature of BEV, as well as to understand how Lames fit into the vernacular culture.
The Thunderbirds (8 speakers) and the Aces (4 speakers) were preadolescent gang members who lived in a single-income housing project. These kids were involved in a vernacular culture similar to the Jets and Cobras, but were much younger (9 – 13 years old).

The Vacation Day Camp kids (10 speakers) were taken from a random geographic sample of Day Camps in Harlem. These Day Camps ran recreational programmes held in schoolyards and playgrounds, and since these kids were enrolled in the camps by their parents there existed an institutional approval in the kids’ engagement in the VDC. Such approval was often denied when kids became involved in any of the street gangs (Labov 1972: 259).

The Lames (4 speakers) were isolated individuals who had some knowledge of the vernacular culture but did not engage in it for different reasons. While the Lames were variable in their orientation towards vernacular activities, they existed outside the dominant peer-controlled vernacular culture and lacked the verbal knowledge and skills to become involved in the ‘game’ of vernacular culture (Labov 1972: 259). By this Labov intends to highlight the inability of a Lame to be ‘street-wise’ and verbally dexterous.

The data collection was done in a local youth club, with card games, juice, potato crisps, jokes, and music used to reduce the effect of observation on vernacular style speech (Labov 1972: xix). The informants were recorded onto a single track via a lavaliere microphone, with a single central microphone used to record all participants at once. Four speaking styles were recorded (styles A, B, C, D) which corresponded to vernacular style, main interview style, reading passage style, and word list style (Labov 1972: 39).
Five variables are discussed in Labov’s discussion of Lames, the first of which
is (r). This variable was further analysed as post-vocalic (r) (e.g. *car* and *far*), and *(r# # V)* (word final /r/ used before a following initial vowel, e.g. *four o’clock*). For post-
vocalic (r) the Lames had low rates of [r], while the Aces, Thunderbirds and VDCs had 0% of [r] in connected speech. In word list data, however, the Lames had the highest recorded percentage of [r] of approximately 50% while the other peer-groups had percentages of approximately 25%. For *(r# #V)* the Lames again had the highest rate of [r] at 21% while the peer-group speakers had percentage scores of between 4% – 7% (Labov 1972: 265).

The second variable was the stigmatised realisation [d] used for [ð] (e.g. *this* and *then*). Again, the Lames were lower than the Aces and the Thunderbirds in their use of the [d] variant (Labov 1972: 265).

The third variable was (ing), which is the percentage of [ɪŋ] variants as opposed to [ɪn] variants for unstressed (ing) (e.g. *running* vs. *runnin*). In style A all the speakers were close to categorical [ɪn] and in styles C and D were close to categorical [ɪŋ]. In style B, however, the VDCs and the Lames used [ɪŋ] approximately 25% of the time while the Aces and the Thunderbirds maintain the vernacular variant (Labov 1972: 266).

The fourth variable was –t, -d deletion, subdivided into four categories: the presence or absence of a grammatical boundary before the final /t/ or /d/ (e.g. *past* vs. *passed*) and the presence or absence of a following vowel (e.g. *passed me* vs. *passed us*). This gives four possible combinations affecting –t, -d deletion: *past me* (KD<sub>MM</sub>) __ K, *past us* (KD<sub>MM</sub>) __ V, *passed me* (KD<sub>P</sub>) __ K, *passed us* (KD<sub>P</sub>) __ V<sup>10</sup> (Labov 1972:266). For –t, -d deletion all speakers followed the BEV rule by less deletion

<sup>10</sup>In this notation, MM stands for morphophonemic, p stands for predicator, K stands for consonant, and V stands for vowel.
before a vowel than before a consonant, and less deletion in a grammatical boundary than no grammatical boundary. But where the Lames differed from the other peer-groups was in cases where ‘one factor favour[ed] the operation of the rule and the other [did] not’ (Labov 1972: 266). In the case of the intermediate forms it was the phonological constraint which was more important, while for the Lames it was the grammatical boundary which was more influential. As a result of this the Lames were more like the white non-standard vernacular of New York than the BEV speakers. Labov argues that this is a result of the Lames being isolated from the black vernacular and being exposed to Standard English.

The final variable studied was the contraction and deletion of *is* as a realisation of the copula and the auxiliary *be* (Labov 1972: 267). In this variable only two groups were analysed, the Lames and the Thunderbirds, due to the fact they were diametrically opposed in their orientation to the vernacular culture. For the contraction rule the Lames followed a similar pattern to the Thunderbirds, but for deletion the pattern was very different, with the Lames having a probability of only 0.12 and the Thunderbirds having a probability of 0.52. Thus, the Lames have a radically different pattern of deletion of the copula which does not converge towards the pattern of the BEV dominant peer-group. This is the result of their limited engagement with the cultural life of the gangs, as well as limiting any future involvement.

Labov also analyses how vernacular loyalty is indexed in the Jets gang by focussing on the use of BEV by the core, secondary, and peripheral members of the gang. The deletion of *is* is the most sensitive indicator of a speaker’s relation to the BEV and the vernacular culture, with the core members using the deletion rule more often than either of the secondary or peripheral members. The Lames who are
attached to the Jets cohort use the deletion rule approximately less than half as much as the core members, highlighting the fact that the use of the deletion rule indexes how closely involved in the vernacular culture a speaker is (Labov 1972: 280).

Labov’s analysis covers many areas and was a convincing quantitative study of a stigmatised variety of English. It also unpacked how variation operates within adolescent sub-cultures, and how linguistic variation reflects differing orientations to this culture. While Labov does not explicitly consider the social practices in which the adolescents engage, it does provide a starting point for understanding the social significance of linguistic variation.

3.3.2 Cheshire, Reading

Cheshire’s (1982) study focuses on the linguistic variation of morphological and syntactic variables of working-class adolescents in Reading. Cheshire recorded several groups of adolescent boys and girls who socialised in the local adventure playgrounds in or near inner-city Reading: Orts and Shinfield (Cheshire 1982: 13). This methodology led to a relatively unmonitored ‘vernacular style’ speech, and by using long-term participant-observation Cheshire was able to become a relatively accepted member within the groups. Over the course of 9 months approximately 18 hours of data from the informants in the adventure playgrounds was recorded. In addition to this data, approximately four hours of data between the children and their teacher was collected at the schools the children attended was also collected, providing a more formal and controlled dataset than afforded by the playground data (Cheshire 1982: 19).

The informants fell into three groups which, although uncontrolled, were natural friendship groupings ideal for sociolinguistic analysis due to the shared social
characteristics each group exhibited (Cheshire 1982: 21). The three groups consisted of ten Orts Road boys aged between 11 and 17 years old, three Shinfield boys aged between 13 and 15 years old, and eleven Shinfield girls aged between 9 and 13 years old. All these speakers were working-class, from the same local area, and had shared social interests and activities.

Cheshire comments that using speakers ‘who share a number of common values and activities’ (Cheshire 1982: 5) was important in understanding how fine-grained linguistic variation operates within relatively homogenous social groupings, rather than the commonly researched and understood interactions between linguistic variation and the global categories of age, gender, or social class. In this way, Cheshire used an approach which focused on the importance of shared social practices and values, similar to the framework used later by Eckert (2000) in Belten High. What this suggests is that analysts and researchers were, at this point, becoming more conscious of the importance of linguistic variation within homogenous groups, and how this linguistic variation was related to the relative degree of engagement within the peer-group order.

Cheshire focuses on several morphological and syntactic variables which were used by the three groups of informants. Cheshire (1982: 26) provides a list of 14 morphological and syntactic variables analysed.

Verb forms
1. Present tense verb forms
2. Past tense verb forms
3. Tense in conditional sentences

Negation
4. Ain’t
5. Negative concord
6. Non-standard never
By calculating a frequency index of the occurrence of non-standard and standard variants, Cheshire was able to establish links between gender and linguistic variation. She also established how integrated each of the speakers was into either the vernacular or legitimate cultures that define adolescent life.

One of the main findings from the study was that both the Orts Road and the Shinfield boys used more non-standard forms than the Shinfield girls group for most of the variables except the non-standard past tense form *does* and the non-standard present tense form of *do*. For these variables the girls used the most non-standard variants. While this supports the generalisation that males use more vernacular forms than females (Trudgill 1974, Milroy 1980), what this patterning does not show is ‘the way in which the linguistic features fulfil different social functions for the different sexes’ (Cheshire 1982: 87). Essentially, the explanation of gender differences does not show the social meaning of the variables, only the way in which the variables are distributed across the gender groups. In order to explain what linguistic variables *mean* it is necessary to look beyond their distribution and examine how the social practices of the informants interpenetrate, and are coordinated with, the linguistic variation exhibited by the speakers. Cheshire does this by establishing a ‘vernacular culture index’ (Cheshire 1982: 97) which considers a range of social practices which
are important to the children and then scores the children depending on their alignment with these social practices.

The vernacular culture index is a system which identifies each informant’s relative involvement in the vernacular sub-culture of the playground, as opposed to the ‘legitimate’ culture of films, music, clothing; essentially main-stream activities. The six social practices identified were: skill at fighting, carrying of weapons, involvement in criminal activities, choice of employment, personal style, and amount of swearing (Cheshire 1982: 98 – 102). These six social activities or practices were the ones which are associated, either in part or in full, with a taboo sub-culture within the general adolescent culture, and as such the activities connected to these were not legitimised by the general public or the establishment.

When the VCI was applied to the informants of the boys of Orts Road playground, four groups were established. These four groups showed differing allegiance to the vernacular culture, with group 1 showing the most allegiance to the vernacular culture by virtue of being identified as the best fighters, carrying weapons, having ‘masculine’ jobs, being involved in petty crime, being concerned with personal appearance, and swearing the most, while group 4 showed the least allegiance to these activities. Group 2 and 3 fell in the median of either extreme (Cheshire 1982: 102). The non-standard linguistic variables were then correlated with these four groups providing a clearer picture of the distribution of the variables according to the engagement with the vernacular culture. The distribution of the variables varied resulting in three main classes of variables; class A, B, and C.

Of the four groups, group 1 had the highest rate of class A variables, which then fell according to group affiliation. Of the group A variables, non-standard present tense (s) marker was most closely correlated with vernacular alignment.
Group B variables followed a similar pattern, but the greatest differences occur between group 1 boys and group 2 boys. These features were maximally differentiated by the two groups, while group 2 and 3 had varying frequencies which were non-linear between group 1 and 4. When group 2 and 3 scores were conflated, however, a regular linear pattern emerged, with a steady decrease in the amount of non-standard variants from group 1 to group 4. Lastly, group C variables were not related in any way to the informants’ alignment to vernacular culture (Cheshire 1982: 104 – 105). Thus, a fine-grained pattern of variation emerged from the data when the speakers were viewed as active practitioners in the development of meaning making. Essentially, the linguistic variation of a group of homogenous speakers was better understood when their social practices were taken into consideration, including their engagement with vernacular culture.

3.3.3. Eckert, Belten High

Eckert’s (2000) sociolinguistic study of ‘jocks’ and ‘burnouts’ in Belten High, a high school located in a suburban area of Detroit, explicitly links linguistic variation to the range of social practices in which the informants engage. The explanatory power of Eckert’s study comes from an examination of how linguistic variation is bound up and related to patterns of social variation and social practice in which the kids engage. Eckert recognises the agency of the speakers in Belten High, rather than limiting the speakers to passively reproducing particular social categories. As a result, Eckert examines the speakers through a theory of variation as practice, as opposed to the theory of variation as structure (cf. speech communities as discussed by Labov 1966; Hymes 1974; Hudson 1996; Patrick 2002). In the theory of variation as structure, the social categories of ‘Jock’ and ‘Burnout’ would not have been considered important,
and the categories of age, class, gender, and race would have been taken for granted as analytic categories on which to base the linguistic analysis.

In contrast, Eckert’s approach viewed variation as social practice, where the speakers were active participants in the construction of the social categories, as well as active participants in the construction of the social meaning of language (Eckert 2000: 3). In Belten High, the jocks and burnouts represented the two extremes of adolescent orientation towards school, work, friendship, urban life, dress, and numerous other social practices. The jocks are represented as aligning and identifying with corporate, middle-class, and suburban-based values, while the burnouts are represented as identifying with local, working-class, and urban-based values (Eckert 2000: 2, 47 – 55). Eckert identifies these two groups as ‘Communities of Practice’, communities where ‘an aggregate of people…come together around mutual engagement in an endeavour’ (Eckert and McConnell-Ginet 1992: 464). While the two Community of Practices of jocks and burnouts are closely related to deeper, class-based structures, the two are not necessarily concordant. To be a ‘jock’ does not necessarily entail ‘middle-class’ (Eckert 2000: 48), but instead individual orientation towards either jock or burnout Community of Practice represents an orientation to the social practices and values of each Community of Practice.

For the linguistic analysis of Belten High, Eckert selected 69 speakers from a number of recorded conversations with the adolescents she met during the ethnography. These speakers represent both jocks and burnouts, but also include the ‘in-betweens’ who were neither jock nor burnout. The in-betweens constituted the majority of adolescents in Belten High, and were able to draw their stylistic repertoire from both Jock and Burnout resources depending on their social contacts (Eckert
2000: 59). Although the Jocks and Burnouts dominated the stylistic extremes, the in-
betweens were another way of constituting style.

The conversations were orthographically transcribed with the linguistic variables being further transcribed phonetically (Eckert 2000: 86). Six vocalic variables (the monophthong vowels (e), (ae), (o), (oh) and (ʌ) found in *bed*, *bad*, *top*, *caught*, and *rust*, and one diphthongal vowel (ay) in *right*) were selected for linguistic analysis. Of the six vocalic variables, five are part of the Northern Cities Chain Shift (NCCS), described in Labov (1994) as a pull chain shift initiated by the raising of the vowel in *bad*, the fronting of the vowel in *top*, and the lowering and fronting of the vowel in *caught*. In Detroit, the NCCS is a widespread and developed linguistic shift, and one which operates regardless of speaker age. In Belten High, Eckert argues that these five vowels are not only linked to supra-local linguistic change in North America, but are also locally linked to social meaning within the high school. With the vocalic variable of (ay) there is both nucleus raising and monophthongisation, and while the variable is not involved in any widespread linguistic change such as the NCCS, Eckert argues that this variable also has sociolinguistic significance within Belten High. In addition to the vocalic variables one syntactic variable, negative concord, was chosen for linguistic analysis.

Each variable was analysed according to a sample of 50 tokens per speaker, a total which was reduced from earlier amounts of 200 tokens per speaker. Each of the vocalic variables was then phonetically transcribed and coded for a range of linguistic constraints. The vocalic variables were then analysed according to speaker and the results were correlated with Community of Practice membership, gender and social practices.
The correlations between gender and social practices were difficult to isolate due to the fact that the linguistic variables did not have set patterns which held across the social variables. Eckert identified three main patterns of how social variables affected the patterns of linguistic variables: variables constrained by gender, variables constrained by social categories, and variables constrained by a combination of the two (Eckert 2000: 112). As such, the variables operated in different ways depending on the social factors which constrained them. Due to the complex interaction between gender and the social categories of Jock and Burnout, Eckert argues that an explanation which attributes social meaning of linguistic variation to either gender or social category is ‘oversimplified… [T]he key to social meaning in variation lies in the interaction between the two’ (Eckert 2000: 112). As a result, the explanation of how linguistic variation operates in Belten High is complex, with the variables being appropriated in different ways depending on how the social variables of gender and social category intersect with linguistic variation.

The variables were broken down into three patterns: pattern 1, consisting of (aeh), (o) and (oh), intersected with gender; pattern 2, consisting of backing of (e) and (ʌ), and nucleus raising of (ay), intersected with social category; and pattern 3, consisting of monophthongisation of (ay) and negative concord, intersected with both social category and gender.

Gender was the most salient social factor in the pattern 1 variables, with raising of (aeh) and fronting of (o) led by jock and burnout girls for both variables. Although (oh) fronting correlated with both social category and gender, gender was a more influential factor in this process with girls leading in the use of advanced variants.
In pattern 2 variables, i.e. the backing of (e) and (ʌ) and nucleus raising of (ay), social category was the most important factor, and burnouts led jocks in the use of advanced variants for both (e) and (ʌ). For (ay) raising burnouts led jocks, but gender also influenced this variable, with girls leading in the use of advanced variants. Lastly, pattern 3 variables showed the effect of gender, with males leading in the use of advanced variants for (ay) monophthongisation. Similarly, males led in the use of negative concord regardless of social category affiliation.

Both negative concord and (ay) raising were the only variables which correlated with parental socio-economic status, although Eckert states that ‘in the face of social category, this correlation breaks down completely for (ay) raising, and begins to break down for negative concord’ (Eckert 2000: 113).

While these patterns can be explained by reference to either social category or gender, Eckert goes further and explains how certain of these patterns are related to wider social meanings outside the social context of Belten High. For example, pattern 2 variables were identified as ‘urban’ variables, associated with the urban centre of Detroit. As speakers move closer to Detroit these variables become more retracted, and the result of burnout appropriation of these two variables is that the burnouts more closely affiliate themselves with an urban identity or persona. Conversely, the jock rejection of these variables reifies a rejection of urban life and an embracing of suburban values (Eckert 2000: 136).

With regards to gender, the use of the variables in pattern 1 and pattern 3 demonstrate how males and females of either jock or burnout affiliation used these variables in different ways. Jock girls were least advanced in pattern 2 and 3 variables due to the fact that these variables were most associated with burnouts (pattern 2), or partially associated with burnouts (pattern 3). The jock girls were very advanced in
the pattern 1 variables, and it is because pattern 1 variables were most associated with female identity that explains why the burnout boys were least advanced in pattern 1 variables. In order to reject any association with suburban, corporate, middle-class values which jock identity encapsulates, burnouts boys rejected part of the linguistic currency which was most clearly associated with female jock identity. The pattern of variation in pattern 1 variables, however, cannot be explained by aligning pattern 1 variables with ‘traditional’ femininity (Eckert 2000: 124). If the burnouts girls were aligning themselves with ‘feminine’ variables, and consequently a particular type of femininity, it must be a femininity which is not the traditional femininity displayed and represented by jock girls.

While the burnout girls led the way in the ‘old’ variables of (o), (oh), and (aeh), it was not because the burnouts girls had a more prominent identification with femininity, but because the concept of female gender in Belten High ‘corresponds to greater use of advanced variants of all kinds’ (Eckert 2000: 137). Eckert argues that because these variables are no longer linked to urban identity (Eckert 2000: 136) the social meaning of these variables are renegotiated within the context of Belten High:

The greater variability of the older changes suggests that as changes lose stark geographic and age differences, and hence their value as an urban adolescent symbol, they become more fluid in their symbolic potential, showing greater local variability in use. (Eckert 2000: 137)

Similarly, with the ‘new’ variables (e), (ʌ) and (ə) raising (which are associated with urban identity), it was the burnout girls who led the way. In the case of the ‘new’ variables, both jock and burnout girls utilise these variables by using them in very different ways, establishing the two Community of Practices as being very different in relation to their orientation toward urban life and values.
Where the males do lead it was generally with urban variables (ay) monophthongisation and negative concord. In these variables it was the jock males who led in the use of advanced variants of (ay) monophthongisation, identified as a ‘male’ variable (Eckert 2000: 120), while male burnouts led in the use of an urban variables, negative concord. Essentially, male speech in Belten High is considered to be conservative while female speech, particularly female burnout speech, is considered advanced (Eckert 2000: 137).

Due to the fact that within the adolescent context, males have access to a range of social practices which are imbued with social significance and meaning such as athletics, scholastic achievement and school representation for jocks, or fighting, cruising and physical labour for burnouts, females in Belten High do not have the same rights of access to these activities. Females were generally restricted to activities which were less onerous and socially significant, with females focussing more on ‘personhood’ activities which would allow them to progress socially such as appearance, organisational skills, and interpersonal skills. One of the most salient practices available to females is language, and by manipulating linguistic resources the females in Belten High can construct particular social identities which do not rely on social activities. By virtue of their appropriation of linguistic variables associated with urban life the burnout girls were able to construct a social image of urban toughness and street-smart, and their advanced use of these variables reflects this fact. The low use of the urban variables of the jock girls also achieves a similar aim. Thus, the appropriation of linguistic variables by the females in Belten High achieves a very specific aim of creating particular social identities which do not rely solely on overt social practices.
Ultimately, Eckert’s study provides a fine-grained analysis of the importance of variation as linked to social practice, and as such is a socially motivated explanation of linguistic variation. Eckert’s work is influential insofar as it moves beyond the theory that linguistic variation merely reflects social identities, but rather creates, maintains, and reifies these social identities.

3.3.4 Mendoza-Denton, Sor Juana High

Using a similar Community of Practice approach as Eckert (2000), Mendoza-Denton’s (1997, 2008) study of Latino/a girls in Sor Juana high school, located in the San Francisco Bay area in North California, focuses on the social and linguistic resources used by speakers to negotiate and index orientation towards local girl gangs in the area. This study focuses on the phonetic realisations of /i/ by the various social categories encountered during the two year ethnography. While the social environment of Sor Juana high school has a recognisable divide between the affluent area of Foxbury Hills and the predominantly working-class area of Fog City, and between immigrant and non-immigrant student populations, more fine-grained distinctions in social category exist throughout the school (Mendoza-Denton 1997: 19 – 20). Such distinctions in the social fabric would have been missed if the speakers in Sor Juana were considered through the speech community framework (Bayley 2002: 135).

The Community of Practices were identified through the ethnography by a combination of self-reporting, other reporting and ethnographic observation (Mendoza-Denton 1997: 71 – 72). This framework led to six Community of Practices being identified. Las Piporras, or country girls, were recent immigrants from rural Mexico and as such were considered to be the keepers of traditional Mexican values.
In school activities where Mexican identity was the focal point, it was the Piporras and their mothers who were asked to do traditional Mexican cooking and lead traditional Mexican activities. Because of the social limitations imposed on Piporra girls, they were very rarely allowed out to socialise at night, were frequently absent from school during the farming period in California, and regularly met with resistance from the school board for refusing to take part in gym-related activities (Mendoza-Denton 1997: 39).

Las Fresas, or city girls, were also recent immigrants, but from the urban areas of Mexico. As such their social orientation was directed towards a more westernised Mexican urban youth. Due to a more privileged urban upbringing these girls had a more comprehensive and a better quality of education than Piporras, and considered themselves to be more conscious of the fashion and global youth culture. Relations between Piporra and Fresa girls were difficult, with Fresas mocking Piporras for being ‘small-town’ (Mendoza-Denton 1997: 44). As such the dichotomy represented by Piporra and Fresa girls is reflective of the general dichotomy of urban and rural, or between white and indigenous, populations (Mendoza-Denton 1997: 44), and similar situations are found throughout the world (Cheyne 1970; Preston 2002).

Within these two Community of Practices there exists many symbolic resources which are identified as ‘Piporra’ or ‘Fresa’, and one of the most accessible resources is music. Due to the relative orientation to Mexico the Piporras listen to Banda music, a type of upbeat Mexican Polka music involving close contact couple dancing and athletic moves (Mendoza-Denton 1997: 41). In contrast, the Fresa girls listen to Rock en Español (RNE) which is a derivative of the 1960s movement in Mexico of converting popular American and European music into Spanish. With each Community of Practice aligning itself with a particular type of music, the music
develops a strong social meaning throughout Sor Juana high school. Banda music, the traditional music of Mexico, connotes identification with Mexican identity and cultural values, while RNE connotes a bi-cultural identification with both American and Mexican values (Mendoza-Denton 1997: 43 – 44). As such, music becomes a potent, and important, precursor to social identity within Sor Juana high school.

The Latina Jocks were born in the U.S., but had a Mexican ancestry. Due to their non-immigrant status the Latina Jocks had the best command of English but almost no knowledge of Spanish, and their citizen status resulted in them being regarded with contempt by recent immigrant populations for having foregone any affiliation with Mexican identity. Due to their close integration into the institutional fabric of the high school, which goes against the traditional values demonstrated by the Piporras, the Latina Jocks used the cultural acceptance of the school for approval. Known as ‘coconuts’, an insult on being brown on the outside but white on the inside, the Latina Jocks were socially maligned by the immigrant population, but due to their low rate of social interaction with the Piporras and the Fresas these social evaluations had little impact on the Latina Jocks. Essentially, the Latina Jocks existed outside the social and linguistic system of the immigrant population.

The Disco girls were teenage girls of Mexican descent who were born in the U.S. or immigrated so young that their cultural orientation was towards Chicano influences (Mendoza-Denton 1997: 50). This group had a far wider range of social contacts and influences which included dating outside their own Community of Practice with other minority urban youth groups, listening to a range of minority urban music such as RandB, hip-hop and rap music, and having a particular clothing style with fitted black and white t-shirts and gold hoop earrings. Due to their wider social contacts the Disco girls had a particular linguistic repertoire which was distinct
from other Latinas (Mendoza-Denton 1997: 50). Due to their weak network ties the Disco girls were carriers of linguistic innovations between both the Latina community and the non-Latina community (Milroy 1987: 108, Mendoza-Denton 1997: 51).

These Community of Practices are distinctive in the deployment of a number of different social resources, but where these resources were most diversified is found in the two girl-gangs of Sor Juana high school: the Sureñas (Southerners) and the Norteñas (Northerners).

These gangs were hierarchical in nature, similar to the Jets and Cobras in Labov’s study (1972) of inner-city African-American adolescents, with controlled rights of access to the core of the group through ritual beatings and a peripheral section of ‘wannabes’ who showed some control over the symbolic resources of the gangs, but who did not engage in the more dedicated aspects of gang life such as fighting (Mendoza-Denton 1997: 53). The Sureñas and the Norteñas were divided by their differing orientations towards Mexican identity which were reflected in their use of social resources and it is this aspect of identity politics which distinguishes the Sureñas and the Norteñas from gangs which are organised around the concept of control of territory (e.g. Patrick 1973).

The Sureñas were recent immigrants who identify with Mexican identity, while the Norteñas were mostly U.S. born and identify with an ‘English dominant, bicultural Chicana/o identity’ (Mendoza-Denton 1997: 54). A wide range of social resources were used to index particular gang affiliation, from clothing colour and make-up application to choice of music and football team support (Mendoza-Denton 1997: 56).

From approximately 100 individual and group interviews, 1800 tokens of /u/ were taken from 12 speakers representing the Latina Jocks, the Disco girls, the core
Sureña and Norteñas members, and the wannabe Sureña and Norteña members. The study aimed to discover the pattern of phonetic realisations of /ɪ/ in these communities, and whether particular patterns of /ɪ/ could be correlated with Community of Practice membership.

Two distinctive patterns were identified: raising and lowering of /ɪ/. VARBRUL analysis determined that in the case of /ɪ/ raising the most significant factor was the nature of the following segment, with /ŋ/ being most favoured and all other environments disfavoured. The second most significant factor was social group membership, with core Sureña and Norteña members most likely to raise, followed by wannabe Sureña and Norteña members, with Disco girls and Latino Jocks least likely to raise (Mendoza-Denton 1997: 84). What is most interesting here is that the two groups who were the most socially differentiated have almost similar rates of /ɪ/ raising. It would be expected that the rates of /ɪ/ raising would be indexical of the social differences between the two Community of Practices, but what /ɪ/ raising seems to be indexical of was not a Mexican affiliation, but of a Latina-based identity (Mendoza-Denton 1997: 86). Since both Community of Practices were highlighting a particular type of Latina identity then it follows that their rates of /ɪ/ raising were similar. It also provides an explanation of the linear pattern of reduced likelihood of raising from core gang members to the Latina Jocks. The Latina Jocks did not index any kind of Latina identity, instead being involved in the dominant English cultural values and their rates of /ɪ/ raising reflect this orientation.

Of the individual speakers it is the leaders of each gang, Babygirl and Reina, who had the highest scores for raising. Their extreme linguistic behaviour reflects
their extreme social behaviours of being involved in fights, staying out late, doing drugs, and having connections with prison gang members (Mendoza-Denton 1997: 91).

With regards to lowering only a small percentage (9.7%) of the 1800 tokens fell into this category, but in this case it is not following phonetic environment which predicts lowering but social category (Mendoza-Denton 1997: 93). In this case it is again the core Sureña and Norteña members had the highest probability scores, followed by the Disco girls, the Jock girls, with the wannabe Sureña and Norteña members coming last. Thus, it was the core Sureña and Norteña members who define the envelope of variation by leading both /u/ raising and lowering.

[Core Sureña and Norteña girls] are not only the leaders for raising, the sound change that has been claimed to be characteristic of Chicanos, but also for lowering, which has been documented as a distinctive part of California speech... It is possible that in their role as leaders, and as standard-bearers for many different forms of transgressive behaviour, core gang girls are signalling their transgressiveness by going to extremes in both directions of vocalic variation of /u/. (Mendoza-Denton 1997: 95)

The wannabe gang members scored lowest for rates of lowering, and this was a direct result of the amount of interaction these girls had with the core gang members. Although the wannabe girls used much of the social symbols and resources of the gangs, their limited rights of access and ‘variation rights’ (Mendoza-Denton 1997: 85) meant that the wannabes did not when to lower /u/. Their knowledge of raising and lowering was more an artefact of general linguistic knowledge within Sor Juana high school, and the specific usage of /u/ lowering appeared to be dependant on an intimate knowledge of the patterns of variation which were used within the gang.

With regards to phonetic environment, /ŋ/ became the most disfavoured following phonetic environment but other nasals became the most favoured following
environment (Mendoza-Denton 1997: 97). This is a mirror image of the results obtained for /u/ raising which suggested that patterns of /u/ followed by nasals and /η/ were important phonetic environments to be further analysed. Mendoza-Denton consequently analysed a subset of 195 words, (the TH-Pro set covering anything, nothing, something, everything, and thing) which followed this pattern (Mendoza-Denton 1997: 100).

The results of this analysis were similar to the results obtained for /u/ raising, with /u/ raising favoured after an apico-dental plosive [t] and before a velar nasal [ŋ] (e.g. [samtŋ]) but disfavoured after a dental fricative [θ] and before an alveolar nasal [n] (e.g. [samθn]). The distribution of these forms in discourse was highest among the core gang girls and lowest among the Jocks (Mendoza-Denton 1997: 123).

The manipulation of TH-Pro in Sor Juana high school was due to its relatively high frequency, the multiple opportunities for the manipulation of /u/, /θ/ and /η/, and the ‘impersonal and non-specific semantics of the TH-Pro forms’ (Mendoza-Denton 1997: 140) which meant that in order to understand the meaning of the Th-Pro forms an interlocutor must have access to a range of shared information which would not be available to an outsider (Mendoza-Denton 1997: 142). As such, TH-Pro was a powerful linguistic variable which was used by the gang girls of Sor Juana High School to mark, index, and negotiate particular types of social identity and particular orientations towards significant cultural norms.

The range of social and linguistic factors considered in Mendoza-Denton’s study is another effective example of the importance of variation as practice, and it
provides an in-depth examination of how linguistic variables are manipulated by speakers in order to negotiate particular social identities.

### 3.3.5. Moore, Midlan High

In Moore’s (2003) study, a similar ethnographic methodology was used to provide social context to the linguistic analysis. In this longitudinal study, which focuses on the creation of social identity of forty peer-group girls (aged 12 – 15) in a Bolton high school (Midlan High) over two years, four syntactic variables were analysed; non-standard *were* and *was*, tag questions, negative concord, and right dislocation. Moore argues that the social meaning of variables is not to be found in the patterning of one variable, but in a *range* of variables and how these are used holistically (Moore 2003: 116). Thus, past variationist studies which focus on one linguistic variable fail to account for the fact that different speakers can use variables in different ways and that for different speakers the same variable can be imbued with different social meaning.

The four Community of Practices identified during the fieldwork stage of the research were, for the most part, distinct groups. The Eden Village girls lived in the prestigious area of Eden Village, an area with high house prices and distanced from the urban area of Bolton. The relative isolation of Eden Village, and the necessity for the girls to rely on parental support for transportation to and from social activities, left the girls few opportunities to engage in the local and urban practices of Bolton. The Eden Village girls were also the most institutionalised Community of Practice in that they engaged in a variety of school sanctioned activities, used the form room during break times, ate lunch in the school, and avoided forms of social practices which would invite negative repercussions such as smoking and fighting (Moore 2003: 50 – 52).
Similar to the Eden Village, but lacking the focus of a clique, was the Default Community of Practice. These girls were active participants in the school’s internal structure, and ate lunch in the school snack bar. Although they socialised within the school they did not engage in social activities with one another outside the school, and in an effort to reify their Community of Practice status they made more visible use of ‘the Fence’ area in the second year of Moore’s fieldwork.

Both these Community of Practices were critical of the Popular Community of Practice, a group of girls who were primarily anti-school. These girls were regularly involved in trouble making within the school, rebelled against the school uniform code, smoked, did not use the school’s official lunch arrangements, and ‘cruised’ around the school intimidating other pupils. Outside the school the girls hung out on street corners drinking alcohol late at night. This Community of Practice wore particular branded sportswear which was very visible and was a source of criticism by the Eden Village and Default girls. The Popular Community of Practice developed an offshoot Community of Practice, known as the Townies, which engaged in more extreme social practices as the girls moved into Year 10\textsuperscript{11}.

The Townie Community of Practice developed as a result of three girls (Amanda, Ellie, and Meg) socialising with a group of older boys in the Bolton area. As a result of their interaction with older adolescents, Amanda, Ellie and Meg began to develop extreme social practices, including excessive drinking, drug-taking, and staying out late, which they used to distinguish themselves from their friends in the Popular Community of Practice. The members of the Townie Community of Practice used these new extreme social practices to develop a more mature social identity, a social identity which was contrasted with the ‘immature’ social practices of the

\textsuperscript{11}Year 10 correlates to ages 14 – 15.
Popular Community of Practice. Such views of social practices were not shared by members of the Popular Community of Practice, who viewed the new Townie behaviour as excessive and potentially detrimental (Moore 2003: 56–62).

The first set of syntactic variables, non-standard were and was, showed that the Eden Village girls strongly favoured standard was in 1st person singular constructions, the Default girls weakly favoured standard was, while the Popular girls disfavoured standard was (thus favouring non-standard were) (Moore 2003: 88). Through VARBRUL analysis the major constraint on the linguistic form used by the individual speakers was found to be Community of Practice membership, with verb function being the second most important factor group (Moore 2003: 89). While this may be explained through an analysis of social class (where lower class speakers use more non-standard variants than upper class speakers) Moore shows that the distribution of social class and Community of Practice membership is variable. The spread of social class did not align with the patterns of Community of Practice membership, and although some Popular members and one Eden Village member were both social class III (considered middle-class) in Moore’s analysis, their patterns of were were different.

A more detailed analysis showed that the linguistic restraints for were and was for the Default Community of Practice was a mirror image of the linguistic constraints for the Popular Community of Practice (Moore 2003: 98, need to add), suggesting that the Default Community of Practice was more influenced by traditional syntactic constraints than the Popular Community of Practice.

For negative concord with post-verbal indeterminates the Townie girls had the highest scores over both years of the dataset followed by the Popular girls, while the
Eden Village girls had no recorded instances (Moore 2003: 133). The Default girls (with the exception of Susan and Jennifer) also avoided using negative concord.

Similarly, the use of right dislocation (where the complement of the main clause is highlighted or intensified e.g. *We’re right slags, us*) was highest in the Townie Community of Practice but lowest in the Eden Village Community of Practice. The Default and Popular Community of Practice were more selective, but generally lowered their use of right dislocation between Year 8 and 10.

The use of affective tag questions showed a slightly different patterning, with the Popular girls having the highest rate while all other Community of Practices reduced their rates of tag questions. Even the Townie girls reduced their use of tag questions since tag questions became viewed in Midlan High as being a ‘Popular’ variable. Due to the continual attempts of the Townie girls to mark themselves out as distinctive and separate from the Popular girls, it is no surprise that they did not align themselves with a Popular linguistic variable (Moore 2003: 221).

Thus far, the discussion of the distribution of linguistic variables has not explained the social meaning of the variables. Indeed, as Moore points out (2003: 116) an explanation of the social meaning of variables has to take into account a range of variables and how different Community of Practices use these variables. Each of the CofPs in Midlan High was actively creating a distinct social identity, as opposed to converging towards the extremes typified by the Eden Village girls and the Townie girls. The creation of this social identity was, in part, fuelled by the level of institutional engagement by each of the Community of Practices. The Eden Village girls were the most institutionally bound Community of Practice and as a result their linguistic practices were the most standard. Conversely, the Townie girls were the least institutionally bound, resulting in their high rates of non-standard *was* and *were*
and their high rates of negative concord. The Popular girls had some degree of institutional involvement, such as dancing for the school and taking part in school shows, but they were not as involved in school activities as the Eden Village girls. The Popular girls’ engagement with the school meant that, on some level, they had to recognise the institutional authority the school possessed. Part of this institutional authority is over language, and it is interesting to note that the Popular girls rates of non-standard, stigmatised variables (non-standard were and negative concord) were low, but their use of non-standard, non-stigmatised (but informal) variables (right dislocation and tag questions) were high (Moore 2003: 223). It appears that the use of non-standard, non-stigmatised variables was an attempt to negotiate some level of engagement with the vernacular market as opposed to the standard market.

Moore also highlights two speakers in her dataset who showed active manipulation of the linguistic variables in order to negotiate and create alternative social identities which are constructed through a process of ‘bricolage’ (Levi-Strauss 1962, trans 1966; Hebdige 1979; Eckert 2000).

Jennifer was a member of the Default Community of Practice who broke off a friendship with a Georgia, a Popular Community of Practice member at the beginning of high school. After re-establishing their friendship in Year 9 due to sharing classes both girls began socialising with one another. As a result of this renewed friendship Jennifer developed some aspects of Popular style, including conversational topics which involved sex and alcohol. While Jennifer remained outside the main Popular group due to her occasional social blunders, she hyper-corrected many elements of her language which were identifiable with the Popular Community of Practice in an attempt to be accepted as a legitimate member (Moore 2003: 237 – 238). Thus, the construction of her social identity was through a combination of social practices taken
from the Default Community of Practice and linguistic practices taken from the Popular Community of Practice.

Similarly, Kim (a Popular Community of Practice member) used linguistic practices in order to negotiate her relationship with Amanda and the remainder of the Townie Community of Practice. While Kim rejected, in part, Amanda’s new social orientation she occasionally socialised with the Townie Community of Practice when her dancing commitments and her mother permitted her to do so. Her engagement with the Townie Community of Practice, however, was never consistent and she was occasionally criticised for this by the Townie Community of Practice members. Kim’s scores for the linguistic analysis positioned her as one of the most extreme Popular girls (linguistically) which stems from her attempts to maintain a degree of contact with Amanda and the rest of the Townie Community of Practice. The analysis demonstrates how both linguistic and social resources are used by all speakers in Midlan High to construct, negotiate and index particular social identities and Community of Practice membership.

3.4. Summary

While the studies discussed in chapter three are a necessarily selective review of studies on adolescents and language, they all have in common the idea that both linguistic and social practices are valid resources through which the construction of social identity can be maintained, negotiated, and manipulated (Eckert 1996; Mendoza-Denton 2002). The focus on what speakers do as opposed to what speakers are brings into focus the importance of language in constituting social differences and similarities instead of merely reflecting them. In this way language becomes an active component instead of a passive reflection of social differences, recognising the
agency of speakers in the process of social differentiation. When language is viewed as a reflection of social differences such a theoretical approach underplays the fact that speakers use language instead of simply produce language (Eckert 2002).
Chapter Four: Methodology

4. Introduction

Chapter One stated that a widespread assumption within Scotland was that Glaswegian Vernacular was more ‘violent’ than other varieties of Scottish English. This assumption was found in media representations of Glaswegian speakers, as well as academic research on Glaswegian English (e.g. Macaulay 1977; Pollner 1987). More specifically, adolescent male speakers who are identified as ‘neds’ are believed to be among the most violent and anti-social members of Glaswegian society. Such speakers are also assumed to have a particularly distinctive linguistic system which includes nasalization, tense vowel production, and a higher pitch range. Consequently, there exists a range of (negative) social and linguistic practices abstractly associated with the idea of the ‘ned’, most of which place these adolescents on the periphery of Glaswegian society. The associations between language, violence and ‘neds’, however, impacts on how other adolescent males groups are viewed and categorised in Glasgow, with the negative reputation of ‘neds’ extending to other groups of adolescent males.

This thesis aims to uncover whether adolescent males who identified as ‘neds’ or who engaged in social practices considered ‘neddy’ have quantifiable linguistic differences from those adolescent males who do not. Related to the idea of ‘language and violence’, the thesis also investigates if speakers have quantitative differences between ‘violent’ and ‘non-violent’ talk. To answer these questions, it is necessary to use methodologies which tap into locally constructed categories, as well as elicit data about topics such as fighting, bullying, and insults. Qualitative methodologies such as ethnography and participant-observation are ideally suited in gaining access to the
kinds of information required to answer some of the research questions set out in Chapter One, particularly those related to social identity and group formation. But in order to answer the questions about adolescent male language use in Glasgow, it is also necessary to use traditional quantitative methodology, including auditory and acoustic analyses and statistical testing to provide a fine-grained and methodologically robust analysis of linguistic variation (Eckert 2000: 69).

A two-pronged qualitative/quantitative approach has been successfully in previous analyses of adolescent speech by e.g. Eckert (2000) and Mendoza-Denton (2008), where quantified patterns of linguistic variation were explained and described by reference to fine-grained social distinctions uncovered by ethnography. Such an approach has proved successful in reducing the distance between these two epistemological poles, offering a more nuanced interpretation of linguistic phenomena (Milroy and Gordon 2003). Consequently, the first section of this chapter opens with a discussion of the importance of an ethnographic approach in this research project. The second part provides an overview of the nature of the sample, the linguistic variables analysed, the data collection process, and the acoustic and statistical methods of analysis used.

4.1. The Usefulness of Ethnography in Sociolinguistic Research

The use of ethnographic methodology is a very local endeavour which aims to understand how people orientate themselves to a variety of social phenomena (Brewer 2000: 10). Rather than assuming that the social world of a particular group of speakers is divided neatly into predetermined categories such as ‘age’, ‘class’ or ‘ethnicity’ (for example, Rickford 1986: 217 showed that ‘social class’ in Cane Walk, Guyana had reflexes which differed from traditional Western concepts of class.
Specifically, being ‘Estate Class’ or ‘Non-estate Class’ was locally important, even though both groups descended from the same group of ‘bound coolies’ who worked as indentured labourers), ethnography allows a researcher to discover which groups are locally important (Eckert 2000: 69). By relying on membership defined by the researcher (which is a typical approach in many sociolinguistic studies), it is not always the case that these categories necessarily align with the categories used by the participants themselves (Allen 1994: 92; Mendoza-Denton 2002). Viewing a group of speakers as homogenous by virtue of some shared sociodemographic characteristic misses out on fine-grained social detail.

The benefit of ethnography, therefore, is that it discriminates a level of social granulation which would be missed in a traditional sociolinguistic approach to linguistic variation. For example, the adolescent males from whom the were collected would likely be categorised as ‘working-class’ in a Labovian study, subsuming individual (and local group) patterns of variation under large-scale sociodemographic categories. The use of survey methodologies would have made it difficult to discover how adolescent males categorise themselves within Glasgow (cf. Eckert 2000: 74), a particularly important factor to consider given the negative discourses surrounding ‘neds’ in Glasgow. It is uncertain if an informant would willingly self-identify with this label, and as Stuart-Smith and Timmins (f.c.) note, adolescents in Glasgow typically do not self-identify with negative-valence labels such as ‘ned’. Survey type methods would also be unlikely to elicit talk about violent encounters such as fighting or bullying due to the sensitive nature of such topics.

An ethnographic approach also partly circumvents the problem of the ‘Observer’s Paradox’. Labov (1972: 209) argues that the principle aim of the sociolinguist is ‘to find out how people talk when they are not being systematically
observed; yet we can only obtain this data by systematic observation’. This systematic observation has ramifications on the style of speech used by informants, but by using an ethnographic approach a sociolinguistic researcher can claim to be part of the interaction thus limiting the effect of their presence. My use of ethnography facilitated my attempts to become familiar with the pupils and have the recordings be extensions of our every-day interactions (I even recorded an hour long card game). I never ‘interviewed’ the informants in the traditional sociolinguistic sense of an answer-response model Wolfson 1976). Not only would an interview present obvious issues of power and status (where the power to ask questions lies with the interviewer and not the interviewee, Moore 2003: 43), this type of interaction would be typical of the informants’ conversations with many of the adults in their lives (particularly teachers) where pupils are asked a question and expected to answer accordingly. An interview approach would also fail to see the informants as individuals by following a set of standardised questions. While it is true that there were certain questions central to my understanding of the social environment of Banister Academy, these questions were asked with the understanding that each speaker would bring their own set of cultural knowledge to bear on the answer. Lastly, I wanted the participants to interact with me on as equal footing as possible, giving them the opportunity to shape and direct the conversation as they saw fit. A strict interview structure would have restricted their ability to do this.

Since this thesis examines the relationship between language and violence within different groups of adolescent males in a particular locale, it is necessary to understand how (and why) people assign meaning to particular signs and symbols in particular social contexts (Johnstone 2000: 82). Language is often one of the primary methods for carrying social meaning (Hymes 1974), and it is clear from the
discussion of Glaswegian Vernacular in Chapter One that these social meanings (assumed or real) can have dramatic ramifications on how people are judged and evaluated (Foulkes and Docherty 2007: 74). But obtaining ‘language data’ using traditional sociolinguistic techniques would not suffice in our pursuit of understanding how and why language and violence are so closely intertwined in Glasgow. Specific cultural knowledge informs subsequent interpretation of sociolinguistic data, and we can gain access to this knowledge through ethnography, allowing us to see how speakers orientate themselves towards different social practices which can then be used to explain and describe their linguistic variation. Without the use of ethnography, participants’ orientations to violence (and other social practices) would be decontextualised, and we would have a limited understanding of how a speaker’s linguistic variation was tied to both identity and violence.

Ethnography is concerned with the ‘local’ (as opposed to the global), and as such it is necessary to use a conceptual framework which deals with the complexity of locally situated communities. Such a framework needs to view speakers in a particular light: as social agents who engage with and move in the world around them (Eckert 2000: 34). Conceptualising speakers in terms of a speech community (Labov 1966) or a social network (Milroy 1987) presupposes speakers as static social beings, precluding dynamic mobility between other communities or social constructs. This limits our ability to understand the processes of meaning-making at the local level. As Eckert argues;

To capture the process of meaning-making, we need to focus on a level of social organization at which individual and group identities are being co-constructed, and in which we can observe the emergence of symbolic processes that tie individuals to groups (Eckert 2000: 35).
The construct of the Community of Practice (CofP hereafter) allows us to access the development of social meaning, how social identities are mutually constituted in interaction, and how individuals establish their identities as members of different social groups using different social and linguistic resources. How individuals in Banister Academy orientate themselves towards violence is only one part of how they establish themselves as belonging to one CofP or another, and by observing the relationship between ‘violence’ and CofP membership, it will be possible to show how patterns of linguistic variation can be explained by appealing to social identity.

4.2. Communities of Practice

The term ‘Community of Practice’ was coined in a set of publications between Jean Lave and Etienne Wenger, developed through their work on Vai tailors in Liberia (Lave and Wenger 1991). In the framework, Lave and Wenger use Communities of Practice to explain the process of ‘social learning’ in situated contexts. That is, new members in a particular community (who, in the original research, were apprentice tailors), are unaware of the everyday social practices in which more established members of the community are well versed. Through the process of legitimate peripheral participation in the workplace, the apprentices learned the social practices of becoming a fully-fledged tailor, being given enough participation in the workplace so as to expose them to the various social practices, but not enough that they could be considered full tailors. As the apprentices learned more about the tailoring industry, they became more accepted within the workplace, learning the workings of the industry and eventually passed these skills and knowledge to new apprentices through the same process. This ‘social learning’ underpins the CofP model, whereby members learn specific social practices relevant to being a member of a particular CofP.
The concept was incorporated into sociolinguistics in an influential paper by Penelope Eckert and Sally McConnell-Ginet (1992), where gender was conceptualised as a practice based activity. For Eckert and McConnell-Ginet, gender is not something individuals have, but something individuals do, and in the course of interaction these practice ‘construct members of a community ‘as’ women or ‘as’ men (or members of other gender categories)’ (Eckert and McConnell-Ginet 1992: 463).

Eckert and McConnell-Ginet (Eckert and McConnell-Ginet 1992: 464) define the Community of Practice as:

[A]n aggregate of people who come together around mutual engagement in an endeavor [sic]. Ways of doing things, ways of talking, beliefs, values, power relations – in short, practices – emerge in the course of this mutual endeavor [sic].

This sets out what the authors consider to be the three main components of a CofP:

1) A mutual engagement
2) A joint enterprise
3) A shared repertoire

4.2.1. Mutual Engagement

Mutual engagement refers to the idea that in order to constitute a CofP, there must be a certain degree of interaction between the members. While this can be face-to-face communication or mediated through technology (as in on-line Communities of Practice as described in Schott and Hodgetts 2006; Gee 2008), for sociolinguistic purposes the idea of mutual engagement has tended to centre on face-to-face communication. Tusting (2005: 41) argues that ‘almost all mutual engagement involves language’, and it is difficult to imagine a situation where mutual engagement of any kind is not mediated through language. It is important to note here that mutual engagement is not based on some ‘pre-existing commonality’ (Eckert and
McConnell-Ginet 1999: 186), but instead is based on the deliberate and meaningful interaction individuals construct as the engage in their shared practices (Meyerhoff 2002: 527). In addition, mutual engagement need not always (or exclusively) be consensual or friendly, such as debating teams or families.

4.2.2. Joint Enterprise

Joint enterprise (or jointly negotiated enterprise, Meyerhoff 2002: 528) is the purpose around which a group of individuals come together. Meyerhoff states that ‘members get together for some purpose and this purpose is defined through their pursuit of it’ (Meyerhoff 2002: 528). Thus, a CofP who plays football every day after school defines itself through the pursuit of playing football after school. Eckert and McConnell-Ginet argue that joint enterprises are closely intertwined with socioeconomic class, sex, age, and ethnicity, and that these aspects of their lives impact on the types of CofPs that a) they are exposed to, and b) they end up joining (Eckert and McConnell-Ginet 1992: 472). I would also add to this argument that access to a particular CofP can potentially be constrained by personality, ability (e.g. of a certain sport), or scholastic ambition (to name only a few criteria upon which membership might be predicated, Eckert and Wenger 2005).

4.2.3. Shared Repertoire

Shared repertoire refers to the collection of shared practices which are created, negotiated, and reified within a CofP in the pursuit of a joint enterprise. Wenger defines practice as ‘a set of socially defined ways of doing things in a specific domain: a set of common approaches and shared standards that create the basis for action, communication, problem solving, performance and accountability’ (Wenger,
McDermott, and Snyder 2002: 38). The practices which are used within the Community of Practice are all up for renegotiation by the members, imbuing the practices with new social meanings and purposes.

The usefulness of the CofP model is that a range of practices can be considered, whereas in the classic view of Speech Community (Labov 1966) the sole analytic focus is on the evaluation of linguistic practice. A CofP approach does not neglect those social practices which are non-linguistic in nature, such as clothing, hairstyles, orientation towards school, engagement in age-restricted activities, musical tastes, or areas for socialising, to name but a few. These practices are not divorced from the process of constructing social identity, but are core to the process. While language is invariably a sociolinguist’s main concern, language is not the only means through which speakers present themselves to the world, and the CofP approach is sensitive to this fact. Speakers use social practices in carefully crafted ways to present their social identities, and the focus on linguistic practices may cause researchers to miss important social aspects which are being mediated through other channels.

4.2.4. Communities of Practice: A Critique

Although the framework has been integrated into sociolinguistics for some time, and has been used in several explanations of language variation and change (e.g. Eckert 2000; Hall-Lew 2004; Rose 2006), there remains a lively discussion on the relative merits and limits of the model. For example, Davies (2005) discusses the lack of a structure of power within CofP theory, arguing that although CofPs have internal hierarchies (due to certain individuals gaining access while others are marginalised), the actual framework is ill equipped to deal with this complexity (Davies 2005: 576). Davies also comments on the lack of specificity in the model with regards to ‘shared
endeavour’, ‘mutual engagement’ and ‘practice’, a concern also voiced by Meyerhoff (2002: 530) where she argues that ‘[sociolinguists] need to avoid situations where the closest we can get to defining a shared enterprise is to say that speakers are engaged in “constituting a social category”’. Although a researcher may be able to identify that the only shared enterprise of a CofP is ‘constituting a social category’, viewing this as not fulfilling the remit of a ‘shared endeavour’ trivialises the fact that this social category could be important to the members of that group in terms of their social identity. Indeed, in-group and out-group designations are powerful social tools, and the construction of a ‘social category’ (or the opposition towards a particular identity) should be viewed as a legitimate shared enterprise in which members can be engaged.

In general, the use of CofP theory is borne out of a consideration to be sensitive to the multi-faceted nature of social identity. While the construct of the Speech Community takes language as its central focus (Bucholtz 1999: 907), such an approach presupposes that language is the central focus for members and it is only around patterns of language use which members of the Speech Community cluster. CofP theory is more inclusive in nature by virtue of the fact that other aspects of identity, including language, are taken into consideration in the analysis. The CofP framework views social practice as a way in which speakers can negotiate, reify, construct, and challenge different social identities (Eckert 1996). The use of the CofP framework, therefore, is a holistic attempt to understand the range of social practices in which the individuals engage, and how these practices can explain the social identities they construct. For this research project, the CofP framework is an ideal conceptual tool which allows us to see not only the range of practices in which adolescent males engage, but also if the assumption that ‘all adolescent males in
Glasgow are the same’ actually holds. As the next section describes, adolescent males in Glasgow appear to align with one of several different identities.

4.3. The Sample

Over the course of three years in Banister Academy (located in the south side of Glasgow), I recorded approximately 20 individuals. Some speakers were recorded over all three years (the years of data collection are referred to as Year 1, Year 2, and Year 3) while others were recorded only once or twice. This was due to events outside my control which included pupils leaving school, being suspended, or attending vocational college on the days I was present for fieldwork. The speakers represent four CofPs which I named the Alternative, Sports, Ned, and Schoolie CofPs, although in Year 1 there was one member who did not appear to fall into either the Alternative or Sports CofP and was consequently given his own designation as ‘Floater’. Table 4.1. below shows the breakdown of the speakers and their associated CofP membership across Year 1, Year 2, and Year 3.

<table>
<thead>
<tr>
<th></th>
<th>Alternative</th>
<th>Sports</th>
<th>Ned</th>
<th>Schoolie</th>
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</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>Andrew</td>
<td>Mark</td>
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<td>-</td>
</tr>
<tr>
<td></td>
<td>Jack</td>
<td>Nathan</td>
<td>-</td>
<td>-</td>
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<tr>
<td></td>
<td>Neil</td>
<td>Phil</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Year 2</td>
<td>Kevin</td>
<td>Mark</td>
<td>Danny</td>
<td>-</td>
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<td></td>
<td>Peter</td>
<td>Nathan</td>
<td>Max</td>
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<tr>
<td></td>
<td>Mathew</td>
<td>Phil</td>
<td>Noah</td>
<td>-</td>
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<tr>
<td>Year 3</td>
<td>Ray</td>
<td>John</td>
<td>Ben</td>
<td>Gary</td>
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<td></td>
<td>Peter</td>
<td>Mark</td>
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<td>Trevor</td>
<td>Rick</td>
<td>Victor</td>
</tr>
</tbody>
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Table 4.1. Overview of the sample in Banister Academy (excluding ‘Floater’)
4.4. The Linguistic Variables

One of the first steps in any sociolinguistic project is to identify the linguistic variables on which one wishes to focus (Milroy and Gordon 2003: 136). This research focuses on three phonetic variables: the vowel sound in CAT and BIT, and the consonant (θ). Previous work in Glasgow shows that variation in the vocalic variables is strongly correlated with the broad social categories of age, class, and gender (e.g. Macaulay 1977; Eremeeva and Stuart-Smith 2003), while studies of (θ) (e.g. Stuart-Smith and Timmins 2006; Stuart-Smith et al. 2007) show that working-class adolescent speakers are the leaders in TH-fronting (where [f] is used in place of [θ], Wells 1982). Few studies on Glaswegian, however, use locally defined categories in the analysis, and only recently have researchers started to focus on the nexus of language and social meaning in Glasgow (e.g. Stuart-Smith et al. 2007; Braber and Butterfint 2008).

4.4.1 The Consonantal Variable: (θ)

/θ/ (as in tooth and think), in Scotland, is typically realised as a voiceless dental fricative, where the stricture between the upper-teeth and the blade or tip of the tongue permits only a small amount of airflow. This airflow is pulmonic egressive and there is no voicing from the vocal folds (Catford 2001: 36). Such a realisation is considered the standard pronunciation, but in Glasgow, as in other parts of the UK, there exist several non-standard pronunciations.

The first of these is the traditional Scots [h] variant (Macafee 1983: 33), a voiceless glottal fricative typically used in word-initial position (thing [θŋ ~ 0ŋ]), and intervocalically (something as [samhŋ]). Word medial [h] can also reduce to [ʔ].
The distribution of [h] is limited to a particular set of words, namely *think* and *thing*, and their associated derivatives (such as *thinking*, *thinks*, *something*, *nothing* etc). Words which derive from *thing* (*anything*, *everything*, *nothing*, *something*) are referred to as the TH-pro set. Thus, the lexical distribution of [h] is low, but the words which do take [h] are very common in every-day discourse (Stuart-Smith and Timmins 2006; Clark 2009).

The second of the non-standard variants in Glaswegian, [f], is considered a relatively recent development in Glaswegian, although TH-fronting is typical of Cockney English and indicative of regional dialect levelling in other accents of English (Wells 1982: 328; for a general discussion of TH-fronting in the UK see Kerswill 2003). This realisation is the replacement of a voiceless dental fricative with a voiceless labio-dental fricative, which can occur word-initially *three* [fri ~ 0ri], intervocally *gothic* [gɔfık ~ gɔθık], and word-finally *both* [bof ~ boθ]. The first formal mention of this is in Macafee (1983: 33), and the variant has steadily gained ground in Glasgow in all word positions (Stuart-Smith et al. 2007). Unlike [h], the distribution of [f] is not constrained by lexis and can be found in any position where [θ] occurs (word initially, medially, and finally), but the high frequency of [h] in the *thing/think* lexical set provides a ‘brake’ on the widespread distribution of [f] within Glaswegian (Stuart-Smith and Timmins 2006). The data from Stuart-Smith et al. (2007) allows us to infer that (θ) is undergoing change, with working-class adolescent speakers using higher rates of [f] than other speakers in Glasgow. Stuart-Smith et al. (2007: 251 - 253) also take the view that [f] is involved in a complicated process of locally based language ideologies. In this process the use of [f]:
1) Indexes the speaker as Glaswegian
2) Indexes the speaker as a different type of Glaswegian from middle-class adults and adolescents
3) Indexes the speaker as a different type of Glaswegian from working-class adults.

The use of [f] is a supralocal variant which is not a feature or marker of Glaswegian, and by using such a variant, working-class adolescent speakers distance themselves from both the traditional working-class variant [h], as well as the standard (or ‘posh’ variant) [0] (Stuart-Smith et al. 2007: 252).

4.4.2 The Vocalic Variables: BIT and CAT

Since it was unclear which vowel would demonstrate the most variation across the different Communities of Practice, the number of tokens analysed in Year 1 for the variables BIT and CAT was restricted to 100 tokens in order to establish which vocalic variable was doing the most sociolinguistic work. This number was based on previous sociolinguistic research which determined that the results of the statistical analysis began to change when the token count fell below 25\(^{12}\) (Eckert 2000: 87). Milroy and Gordon (2003: 164) note, however, that although 30 tokens can be considered baseline for statistical tests, phonetic environment must also be taken into account, meaning that the number of tokens measured should ideally be 30 per phonetic environment. While such a suggestion is useful, it is occasionally impractical. For example, in the Banister Academy data, tokens before voiceless obstruents were far more common that before voiced obstruents. In Year 2 and Year 3, every token of CAT was analysed. The overall tables for the number of tokens analysed according to environment are given in Appendix A.

\(^{12}\)Eckert (2000: 87) notes that the results of her VARBRUL analysis began to change as \(N\) approached 25, while Guy (1980) notes that statistical analysis begins to break down as \(N\) approaches 30.
Due to my familiarity with the informants, I felt it was unnecessary to extract tokens from the second half of the interview when informants are generally felt to be more comfortable (in contrast to e.g. Macaulay 1977: 31). To reduce the bias of high frequency tokens, the upper-limit for repeated instances of individual words was ten, representing approximately 10% of the entire number of tokens measured per vowel. Such an approach follows Macaulay (1977) in which he analysed only the first three instances of any particular word, although a limit on the number of repeated tokens was only followed in the analysis of Year 1 data.

Both **BIT** and **CAT** were analysed acoustically to uncover the interaction between vocalic variation with linguistic and social factors. To this end, the primary aim of the analysis was to outline the quantitative acoustic patterns according to following phonetic environment and CofP membership separately, followed by the variation across the CofPs within specific phonetic environments. Unlike **BIT**, **CAT** was analysed over the three years of data. In addition to the overall quantitative results for this variable, **CAT** was examined over real time, as well as within a specific subset of discourse named Negative Affect discourse (or N.A. discourse).

### 4.3.1.1. **BIT**

In one of the first quantitative investigations of linguistic variation in Glasgow, Macaulay (1977: 31) found that for the variable **BIT** (equivalent to Wells’ lexical set of **KIT**, Johnson 1997), working-class speakers had low and retracted realisations, while middle-class speakers had fronted and higher realisations. This finding was supported by Eremeeva and Stuart-Smith’s analysis of 16 male speakers in Glasgow, but this analysis also showed signs of potential linguistic change, with middle-class boys using realisations which were approximately the same vowel height as working-
class speakers but with more fronted realisations (Eremeeva and Stuart-Smith 2003: 1208).

In Glasgow, BIT tokens before /r/ and /l/ are usually very lowered and retracted (Eremeeva and Stuart-Smith 2003: 1207), giving rise to popular Glaswegian stereotypes such as [bʌʃdz] (birds) and [mɑk] (milk). While Eremeeva and Stuart-Smith excluded tokens before /r/ and /l/ from their analysis (as did Macaulay 1977: 31), BIT tokens before /l/ or /r/ were included in this study due to the possibility that speakers from different CofPs would have a continuum ranging from /ʌ/ to /ʌ/, and that this variation could be socially meaningful.

4.3.1.2 CAT

The lexical set of CAT corresponds to Well’s lexical sets of TRAP, PALM, and BATH (Johnston 1997: 484) and in Scotland is typically realised as [a]. Macaulay (1977: 43 – 44) notes that the realisation of CAT is correlated with social class, with fronter realisations associated with middle-class speakers, and retracted realisations associated with working-class speakers. Stuart-Smith (1999b: 208) confirms this finding, noting that backing is more prevalent among working-class speakers than among middle-class speakers in her informal analysis of a corpus of data collected in Glasgow in 1997. Both studies were interested in the intersection of the sociodemographic categories of age, gender, and class with vocalic variation, and did not focus on locally constituted categories. Therefore, we have scant information on how (or indeed if) speakers who claim different social identities would use differing variants of the CAT vowel.
4.5. Data Collection

The data were collected in three blocks of ethnographic fieldwork conducted over a three-year period (2005 – 2007), referred to in the analysis as Year 1, Year 2, and Year 3\textsuperscript{13}. The sociolinguistic data totals approximately 30 hours of audio recordings of primarily dyadic and triadic conversations which were supplemented by long-term ethnographic observations and short questionnaires filled out by the informants (see appendix A). Due to the nature of the fieldwork, no formal sampling technique was used to determine which participants would be interviewed. Instead, speakers were recruited through friendship networks (cf. Cheshire 1982). Although these friendship groups tended to transcend age, there appeared to be a natural division between lower, middle, and upper school\textsuperscript{14}. It was, however, difficult to control the composition of the recordings, and although I attempted to maintain a standard of having two informants involved in any one recording, there were occasions where this had to be abandoned due to a request to have other people (usually friends who were part of the CofP and whom I knew) present at the time. It is possible that this may have had an effect on the linguistic results, yet the analysis (in Chapter 6) does not show major deviations for speakers who had been recorded in conversational dyads and then in triads. Table 4.2. summarises the CofPs recorded and the linguistic variables analysed across each year.

\textsuperscript{13} Year 1 was data collected during my Master’s degree, while Year 2 and Year 3 was collected in the first and second year of my PhD respectively.

\textsuperscript{14} This relates to 1\textsuperscript{st} – 2\textsuperscript{nd} year (12 – 14 years old), 3\textsuperscript{rd} – 4\textsuperscript{th} year (14 – 16 years old), 5\textsuperscript{th} – 6\textsuperscript{th} year (16 – 18 years old).
I aimed to interview each member of each CofP at least once, although practical considerations occasionally prevented this from happening. This included a lack of time on the participant’s behalf (due to school or personal commitments), permission forms not returned (as happened several times), or inadequate facilities to conduct the recording (such as lack of a classroom). Each block of ethnographic fieldwork consisted of approximately six months attending the school for three days a week (typically, Monday, Wednesday, and Friday), beginning in January and ending in July. The winter term was taken as an opportunity to allow the pupils to re-establish their social connection after a long summer break, allowing me to enter into a relatively stable social environment in January. Since time was spent away from the school, it also meant that any social changes which had occurred were more salient to me as an ethnographer.

The recordings were conducted in Year 1 using a Sony DAT recorder (Model TCD-D8), and uni-directional laviere microphones. In Year 2 and Year 3 the recordings were made using a M-Audio Microtrack Digital Recorder and uni-directional laviere microphones. Since the interviews were typically impromptu events, it was difficult to control for recording environment. Some recordings were conducted in the lunchroom during free periods\textsuperscript{15}, others were conducted in empty classrooms, while others were conducted in the assembly hall. In Year 3, I was able to partially secure a special education teaching room which was not included in the

\textsuperscript{15} A ‘free period’ refers to a timetable slot where the pupil elects to not take a class.

<table>
<thead>
<tr>
<th>Year</th>
<th>Variable</th>
<th>Alternative</th>
<th>Sports</th>
<th>Floater</th>
<th>Ned</th>
<th>Schoolie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>BIT</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>CAT</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Year 2</td>
<td>CAT</td>
<td>✓</td>
<td></td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>✓</td>
<td></td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Year 3</td>
<td>CAT</td>
<td>✓</td>
<td></td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 4.2. Breakdown of CofP and variable by year
regular teaching schedule, but when this room was required by staff, interviews had to be temporarily relocated. Occasionally, other pupils would disrupt the recording process, something I could do nothing about. None of the recordings were conducted outside, and none of the recordings were conducted with a solitary pupil (it was occasionally conducted one-on-one, but always in sight of other pupils or staff).

All data were recorded at 44100 Hz and then digitised and downsampled to 21500 Hz at the Experimental Phonetics Laboratory at the University of Glasgow using a CSL Machine (in Year 1) and a conversion tool in QuickTime Pro (Year 2 and Year 3). The Year 1 data were orthographically transcribed using a limited set of transcription conventions, while Year 2 and Year 3 data were fully transcribed using the transcription conventions detailed in Atkinson and Heritage (1984). The data were listened to through a pair of Sony stereo headphones (Model MDR-V300).

4.6. Data Analysis

Having delineated the sample, outlined the variables chosen for analysis, and described the data collection process, I now turn to the methods used in the analysis of the linguistic variables.

4.6.1. Analysis of (0)

The consonantal analysis of (0) was conducted auditorily. Using the text-grid utility of PRAAT to mark all instances of (0) in Year 1 and Year 2, tokens were phonetically transcribed. Each token was then coded for a range of linguistic constraints and analysed according to word position: word initial (e.g. thing), word medial (e.g. something), and word final (e.g. both). Word initial (0) was separated out into two main patterns (Pattern I and Pattern II) which related to the lexical restrictions on
variants of (Ø). Pattern I covers those words which can take either [θ], [f], and [h] (e.g. think, thing), and Pattern II covers those words which can take only [θ] or [f] (e.g. through, throw). In word medial position, words from the TH-pro set (anything, everything, nothing, something, cf. Mendoza-Denton 1997, 2008) were separated out from all other words. There were very few instances where /Ø/ occurred coda-finally (as in birthday), and consequently, these occurrences were not separated out. In word final position with was included for analysis due to the fact that some speakers used [f] in this position (wif), although most used the traditional Scots form wi’ ([w1]) (deletion of (Ø) is indicated by [Ø]). The main variants of (Ø) in each word position are:

<table>
<thead>
<tr>
<th>Word Position</th>
<th>Variants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word Initial Pattern I:</td>
<td>[θ, f]</td>
</tr>
<tr>
<td>Word Initial Pattern II:</td>
<td>[θ, f, h]</td>
</tr>
<tr>
<td>Word Medial:</td>
<td>[θ, h, f, v, ?, Ø]</td>
</tr>
<tr>
<td>Word Final:</td>
<td>[θ, f, Ø]</td>
</tr>
</tbody>
</table>

For each word position, variants were collated alongside the respective lexical items in which the variant occurred, thus it is possible to determine whether all the instances of a variant is restricted to a specific lexical item, or whether it occurs across a number of lexical items.

4.6.2. Analysis of BIT and CAT

The analysis of BIT and CAT was conducted using PRAAT (version 5.0.01, Boersma and Weenink 2005). First, tokens were identified using PRAAT’s integrated text-grid utility to mark each token, then the onset (t₁) and offset (t₂) of the vowel was identified at the point in the waveform where the periodicity started and ended. Because r-vocalisation and l-vocalisation appears to be spreading in Glasgow (Stuart-Smith et al. 2007), it
was sometimes difficult to identify where a vowel ended if it was before /r/ and /l/.

With no falling F₃ to show the transition between the vowel and the following approximant (a typical acoustic characteristic of retroflex variants of /r/, Stevens 1998; Nagy 2007), the end point of the vowel was taken at the end of the word. Although similar cases occurred with vocalised variants of /l/ (e.g. *pal*), it was easier to identify where /a/ ended, due to the fact that /l/ usually resulted in a high back rounded vowel [u], [u], [o]. Each mid-point of the vowel was calculated using the formula:

\[
\text{Midpoint} = \frac{t₁ - t₂}{2}
\]

The formant frequencies of each vowel (F₁, F₂, F₃) were measured at the temporal mid-point and extracted to a log-file which was word and time-stamped for each individual token. PRAAT utilises Linear Predictive Coding (LPC) analysis of the spectrum to generate the formant frequencies. While automatic formant tracking is useful, the values measured can be inaccurate for several reasons. Occasionally background environmental noise made formant analysis unreliable. Tokens of this type, however, were not included in the analysis. Measurements were checked for accuracy by comparing the formant track against the spectrogram and by taking a Fast Fourier Transform spectra (see Johnson 2003: 33 – 37 for a discussion of FFT) in order to determine formant values.

Once each token was identified and the formants taken, it was then coded in Excel for the following:

- Word Class (noun, verb, adjective etc)
- Number of syllables (mono-, di- or poly-syllabic)
- Preceding environment (sound in same word, sound not in same word, pause)
- Preceding class (voiceless obstruent etc)
- Preceding place of articulation (bilabial, nasal etc)
Following environment
Following class
Following place of articulation
Topic
Affect (violent, non-violent, undetermined)\textsuperscript{16}

\textbf{BIT} tokens from Year 1 were separated according to the following phonetic environments:

1) Before voiceless obstruents (VLO), e.g. \textit{kiss, hip}
2) Before voiced obstruents (VDO), e.g. \textit{bid, big}
3) Before phonological /l/, e.g. \textit{fill, hill}
4) Before phonological /r/, e.g. \textit{first, thirst}
5) Before nasals, e.g. \textit{pin, thing}
6) Before glottal stops, e.g. \textit{fit, bit}

Similarly, \textbf{CAT} tokens were separated according to the following phonetic environments:

Before voiceless obstruents, e.g. \textit{pass, fast, gap}
Before voiced obstruents, e.g. \textit{grab, fad, bag}
Before phonological /r/, e.g. \textit{bar, start, far}
Before phonological /l/, e.g. \textit{pal} (Year 2 and Year 3 only)
Before nasals, e.g. \textit{bang, want, landed}
Before glottal stops, e.g. \textit{batter, that, matter}

Due to the physiological differences between the speakers of different ages in Banister Academy, it was necessary for the data to be normalised. Since the data was collected over a period of three years, it would not be possible to compare Year 1 data with Year 3 data without normalisation. In addition, all of the pupils recorded were different body heights and weights. While the differences were sometimes minimal, some pupils were significantly larger than their peers. Acoustically, this means that a larger vocal tract would produce lower formant values, while a smaller vocal tract would produce higher formant values (Johnson 2003: 102 – 104).

\textsuperscript{16} See Appendix B for the full social and linguistic coding system.
Normalisation was carried out using the Bark Difference Method (cf. Syrdal and Gopal 1986), available online at North Carolina Sociolinguistic Archive and Analysis Project\textsuperscript{17}. The Bark Difference Method is an efficient method for vowel normalisation due to its ability to filter out the physiological differences between speakers while retaining any sociolinguistic differences (Syrdal and Gopal 1986: 1095). As a vowel-intrinsic method of normalisation, theoretically only measurements from the vowel under analysis have to be taken (in comparison to vowel-extrinsic methods such as the Lobanov or Neary methods which rely on the whole vowel system being measured). The Bark Difference Method works by calculating the differences between Bark-converted values (Z-scores) for vowel height and retraction. For height, $Z_3 - Z_1$ was used (this translates to Bark-converted $F_3$ minus Bark-converted $F_1$ and corresponds to $F_1$), and for retraction, $Z_3 - Z_2$ was used (this translates to Bark-converted $F_3$ minus Bark-converted $F_2$ and corresponds to $F_2$). While the vowel plots in Chapter Six show $Z_3 - Z_1$ and $Z_3 - Z_2$ on the axes (as the actual measures), for ease of reading I will refer these measures as normalised $F_1$ and normalised $F_2$ in the text. Unlike traditional vowel plots where an inverse relationship between $F_1$ and vowel height exists (i.e. where $F_1$ increases, the height of the vowel decreases, Ladefoged 1996), Bark plots reverse this relationship so that when $Z_3 - Z_1$ value increases, vowel height increases (i.e. the vowel becomes closer), and when $Z_3 - Z_2$ values increases, the vowel becomes more retracted.

While the Bark Method is useful, it relies on an accurate $F_3$ measurement which may be difficult to obtain in poor quality recordings (as stated previously, tokens which were indistinct or unclear were rejected in the analysis). Since CAT tokens in Glaswegian are very retracted before /r/, these tokens were analysed

\textsuperscript{17} Website: http://ncslaap.lib.ncsu.edu/tools/norm/
separately. Lastly, nasality may also cause difficulties in measuring \( F_3 \), potentially skewing the results, although this did not appear to impact on the analysis.

While \textit{bit} was only analysed in Year 1, \textit{cat} was analysed in Year 1, Year 2, and Year 3. This allows us to chart the variable longitudinally over time and observe if patterns of linguistic change correlate with patterns of social change. This allows us to chart speaker variation in real time (as opposed to apparent time, Bailey 2002). Analysis of variation over real time has important implications for theories of linguistic change, most particularly because childhood and adolescence is reported to be significant point in the development of an individual’s linguistic system (Eckert 1999; Milroy and Gordon 2003: 36). Since linguistic change happens most dramatically in adolescence, are there social precursors which influence the direction of these changes (Moore 2003)? For the speakers in Banister Academy, does a move from one CofP to another result in a change in that speaker’s linguistic system? Moreover, do speakers who do \textit{not} change CofP over the course of the fieldwork remain stable in their linguistic system?

One possible danger inherent in this type of analysis, however, is the difficulty in disentangling life-span linguistic changes versus linguistic changes predicated by membership of a new CofP. While it is clear that these factors are closely related, insofar as that membership of a new group may instigate alterations to a speaker’s linguistic profile which then become crystallised and reified as their usual mode of speech (for example, see Mendoza-Denton 2008: 208 for a discussion of /u/ raising among newly-inducted gang members who previously had lowered realisations of /u/), given the short time-depth of the longitudinal analysis, it is difficult to claim whether a speaker’s linguistic change is related more to real-time factors or CofP factors.
Lastly, since CAT has the most number of tokens across the three batches of data, it also allows us to examine the patterning of this variable within specific types of discourse. It is to this section of analysis I now turn, before concluding with a description of the statistical methods used to test the quantitative linguistic results.

4.6.3. Analysis of CAT within Negative Affect Discourse

Since the term ‘violence’ has such a negative valency, particularly in reference to urban adolescent males, it is necessary to deconstruct what is meant by ‘violence’ in regards to speech. One of the characteristic definitions of ‘violence’ is that it includes some degree of physical force which is intended to cause harm to oneself, other people, or property (Krug et al. 2002). Within urban adolescent male communities, such violence may be instrumental in nature insofar that the use of violence is expected (or anticipated) to affect a particular social aim, including gaining respect from one’s peers, self-defence, and establishing one’s identity as a ‘fighter’ (Anderson 1997). Indeed, if we take the definition of violence to be purely physical, recording language in the lead up to (and possibly during), for example, a fight might be one way in which the potential relationship between language and violence could be analysed. I would argue, however, that this approach is both impossible and deeply unethical. Not only would the researcher have to rely on a fight actually happening, it would take advantage of those who were engaged in physical violence, raising difficult ethical questions with regards to the safety of the research participants, as well as the safety of the researcher (Lee-Treweek and Linkogle 2000). Moreover, it would simply exacerbate those stereotypes which surround urban male adolescents (and a particular subset of urban male adolescents), reifying and emphasising social and cultural expectations of adolescent male behaviour in the UK. Lastly, since this
definition of violence is limited, it omits other kinds of ‘violence’, including verbal or linguistic violence in the form of arguments and insults (cf. Hall 1997). In short, very little of value would be gained in taking such an approach.

An alternative approach is to analyse linguistic variation in stretches of discourse where urban adolescent males talk about violence, in particular violent social practices, bullying, fighting, insults, arguments, and violent physical encounters. By examining tokens which occur in these types of narratives, called here “Negative Affect discourse” (N.A. discourse), it is possible to determine if a quantitative difference exists between tokens in N.A. discourse and tokens in non-N.A. discourse. For the purposes of the analysis of N.A. discourse tokens, the variable CAT in Year 2 and Year 3 was chosen due to its high frequency. CAT tokens were defined as Negative Affect when they occurred in the following:

- Topics which centred on physical violence where the interlocutors were instigators, participants, observers, or victims.
- Topics which centered on bullying or intimidation where the interlocutors were instigators, participants, observers, or victims.
- Insults directed at an interlocutor or absent third party
- Arguments which arose during the interview.

All other tokens were coded as non-N.A. discourse and provide a comparison with N.A. tokens.

---

18 These years were selected because every token of CAT was measured, providing the maximum amount of coverage of the data and the maximum number of negative affect discourse narratives in which CAT was used. By contrast, only a subset of CAT Year 1 tokens were measured, resulting in only a few tokens in negative affect discourse.
4.6.4. Statistical Analysis Methods

All statistical analyses were performed using *Statistical Program for the Social Sciences* (SPSS), running on an Apple MacBook Pro. While logistic regression and Variable Rule Analysis (VARBRUL, Tagliamonte 2006) is typically used for categorical variables (where the variable under consideration has an either/or distinction), the low token count made such statistical tools inappropriate for the analysis of (0). Instead of logistic regression or VARBRIL, chi-square tests were used, which is a statistical method which tests the relationship between a dependent variable and an independent variable by comparing the observed frequency of a variable with its expected frequency. The chi-square test, however, requires that each cell have an expected frequency of more than 5. Due to the low token count in other positions, only word initial (0) was analysed (Pattern I and Pattern II were conflated for the purposes of the analysis), with realisations of word initial (0) as the dependent variable and CofP membership as the independent variable. One important statistic in the chi-square test is Cramer’s V. Although a chi-square test shows if a statistically significant relationship exists between the variables, it does not report on the strength of this relationship. The value of Cramer’s V is one way of determining the strength of the association between the dependent and independent variables. The statistic has a value between 0 and 1, where 0 indicates no association between the variables, while 1 indicates a very strong association between the variables. While

Multiple linear regression and ANOVA tests were the principle statistical methods used in the analysis of BIT and CAT. Multiple linear regression analysis is a method of statistical testing which aims to understand the relationship between a continuous dependent variable \( Y \) (in this case normalised \( F_1 \) and \( F_2 \)) and two or more independent variables \( X \) (Pryce 2003). This relationship is determined by fitting a
straight line of best fit through the observed data points and calculating the coefficients of each independent variable. These coefficients show the relative effect of each independent variable such that when $X$ changes, the value of $Y$ can be predicted. By observing the relative effect of the independent variables on the dependent variable, it is possible to determine which factors have more or less influence on the dependent variable.

Regression analysis using the enter method was conducted on normalised $F_1$ and $F_2$ vowel values (i.e. one set of regressions were run with normalised $F_1$ as the dependent variable, and a second set of regressions were run with normalised $F_2$ as the dependent variable). The following independent variables were included in the regression models, with each variable having a number of levels (or factors) within it:

- **CofP membership (social variable)**
  - Alternative
  - Sports
  - Floater
  - Ned
  - Schoolie

- **Following phonetic environment (linguistic variable)**
  - Voiceless obstruents
  - Voiced obstruents
  - Approximants
  - Nasals
  - Glottals

For each factor included in the model, multiple linear regression requires a baseline group which functions as a reference point. This is typically the factor with the most amount of data points, or more usually a control group of some sort (Field 2005). Since here each regression model has two sets independent variables (CofP membership and following phonetic environment), each baseline factor is stated in
each set of regression analyses (see the statistical analysis sections in Chapter Six). For the analysis of CAT over time, an extra variable of ‘Year’ was added to the regression model (having three factors: Year 1, Year 2, and Year 3), while the analysis of CAT in N.A. discourse had an added variable of ‘Discourse Type’ (having two factors: token in N.A. discourse and token in non-N.A. discourse).

Both the independent variables (and their respective factors) were entered in the same regression analysis, and following Field (2005: 162), factors which were non-significant (i.e. $p > 0.05$) were taken out of the regression model and the regression was run again using those factors which were significant (i.e. $p < 0.05$). The results of the regression model are presented with the coefficients for each factor (provided the $p$-value of the coefficient was less than 0.05), and an adjusted r-squared value which shows the amount of variation described by the model.

While regression analysis is a useful method in determining the relative empirical effect of independent variables on the dependent variables, it cannot tell us whether particular patterns of distribution are significantly different from one another. It also cannot tell us if there exists an interaction between the different factors in the model.

In order to answer questions of this type, two-way Analysis of Variance (ANOVA) tests were used. The main aim of ANOVA is to test if the means of three or more groups are statistically different or not. ANOVA also tests the relative effect of the independent variables (the same independent variables included in the regression analysis), and the interaction between each of these independent variables. Importantly, ANOVA rely on a number of assumptions being met, the primary of which is that the variances are equal and sample sizes are equal. Although ANOVA is relatively robust to violations of these assumptions (Chiarotti 2004), Levene’s test
must be used to check whether the variances in a sample are equal (the assumption of homogeneity of variance) since this has implications on the type of post hoc tests used. One limitation of the ANOVA is that if there are statistically significant differences between the group means, the test cannot show where these differences lie. In an analysis of three groups (for example, Group A, B, and C), the ANOVA is unable to show whether the difference is between Group A and B, Group A and C, Group B and C, or between all three groups. In order to determine where the difference lies, it is necessary to perform a post-hoc test, and if the assumptions of ANOVA are not met (i.e. the Levene’s statistic was significant), a non-parametric Games-Howell post-hoc test must be used.

4.7. Summary

This chapter has sketched out the methodological approaches used in the analysis of data collected from male speakers in Banister Academy. I initially discussed the importance of ethnography and how such an approach was necessary to gain access to local communities and how the CofP approach differed from other theoretical constructs within sociolinguistics. I then described the nature of the sample from Banister Academy, including the speakers interviewed, as well as their CofP affiliation. There followed a description of the linguistic variables and the auditory and acoustic techniques used in the course of the analysis. The concept of N.A. discourse was defined after this, and the chapter concluded with a discussion of the statistical techniques used to test the quantitative results of the linguistic analysis.
Chapter Five: Ethnography of Banister Academy

5. Introduction

Chapter Four outlined the methodology of this study where I argued that the ethnographic approach was a core element in gaining access to locally constituted social groups. This kind of ‘local knowledge’ would allow us to delineate groups using informants’ own labels and categories which would be far more nuanced than the type of gross sociodemographic categories used in traditional quantitative sociolinguistic research. By mapping potential patterns of linguistic variation onto these groups, we would be able to observe exactly how linguistic variants were being used within particular communities, and see the local processes through which linguistic variants obtain social meaning.

As such, Chapter Five forms the ethnography of Banister Academy, establishing the social environment of the school and the participants. I begin by outlining the development of ethnography within sociolinguistics, before discussing my own positionality as a researcher and how this might impact my interpretations of the events I recorded over the course of the fieldwork. The main section of the ethnography begins with a discussion of Glasgow and the local area in which Banister Academy is located. I then deal with some ethical and moral issues which are especially important when working with adolescents. This prefaces the bulk of chapter five which focuses on the CoPs and their social practices which constituted Banister Academy. The last section of this chapter discusses a particularly important social practice among the males of Banister Academy: physical violence. Using aspects of discourse analysis (Gee 2005), I attempt to establish how orientations
towards physical violence are manifest in conversation, and that these orientations tie in with specific instantiations of masculinity.

5.1. ‘Objectivity’ and the Ethnographic Endeavour

In variationist sociolinguistics, there tends to be a prevailing epistemological stance where the researchers are viewed as being ‘outside’ the research context (Duranti 1997: 9). This is partly borne from the view that variationist sociolinguistics (and other disciplines in the physical sciences) are ‘positivist’, and as such objective and scientific (Atkinson and Hammersley 1994; Lee-Treweek and Linkogle 2000: 20–21). In this positivist paradigm, researchers collect data which are then taken back to a laboratory where it is analysed and the findings published. The impact of the researcher is typically never discussed or considered. While viewing oneself as ‘outside’ the research context in a large-scale quantitative study of New York City (Labov 1972), Norwich (Trudgill 1973), or Glasgow (Stuart-Smith et al. 2007) may be appropriate, the use of particular research methodologies (such as ethnography or participant-observation) actively places a researcher inside the research context (Milroy and Gordon 2003: 68). As such, acknowledging one’s positionality (Rudge 1996) and ‘writing oneself into the research’ is an important part of any ethnographic endeavour, allowing the writer to emphasise that the interpretation of the data is not an objective account, but rather is coloured and influenced by their own lived experiences and personal history (Whyte 1984: 27; Mendoza-Denton 2008: 44).

Such an approach in mainstream variationist sociolinguistics contrasts quite significantly with the adjacent field of linguistic anthropology (and anthropology more generally), where being forthcoming about one’s own experiential history is an important part of the ethnographic process. As well outlining the researcher’s
‘background, assumptions, overt and hidden agendas…. and epistemologies’ (Mendoza-Denton 2008: 44), by setting out his or her own past (and the impact this might have on the interpretation of the ethnographic data), the ethnographer foregrounds the fact that their work cannot an objective representation of a particular community. Moreover, by setting out one’s background, anthropologists (and researchers more generally) set themselves up as more accountable for their research output, a particularly crucial facet of anthropological research given its history of ethnocentrism and exploitation of people and cultures (Narayan 1993).

5.2. A Short History of a Boy from Carluke

I was brought up in the small town of Carluke, Scotland, approximately 20 miles outside of Glasgow. My mother and father did not attend university, but constantly encouraged me to apply myself in my schoolwork. As a result, I did well enough in high school (I would have been considered conformist, or an “ear ‘ole”, following Willis 1977: 13), to pursue an undergraduate degree at the University of Glasgow in 2000, initially focusing on English Literature (linguistics was my secondary subject). After commuting to university for a year, I moved to Glasgow in October 2001. In only a few months, I became aware of the ‘ned’ subculture, quickly noticing that much of the discourse surrounding these adolescents was negative. One of the major complaints about neds was that they would assault lone individuals as they walked home through Glasgow. Although living in almost any major city can be dangerous, I managed to avoid being the target of any physical attacks for nearly four years. In April 2005, however, I was the victim of a random attack by a group of adolescent males (who at the time I identified as neds) near my house. I managed to escape any
serious injury, but one unanticipated (and conciliatory) result was that the event opened up a potential avenue for post-graduate research.

Listening to conversations people had about neds, I was struck by the association between neds and the assumption that they were criminal and anti-social. I noticed that when people talked about neds they used a particular constellation of linguistic features to show that the character they were portraying was a ned, including higher pitch range, tense vowel production, nasalised voice quality, and Glaswegian Vernacular phonology. What struck me even more was that the assumptions surrounding neds were generalised to other urban adolescent males. Regardless of whether a male adolescent in Glasgow self-identified as a ned or not was beside the point, the result appeared to be mass suspicion towards all adolescent males in Glasgow. What appeared to be the case was that male adolescents in Glasgow were pigeonholed by society. More surprisingly, it was a range of adolescents who were affected, not just those who actively engaged in the subcultural economy.

Since I wanted to find out how (or if) adolescent males in Glasgow labelled themselves with specific social categories and practices, I decided to conduct research in a local high school in Glasgow (the names of the school, the local areas, and the participants are all pseudonyms). Through this, I hoped to gain a better understanding of how adolescent males viewed themselves within Glaswegian society, how they patterned their everyday social experiences, and how they orientated themselves towards violence.
5.3. Protecting Human Subjects

My first step in the ethnography was to obtain legal clearance to work with high school pupils. In order to work with children in the UK (as well as other vulnerable sections of society, including the mentally ill and elderly), potential researchers (or employees) have to disclose all previous criminal history (including convictions which did not lead to a criminal charge, and those criminal charges which were considered ‘spent’). This process is formalised under the Protection of Children (Scotland) Act 2003, meaning that in order to work with children, applicants are required to complete an advanced Disclosure Scotland form¹⁹. I was required to file an advanced Disclosure Scotland form, a research outline with the Department of Education (Glasgow) at the City Chambers, and an ethics form for the University of Glasgow.

Once these steps were completed, I had to find a high school in Glasgow which would be amenable to my request of unrestricted access to the school. My opening strategy was to contact several schools by telephone in order to arrange a meeting with the head-teacher. Several head-teachers questioned me on the goals of the research and expressed a willingness to allow a researcher into the school who could show a research methodology such as a questionnaire or opinion form. Most, however, had no idea what ethnography involved, and even in my haste to explain, head-teachers were typically too busy (or possibly bored!) to listen to my detailed methodology and research aims. Only the head-teacher of a school in the south side of Glasgow (which I named Banister Academy) arranged a face-to-face meeting, and in my desire to impress him with the efficacy of the research methodology and my personal investment in the research, I wore a suit and treated the whole process as an

¹⁹ There are three levels of Disclosure Scotland form: Basic, Standard, and Advanced.
interview. I came along with previous works similar to my own to demonstrate the legitimacy of what I was doing, my aims and objectives of the research, and the way I would go around my daily business. Thankfully, Mr Jackson agreed to my research, with several provisos: I would never be left alone with a pupil, and any recordings I did had to have parental permission (this last point was covered by ethical requirements). He explained to me that he had been actively redeveloping the school curriculum and streaming process to ensure a high quality of education for his pupils, as well as spearheading the transition from an older building in which the school was housed, to a new, high-tech, pupil-friendly building in a quieter area of Parkton. But more importantly, he was interested in bringing new experiences to the pupils, particularly the kinds of experiences (such as conversing with an ethnographer) which would typically be unexpected. Mr Jackson took the view that anything that exposed the pupils to life beyond Banister Academy could only be beneficial and enriching, and supported my research.

5.4. Banister Academy

Banister Academy is located in the area of Parkton (pseudonym), on the southwestern outskirts of Glasgow. The area is served by the M77, one of the main motorway arteries through Glasgow and was created from the redistribution of families in the crowded city centre area during the 1930s. It now has a population of approximately 30,000 inhabitants, with the total number of dwellings around 14,000. Approximately 7,000 of these are owner-occupied, 500 are private rented, 3,000 are owned by the Glasgow Housing Association, and the remainder is of ‘other social rented’ status. Of the 19,000 inhabitants who are of working age, approximately 13,000 inhabitants of Parkton are employed, 3,500 are full-time students, and 1,600 are long-term
unemployed. 5,000 receive of some kind of benefit support, while 700 also receive job-seekers allowance\textsuperscript{20}. There is no major industry in Parkton, although the recent development of a local shopping centre has provided a significant amount of new employment opportunities in the food and customer service sector.

Banister Academy was relocated from an older site in Parkton and rebuilt anew as a result of widespread high school reform in Glasgow (Watson 2008). The restructuring provided local authorities with significant savings, although the scheme has been locally criticised for overcrowding existing school infrastructure (e.g. \textit{Glasgow Save Our Schools Campaign}, a grass-roots movement which opposed larger class sizes and overcrowding). In 2007 the school had a population of approximately 690 pupils, with approximately 44% receiving a free school meals allowance. Approximately 10% of enrolled pupils have specific behavioural problems (including Asperger’s syndrome and autism), tailored education plans, or receive auxiliary support from outside the school (including pupils who have social workers or are in foster homes). Pupils of school leaving age (16 years old) whose family income was less than £31,528 (as of 2007\textsuperscript{21}) were eligible for an Educational Maintenance Award. The scheme was developed in order to encourage pupils to remain in full-time education past their Standard Grade exams, potentially resulting in better exam results before leaving school. In Banister Academy, several pupils were eligible for this award, although exact figures were unavailable from the school administration. The school day lasted from 8:50am till 3:35pm, with six periods of class instruction, each lasting approximately 50 minutes. There was a fifteen-minute breaktime from 10:50am to 11:05am, and lunchtime lasted between 1pm and 1:50pm.

\textsuperscript{20} Figures taken from \textit{City Ward Factsheet 2007}, available online at www.glasgow.gov
\textsuperscript{21} See www.emascotland.com for an outline of the Educational Maintenance Award.
Security was a prime concern in Banister Academy, with the entrance to the school guarded by electronic lock during class time, used to both deter unauthorised individuals entering the school during class time, and to monitor pupils who were late and/or truant school. In order to enter the school beyond ‘free time’ (which covered the time before school started, break time, lunch time, and home time), pupils and visitors had to contact the secretary’s office. Visitors signed their names in a visitor’s book, providing their affiliation, date and time of entry, purpose of visit, and vehicle registration number (if available). All visitors were required to wear a visible visitor’s badge during their time in the school, allowing both pupils and staff to see that the visitor had been sanctioned to enter the school. This process was followed by every visitor to the school, including parents, outside contractors, police officers, social workers, and myself. The school entrance was also controlled by several CCTV cameras which monitored the school at all times, providing a visible deterrent to vandals and potential troublemakers. At the end of the school day, all lower level windows of the school were covered by automatic shutters, preventing people from defacing or vandalising school property.

Pupils were required to wear school uniform, nominally consisting of a white shirt and school tie, although in practice there were many options available to pupils. Younger pupils wore a variety of outerwear, including black sweaters or white t-shirts, both with the Banister Academy crest on it. Some pupils did not wear the school tie, preferring instead to wear a black sweater and one of their own t-shirts under it. Others wore the white school t-shirt and no tie, while a few wore white shirt and tie with jeans and trainers. Generally, most of the younger male pupils wore trainers in order to play football during break times. Conversely, older pupils (particularly those in their final year) wore blazers, black trousers (or a skirt for
female pupils), and black shoes. There appeared to be numerous deployments of dress choice within Banister Academy, and as the ethnography progressed I began to realise that these choices had salient social meaning to the pupils.

5.4.1. Physical Layout of Banister Academy

Banister Academy consisted of five main areas: the science unit, the P.E. unit, the main teaching unit, the administration area, and the cafeteria. The P.E. unit was the only one not connected to the main school building, but was accessible by walking across one of the playgrounds. The fact that the P.E. building had several quiet nooks away from the view of the teachers was very important, a fact which will become relevant in later discussions.

The science unit and main teaching units were both multi-storied, resulting in many stairs and corridors which connected the various departments around the school. While the route from class A to class B was usually straightforward, there were other potential routes, offering pupils numerous diversions as they moved from classroom to classroom. While not all pupils took advantage of this fact, several did, using the most circumlocutory route between classes in order to minimise contact time with the teachers. The areas in the main teaching unit and the science block were never used for socialising during break time, due to the distance from the cafeteria and the lack of available seating. Instead, these areas were accessed by pupils only during class time and extra-curricular activities.

The administration building and cafeteria were joined together by the main foyer, and was the central hub of all school activity. All pupils had to walk through the foyer to get to the office, the cafeteria, the social area, the assembly hall, and the stairwell which connected to the main teaching unit. This part of the school was the
busiest due to the high concentration of administrative units (including the headteacher’s office, the reprographics room, the first aid room, the janitors office, the secretary’s office, and the parent’s waiting area) and the large amounts of social spaces used by pupils (including the assembly hall, entrance to the cafeteria, and entrance to the main social area). There was no way to avoid the foyer during the school day, and as such it became a particularly important locus of social interaction.

The cafeteria was used twice a day: break time and lunchtime. In Banister Academy, the cafeteria was the only place for pupils to purchase food using their top-up card\textsuperscript{22}, and for those pupils in receipt of free school meals it was the only legitimate outlet. Pupils who did not receive free school meals had the option to purchase food from other locations, including the nearby Ellington Shopping Centre. Since food purchased in the cafeteria was not allowed outside the cafeteria, those pupils who purchased food in the cafeteria were not allowed to leave until they had finished their meal. This severely limited pupils’ movements during lunchtime and made the cafeteria one area which was assiduously observed by teachers who were quick to reprimand any troublemakers.

Unlike my own experience of high school, there were no separate areas for pupils in specific years. Many schools have ‘common rooms’ which are used by pupils in the upper echelons of the school (usually 5\textsuperscript{th} and 6\textsuperscript{th} year), and these areas are out-of-bound to younger pupils. This allows older pupils to socialise away from the main school contingent, providing an opportunity for them to impose their collective personality on these areas. In Banister Academy, however, common rooms were non-existent. I heard several reasons as to why this was, the most common of

\textsuperscript{22}In order to combat bullying and theft, pupils are not allowed to purchase food with cash. Instead, pupils are given a ‘charge-card’ at the beginning of the school year which they then top up at a special charge machine. Money is then taken off this card at the point-of-sale in the cafeteria when food is purchased.
which was that a senior female pupil had decided to bring alcoholic beverages into school and was subsequently found in the common room being drunk and disorderly. This blatant breach of school rules led the school authorities to disband the common room, moving pupils into non-exclusive social spaces. While I never conclusively learned the real reason, the lack of common rooms had the effect of forcing younger and older pupils to share a limited set of social areas and resources.

Outside the school, apparently neutral areas of land were actually meaningful sites of social interaction and contestation. The majority of outdoor sites were utilised by male pupils playing football, and access to prime football ‘pitches’ was jealously guarded. The main sites for this included the rear of the science unit, outside the main social area, and the ash pitch at the rear of the school. Each of these areas had its advantages and disadvantages, and pupils occasionally clashed over ‘ownership’ of the best locations. A significant body of pupils congregated outside the front of the school during break times, usually across the street and near the woods approximately five minutes walk from the school. This was where the local snack van parked every day, providing pupils the opportunity to purchase sweets, crisps, and juice which were not available in the cafeteria. The pupils who socialised in this area usually smoked and were often orientated against the school. Moreover, it was not unusual to hear of local residents lodging official complaints against the school for vandalism of hedges and fences surrounding their property.

While the delineations between spaces may not be as well defined as those in Belten High (Eckert 1989: 45), the way the social spaces were used were significant in underpinning some of the divisions between the different CofPs in Banister Academy. It took me some time to become sensitive to these divisions, although once
I began to recognise them it was clear that space played an important role in Banister Academy, with particular rules of access within specific social groups.

5.4.2. Ethics and Issues

I began my ethnography at Banister Academy in February 2005, but was unaware of the difficulties, challenges, and obstacles I would have to overcome: bureaucratic, emotional, and professional (cf. Lee-Treweek and Linkogle 2000). By the end of the ethnography I found myself agreeing with Agar’s assertion that ‘ethnography truly is a personal discipline as well as a professional one’ (Agar 1996: 92). The degree of personal and emotional involvement I invested in the ethnography was beyond what I had expected. Moreover, actively seeking out prolonged interaction with the pupils of Banister Academy (and often being rejected) was exhausting and demoralising. My readings of ethnographic fieldwork unfortunately lulled me into a false sense of security and the erroneous conclusion that ‘ethnography was easy’. I quickly realised that I was ill prepared for the emotional and physical toil, and that the skills needed for success were far beyond simply talking to people and taking notes.

One of the main difficulties that I faced with regards to ethics was that my research design prevented me from telling the participants about my research focus. Since one of my aims was to investigate the potential links between language and violence among urban male adolescents, informing the pupils about this would have irrevocably affected my interactions with them. My concern was that if I were candid about the research aim, the pupils would enact behaviours they would assume I wanted to see. My strategy, therefore, was to inform pupils that I was writing an essay about how they spoke differently among their peer groups, and that I wanted to document if their linguistic features changed as they moved between friendship
groups. This was not a fabrication, since investigating linguistic variation according to CofP membership was a fundamental step in being able to chart whether different groups of adolescents actually spoke differently, a basic assumption in the discourse surrounding urban adolescents who engage in violent social practices. While my initial explanation was accepted, as the ethnography progressed (particularly in the final few months) I was more willing to divulge the main aim of the research since I was more familiar with the participants. Of the few times I attempted to provide more detail on what I did in the lab (such as measuring formant values), I was not surprised to find the pupils less than enthusiastic about the intricacies of my research, with comments ranging from an ambiguous ‘that’s cool’ to a more straightforward ‘and why is that interesting?’ It was difficult for the pupils to accept the amount of work that was required of a PhD, and even in my attempts to base explanations in structures which (I hoped) were familiar to them, I often struggled to convince them that what I was doing was useful and interesting.

The second difficulty I faced was obtaining informed consent. Over the course of the ethnography, the permission and confidentiality form took two shapes, each with its own advantages and disadvantages. During Year 1 of the ethnography, the form was very specific (following Johnstone 2000: 48) and laid out all the major components of the research, including a wordy research summary and detailed signature forms. This, however, did not have a very high return rate, most likely due to the unnecessary complexity of the form. For Year 2 and Year 3, I opted to use a simplified version of the Year 1 form with a very basic summary of the research project and requiring only one signature. Even though this achieved a higher return rate, some of the problems in getting a signed and returned form caused lengthy
delays. One of the most frustrating situations involved one pupil who took four copies and over a year of reminders before I received a signed copy back.

One of the other major problems I faced during my movement across different CofPs was that due to my age and institutional autonomy it felt to me as though I was regarded by certain groups as almost some sort of ‘trophy’. This was an issue since it felt that when I did not socialise with these groups they felt somehow rejected. Occasionally, I was unsure if the tension between the participants was related to some perception of ‘preferential treatment’ or something else entirely. Whether this affected the overall fieldwork is debatable, but it added an extra interactional dimension which I had not anticipated.

The last thing I had no control over during the fieldwork was my sex. Moore (2003: 41 – 42) notes that she had particular difficulty in being accepted into all-male groups, but no problems being accepted in all-female groups. While I had no issues talking and interacting with female pupils (for example, I conducted several interviews with female informants), I was aware that the emergence of sexual identity and gender politics during the adolescent life-stage offered potential complications. In one particular event after school, I was reminded of the thin line the ethnographer walks. One group of pupils (the Alternative CofP, discussed in more detail in section 5.5.1.) had a very close rapport with one another, so much so that at the end of the school day the females in the group would hug their friends (which included male friends) before leaving for home. On this occasion, I was on the periphery of the group chatting to one pupil when his friend came up to hug him. As she was about to leave, she approached me and asked for a hug. While it was clear that her act was a gesture of friendship and inclusivity to the group (individuals who were regarded as outside the group were never offered hugs), there are obvious ethical implications at
play here. My rejection of an apparently friendly gesture could have easily damaged my relationship with this individual (although thankfully it did not), but reciprocating could have easily compromised my ethical integrity. Indeed, the situation brought home the need to be cognisant of the interactional norms of a group, as well as the fact that even after prolonged contact with a group, there will be situations where a researcher might be unable to strike a middle ground in their response to that situation.

5.4.3. Getting Established

One of the most difficult things the ethnographer faces is obtaining initial access to the community or group he or she wishes to document. An ethnographer attempts to gain access to a community of strangers beyond the most usual means of entry (such as friendship ties and personal life experiences) and aims to have those individuals divulge their personal social history in the interests of research and documentation (Agar 1996: 91). This social history is often given without any sort of reciprocal benefits between the ethnographer and the participants, and these relationships are typically played out in asymmetric power relations (Eckert 2000: 70 – 7; Agar 1996: 212). It is more difficult to obtain access to those communities or groups considered ‘at risk’ and where asymmetric power relations are more apparent, including relationships with the elderly, pre-adolescents, adolescents, drug-users (both recreational and habitual), alcoholics, or prisoners (Bourgois 2003).

Consequently, the saying that ‘first impressions last’ was one that I was acutely aware of during my first voyage into Banister Academy. In my first day in school I realised that I was attempting to interact with individuals almost ten years younger than me, all of whom were from different backgrounds to myself, and all of
whom were naturally curious and/or suspicious of my appearance in a high school. Few pupils could sport a full-blown beard and sideburns like I did (although some did), and even though I tried to dress as inconspicuously as possible with t-shirt and jeans to minimise the generational gap (Cheshire 1982; Eckert 2000: 71; Bryman 2008: 408), it was clear that I did not blend in. One of my main concerns was ‘how do I talk to these pupils?’, quickly followed up with ‘how do I make these pupils think that I’m not weird?’. It was clear that the pupils were aware of the difficulties adults had speaking to them.

In excerpt 5.1. I mention a few of my initial worries and observations, namely that the level of physical violence (line 8) was something for which I had been unprepared. But Peter believes that my first reaction was how I was going to talk to ‘wan of these cunts’ (line 9 – 10). I believe that this indexes several things regarding the relationship between adults and adolescents, and more specifically of the relationship between the ethnographer and the informants. One of the first things to note is Peter’s belief that very few adults are interested in talking to adolescents beyond teaching, lecturing, or reprimanding them. The fact that I was interested in finding out about their day-to-day lives was odd for some pupils, particularly given the fact that until I arrived in Banister Academy very few pupils had any opportunity to speak openly...
about their lives. The second issue I believe Peter’s comment indexes is his belief of how adults view adolescents. The word *cunt* functions here as a self-referential derogatory term (rather than an external insult to an interlocutor or absent third-party) and could be glossed as ‘group of adolescents’. This is perhaps indicative of Peter’s opinion that adults hold such negative views of adolescents, and the fact that no other swear words which carry less connotational load are used here (such as *fuckers*, *bastards*, or *arseholes*) suggests that the word is chosen for a deliberate conversational purpose of marking out an ‘us versus them’ mentality.

It did not take long to find a group of individuals with whom I felt comfortable enough to chat and ask questions. More importantly, however, they were happy to be recorded. The conversations I had (both on and off-tape) showed many of the informants to be open, funny, and generous with their time. This went against many of the contemporary views held in Glasgow about adolescent males, and part of me did not expect to garner such a positive response to being recorded (cf. Moore 2003: 47). The recordings also showed a different side of the participants in comparison to large group interactions. In my position as ethnographer I observed the shift from large-group dynamics to smaller conversational triads, sometimes over the course of a few hours. The fact that I was not afforded any institutional authority meant that I was outside the ‘establishment’ of which many of the pupils were suspicious, ultimately facilitating the recording process. As such, I became something of a confidant, although as Eckert (1989: 34 – 35) points out, this can be a perilous position. As the ethnography progressed I realised that the pupils had very few non-judgmental adult characters in their life who would not criticise or disapprove of their activities. This was made most apparent to me during one exchange I had in Year 2 of the ethnography with Mark and Phil. During a discussion regarding an ex-girlfriend of
Phil’s, the narrative thread was stopped and they began questioning one another on whether they should continue with their story, mindful of the fact that the tape recorder was on. I offered to pause the tape so that what they said would be said in confidence, as well as reminding them that they were not required to tell me anything with which they did not feel comfortable. Instead of accepting either of these offers, I was told one of the reasons why they were willing to divulge particularly socially sensitive information.

1 Mark: I actually trust [RL] more than anybody else, well apart fae [Phil] obviously. I trust [RL] more than a lot of my pals.
   RL: Aw thanks, nice [tae hear.
5 Phil: [I know actually.
   Mark: I don’t know how.
   (1.6)
   RL: See when you see me what like, maybe two or three times a week?
10 (0.6)
   Mark: I know.
   (1.0)
   (inaudible)
   (1.7)
15 Don’t know.
   (1.8)
   Phil: Mhmmm.
   Mark: At least that I tr-
   (Obviously you’re a trustable guy)
20 Phil: A trustable character.
   RL: Thanks very much.
   Mark: A trustable character.
(Excerpt 5.2. Mark and Phil, Sports CofP, Year 2)

This particular event made me aware of the fact that these adolescents placed a certain degree of trust in me, and the event highlighted this fact to me.

The switching between Banister Academy and my personal life at least three times a week also became very stressful. Agar (1996: 102) notes that conducting ethnography which takes place in a researcher’s own society is often more difficult than ethnography which takes the researcher into a completely different society.
While working in your own society, you still have the stress of detached involvement, compounded by the substitution of frequent repeated minidoses of culture shock in place of the one huge jolt that you usually get in more traditional forms of fieldwork. (Agar 1996: 102 – 103)

The fact that I knew the area in which the school was located and the fact that I did not have to travel outside of Glasgow, exposed me to a culture which was simultaneously familiar and foreign, and it was sometimes difficult to reconcile this. One of the most obvious occasions where my ethnography and personal life clashed was during the weekend where I worked at a local visitor centre. Since the centre was a popular place for families to visit, there were a few times where my ethnography would literally ‘come to work’ with me through pupils visiting the centre with their parents. Such events were obviously unexpected (and initially disconcerting), but I realised that my ethnography did not stop when I walked out the doors of Banister Academy. I believe those events were ultimately beneficial in developing my relationships with the pupils since meeting me in an environment beyond the school grounds gave the informants opportunity to witness first-hand the fact that I was a ‘normal’ person like them, someone who had to work, who had social contacts outside the school, and who had a life beyond research. There was also the legitimacy I was given through my employment by a well-known public attraction, something I believe carried over to my fieldwork.

As I spent more time in Banister Academy, I was introduced to more and more pupils, some of whom would introduce me to new informants, others who were the provincial ‘dead-end’ with very few contacts outside their immediate friendship group. This ‘snow-balling’ method of meeting new individuals worked very well, but it was occasionally hampered by the fact that sometimes there were no new contact paths to exploit, resulting in an ethnographic cul-de-sac. As such, it was occasionally
difficult to branch out to completely new social groups if I did not have a legitimate contact within that group. This was one of the major blocks in my attempts to gain access to particular groups of pupils within the school. I also did not have the privilege of a gatekeeper who could facilitate contacts, provide opportunities to talk with new informants, and generally smooth my progression through the social fabric of Banister Academy. Such a gatekeeper is taken to be a given in many ethnographic studies (Patrick 1973; Whyte 1984: 42 – 51; Agar 1996: 80; Eckert 1989: 31, 2000: 75; Bryman 2008: 407), yet in the three years I spent in Banister Academy, I never met anyone who fulfilled this role. Despite the lack of a gatekeeper, however, I was still able integrate myself with many of the pupils and groups within the school. It did not take long to recognise particular constellations of individuals who appeared to comprise (relatively) unified groups. It is to these Communities of Practice I now turn.

5.5. The Communities of Practice

Over the course of the three years in Banister Academy, I met many pupils from varying social backgrounds. While my interactions with these pupils served as the backbone of my ethnographic observations, as I moved through the social connections in the high school I began to notice particularly consistent groups. Table 5.1. outlines the main CofPs I encountered during the fieldwork, and the number of members in each one. All the labels for the CofPs were chosen by me and, with the exception of ‘ned’, were not used by the participants.
<table>
<thead>
<tr>
<th>CofP</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
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<td>✓</td>
<td>✓</td>
<td>3</td>
</tr>
<tr>
<td>SPORTS</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>3</td>
</tr>
<tr>
<td>NED</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>3</td>
</tr>
<tr>
<td>SCHOOLIES</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>0</td>
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</tbody>
</table>

Table 5.1. Breakdown of the main CofPs by year

A member was categorised to a specific CofP through a combination of factors: self-identification, other-identification, and researcher-identification. This, however, did not prove entirely satisfactory due to the occasional mismatch between each of the categories. For example, while a participant might not identify as belonging to any one category, other people were only too happy to categorise that individual as a ‘goth’, ‘ned’, or ‘geek’. Contrastingly, individuals might identify as one category while other people in the school categorised them differently. I decided that provided there was agreement over at least two of the identifying methods (self/other/researcher-identification), a participant would be categorised as belonging to that particular group. The labels for each CofP were usually established by myself, but were informed by the social practices in which the CofPs engaged. I discuss this point in more detail under the separate sections for each CofP.

Membership was also determined by the social practices in which an informant engaged. Unlike Mendoza-Denton (2008), however, it was initially difficult to determine a particularly reified set of practices which would establish an individual as belonging to any one CofP membership. The practices that became important in this respect emerged over the course of the ethnography, and in conversations with the informants I became aware of those social practices which held particular social significance, and those which did not. Within the discussion of each CofP, I outline the practices which were relevant to the members of that CofP, and demonstrate how
each CofP had a set of shared social practices which distinguished it from other CofPs.

As each year passed in Banister Academy, I integrated myself more firmly within new CofPs. My most developed relationships were with the Alternative and Sports CofPs, primarily due to the fact that I had spent three years getting to know each of the members. I was introduced to the Schoolie CofP in my last year in Banister Academy. The Ned CofP was perhaps the most difficult for me to connect with, and I believe that my interactions with them did not have the same level of familiarity I had developed other CofPs. Nevertheless, I found that members from all CofPs shared many of the same hopes, dreams, and fears as one another, and that despite their diverse social practices there were many threads of commonality.

5.5.1. The Alternative CofP

The Alternative CofP was among the first set of pupils I was introduced to in Banister Academy when I began the ethnography in 2005, and was one CofP I maintained relations with throughout the entire course of the fieldwork (in addition to the Sports CofP). Over the course of the ethnography, I interviewed Andrew, Jack, Kevin, Matthew, Peter (who was a Floater member in Year 1), and Ray, all of whom I identified as belonging to the Alternative CofP (the members never used the label ‘Alternative’, but it was clear they formed a group comprising of ‘goth’, ‘mosher’, and ‘emo’ sub-identities).

The Alternative CofP varied widely in both its composition over the years. In Year 1, the members I recorded were Andrew, Jack, and Neil. By Year 2, however, Jack and Andrew had moved out of this CofP into a peripheral position and I was not able to record them at all. Although Neil was still considered a core member, due to
timetabling conflicts I was also not able to record him at all in Year 2. Therefore, I recorded other members who I had not encountered in Year 1, including Kevin, Matthew, and Peter. Matthew was regarded as a peripheral member (similar to Andrew and Jack), while Kevin was considered a core member. Peter, over the summer, had moved from being a floater in Year 1 (in that he moved between both the Sports and the Alternative CofP), to being a relatively core member of the Alternative CofP. By Year 3, Peter and Ray, had become the central members of the Alternative CofP, while Neil continued his move out to the periphery. This was partly due to Neil taking an access course at a local community collage, which meant that he was away from the school two days a week. His inability to participate in the full activities of the CofP, as well as his exposure to life outside Banister Academy, heralded a significant change in Neil’s attitude towards leaving high school, his manner of dress, and the friendship groups in which he participated.

One of the first things I noticed about the Alternative CofP was that all members participated in (and typically rejected) very few ‘mainstream’ practices, including particular styles of clothing, sports, and music. Instead, the members participated in several social practices which would be considered ‘alternative’ from a sub-cultural standpoint (e.g. Hebdige 1979), as well as by their peers in Banister Academy (this was the main reason I called them the Alternative CofP). Although the members differed in their engagement with a specific way of being ‘alternative’ (i.e. not all the members were ‘goths’ or ‘moshers’), they clustered around the idea that they were different from the ‘mainstream’. The core and peripheral members did, however, distinguish themselves from one another through clothing, and this did not vary across the years. Wearing black leather jackets, biker boots, and rock-metal branded t-shirts were often sufficient enough to be recognised as a ‘goth’ (Hodkinson
In line 2 – 4, Andrew comments on the necessary appearance requirements to be labelled a ‘mosher’, including wearing black clothing and having long hair, both of which Neil had in Year 1. From line 5 onwards, however, Andrew comments on the necessary appearance requirements to be labelled a ‘goth’, noting that Neil was also partly adopting this identity. This would suggest that the lines between different orientations to extreme Alternative style (and the goth and mosher styles are substantiations of extreme style) were not so clearly defined, causing difficulty in categorisation. Both Andrew and Jack were not as extreme in their clothing choices, but they signalled their Alternative orientation in other ways. Andrew regularly wore wrestling or branded band t-shirts under his school shirt, while Jack was regarded by many of the other members as having an ‘emo’ style. This refers to a particular adolescent style which favours striped scarves and jumpers, dark hair with a long
fringe combed over the eyes, skinny jeans, and skater shoes and is defined by the The Urban Dictionary (an online dictionary with user-generated definitions) as,

[a] genre of soft-core punk music that integrates unenthusiastic melodramatic 17 year olds who don’t smile, high pitched overwrought lyrics and inaudible guitar rifts with tight wool sweaters, tighter jeans, itchy scarves (even in the summer), ripped chucks with favorite bands signature, black square rimmed glasses, and ebony greasy unwashed hair that is required to cover at least 3/5ths of the face at an angle (http://www.urbandictionary.com/define.php?term=emo).

Thus, while Jack had a clothing style which was distinctively different from the mainstream, it was also different from the goth or mosher styles characterised by Kevin and Neil. As the ethnography progressed, however, Jack moved to the periphery of the Alternative CofP, and became more extreme in his emo style.

The other major social practice the Alternative CofP members engaged in was listening to rock and metal music, including Nirvana, Cradle of Filth, Iron Maiden, Metallica, and Slipknot.

1 RL: So, how come- like-
What do you all have in common then?
Andrew: We listen tae music.
We play the same games.
Stuff like that, aye.
We can talk tae each other.

5 RL: So youse like the same kind of music?
Jack: Aye, I like-
Andrew: (Some of them.)
I like some of the songs, (we like), in other words.
Neil: Andrew watches aw the wrestling.
He’s intae wrestling stuff,

10 but a lot of bands that have done wrestling songs have come through intae like-
Manson done=
Andrew: =The Beautiful People for Smackdown theme

15 RL: [Right.
Neil: Em-
Survivor, they’re quite good.
(Excerpt 5.4. Andrew, Jack, and Neil, Alternative CofP, Year 1)
Claiming musical affiliation as a precursor to claiming status as a goth or a mosher, however, was fraught with internal politics (McClary 1994: 31; Williams 2006), as some members viewed others as being ‘fake’.

1  RL:    But Peter kind of acts like you guys as well.
Kevin: But he’s a wanna be.
RL:    Peter is?
Kevin: Yeah.

5  He he wears like Cradle shirts and it’s like,
   (0.6)
   right.
   (0.9)
   Y- y- y- you don’t own any other merchandise.

10  You don’t own-
    You own their songs on an MP3 player,
    but you don’t know the names and you don’t know
    the words.

15  Right.

(Excerpt 5.5. Kevin, Alternative CofP, Year 2)

In excerpt 5.5. Kevin claims that merely listening to the music is not enough to claim ‘Alternative’ status (my label), but rather that there has to be more of an investment, arguing that owning other band merchandise, knowing the song titles as well as the lyrics, and most importantly, attending gigs, are absolutely vital prerequisites to a) claiming to be a mosher or a goth and b) being a fan of a particular band. His claim that Peter is a ‘wanna be’ is at significant discord with Peter’s own recognition of his status, as excerpt 5.6. shows.

1  RL:    So how’s the goth transformation comin along
Nathan?
Nathan: Oh [good.
Peter:    [I’m very we-

5  I’m I’m takin him tae a new stage of goth.
   (1.3)
I’m takin him a bit more advanced,
   than what he is in.
   Just.

10  (0.5)
Way below me in advance.
If you know what I mean.
As in there’s [like,
Matthew: [He’s coming along quite great
15 actually=
Peter: =It’s a food chain.
There’s me.
There’s Neil and me.
Kevin.
20 Nathan: [Then me.
Peter: [There’s people like,
there’s people like Nathan
and Susan and aw that.
25 And then there’s fuckin emos
which are doon the bottom.
Nathan: EMO!
(1.2)
Matthew: Sorry for that.
30 RL: [So-
Peter: [So me, Neil and Kevin have to be at the top
of the food chain.
RL: Right.
(1.3)
35 [[Nathan doesn’t]] look very goth.
Peter: I’m gaunae get him tae catch up.
[I’m gaunae get him-
Nathan: [Not yet.
I’ve got the gloves,
and I’ve got a pair of trousers.
40 Peter I’ve got troosers.
Everything.
(excerpt 5.6. peter and nathan, mixed conversation, year 2)

Excerpt 5.6. focuses on the ‘transition’ of Nathan to a goth (i.e. from the
Sports CofP to the Alternative CofP), with Peter arguing that he is more advanced in
this process than Nathan. Peter states that there is a hierarchy, with himself, Kevin,
and Neil constituting the higher ranks of the CofP. He also emphatically places emos
at the bottom of this hierarchy, which would accord with Jack’s marginal participation
in the Alternative CofP. Despite Nathan’s claim of being a ‘goth’ (and thus an
Alternative CofP member), I did not observe any convincing evidence that he had
actually achieved this status. He continued wearing the same kinds of clothing that the
other Sports CofP members wore (discussed in section 5.5.2), he continued playing
football (and never took up wrestling), he did not have the same financial (or emotional) investment in Alternative music styles, and he rarely instigated any conversations based on musical taste (as the other Alternative CofP members did). Nathan’s lack of engagement could be related to the fact that he did not have a great deal of disposable income to maintain the same level of involvement as more established members of the Alternative CofP. Despite the fact that Nathan claimed a ‘goth’ identity, he did not engage with the necessary social practices.

What was more convincing, however, was Peter’s transition. In Year 1, Peter fell between the Alternative and Sports CofPs, listening to Alternative style music but also playing football and rugby with the Sports CofP. He wore silver jewellery (those in the Sports CofP wore gold), and split his socialising between both CofPs. In essence, he ‘floated’ between two very distinct social identities.

1 Mark: [Peter’s] a, eh, he’s a mosher.
   Peter: I’m a mosher.
   I’m mixed in wi the Goths and my group here, my other group, my pals.
5 I’m mixed in wi the two of them.
   All of them come in.
   (Excerpt 5.7. Peter and Nathan, mixed conversation, Year 1)

The fact that Peter had moved between CofPs was evident in one argument Nathan and Peter had in Year 2 regarding Peter’s social movements.

1 RL: Right, when did you paint your nails?
   Nathan: Sweaty minge.
   Peter: Ages ago.
   Nathan: He didn’t.
5 RL: What for?
   Nathan: Laura=
   Peter: =Laura
   RL: Eh?
   Peter: I wanted tae.
10 RL: Is this part of the, (0.8)
   Nathan: The [phase
Peter: [W- naw.
15 Nathan: The phase he’s [gaun through.
RL: [Goth look.
Peter: Mhmmm.
RL: Right.
(0.7)
20 Peter: Don’t call ([kn]) me a mosher.
RL: Are you no a mosher anymore?
Nathan: Um- he’s never been a mosher.
RL: You were a bit like a mosher last [year.
Peter: I’m a skater,
25 a mosher,
and noo I’m a goth.
RL: Right=
Peter: I’ve been a goth for three year.
RL: You’ve been a what?
30 Peter: [[A goth.
Nathan: [[]You haven’t ([havne]) been a goth for three
year.
Peter: I have.
Nathan: Naw you haven’t.
35 (0.9)
Peter: [[I am.
Nathan: [[Don’t talkin pish.
Peter: How the fuck are you supposed tae know?
Nathan: Cause I used tae hang ([hnj]) aboot wi you last
year and you were a fuckin ned=
40 Peter: =EMO.
Nathan: Naw you’re no an emo.
Peter: You’re an [emo.
Nathan: YOU’RE A NED.
45 Peter: You’re an emo.
Nathan: Oh!
Peter: Emos tryin tae fight.
(Excerpt 5.8. Peter and Nathan, mixed conversation, Year 2)

Here, Peter and Nathan argue about Peter’s status, with Peter maintaining he
has been a goth since 2003 (the recording was done in 2006), a fact with which
Nathan vehemently disagrees, instead stating that Peter used to be a ned. The use of
ned and emo as insults demonstrate a trenchant view of these social categories as
somehow deficient and potentially socially worthless. This is most obvious in line
47, where Peter’s comment suggests that emos are physically incapable of fighting,
especially against someone who claims goth identity (the social category of ‘ned’ is
discussed in section 5.5.3). This is not only narrated for the benefit of the
ethnographer as a meta-comment on the inefficacy of emo’s fighting ability, but also serves to emphasise a group belief that emos are physically inept.

The social practice of listening to specific kinds of music also intersects with another social practice of the Alternative CofP: wrestling. When I was told about the one sport in which many of the Alternative CofP males participated, I was unsure as to how far this participation actually went. To the best of my knowledge, there were no local wrestling groups in the area, and the school did not run an extra-curricular wrestling class after school. My own experiences of high school in the late 90s meant I knew about the World Wrestling Federation, but I was still surprised to discover that this was the kind of wrestling in which they were participating. The members did not actually participate in organised bouts, but rather played videogames based on the sport, watched the games both live and on T.V., and ‘wrestled’ one another while socialising with one another outside of school. The following narrative by Kevin demonstrates the physicality and competitive nature of the event.

1 RL: Right. So how did you learn this wee move? (1.2)

Kevin: Watchin (the comic).

5 RL: Right.

Kevin: See if you- Eh, because I do wrestlin-

RL: Uh-huh.

Kevin: It’s if you get like (really good) they can dae certain stuff wi their body.

10 RL: Uh-huh.

Kevin: Which I d- I done this wi Neil, eh,

15 (0.6) naw Andrew, the other time.

(0.7) And it was a-

I d- done that,

20 and he hit himself there, and I grabbed his wrist and I, (0.8) pulled it right doon his back.

RL: Uh-huh.
Kevin: Other wan wi Neil is em, he went he went tae dae that and I grabbed his arm ([ɛːm]), and I pulled him towards me and I whipped his arm ([ɛːm]) in.

RL: Mhmmm.
Kevin: (Went up)-
(0.8)
I like, put my arm ([ɛːm]) underneath his back, (0.9) wi that and grabbed his head and started yankin his arm ([ɛːm]) roon.

RL: Mhmmm.
Kevin: So he’s bas-
He’s basically chokin himself out.
RL: Right.
Kevin: And I- I’m not doin it.

RL: Uh-huh.
Kevin: =tries tae pull it away, it’s making little and less space=
RL: Right.

(Excerpt 5.9. Kevin, Alternative CoP, Year 2)

Despite the important role wrestling plays in defining this CoP, some members were aware of the negative repercussions involved with admitting to enjoying the sport, as Andrew highlighted during a conversation in Year 1.

1 RL: Right, so what-
On the other, the other side of that, what’s cool?
Andrew: Eh, I don’t know.
Jack: The same.

5 Just like, if you like it you like it.
Theirs nothing you can really dae aboot it.
RL: Right, fair enough
Jack: Guitars are cool.
Andrew: Like the websites you go on and aw that.

10 RL: Uh-huh.
Websites you go on?
Andrew: Like, I go tae wrestling and stuff like that.

Other people would look and go,
Andrew’s recognition of the need to keep this particular social practice low-key because of the negative views other pupils have towards those in the Alternative CofP shows that he is aware of the fact wrestling does not enjoy the same status as other, more mainstream, sports (primarily football and rugby).

5.5.2. The Sports CofP

Along with the Alternative CofP, the Sports CofP was one which I was introduced to at the beginning of the ethnography. I was introduced to the members of this CofP by being invited to play a game of football at lunchtime one day. Despite my reservations, I joined in as well as my poor football skills would allow. It was from that point on the Sports CofP members became central figures in my ethnography.

The membership of this CofP was fairly consistent throughout the fieldwork (unlike the Alternative CofP), and comprised of Mark, Nathan (who claimed he was actually a ‘mosher’ in Year 1), Phil, Trevor, and John.

One of the main social practices in which the Sports CofP engaged was sports, specifically football and rugby. This involved playing, watching, and discussing sport, as the excerpt between Mark and Phil shows.

---

23 I was never any good at football during my own time at high school, so I was naturally nervous about demonstrating my complete lack of football skills in front of a group of adolescents I barely knew. I believe, however, that my willingness to participate spoke volumes!
Anyway:::
Oh here, I’m a (inaudible).
In the Champions League game.
RL: Who’s playin tomorrow?
5
Mark: Eh.
Phil: Barca.
RL: I totally don’t know.
Who?
Arsenal and Barcelona?
10 Mark: Champions League
RL: Right.
Phil: Hopefully Barca win it.
Mark: (inaudible)
Phil: Aye, did-
11 Eh, UEFA cup final last week. Aw that was sho-
I thought- M- Middlesbourgh played well.
Naw.
Sorry sorry.
Seville right, they played the better fitba right, but-
S- M- Middlesbrough should be-
should’ve been leading two [wan.
Mark: [Two wan.
They- they had a penalty appeal disallowed.
But it should’n’t’ve been a penalty right.
20 And then-
Vaduka’s - eh-
shot, but it was some save by the goaly.
(inaudible)
Phil: Naw it wasnae a sitter.
25 That was-
He done it everything perfect.
Mark: That bit.
Phil: What bit?
Mark: Um, just before hauf-time.
30 (1.2)
That’s a pure sitter.
(1.7)
Did you no see it at aw?
Phil: I’ve told you wance before don’t even try and talk
fitbaw [wi me.
35 Mark: [Did you watch the game?
Phil: I was watchin the game aye but don’t talk aboot fitbaw
wi me.
(1.5)
40 I hate him talkin aboot fitbaw wi me.
Robert: How?
(0.7)
Phil: Cause he always tries tae prove me wrang.
(Excerpt 5.11. Mark and Phil, Sports CofP, Year 2)

It is clear that this narrative functions as a form of group cohesion could be interpreted as relatively cooperative (Cameron 1997: 55 – 57; Coates 2003: 58 – 65).
The narrative opens with a discussion of an upcoming game of which the ethnographer has no knowledge (line 4), and both Mark and Phil then share this knowledge collaboratively (line 6 and line 10), building on each other’s shared knowledge of the game. Phil then offers a commentary on a game played the week before, to which Mark is able to add his own commentary (line 17 – 22). Such a pattern of collaborative talk, especially in context of sporting events, is characteristic of conversations between men (Cameron 1997: 50). In line 24, however, there is a subtle shift in the pattern of the conversation, where Phil disagrees with Mark’s statement that the shot ‘was a pure sitter’. Here, the talk changes from collaborative to competitive, with Mark attempting to use his superior attention to detail and knowledge of the game to ‘out-do’ Phil in line 33. Phil, however, offers a quick rebuttal in line 34 – 35, establishing a challenging stance to Mark’s statement. The role of this conversation, then, is two-fold. It purposively builds a cohesive relationship between the two interlocutors in terms of the deployment of shared cultural knowledge, but it is also simultaneously a contrastive conversation where the speakers openly challenge one another. Ultimately, such an interpretation raises questions regarding the notion that talk amongst males (particularly in all-male groups) is inherently competitive, while talk amongst women is inherently cooperative.

Beginning with the ‘dominance’ paradigm (1973), Lakoff argues that the position of women as socially powerless has consequences for the status of their language, where “strong expression of feeling is avoided, expression of uncertainty is favored, and means of expression in regard to the subject-matter deemed ‘trivial’ to the ‘real’ world are elaborated (Lakoff 1973: 45)”. Such features tend to lend
themselves to being interpreted as ‘cooperative’, in the sense that they do little to threaten an interlocutor’s positive or negative face (Lakoff 1973: 45).

Contrastingly, men’s language is viewed as ‘powerful’ (by virtue of their position in the social hierarchy), and ‘competitive’ (by the presence of more interruptions, longer conversational turns, arguments, commands, and oppositional stance-taking, following Tannen, 1994: 40). In support of this claim, Maltz and Borker (1982: 170) argue that the social function of men talk is:

1. To assert one’s position of dominance
2. To attract and maintain an audience
3. To assert oneself when other speakers have the floor.

Indeed, researchers such as Coates (2003: 116) argue that ‘competition is an important aspect of dominant versions of masculinity’, and her analysis of data collected from groups of men appears to show that men use conversations as an arena in which to act out their ‘competitive’ nature. Although Coates emphasizes the fact that male conversations often have a high degree of co-operation, she nevertheless argues that a defining characteristic of male conversations is the fact that they are ‘often about competition and individual achievement’.

Such findings have been repeated in a range of sociolinguistic research, and one could argue this finding is now part of the folk mythology of men’s language. This is perhaps best summarized by Johnson (1997: 9) who states that “‘men compete, women cooperate’ has become the familiar catch-phrase where [language and gender research] is concerned”.

Researchers working within the social constructionist model, such as Penny Eckert and Sally McConnell-Ginet (2003), however, argue that the simple
discrimination between men as competitive and women as cooperative neglects any
discussion of the social factors which underpin such a position (Eckert 1993: 33):

We believe that [women] are every bit as driven to compete as men. Only the
domain in which they compete, and the means and form of competition, are

Eckert and McConnell-Ginet’s main argument is that while the socialization of
men tends to support (and in some cases actively encourages) competition, the
socialization of women does not, and this has ramifications for how we view the
supposed contrastive nature of male versus female speech. More specifically, since
the social value of women tends to be centered around ‘personal worth’ (Eckert and
McConnell-Ginet 2003: 124), the concerns with status, social inclusion and social
exclusion is often not viewed as a legitimate form of social competition compared to
the competition between males (which tends to focus on the visible accumulation of
goods and social power).

I would argue the binary distinction between male speech as competitive and
female speech as cooperative has several drawbacks, one of which is the limitations
such a distinction places on our analytical focus. By taking such an binary approach
of competitive versus cooperative speech, it may be difficult to recognize (and
subsequently interpret) patterns of discourse which may not appear to fit in with our
expectations. As Cameron (1997: 48) argues:

Analysis is never done without preconceptions, we can never be absolutely non-
selective in our observations, and where the object of observation and analysis
has to do with gender it is extraordinarily difficult to subdue certain expectations.

Indeed, her insightful analysis of ‘gossip’ among heterosexual university males sheds
light on the cooperative work which occurs within apparently ‘competitive’ types of
discourse, as does Eckert’s work (1993) on the same feature among adolescent girls.

Analysis of the kind which attempts to uncover the differential layers of discourse strategies (whether cooperative or competitive) show how interlocutors can simultaneously be involved in conversational aims which although competitive and face-threatening, might also be supportive and cooperative in a larger social sense, and the qualitative analysis of my own data shows remarkably similar patterns of ‘competitive cooperation’ among adolescent males in Glasgow.

Although there are other examples of similar conversations from other CofPs, they were never placed in a sporting context. While the above excerpt demonstrates clear issues of power dynamics, it also demonstrates that sport is an important social practice around which the members create their specific social identities. The members of this CofP usually played football on the concrete pitch behind the science block, although this had its dangers. The windows of the science classrooms overlooked the pitch, and a high ball could ricochet off one of the windows would often cause the teacher to move the players away from the area. In addition, there was a low building adjacent to the pitch which, by the end of the year, was home to many enthusiastically-kicked footballs. Despite these drawbacks, the Sports CofP would regularly frequent this area for impromptu games, and usually many other pupils (most of whom did not socialise with the Sports CofP members outside of this time), would join in as well. This was often a source of friction between the pupils, as excerpt 5.12. shows.

1 Nathan: There used tae be Dave, but don’t hang aboot wi him anymore.
RL: Right.
Nathan: He’s a traitor.

5 Phil: That’s Alex Raleigh
RL: [[Right.
Nathan: [[Wi ginger hair.
Phil: We call him ‘Bigfoot’ cause he’s got big feet.
Cool, so he’s a traitor?

Yes.

What happened?

Well, first-

He used tae be awright, right?

He used tae always play fitba’ wi us, right?

And then we did-

Wance, I was bringin fitba’s in.

I brought ma fitba in a couple of times.

And then cause it went flat, right?

And I couldnae bring it in,

cause I couldnae find ma adaptor for my pump.

Mmmhmm.

He went-

He went and hung aboot wi John Helens.

He’s been papped oot of school noo\textsuperscript{24}, right, for good.

But he was hangin aboot wi him,

playin wi the-

playin wi the fitba.

See when we brought wan in,

he came and hung aboot wi us.

Right.

So-

Just recently, wasn’t it?

We-

Cause we wouldnae bring a ba’ in,

none of us had a ba’ tae bring in.

Mmmmm.

He kept on moanin tae me.

Went like that tae him,

‘how you no bring a ba in?’

‘Ma ba’s too good tae bring intae school’.

That’s what he thinks.

‘Aw, I’ve got Euro 2004 but’.

What’s the point of bringin in-

What’s the point in havin a ba’ if cannae play fitba’ wi

it?

(Excerpt 5.12. Nathan and Phil, Sports CoP, Year 1)

Many instances of conversation about sport can also be found with regards to rugby, particularly since all the members of the Sports CoP played for the school’s rugby team. The fact that it was this particular group which had founded the school’s first rugby team was an achievement of considerable pride in the CoP, and one which they were keen to recount on many occasions.

\textsuperscript{24} papped oot, lit. ‘expelled’
We keep on puttin, like-
See every time we move up a year,
we put- we put another year on tae rugby.

Mark: Cause it’s only supposed tae be first year tae third year.
Peter: I know.

RL: Right.
Mark: But when we go tae fourth year we’re gettin it again.
Peter: See every time, see every-

Mark: We’re the most people that turn up.
Peter: We started-

Mark: From first year, we started it.
Peter: We started the rugby as soon as we got in.

Then we started the third year team,
and if any- if we’re aw still here in fifth year, we’re startin that as well.

Mark: We actually phoned up the coach and asked him tae come.
Peter: We got a coach and Mr McDonald,

but then Mr McDonald came and helped us man.
Then Miss McIver came.

(Excerpt 5.13. Mark, Nathan, and Peter, mixed conversation, Year 1)

This visible and lasting contribution to the school was something they achieved under their own direction and initiative, and it was something to which they could claim ownership. This sense of ownership was usually denied to them through the more mainstream academic routes, since none of the Sports CofP members were academically outstanding (although Phil achieved one of the school’s highest honours by being awarded ‘Pupil of the Year’).

In terms of dress, the Sports CofP style was not as clearly defined as some aspects of the Alternative CofP style (especially the goth/mosher style). One thing which was consistent across all members, however, was that they all wore trainers instead of shoes, facilitating their regular participation in football during breaktime and lunchtime. There was little consistency with regards to sweaters and shirts, with
each member varying depending on the clothes available to them. On rare days, each of the members would wear a white shirt with the school tie, but more usually each would wear either a) the school sweater with a t-shirt underneath, or b) the white school t-shirt (with or without a tie), and they all wore regular black school trousers during school time. All three members wore gold jewellery, including chains and rings. They also enjoyed watching television, including popular British soap operas (such as *EastEnders*), and they tended to listen to widely available pop music (something which Alternative CofP members greatly disliked).

### 5.5.3. The Ned CofP

In Year 2 and Year 3 of the ethnography, I gained access to the Ned CofP, where Danny, Max, Noah, and Rick were the main members. This CofP tended to drink, smoke, engage with the local subculture, fight, listen to ‘New Monkey’ (a very active form of dance music), and took an active anti-school stance (cf. Moore’s 2003: 214 ‘Townies’ and ‘Populars’). The ‘ned’ is a relatively recent addition to the subculture of Glasgow25 (cf Macafee 1994: 139), with the possibility of the term originally used in policing (Mr Alistair Fraser, personal communication). A ned is typically assumed to be a working-class, adolescent male who wears a tracksuit, Burberry branded clothing (which is recognisable by its plaid design), a baseball cap, white sports trainers, gold sovereign rings, and a Berghaus ‘merapeak’ jacket (a very expensive hiking jacket). In terms of social practices, these tend to be criminal or deviant in nature, including vandalism, petty theft, age-restricted activities including alcohol, smoking and sex, muggings, loitering, criminal damage, general affray, and fighting (both organised and random). Although the *Oxford English Dictionary* accepted the

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25 The term ‘ned’ is generally reserved for Scotland, and Glasgow particularly, while ‘chav’ is more common in England (Hayward and Yar 2006).
term ‘ned’ in 2001 with the following definition: ‘a derogatory term for a young working-class person who dresses in casual sports clothes’, the definition focuses only on visible style and omits any mention of the deviant and criminal aspects held concerning ‘neds’ in Glasgow.

When I began the ethnography in Banister Academy, it did not take long to recognise that neds were part of the social make-up of the school. Beyond my own observations, other pupils in the school often pointed out the pupil X was a ned and that I should take pains to not interact with them. The term ‘ned’ in Banister Academy (as in Glasgow more generally) was synonymous with deviance, criminality, aggression, gang life, alcohol, and smoking, and as a social group very few of their peers had anything positive to say about them, as excerpts 5.13. and 5.14. below show.

Excerpt 5.14. demonstrates the social judgement the Alternative CofP makes on the physical movements of neds, describing their swagger in line 5 as ‘stupid’, and laughing when discussing the way neds talk. This ties in with the assumption that particular forms of Glaswegian Vernacular are associated with violence and criminality, and that neds embody such an association. There is also the undertone of
physical violence and fighting, since Andrew has a clustering of threatening language in lines 13 and 14. This was something which was very typical in discussions between pupils on the social practices of neds.

In excerpt 5.15., I ask the same question to the Sports CofP members and again a similar set of ‘typical ned characteristics’ were described.

1 RL: What makes a ned a ned?
   Peter: A ned a ned?
   Mark: Like, they go aboot bullyin people for nae such reason.
   RL: Right.
5 Peter: See for instance, right-
   Mark: Bully people, graffiti aw o’er the place, annoy people.
   RL: Uh-huh.
10 Peter: Dae practically everything bad.
   RL: Right.
   Peter: They dae everything-
   Mark: Be bad in class,
        but I’m bad in class,
   15 but I’m no a ned.
   Peter: Everybody’s bad in class,
        but none of us are neds.
(Excerpt 5.15. Mark, Peter, and Phil, mixed conversation, Year 1)

Excerpt 5.15. shows the importance of physical violence, specifically bullying, and anti-social behaviours including vandalism in defining a ned. More importantly, however, is the subtle reorganisation of the social practices to present the Sports CofP members as not being neds, specifically from line 14 onwards. Both Mark and Peter comment on the fact that neds are ‘bad in class’, quickly adding that although they are bad in class they are not neds, actively constructing their social identity in two ways: by admitting they is bad in class they obtain a degree of credibility among their friends who view them as not capitulating to the educational system (similar to ‘the lads’, Willis 1977), and secondly by stating they are not neds, they distances themselves from a discourse of violence and anti-social behaviour which they recognises would be detrimental to their overall chances of success. Indeed, in later
conversations, Mark states that he would be concerned if he were viewed as a ned, taking the opinion that such a label would potentially undermine his achieved social status within the school.

With regards to dress, there are also many assumptions as to what neds wear, including Merapeaks jackets (an upmarket hiking jacket), Burberry branded clothing such as baseball hats, tracksuits, and high-cost brands such as Lacoste.

Andrew: That’s how you can tell who the neds are. Merapeak jackets.
Jack: They wear hats.
Andrew: Aye, the stupid Burberry hats.
Jack: The Burberry tracksuit.
Andrew: Aye.
Jack: Naw, Lacoste shoes and aw that.
So-
(Excerpt 5.16. Jack and Andrew, Alternative CofP, Year 1)

Neds are also assumed to wear gold sovereign rings, high sports socks over the tops of their tracksuit trousers, and white trainers. In Banister Academy, however, there did not appear to be any uniformity within the Ned CofP with regards to clothing. There were a few pupils who wore Merapeak jackets (for example, Noah) and all of them wore some form of gold jewellery, but with regards to widespread use of Burberry baseball hats and tracksuits, only a few members of the Ned CofP actually wore these types of items (e.g. Danny wore a Burberry hat outside of school). It may be that these clothing choices were only made outside the school environment when they were socialising with friends, and the fairly restrictive school dress code did not allow for major deviations from the sanctioned uniform.

One of the social practices which set the Ned CofP apart from other CofPs in Banister Academy was the prevalence of smoking. Since I had not encountered anybody who smoked during the ethnography in Year 1, I mistakenly assumed that
smoking was not an issue. When I began socialising with the Ned CofP, however, I noticed that smoking was a very central social practice, one which reified their opposition to the school (Croghan, Aveyard, Griffin, and Cheng 2003: 73), and collectively affirmed their social relation to one another by means of sharing (Turner, Gordon, and Young 2004). The members were very open about their smoking habits, and in my entire time at Banister Academy, a pupil was never reprimanded for smoking. This was due, in part, to the diligence of the smokers. For example, one of the locations where the members would smoke was near the P.E. block, since this particular spot offered a clear view across playground and ensured that any teachers walking towards the P.E. building would be seen in time to either stub out the cigarette and keep it for another time or to finish smoking it.

Since many of the members were under 16, and given the prohibitive cost of cigarettes, I wondered how these members were able to obtain such a ready supply. The main method of supply was the exploitation of particular ‘social sources’ (Croghan et al. 2003; Turner, Gordon, and Young 2004) which included borrowing or stealing from their parents, procuring the services of an older pupil or adult who was willing to purchase cigarettes on their behalf, or purchasing and sharing cigarettes amongst themselves. The use of commercial sources, however, was also a common method, and one which was easy and commonplace.

1 Cathy: S- see fags?  
Noah: [[Ask my (inaudible)]]  
Cathy: [[Fags are the easiest thing tae buy, I’m tellin you.]]  
Noah: I can walk intae a shop up my bit,

5 any shop.

Cathy: Noah, what shops are youse-  
See Haddows,  
don’t ([den?]) you get served in Haddows nae problem noo?  

10 [They don’t-  
Noah: [I’m what?  
I’m no even five foot.
[And I’m only served fags, and I’m only-
[15]
I swear tae god.
He walked in and they says-
They never asked him for ID or nothin.
See the wan I was tellin you up at Preston
Road?
Cathy:
[15]
I swear tae god.
He walked in there and he went can I get ten
Mayfair?
And she went,
(0.6)
20
em, what age are you?
And he went, I’m fourteen,
and she held the fags o’er tae him.
(1.1)
RL:
Really?
30
(0.9)
Noah:
Aye, because, like, hunners of people-
They would rather-
I think they would rather serve you,
than serve someone else for you.
(1.2)
Cause like, the shop up my bit every morning I used
tae always go in and buy [fags.
RL:
[15]
they’d be mair likely tae serve someone for you,
40
[because they can get done.
Noah:
[Naw, see-
Ah, but cause there’s so many people-
Cause up my bit so many people
get someone tae go in they’re like,
(1.0)
you may as well come and try it yourself.
RL:
Uh-huh.
Noah:
Cause we’re gaunae let you-
If you keep keep gettin someone tae come in,
eventually we’re gaunae stop servin people fags.
RL:
Uh-huh.
Noah:
And just stop sellin fags aw together.
So it’s like pure,
(0.8)
you may as well come in yourself.
Cathy:
I’m tellin you, fags is easiest.
Tellin you, see if they didnae have chocolate?
RL:
Mhmmm.
Cathy:
Fags would be the easiest thing tae buy.
(0.7)
I’m tellin you, up in Parkton it is, isn’t it?
(1.4)
It’s the easiest thing tae buy.
(Excerpt 5.17. Cathy and Noah, Ned CofP, Year 2)
Here, both Noah and Cathy suggest that adults in their area are implicit in providing access to age-restricted social practices, resulting in a situation where ‘cigarettes are as easy to purchase in Parkton as chocolate’. Such comments mirror the results found by Turner, Gordon, and Young (2004: 431 – 432), suggesting that, in Scotland at least, age-restricting access to cigarettes is an unreliable method of tackling teenage smoking.

The members of the Ned CofP were also very candid regarding their alcohol consumption, and related many stories to me about how drunk they got at the weekends. Drinking was not an exclusively Ned social practice, and indeed, some older members of the Alternative CofP related at length about much they drank at social events. There was a distinct separation between the Alternative and Ned CofP orientations towards alcohol, particularly with regards to physical safety.

1 Peter: Usually, occasionally we basically just drink in the hoose, (0.4) wi oor family or something, if we’re allowed tae. (1.1) Basically you’re allowed tae drink as long as you’re in the hoose and stuff. (0.4) So that your ma tells you and aw that crap. (0.5) We’ll drink in the hoose, but they don’t- they don’t dae that. (0.4) They drink, like, oot on the streets wi aw the police and aw that crap. (0.9)

5

Neil: They can get stabbed and stuff. Peter: Get stabbed and fight and aw that. We d- It’s a bit pointless, (0.5) when you can sit in the hoose and drink yourself, where you’re safe. (0.9) See if you drink ootside in the streets, you’re no really safe at aw but see,
In excerpt 5.18., Neil and Peter make a clear comparison between ‘us’ and ‘them’ (the ‘them’ in this case, are ‘neds’), and a clear comparison between their differing orientations towards alcohol. Moreover, Peter draws a parallel between drinking in the street and physical danger, claiming that those adolescents who engage in the local drinking subculture are more liable to be involved in fights and stabbings (cf. White, Loeber, Stouthamer-Loeber, and Farrington 1999; Swahn, Simon, Hammig, and Guerrero 2004). By contrasting his own ‘style’ of drinking (i.e. in the home under the supervision of family members), with the more problematic ‘style’ of street-drinking, he distances himself from the ‘ned’ identity, ultimately situating himself outside of the social norms he perceives to govern ‘them’.

Like smoking, members of the Ned CofP were exposed to alcohol at a very young age through their families, as one comment by Noah highlighted:

1 Noah: See, I- I started drinkin because of my sister. Cause like, we used tae go (.) fitbaw.  
(0.9) Her boyfriends used tae come up.  
5 RL: Uh-huh.  
Noah: In my hoose. So it was like-  
10 Wan of the persons- And my big sister and her boyfriend just always wanted a drink.  
RL: Uh-huh.  
Noah: But like, my big sister used tae always watch me, like, when my ma was gaun oot.  
15 (1.4)
And,
(0.8)
like, we used tae always go (crates) of beer.

20  RL:    Uh-huh.
Noah:  It was, like, wan or two beer.
RL:    Right.
Noah:  And then (.) like, a Bacardi Breezer.
Cathy:  Well I s- I-

25  [When I started-
Noah:  [That’s why I started so early then it got-
went through beer and aw that.
Cathy:  Naw, but see him?
Noah:  Cider and Buckfast and Maddog.
Cathy:  Naw, but see him?
See how he started wi his sister?
I started when I was like,
(1.0)
about four months auld.

30  (0.9)
Cause see ma da?

35  RL:    Uh-huh.
Cathy:  Ev- every wean in my family when they’re born,
their dads when they’re drinkin,

40  they dip wir [dummy] intae it and shove in wir
mooth.
Noah:  Ah::
That happened tae me.
Cathy:  So, really we started when we were young.

45  ((laughs))
(Excerpt 5.19. Noah and Cathy, Ned CofP, Year 2)

Despite the fact that these adolescents were introduced to alcohol and
smoking at a very young age by their families (whether deliberately or otherwise),
Cathy commented on the importance of ‘peer-pressure’ as a social force in
maintaining or initiating involvement in alcohol and smoking (cf. Morton, Haynie,

1  Cathy:  The main reason I drink and smoke is because my
pals dae it
RL:    Right.
Cathy:  Right.

5  But,
(0.7)
I don’t just dae it for that.
I dae it cause I want tae dae it,
but I also dae it because they dae it.

10  RL:    Right, ok.
Cathy:  And if you don’t,
when they’re pissed they go you’re a chicken, you’re this, you’re that, so you end up you go “aw fuck it just gies it and I’ll prove tae youse that I dae it”.

15

RL: Uh-huh.
Cathy: And that’s how I dae it.
RL: Right.

(Excerpt 5.20. Noah and Cathy, Ned CofP, Year 2)

While some of these social practices were typical of the Ned CofP I encountered, many of them were not, casting doubt on the prototypical ‘ned’, at least in Banister Academy. Even those adolescents I met who were identified as neds by their peers seemed unwilling to adopt the label (Stuart-Smith and Timmins, f.c. also note that Glaswegian adolescents tend not to self-identify as ‘neds’), as a conversation with Danny demonstrated to me.

1 

Danny: Naw man. I’m no a fuckin ned I know that wan. I’m a mosher, so I am.

RL: Are you?

5 

Will: Neds- 
Danny: What?
Will: I was gaunae say neds.
Danny: I fuckin hate them.
RL: You hate neds?

10 

Danny: Aye.
RL: Right.
Danny: I get on awright wi some of them, but most of them I fuckin always try and attack.
Will: DJs are awright, but the-

15 

Danny: DJs. ((imitates beatboxing))
RL: Uh-huh. So what makes a ned a ned?
Danny: Sm- always smokin.

20 

Like, smoking hash, like, twenty four seven and that, know what I mean? Thinkin they’re wide.
Will: Fightin, drinkin, takin drugs.
Danny: Aye, fuckin talkin wide.

25 

Hingy, always start fights and aw that.
RL: Uh-huh.
Danny: Walkin aboot in gangs, tryin tae fuckin start wars and aw that.
RL: Right.

(Excerpt 5.21. Danny and Will, Ned CofP, Year 2)
Danny was one pupil in Banister Academy whom almost everyone identified as a ned, and I was unprepared for his admission that he was not. His declaration that he was a mosher was surprising due to the fact that during my conversations with him he had never once mentioned his status as a mosher, and I had not witnessed any evidence which would support his claim. What was also surprising about his statement was that the entire conversation prior to his claim focused on fighting, gangs, smoking hash, getting drunk, and stealing in the school. The only explanation I can offer is that, like the other pupils in Banister Academy, Danny was all too aware of the negative connotations the label ‘ned’ carried, and attempted to distance himself from these connotations. There is also the possibility that the degree of anti-social behaviour influenced Danny’s comment. Although he smoked hash, drank, and was involved in many fights, he took the view that he did these activities less than ‘hard-core’ neds, allowing him to present himself as a different social category entirely.

5.5.4 The Schoolie CofP

Even though I had been on the fringes of the Schoolie CofP since the middle of Year 2 (mid 2006), it was only in Year 3 that I was able to gain legitimate access. The members of the Schoolie CofP were Gary, Jay, Josh, and Victor (Josh and Victor were brothers), and all were born and raised in Glasgow. Gary, Josh, and Victor lived in the same area of Parkton, while Josh came from further afield. All four members shared a particular affinity towards computer games, music (listening to music as well as playing instruments), and certain sports (involvement in American Football was mentioned on several occasions). The members of this CofP also shared particularly negative orientations towards alcohol and drugs, had similar outlooks with regards life after Banister Academy, and could be considered more ‘pro-school’ than ‘anti-
school’. Indeed, the designation ‘Schoolie’ (my label) is intended to index a particular orientation of conformity towards the school.

The members of the Schoolie CofP (particularly Josh and Victor, and to a lesser extent Gary and Jay) orientated themselves towards the values and expectations of the school, and although not directly correlated with the ‘ear’oles’, the Schoolie CofP members did invest ‘something of their own identities in the formal aims of education and support of the school institution’ (Willis 1977: 13). Josh and Victor were particular substantiations of this, and their support of the school was in marked contrast to the other CofPs who viewed the school as a source of friction and challenge (particularly the Ned CofP members). The only criticism Victor had about Banister Academy was that there were not enough provisions to allow pupils to pursue Advanced Higher courses. Gary, Josh, and Victor were conscientious in their approach to their schoolwork and took efforts to do their best. The members of the other CofPs, on the other hand, were usually conscientious in their work, but viewed school as a means to interact with their friends rather than provide them with the means to obtain employment and life-skills.

1  Noah: I hate [school].
Ben: It’s- it’s good man.
   (0.4)
   Go oot for a wee fag in the mornin.
   (0.9)
5  Then go back in then go back oot get another wee fag.
   (0.8)
   RL: Uh-huh.
10  Noah: That’s aw you dae but.
    (1.8)
    Ben: Get a munch.
       (0.8)
       Talk tae your pals,
       (1.2)
       hang aboot wi your pals.
15  (1.2)
    RL: So you like it mair for like,
    cause it’s social?
    Ben: [[Mhmmm.
For Noah and Ben, teachers imposed restrictions on being able to enjoy oneself while at school, and as such, particularly for Noah, this contradicted their reason for attending school which was to socialise with friends. A similar stance was taken by members of the Alternative CofP, where interaction with friends and ‘having a laugh’ (cf. Willis 1977: 14) were seen as some of the main reasons for attending school.

Such an orientation of conformity was also manifested in the clothing choices made by the Schoolie CofP members. While members of the Alternative, Sports, and Ned CofPs used particular configurations of clothing which incorporated some
aspects of the school dress code, they still augmented these clothing choices with a sense of their own individuality and identity. The Schoolie CofP members (with the exception of Jay), by way of contrast, were the most observant of the school dress code. Gary, Josh, and Victor all wore white shirts buttoned to the top, with a school tie, black trousers, and black shoes, while Josh and Victor also supplemented this with a school jumper. Gary was more casual in his dress code (for example, he wore trainers instead of shoes), and I believe that this was the result of his increased social contacts within Banister Academy. Jay was most peripheral of the Schoolie CofP in terms of alignment with the school, and was the most active sporting member of the Schoolie CofP (he played rugby at international youth level). Despite believing himself to be categorised as a ‘mosher’ (most likely to do with the length of his hair and his musical tastes), he actually used musical preferences to distinguish himself from (rather than align with) more ‘hardcore moshers’ like Neil (Alternative CofP) who liked Death Metal music rather. He also recognised the difference between himself and the other members of the Schoolie CofP in terms of academic aptitude.

1  Jay: It’s a really odd group we’ve got.
(0.6)
RL: Uh-huh.
Jay: We’ve got one of the we-
(1.8)
RL: Odd in what way?
Jay: You’ve got me, I’m not the smartest guy.
(0.7)
I’m like- in other words it’s like a big ar- superhero-
Victor: It’s- it’s- it’s [a mixed group.
Jay: [It’s like a super-
It’s like a superhero team,
I’m big brute and they’re the smart guys.
(Excerpt 5.24. Jay, Josh, and Victor, Schoolie CofP, Year 3)

Here, Jay acknowledges he is not as academically motivated as Josh or Victor, as well as the fact that the group is made up of quite diverse individuals. While this is true to
an extent, I believe that due to their shared social practices, Gary, Jay, Josh, and Victor constituted a CofP core within a larger group of individuals.

The negative stance held by the Schoolie CofP towards alcohol contrasted significantly with attitudes towards alcohol in other CofPs. As well as such a negative orientation aligning with the stance taken by the school (and by extension, ‘the establishment’), it shows the Schoolie CofP rejecting one of the dominant means of subverting and challenging adult authority by adolescents (cf. Griffiths and Sunderland 1998: 425). Rejection of alcohol was both pragmatic and ideological.

1  RL: So what is it that stops you fae gaun oot at the weekends and=
    Gary: Drinkin?
    RL: =gettin wasted and drinkin you know, all that stuff?
5  Gary: Well, I went oot wi my mates wance and then I- I was just, like, drinkin coke and stuff like that and then I s-
     (0.6)  I see what they were like when they’re drunk and I’m like that, ‘aw, that’s a pure embarrassment, I’d never waant tae be like that’
10 RL: Uh-huh.
   (1.2)  Gary: It is pretty, 
     (0.9)  horrible. Like, they puke aw o’er themselves and stuff like that hauf the time.
     (0.6)  I just don’t want tae end up like that.
   RL: Right.
     (1.4)
15  RL: Right.
   (1.2)  Gary: Like, you drink too much and then you start bein sick aw o’er the place and stuff like that.
   (Excerpt 5.25. Gary, Schoolie CofP, Year 3)
Gary shows that he is aware of the negative repercussions alcohol consumption can have, and deliberately distances himself from this (line 22 and line 28). Such distancing was the general consensus within the Schoolie CofP.

Lastly, the Schoolie’s attitude towards the local area was more markedly oppositional than other CofPs. While most members of the Alternative, Sports, and Ned CofPs had negative opinions about Parkton, some were happy to remain living in Parkton once they had finished school. In contrast, all four Schoolie CofP members expressed an overt willingness to leave as soon as possible.

1 RL: Yeah, so you think youse’ll try and move out?

J: I’m gaunae s- I’m wantin to actually go to Canada for a while.

5 …

RL: And what about you guys? Do you think you’ll stay in Parkton or, you think you’ll- you’ll move away to the university that youse’re gaunae be at or move into town?

J: Move to Canada as well. We’ve got relatives in Canada.

(Excerpt 5.26. Jay, Josh, and Victor, Schoolie CofP, Year 3)

It is clear that moving from Parkton is preferable, and this is further highlighted by Josh’s admission that their future lives would not mesh with the lifestyle of Parkton.

1 RL: You think you’ll stay in this area or, move away or how do you think you know kind of livin arrangements’ll, [‘ll-]

5 J: [I don’t know. A famous rugby player in Parkton, a military historian in Parkton, and a Jazz musician in Parkton.

…

10 As if- as if I’m gaunae get a full house of [people], watchin the Josh McCafferty Quartet in the Parkton Community Centre.

(Excerpt 5.27. Jay, Josh, and Victor, Schoolie CofP, Year 3)
In excerpt 5.27., Josh expresses doubt that a rugby player, a military historian, and a Jazz musician (the future career paths of Jay, Josh, and Victor respectively) could possibly integrate themselves into the community of Parkton. Indeed, his juxtaposition of ‘high-brow Jazz music’ with ‘Parkton Community Centre’ (line 12–13) emphasises his belief that the potential routes of their lives after school are incompatible with life in Parkton, and as such they would need to move in order to be able to pursue these career paths.

5.5. Problems of Identity and Status

Since I was conducting a sociolinguistic study, it was necessary for me to divide the informants into groups of some kind in order to be able to conduct the linguistic analysis in any meaningful way (otherwise I would simply have had a collection of individuals with no way to describe how social identity and practices intersected with linguistic variation). While the labels are my own, they were informed by the participants’ own social practices. The difficulty of categorising the participants using their own labels was highlighted when I asked the pupils how they defined themselves, particularly within the school setting. Many of the informants answered they were ‘just normal’, or just ‘themselves’, meaning that if I had chosen self-identified labels for the CofPs, I would have had a very large group of ‘normal’ speakers.

It is true that those who were more fully integrated into the Alternative style were more apt to admit they were moshers, goths, or metal-heads, but the labels they gave themselves did not reflect the fact that one common thread uniting their social practices was their opposition to the mainstream (although they were perhaps not
aware of this). Similarly, the Sports CofP members did not identity as ‘Sports’, and when I questioned Mark about his identity, his answer was fairly oblique:

1 RL: How would youse define, like, how would youse define yourselves like?
Mark: Call them back.
If they call us anything we call them back
5 Peter: We dae-
RL: Naw, I mean like, you know how, like, you’ve got the Goth group and the ned group and stuff like that, like, they say-
Peter: We talk tae the goths.
10 We’re mixed in.
The Goths and the-
Mark: He’s a, um, he’s a mosher.
Peter: I’m a mosher.
I’m mixed in wi the Goths and ma group here,
my other group, my pals.
I’m mixed in wi the two of them, aw of them come in.
Mark: I’d be worried if I was gettin’ called a ned.

20 RL: Would you, aye?
Mark: Aye.
Or a mosh-, naw actually, I used tae be a mosher.
I liked being a mosher.
RL: Right
Peter: Mosher are good.
25 Mark: I liked aw the music and aw that.

I don’t see-

Peter: The mosher are.
I like the music.
Mark: You get slagged.
30 Why but, why’d you get slagged?
(Excerpt 5.28. Mark and Peter, mixed conversation, Year 1)

Peter instantly admits he is mixed with both groups, while Mark is more concerned with being negatively labelled a ned. In contrast to Peter, Mark views his status as not being sufficiently differentiated from the Ned CofP to avoid confusion. He wore similar clothing (nominally defined as ‘casual dress’), he played football, and he wore a gold sovereign ring on his middle finger. Yet, Mark did not socially locate himself in a separate category, instead preferring to define himself through
what he is not, rather than what he is. His continual use of dichotomous referents also highlights his opinion that he is not in the same social category as Peter:

Peter: *We* talk tae the goths.
*We’re* mixed in.
The Goths and the-
Mark: *He’s* a, um, *he’s* a mosher.

(Excerpt 5.28. Peter and Mark, mixed conversation, Year 1)

And:

Mark: *You* git slagged.
Why but, why’d *you* get slagged?

(Excerpt 5.29. Peter and Mark, mixed conversation, Year 1)

Mark also appears to distance himself from his past social identity of a mosher: ‘I *used to be* a mosher’, ‘I *liked* the music’, all statements which suggest his feelings towards this particular style have changed.

Many members in the Alternative, Sports, and Schoolie CofPs were particularly vocal about distancing themselves from the ‘ned’ identity.

1 RL: Uh-huh.
(0.4)
And- and youse wouldn’t categorise yourselves as,
(0.4)
5 neds?
(0.5)
Jay: Never.
Victor: Definitely not.
Jay: ((laughs))

(Excerpt 5.30. Jay and Victor, Schoolie CofP, Year 3)

Jay’s comment that he would rather ‘take a shotgun to [his] head’ than identify himself as a ned is powerful image, and coupled with the negative stance taken by
most participants outside the Ned CofP, speaks directly of the difficulties faced by those adolescents who risk being identified as a ‘ned’. Within the Schoolie CofP, though, there is also an overt distinction from other CofPs, particularly emphasised by Victor.

1 Victor: I like to think myself as unique, different from, (0.4) [the Sports CofP].

5 Jay: ((laughs))
Victor: I would hope, (0.4) I was unique and different from them.

10 RL: Uh-huh.
Victor: Em.
RL: How come?

15 Victor: I don’t know.
Jay: Cause Mark can be sometimes an asshole at points.
RL: Right, ok.
Jay: He can be.

20 Victor: And they’re- (0.7) I’m not sayin that they’re- (0.5) they’re stupid,

25 but they pretend to be extremely stupid sometimes, (1.0) and I try and keep away from that.
(Excerpt 5.31. Jay and Victor, Schoolie CofP, Year 3)

A significant portion of Victor’s social identity is tied up with academic prowess and ability. He takes the view that members of the Sports CofP either do not have this ability, or actively avoid making an effort in school, something from which he tries to distance himself.

Assigning an individual into a particular social category was not as straightforward as an informant claiming an identity since issues of status were often complicated by social politics. The ethnographic approach allowed me to see that
engagement with social practices was an important part of being accepted as having a particular identity. It was this engagement which seemed to be more important in defining someone as an ‘Alternative’ or a ‘Ned’, rather than simply saying “I’m identify as X, Y, or Z”. This engagement traversed a range of social practices, and engagement with violence (both physical and verbal) was a particularly important social practice in the eyes of all the participants (but for different reasons). It is to this point I now turn.

5.6. Fighting Talk: CofP Orientations toward Violence

Cambell and Muncer (1987: 489 – 490) suggest that while physical violence is typically a fleeting and brief event, it is an event that is typically talked about at great length. Reflections and retellings of fighting, violence, and physical aggression (either as an observer or a participant) were typical of many of my conversations with the informants, and this finding is not restricted to Banister Academy. For example, a survey of data collected by Jane Stuart-Smith and Claire Timmins for the purposes of examining the effect of television on accent change among adolescents (ESRC R000239757, 2002 - 2005) showed that similar narratives are a cultural touchstone among adolescent male conversations.

The violent narratives of Banister Academy performed several functions, from collectively reifying a shared group history and social cohesiveness (Tannen 2003: 222 – 223; Mendoza-Denton 2004), to establishing one’s position as dominant within the peer hierarchy (Willis 1977; Elliot 1994; Anderson 1997; Connell 2005: 83; Hawley, Little, and Card 2008), to demonstrating one’s physical ability and prowess (Willis 1977). As Hobbs argues (1994: 120), the potentiality of violent acts is a staple of working-class culture, and the male adolescents of Banister Academy were
expected to have a particular orientation towards violence and physical aggression. They were expected to be able to ‘handle themselves’ (Parker 1974: 141; Anderson 1997: 3), not back down from a fight, and gain respect from one’s peers (Anderson 1997; Fagan and Wilkinson 1998; Wilkinson 2001).

1 RL: Right.
(0.5)
So how- how are you in a fight, like?
(1.4)

5 Gary: I’ve no got that much confidence but,
(0.8)
if it’s somebody, like, I know quite well=
RL: Mhmmm.
Gary: =or fae school that I’ll tend tae fight

10 back so it-
(0.4)
so that I don’t end up gettin rumours
spread that they’ve fought wi me and won
or something like that.

15 RL: Right, ok.
But what kind of-
What kind of rumours?
(0.5)

Gary: Like, you got battered and stuff like that and,
(1.3)
I tend tae fight back.

20 RL: Right.
(0.4)
So is that quite a- a common thing,
that people’ll,
(0.5)
will fight back tae stop people talkin
about them?
Like, what kind of things would they say?
(0.9)

25 Gary: Um, just,
(0.7)
stuff like,
‘he got beat up aff him’
and,
‘that boy’s a crap fighter and he beat him’
and stuff like that and,
(0.8)
‘he cannae fight’,
and stuff like that.

30 RL: You think it would make you look like,
(1.0)
a coward or like, less of a-
less of a man ((low pitch)),

35 kind [of thing]?
Gary: $[((	ext{laughs}))$

$0.5$

Aye, kind of a bit of both really.

(Excerpt 5.32. Gary, Schoolie CoP, Year 3)

In excerpt 5.32., Gary points out that he fights not out of a sense of enjoyment, but rather so that people do not speak about him behind his back, where fighting functions as a necessary evil in order to maintain some degree of social legitimacy within Banister Academy (Willis 1977: 35). Particularly given his view that non-involvement in fighting would result in harsh social censure, Gary’s position is concordant with the ‘code of the street’, where ‘at the heart of the code is the issue of respect- loosely defined as being treated “right” or granted the deference one deserve’ (Anderson 1997: 2). Comments which call into question physical ability run contrary to this code since such comments are considered to be face-threatening (Brown and Levinson 1987), and as a result, Gary feels like fighting is one way (perhaps the only way) by which such comments can be challenged (cf. Parker 1977: 145; Kimmel 2001: 278).

Even though there were threads of commonality regards to displays of physical aggression, the need to show a willingness to fight, and a desire to be effective during violent physical confrontations, there were ideological stances which were not common. For example, although the Schoolie CoP recognised many of the factors which made someone ‘a man’ in other CoPs, they diverged from many of the core components, including showing fear and emotion. It is important to note, however, that violence was a part of everyday life for all the participants. The following analysis, which draws on aspects of critical discourse analysis (Gee 2003), attempts to uncover some of the contrastive and common ideologies towards violence across the CoPs.
The presentation of masculinity is at the core of many of the stories which have physical violence as their focus (Gilmore 1994), and a particular type of ‘tough’ masculinity is a pronounced concern for many of the males of Banister Academy (whether it is an ideal towards which an individual might strive, or whether it is a type of person an individual might avoid). Moreover, the standard of masculinity adolescent males in Glasgow are supposed to strive towards meshes well with traditional views of masculine behaviour in post-industrial urban settings (Meyer 199; McDowell 2002; Connell 2003). Typically, it was the Alternative, Ned and the Sports CofPs who were most actively engaged in relating ‘violent’ stories, since much of their social identity was tied up with the idea of ‘being a man’ (although as noted, engagement with physical violence is important to many adolescent males in Glasgow), and there were common themes regarding violence which were articulated by many of the participants. These included fearlessness, lack of (and criticism towards) ‘weak’ emotionality (this would include bouts of crying but exclude raising one’s voice or ‘losing control’), and technical prowess during fighting. While the Alternative, Sports and Ned CofPs actively engaged with these themes (to a greater or lesser degree), the Schoolie CofP recognised these factors as part of hegemonic masculinity within Banister Academy but never established a positive orientation towards them. This section will trace how these orientations towards violence are set out across the different CofPs, arguing that although violence is a major part of life for all the participants in the fieldwork, not all of them share the same perspective.

The first common theme within the CofPs was that it was necessary to establish a sense of ‘fearlessness’ when engaged in any type of violent physical encounter. While members of the Sports and Ned CofPs actively adopted this
position, it was carried out to a lesser extent within the Alternative CofP, and almost completely rejected by the Schoolie CofP. Since showing fear or weakness was taken to be the antithesis of ‘being a man’ (Kimmel 2001: 278 - 279), many of the participants actively constructed their social identities as ‘fighters’, and deployment of such a strategy achieved the dual purpose of forestalling any challenge to their masculinity (Anderson 1997: 13), as well as establishing a type of social identity which was positively valued within the community (Parker 1977: 143 – 144). Claiming to be unafraid during a violent physical encounter was the cornerstone of many the participants’ narratives of the event. For example, recounting a fight during a rugby match, Phil relates the following:

In this narrative, a fight begins between Nathan and members of the opposing team which Phil attempts to defuse (line 4). Although he acts in the interests of Nathan, by intervening, he faces the risk of being sent to the sin-bin (a ten minute penalty where he is not allowed on the field of play). This sets Phil up in a ‘protector’ role in which he places the needs of his own teammates before his own (cf. Kiesling
1997: 165 – 166 in his discussion of ‘Ram’ as the ‘caring leader’ of the fraternity). After the fight is forestalled (albeit temporarily), the team returns to the changing room where the possibility of violence emerges again when the opposing team attempt to challenge Phil. Despite being outnumbered and out-geared (Phil is only wearing his boxer-shorts and is barefoot while the opposing team members are fully-clothed and wearing boots), Phil stands his ground at the threat of ‘being slashed’ (line 15). But not only does Phil hold his own against the threat of extreme violence, he states that he is ‘no even scared and aw that’ (line 18, see Goodey 1999 for a discussion of the interaction between fear and gender). Despite facing the possibility of being stabbed in the course of this fight, Phil creates a social identity of bravery which is entirely in accord with the expectations of working-class adolescent male behaviour within Banister Academy. Moreover, Phil relates several stories with similar content (i.e. a fight where he faces being stabbed), all of which end with the same articulation of fearlessness, establishing himself within the CofP (and Banister Academy more generally) as someone who is reliable and looks out for his friends. But by drawing on discourses of fearlessness, Phil also reifies his identity as a fighter, establishing a reputation as a person who cannot be scared. Similarly, Nathan draws on almost identical types of discourse:

1 Nathan: I’m honestly-
I’m no scared of people.
People think I’m scared of them, right,
cause I run away fae them, but honestly,

5 I’m no scared of anybody in this school,
in’t I no?
See if they threaten me,
I just tell them tae “c’mon then”.
I don’t care. It’s what my nan says,

10 only worst thing they kin dae tae is gie ye a doin.
(Excerpt 5.34. Nathan, Sports CofP, Year 1)

26 Attacked with a knife.
Nathan begins with the claim that what people see (i.e. him running away) is not indicative of what kind of person he is (i.e. brave), and asserts that even though he might run away from a potential fight (line 4), this is not enough to conclude he is scared of fighting. The rest of his excerpt functions as an attempt to justify this position and establish an identity which is congruent with the traditional masculine ideal. His tag question in line 6 serves to have Nathan’s interlocutor (in this case, Phil) provide some substantiation and agreement to his claim that he is scared of no-one in the school. Nathan then uses specific terminology to evoke a sense of distance from the threat physical violence embodies (line 9, ‘I don’t care’), before finally admitting that the ‘worst’ thing that can happen is that he gets beaten up. There is the suggestion here that this is a small price to pay in exchange for being viewed as unafraid. One conversation with Peter highlighted the apparent lack of ‘self-preservation’ among some adolescent males in Glasgow.

Peter: Cause the only thing I worry aboot in Altonheid is knives, that’s aboot it, I don’t really worry aboot anything else.

RL: Right.

Peter: And even more, I don’t worry aboot knives at aw cause I’m no really bothered if they stab me or no.

(Excerpt 5.35. Peter, Alternative CofP, Year 3)

Peter’s opening comment centres on his fear of knives in his local area (Altonhead), but only three lines later he reframes his comment to suggest he is not scared of knives. This is further emphasised, where he says ‘I’m no really bothered if they stab me or no’ (line 6), implying an almost complete disregard for his own personal safety. Later in this exchange, Peter relates a narrative where despite being stabbed and consequently having to receive hospitalisation for his wounds, he is able to emerge the victor in the fight (cf. Coates 2003: 47 – 53).
‘Defying the odds’, rising to the challenge of physical violence, and showing no fear, was also a theme throughout many of the narratives told by members of the Ned CofP.

Noah: But I only took my my bat cause they were aw sayin on the bus, ‘Aye, we’re bringin-I’m bringin my machete and I’m bringin aw my pals and I’m bringin a chopper’. Was like that, ‘You dae that cause I’ll bring a baseball bat and a blade’.

(Excerpt 5.36. Noah and Max, Ned CofP, Year 2)

Although faced against overwhelming odds (including being outnumbered), Noah responds to this situation with audacity and nerve. He does not back down from the challenge, but rather faces up to it.

The display of fearlessness is a hallmark of masculinity within the Alternative, Sports, and Ned CofPs, but the Schoolie CofP members were directly set against this aspect of the dominant masculine enterprise of Banister Academy. The Alternative, Sports, and Ned CofPs were unwilling to demonstrate their fear of a violent encounter due to the negative repercussions such an admission would have on their established social identities. Although this is recognised by the Schoolie CofP members, they are not engaged in the same type of masculine endeavour as the other CofPs, thus admitting fear does not hold the same level of social discrimination.

RL: So, how d- how you feel when you’re put in [a fight] kind of situation, like?

(1.6)

Gary: [It’s-

5

RL: [For me like I would be shiting my pants. Aye, it is pure scary I think, cause like you’re-you’re throwin about the American fitbaw, or kickin the fitbaw,
and then you look up the hill and there’s this big group comin doon and it’s dark and you cannae really see who it is, you dae, pure crap it.

(Excerpt 5.37. Gary, Schoolie CofP, Year 3)

Such frank disclosure would be untenable within other CofPs, but Gary admits that the possibility of violence (characterised by the anomalous ‘group’ in line 12) would give him cause for concern (it must be noted that although my own response in line 5 potentially influences Gary, if he was involved in the dominant masculine enterprise, it is likely that he would use his turn in line 6 to refute me). In a similar vein, Josh admits that rather than face a violent physical encounter (the expected response in other CofPs), he would not see the encounter through.

RL: So if you got in a fight now, like, how do you think you’d react?

(0.6)

Josh: Probably run away.

(0.7)

(Excerpt 5.38. Josh, Schoolie CofP, Year 3)

For the members of the Schoolie CofP, showing fear (and more importantly, disclosing such fear) is a legitimate response to interpersonal violence. Rather than deny (or lie about) their emotional state, the members of the Schoolie CofP are willing to forgo a type of masculinity that is positively valued within Banister Academy (and Glasgow more generally) and reconfigure their masculine identities using the tools available to them. For the Schoolie CofP members (most particularly Gary, Josh, and Victor), violence is not part of their ‘masculine toolkit’, and instead they have to rely on alternative means through which to negotiate their masculinity. This includes a positive orientation to the school environment (which, by extension,
represents engagement with the establishment) and a formal technical ability in academic subjects.

Important to the discussion about fearlessness is that questioning one’s willingness or ability to fight was often a loaded tactic (Willis 1977: 35) which functioned to simultaneously elevate one party and denigrate the other. In order to counter this, some participants advertised their fighting prowess to ensure people knew how capable they were at fighting.

Danny: So if I’m hyper when some cunt says something wrang tae me I fuckin-
Just cannæ help myself.
I just turn roon and just go like that, smack.

RL: Uh-huh.
Danny: And I’m fuckin-
I’m liable tae fuckin knock them straight out wi wan hit.

(Excerpt 5.39. Danny, Ned CofP, Year 2)

Danny also spoke about the fact that he was so good at fighting that he would be able to ‘kill somebody’, making it clear that he would take extreme measures during a fight. This ‘extremism’ was common within the Ned CofP, with the use of weapons (usually baseball bats and knives) talked about more in the Ned CofP than in any other CofP.

Noah: There’s a boy right,
and I used tae hang aboot wi him right?
But he’s like, anywhere he goes,
the Briar, the Cross, the Young Team,
they’re aw after him, right?

RL: Uh-huh.
Noah: So he needs tae walk aboot wi either a hammer, a blade,
anything he can get his hauns on.
He’s a-
He walked aboot wi a set of Nunchucks up his sleeve.

Max: What?
Noah: Just tae go doon the shop.

(0.6)
Max:   Fuck that.
Noah: I walked him roon the shop man,  
        me and Willy man,  
        20   and he was walkin-  
        He had nunchucks and I had his mad knife.  
        (0.6)  
        Was like that-  
        He’s like that,  
        25   ‘You better take something cause you’ll get  
        smashed hell oot if you’re wi me’.  
RL:    Mhmmm.  
Noah:   Was like that,  
        ((laughs))  
        30   ‘Gies your knife’.  
(Excerpt 5.40. Noah and Max, Ned CofP, Year 3)

This occasionally culminated in involvement with the police for minor offences.

1   Noah: I was fightin before I went tae the police st-  
      Right, see that boy Ray Cairn?  
      We were messin aboot wi his air rifle oot  
      the back and the police came.  
      (1.2)  
      That’s it basically,  
      and they ta’en me hame and charged me.  
      (0.5)  
      But, instead- cause-  
      5   The police pushed it instead of gaun tae  
      court and a children’s panel and aw that,  
      (0.5)  
      he got me a police warnin cause of my Ma  
      and aw that was in and my Ma was pure-  
      (0.4)  
      Like, basically I came fae a good hoose,  
      well I come fae a good hoose.  
      I know what’s right and what’s wrang.  
      I just (f)ought aw,  
      10   (0.6)  
      me and my pal’s are no gaunae get caught.  
      (1.6)  
      But the mad pol-  
      Of, but before that cause I’m supposed tae  
      be gettin-  
      (0.5)  
      Cause I’m supposed tae be supposed tae  
      gettin battered aff the Big Mob,  
      (0.5)  
      25   that of, wan of them pulled me up and  
      punched me so I started fightin wi her.  
(Excerpt 5.41. Noah, Ned CofP, Year 3)
Other speakers, however, found less dramatic strategies which typically involved verbal negotiation to display their orientation towards this ‘tough’ masculinity, and it was during these events that participants became most vocal in disputing shared histories, narrative perspectives, or personal bias, as one conversation between Nathan and Phil highlighted.

1 Nathan: Honestly, I didnae see you greetin,27 but see when we- see when we aw looked back, I did see tears of water dripping fae your eyes. [I know, but see if you ask- see if you ask-

5 Phil: [See because your face goes aw red.
Nathan: See if you ask [anybody], they aw say it did look like you were greetin. Honestly, it did look like you were greetin

RL: I used tae be like that as well.

10 Phil: There’s just- there’s that much emotion, that even if you win, you still like-

Phil: I wasnae actually fightin.

I was gaunae go stick up for him, right,

cause I was just gaunae dae what he done tae him.

15 RL: Uh-huh.
Phil: So I- I really really wasnae greetin.
Nathan: Aye, I wasnae sayin you were greetin, but it did look like you were greetin
Phil: Naw, it’s think it’s just cause my eyes,

20 it look like I’m greetin.

Dae I look as if I’m greetin noo?

Nathan: Naw, but I did see something.
Phil: The colour of my eyes look like they’re

aw thingwied- look like they’ve got water in them.

25 RL: Was it windy?
Nathan: Naw.
RL: Right. You ever get like that-
Nathan: It was like that-

It was like that.

30 Phil: See my- my eyes always water, and they always think I’m greetin, right? Don’t know, it’s something tae dae wi’ cauld air, cold air makes me- my eyes water,

27 *Crying.
or if I keep, thingwy- my eyes,
because- cause I’ve got glasses,
my eyes are always itchy.
(Excerpt 5.42. Nathan and Phil, Sports CofP, Year 1)

Just prior to excerpt 5.42., Nathan tells the story of his fight with Mark (another Sports CofP member). In the narrative, Phil attempted to break up this fight, in addition to exacting revenge on Nathan (line 13 – 14). Although Mark and Nathan walked away from one another once the fight had reached its conclusion, Nathan uses their shared social history as an opportunity to launch an attack on Phil’s masculinity by claiming that he had an outburst of crying. This attack plays on several issues regarding hegemonic masculinity, including displays of ‘weak’ over-emotionality (Bird 1996; Kerfoot 2001: 237; Coates 2003: 197 – 198) and lack of personal self-control in front of one’s peers. Nathan’s claim, however, is not taken lightly by Phil, and the delicate negotiation between the two which follows is simultaneously an attempt by Phil to contest Nathan’s claim (line 16), and a reframing by Nathan to reduce the impact of his claim (lines 17 – 18). This narrative functions as a vehicle which allows both interlocutors to achieve their conversational goals (Roberts 1998): Nathan to contest Phil’s masculinity (albeit in an indirect way), and Phil to establish his position as ‘protector’ and ‘arbiter’.

Other speakers use more direct means to attack or question the physical ability of others, a strategy which allows the speaker to develop their own sense of masculinity.

1 Trevor: Can I just say [Mark] went for,
   (0.9)
   the sort of weakest there,
because Peter,
   (0.4)
slags him,
   I slag him,
   (1.0)
and then as soon as Nathan slags him,

(1.1)

that’s it.

(0.4)

Nathan: He [thinks-]

Peter: Cause he wouldnae start tae go for me

cause I’ll probably p-

(0.8)

Wan-

Trevor: Because he hit-

(0.7)

He hit-

Peter: [He’d be dead.

Trevor: He hit me in maths and I hit him back, and he just,

AH:::

25 Peter: If he knows somebody’ll hit them, but see if he know, see Trevor he would’ve hit him back, I would’ve hit him back nae bother.

(0.4)

30 If N-

Cause he thinks Nathan wullnae be able tae batter him.

(Excerpt 5.43. Peter, Nathan, and Trevor, Sports CofP, Year 3)

Trevor begins his commentary by saying that he believes Mark only fights with people against whom he believes he has any chance of winning (line 1 – 11). In these lines, Trevor establishes both himself and Peter as capable fighters, a claim which solidifies Peter’s reputation as one of the more feared individuals in Banister Academy (at well over 6 feet and close to 14 stone, this reputation was well established). Line 1 – 11 also has the intended effect of grouping Mark and Nathan together as ineffectual fighters, since in Trevor’s opinion, Mark only ‘goes for’ those people he views as weak (line 3). Peter then joins in with this commentary, supporting Trevor’s claim and further isolating Nathan from the group, as well as aggravating relations between Mark and Nathan (which, at that point of the ethnography, were already exceedingly strained).

I argue that the kinds of narratives outlined above (excerpts 5.42. and 5.43) cannot be seen in a simple dimension of cooperation/competitiveness (Tannen 1994:
In some respects, the narratives are competitive in that interlocutors are set against one another in an attempt to reconfigure the power relations which exist between them. However, the narratives can also be considered to be cooperative in that the interlocutors attempt to negotiate some discursive space in which both their conversational goals can be achieved. Such multi-level discourse strategies reach out beyond their immediate conversational context and embed the speakers in the social life of Banister Academy. Indeed, reading the excerpts as isolated conversational units limits the interpretation of the narratives, since the interlocutors are not speaking without reference to shared social norms, experiences, and histories. It is only in building out from these narratives to the wider social sphere can the orientations and motivations of the speakers be established, allowing for a richer and more nuanced interpretation of the data.

In contrast to the displays of hegemonic masculinity outlined above, some of the participants reject the dominant ideology of violent physicality. This is most pronounced within the Schoolie CofP since they orientate themselves towards the ideology of the school (Willis 1977: 34) while simultaneously opposing the stance promoted by the members of the Alternative, Sports, and Ned CofPs. For example, the position of Jay as peripheral to the Schoolie CofP has repercussions as to how he conceptualises violence. The only time he engages in violence (unwillingly) is in the sphere of rugby where violence is a legitimate part of the game (cf. Messner 1990; Connell 2005). While the members of the Alternative, Sports, and Ned CofPs see the fighting in mostly positive terms, the Schoolie CofP view violent physical encounters as a negative social event.

1 Victor I didn’t fight back cause em, (0.7) I don’t really,
want- I didn’t want to fight back and maybe get myself in trouble
So I just take it, kicked in the head, nutted and punched,
and eventually they just ran away.
(Excerpt 5.44. Victor, Schoolie CofP, Year 3)

Unlike the members in the Alternative, Sports, or Ned CofPs, Victor has a dramatically different attitude towards fighting. This is manifested in his outlook on the negative outcomes and consequences of fighting, the most acute of which is ‘getting in trouble’ (line 5 – 6). None of the participants from the Alternative, Sports, or Ned CofPs raised being reprimanded as an issue when talking about fighting, yet it is a central concern for Victor. This most likely stems from the fact that ‘getting in trouble’ is at odds with the conformist mentality, where behaving is a paramount behavioural norm. Victor’s passivity (line 8) is also in sharp contrast to the active engagement displayed by those members of the Alternative, Sports, and Ned CofPs, where narratives are rich in descriptive detail and the participant’s actions and skill are given precedence.

Peter: It’s happened tae me wance, right?
Wance I got jumped aff a big group of boys.
I- I turned aroun and smacked wan of them wi’ a pole,
and then put it doon then just walked away, right?
And aw these boys were sittin-, staunin aroun him.
He was like that haudin his face.
I think he had a big massive bruise there,
a big massive thing there.
(Excerpt 5.45. Peter and Mark, mixed conversation, Year 1)
In this excerpt, Peter is an active participant in the encounter, rather than a passive victim, and he uses the narrative as a showcase for his skill as a fighter. Technical knowledge of any kind is a valued commodity with the realm of hegemonic masculinity (Barrett 2001: 92–94), and technical prowess within the realm of violent physicality is one of the benchmarks of hegemonic masculinity in Banister Academy.

Indeed, Josh, says the following about his own ability:

Josh: Like, if I ever ever got in a fight
I probably wouldn’t know what to do.
(Excerpt 5.46. Josh, Schoolie CofP, Year 3)

His lack of expertise in this area places him outside an ideology the Alternative, Sports, and Ned CofP members have towards fighting. The display of scholastic knowledge by the Schoolie CofP contrasts quite markedly with the display of ‘violent’ knowledge by other CofPs.

This discussion has shown that despite the fact that violence is a part of everyday life for all of the participants in the fieldwork, their orientation towards violence functions as a cultural practice through which the members can claim membership to a particular CofP. The Ned CofP may be considered the most ‘violent’ through their use of weapons and their knowledge of the local subculture, but the Alternative and Sports CofP also actively engage in physical violence. Moreover, although the Schoolie CofP recognises the type of dominant masculinity in Banister Academy (and are aware of the need to engage with social practices related to this form of masculinity), they are almost diametrically opposed to using physical violence as an expression of this masculinity except in the most pressing circumstances. Ultimately, the use of (and attitudes) towards violence by the adolescents in Banister Academy are not one-dimensional, and violence must be seen
from the local perspective to understand the multi-valent strategies individuals use to structure social identities as masculine.

5.7. Summary

This chapter has outlined the ethnography of four CofPs in Banister Academy (the Alternative, Sports, Ned, and Schoolie CofPs). These CofPs were delineated according to three criteria: self-reported membership, other-reported membership, and observed membership, and each CofP had a particular configuration of social practices which distinguished them from one another, including (but not limited to) different styles of dress, music, sports, smoking, orientation towards school, attitudes towards the local area, and violence.

Indeed, talk about fighting and violent physical encounters were some of the most common conversational themes throughout the fieldwork, and it was clear from both the conversations and my own ethnographical observations that orientations and stances towards fighting and violence differed across the CofPs. This was particularly noticeable in the Schoolie CofP where fighting had a markedly negative valence compared to the positive valence it had within the Alternative, Sports, and Ned CofPs. Moreover, fighting and violence were areas which allowed for differentiated expressions of masculinity, particularly in relation to emotionality. The Schoolie CofP were open to discussing feelings of fear and discomfort, while those members from the Alternative, Sports, and Ned CofP viewed this as antithetical to a masculine ideal.

The use of ethnography allowed us to describe fine-grained social distinctions which would have otherwise been invisible to more generalised survey methods, and we have there for been able to see how different an apparently homogenous group of ‘working-class adolescent males’ actually are.
Chapter Six: Results of the Linguistic Variables

6.1. Introduction

Chapter Five outlined the ethnographic results of Banister Academy, showing the patterning of social practices as delimited by CofP membership. This chapter will present the results of the analysis of three linguistic variables (two vocalic and one consonantal) which will be presented in the following order:

BIT: Year 1
(0): Year 1, Year 2
CAT: Year 1, Year 2, Year 3

For the vocalic data, I outline the overall pattern of variation according to phonetic environment, according to CofP membership, and then according to both factors. I then present the results of the regression analysis which considers the effects of the following independent factors on the two dependent variables, normalised $F_1$ and normalised $F_2$:

- Community of Practice membership:
  - Alternative (Alt)
  - Sports (Sport)
  - Floater (Peter)
  - Ned (Ned)
  - Schoolie (Schoolie)

- Following phonetic environment:
  - Voiceless obstruent (VLO)
  - Voiced obstruent (VDO)
  - Phonological /l/
  - Phonological /r/
  - Nasal
  - Glottal

Hertz formant measures were normalised to Bark (see Chapter Four, section 4.5.2). The Bark measurements $Z_1 - Z_1$ and $Z_3 - Z_2$ relate to vowel height ($F_1$) and vowel fronting/retraction ($F_2$) respectively. While the axes of the vowel plots show the actual measures $Z_3 - Z_1$ (x-axis) and $Z_3 - Z_2$ (y-axis), in the text these are glossed as normalised $F_1$ and normalised $F_2$. 

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The regression analysis is supplemented by two-way ANOVA tests to determine the relative effect of the independent variables on the dependent variables, and the interactions between the independent variables.

The data for the consonantal variable (θ) is presented according to word position (word initial, medial, and final) within each CofP. I then compare the patterns of variation across all CofPs, concluding with a statistical analysis using chi-square tests to determine the relative effect of CofP membership on (θ) realisations.

6.1.1. Overall Pattern of BIT Variation According to Phonetic Environment in Year 1

Figure 6.1. Mean of BIT tokens by following phonetic environment in Year 1
Figure 6.2. Spread of all BIT tokens by following phonetic environment in Year 1

<table>
<thead>
<tr>
<th>Environment</th>
<th>n</th>
<th>Normalised F₁ Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised F₂ Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>VLO</td>
<td>176</td>
<td>8.75</td>
<td>0.76</td>
<td>0.06</td>
<td>3.39</td>
<td>0.78</td>
<td>0.06</td>
</tr>
<tr>
<td>VDO</td>
<td>110</td>
<td>9.28</td>
<td>0.77</td>
<td>0.07</td>
<td>3.10</td>
<td>0.58</td>
<td>0.06</td>
</tr>
<tr>
<td>/l/</td>
<td>53</td>
<td>9.10</td>
<td>0.83</td>
<td>0.11</td>
<td>4.88</td>
<td>0.97</td>
<td>0.13</td>
</tr>
<tr>
<td>/r/</td>
<td>48</td>
<td>8.83</td>
<td>0.53</td>
<td>0.08</td>
<td>5.88</td>
<td>1.05</td>
<td>0.15</td>
</tr>
<tr>
<td>Nasals</td>
<td>150</td>
<td>8.74</td>
<td>0.84</td>
<td>0.07</td>
<td>2.93</td>
<td>0.79</td>
<td>0.06</td>
</tr>
<tr>
<td>Glottals</td>
<td>55</td>
<td>8.81</td>
<td>0.70</td>
<td>0.09</td>
<td>3.46</td>
<td>0.58</td>
<td>0.08</td>
</tr>
</tbody>
</table>

Table 6.1. Descriptive statistics for all tokens of BIT by phonetic environment in Year 1

Before phonological /l/ and /r/, BIT tokens are very retracted, while tokens before nasals and voiced obstruents are fronted. Voiceless obstruents and glottals are very close to one another (Figure 6.1 and Table 6.1).
6.1.2. Overall Pattern of BIT Variation According to CofP in Year 1

Figure 6.3. Mean of BIT tokens across all speakers in Year 1

Figure 6.4. Spread of all BIT tokens across all speakers in Year 1
<table>
<thead>
<tr>
<th>CofP</th>
<th>Speaker</th>
<th>n</th>
<th>Normalised F₁ Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised F₂ Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt</td>
<td>Andrew</td>
<td>99</td>
<td>8.80</td>
<td>0.89</td>
<td>0.09</td>
<td>3.61</td>
<td>1.24</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>Jack</td>
<td>75</td>
<td>9.85</td>
<td>0.79</td>
<td>0.09</td>
<td>3.74</td>
<td>1.12</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>Neil</td>
<td>72</td>
<td>8.80</td>
<td>0.73</td>
<td>0.09</td>
<td>3.38</td>
<td>1.02</td>
<td>0.12</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>246</td>
<td>9.12</td>
<td>0.94</td>
<td>0.06</td>
<td>3.58</td>
<td>1.15</td>
<td>0.07</td>
</tr>
<tr>
<td>Sports</td>
<td>Mark</td>
<td>79</td>
<td>8.60</td>
<td>0.65</td>
<td>0.07</td>
<td>3.50</td>
<td>1.02</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>94</td>
<td>8.98</td>
<td>0.06</td>
<td>0.06</td>
<td>3.75</td>
<td>1.21</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>Phil</td>
<td>78</td>
<td>8.60</td>
<td>0.62</td>
<td>0.07</td>
<td>3.31</td>
<td>0.96</td>
<td>0.11</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>251</td>
<td>8.74</td>
<td>0.63</td>
<td>0.04</td>
<td>3.54</td>
<td>1.09</td>
<td>0.07</td>
</tr>
<tr>
<td>Floater</td>
<td>Peter</td>
<td>95</td>
<td>8.68</td>
<td>0.89</td>
<td>0.09</td>
<td>3.53</td>
<td>1.28</td>
<td>0.13</td>
</tr>
</tbody>
</table>

Table 6.2. Descriptive statistics for all tokens of **bit** by speaker and CofP in Year 1

**bit** shows a separation between the Alternative and Sports CofP for normalised F₁, with all three Alternative CofP speakers producing higher normalised F₁ means than Mark and Phil (Sports CofP), especially Jack who is the most raised speaker of the sample (Table 6.2). In the Sports CofP, however, Nathan has a normalised F₁ mean which places him within the Alternative CofP. Mark and Phil have a roughly similar pattern of variation for normalised F₁ producing the most open realisations of all seven speakers. For both his mean and spread values, the Floater (Peter) falls between both CofPs for normalised F₁ (Figure 6.4). For normalised F₂, all seven speakers have similar mean and spread values.
6.1.3. Pattern of BIT Variation before Voiceless Obstruents in Year 1

There is a separation of normalised $F_1$ means between the Alternative and Sports CofPs, with the Alternative CofP mean showing a closer vowel (Figure 6.5). While this is partly due to Jack’s very high normalised $F_1$ values raising the Alternative CofP mean, both Andrew and Neil have a closer BIT vowel than either Mark or Phil.
Nathan (Sports CofP) has a raised mean which place him within the Alternative CofP (Table 6.3).

The Alternative CofP speakers are more retracted and the Sports CofP are more fronted in their spread values, but Nathan’s mean normalised $F_2$ patterns closer to the Alternative CofP than the Sports CofP.

6.1.4. Pattern of BIT Variation before Voiced Obstruents in Year 1

![Figure 6.6. Spread of BIT tokens before voiced obstruents by speaker in Year 1](image)

<table>
<thead>
<tr>
<th>CoP</th>
<th>Speaker</th>
<th>n</th>
<th>Normalised $F_1$ Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised $F_2$ Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt</td>
<td>Andrew</td>
<td>10</td>
<td>9.78</td>
<td>0.60</td>
<td>0.19</td>
<td>3.39</td>
<td>0.54</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>Jack</td>
<td>20</td>
<td>9.97</td>
<td>0.69</td>
<td>0.15</td>
<td>3.53</td>
<td>0.67</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>Neil</td>
<td>12</td>
<td>9.19</td>
<td>0.85</td>
<td>0.25</td>
<td>2.84</td>
<td>0.58</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>42</td>
<td><strong>9.70</strong></td>
<td><strong>0.78</strong></td>
<td><strong>0.12</strong></td>
<td><strong>3.30</strong></td>
<td><strong>0.67</strong></td>
<td><strong>0.10</strong></td>
</tr>
<tr>
<td>Sports</td>
<td>Mark</td>
<td>16</td>
<td>9.02</td>
<td>0.60</td>
<td>0.15</td>
<td>2.91</td>
<td>0.48</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>20</td>
<td>9.15</td>
<td>0.15</td>
<td>0.53</td>
<td>3.06</td>
<td>0.40</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>Phil</td>
<td>16</td>
<td>8.91</td>
<td>0.91</td>
<td>0.23</td>
<td>3.08</td>
<td>0.43</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>77</td>
<td><strong>9.03</strong></td>
<td><strong>0.68</strong></td>
<td><strong>0.10</strong></td>
<td><strong>3.02</strong></td>
<td><strong>0.44</strong></td>
<td><strong>0.06</strong></td>
</tr>
<tr>
<td>Floater</td>
<td>Peter</td>
<td>16</td>
<td>8.98</td>
<td>0.56</td>
<td>0.14</td>
<td>2.85</td>
<td>0.60</td>
<td>0.15</td>
</tr>
</tbody>
</table>

Table 6.4. Descriptive statistics for BIT before voiced obstruents by speaker and CoP in Year 1
For *bit* tokens before a voiced obstruent, there is a separation of CofP along normalised $F_1$, with the Alternative CofP speakers having closer realisations than the Sports CofP speakers (Figure 6.6).

Within the Alternative CofP, Jack has the highest and most retracted values. Andrew patterns most closely with Jack, having a very raised normalised $F_1$ and a very retracted normalised $F_2$. Neil, however, has a very low normalised $F_1$ mean value, patterning with the Sports CofP speakers.

Within the Sports CofP, all three speakers have very similar values for normalised $F_1$ and normalised $F_2$. The mean Sports CofP value is very close to the individual speaker means for both normalised $F_1$ and normalised $F_2$ (Table 6.4). Moreover, the spread normalised $F_1$ values show all three Sports CofP speakers to be lowered.

Peter’s variation appears to fall across both CofPs in terms of spread values, especially along the normalised $F_2$ axis. His normalised $F_1$ mean patterns more with the Sports CofP speakers, but he has a mean normalised $F_2$ mean which is almost as fronted as Neil’s.
6.1.5. Pattern of BIT Variation before Phonological /l/ in Year 1

Before /l/, we must note the very low overall token count before proceeding with the results. The Alternative CofP has a closer mean realisation than the Sports CofP, although this value is affected by Jack’s very high normalised $F_1$ (Table 6.5). In the Sports CofP, Mark has the lowest normalised $F_1$, although this should be taken cautiously since there are only 14 tokens overall for the Sports CofP. Peter’s mean
normalised $F_1$ value falls close to Mark’s, although his spread values are across both CofPs (Figure 6.7).

The mean normalised $F_2$ values suggest that the Alternative CofP has the most fronted realisation while the Sports CofP has the most retracted (Table 6.5). This is an unusual result given that for BIT tokens before voiceless and voiced obstruents, the Alternative CofP had the most retracted values. Again, Nathan (Sports CofP) is very raised and retracted, patterning with the Alternative CofP speakers.

### 6.1.6. Pattern of BIT Variation before Phonological /r/ in Year 1

![Figure 6.8. Spread of BIT tokens before phonological /r/ by speaker in Year 1](image)

Table 6.6. Descriptive statistics for BIT before phonological /r/ by speaker and CofP in Year 1

<table>
<thead>
<tr>
<th>CofP</th>
<th>Speaker</th>
<th>n</th>
<th>Normalised $F_1$ Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised $F_2$ Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt</td>
<td>Andrew</td>
<td>9</td>
<td>9.29</td>
<td>0.36</td>
<td>0.12</td>
<td>6.11</td>
<td>1.26</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>Jack</td>
<td>4</td>
<td>9.12</td>
<td>0.26</td>
<td>0.13</td>
<td>5.44</td>
<td>0.78</td>
<td>0.39</td>
</tr>
<tr>
<td></td>
<td>Neil</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>13</td>
<td>9.24</td>
<td>0.34</td>
<td>0.09</td>
<td>5.90</td>
<td>1.15</td>
<td>0.32</td>
</tr>
<tr>
<td>Sports</td>
<td>Mark</td>
<td>5</td>
<td>8.59</td>
<td>0.65</td>
<td>0.29</td>
<td>5.83</td>
<td>0.98</td>
<td>0.44</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>10</td>
<td>8.68</td>
<td>0.56</td>
<td>0.18</td>
<td>6.02</td>
<td>0.41</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>Phil</td>
<td>10</td>
<td>8.72</td>
<td>0.38</td>
<td>0.12</td>
<td>5.06</td>
<td>0.66</td>
<td>0.21</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>25</td>
<td>8.68</td>
<td>0.50</td>
<td>0.01</td>
<td>5.60</td>
<td>0.77</td>
<td>0.15</td>
</tr>
<tr>
<td>Floater</td>
<td>Peter</td>
<td>10</td>
<td>8.80</td>
<td>0.27</td>
<td>0.09</td>
<td>6.19</td>
<td>1.43</td>
<td>0.45</td>
</tr>
</tbody>
</table>
Before /r/, the overall token count is very low, though some patterning can be found in the data. The main pattern is the separation of normalised $F_1$ means between the Alternative and Sports CofP, with the Alternative CofP speakers most raised and the Sports CofP speakers most lowered (Table 6.6).

For normalised $F_1$, Andrew and Jack (Alternative CofP) are the most raised, while all three Sports CofP speakers are lowered (Figure 6.8). Mark and Nathan’s mean normalised $F_2$ values are more retracted than Jack (Alternative CofP), although Andrew’s mean normalised $F_2$ value aligns with the Sports CofP. Peter’s result for normalised $F_2$ shows him to be retracted, yet his overall spread falls across both CofPs.

### 6.1.7. Pattern of BIT Variation before Nasals in Year 1

![Figure 6.9. Spread of BIT tokens before nasals by speaker in Year 1](image-url)
Before nasals, Alternative CofP speakers generally produce more raised realisations than the Sports CofP (Figure 6.9). Andrew’s mean value, however, places him within the Sports CofP distribution. As was found in previous environments, Nathan’s mean normalised F₁ value places him within the Alternative CofP distribution (Table 6.7). For normalised F₂, the CofP means shows the Alternative speakers as slightly more fronted (although Phil in the Sports CofP is also very fronted).

6.1.8. Pattern of BIT Variation before Glottals in Year 1

![Figure 6.10. Spread of BIT tokens before glottals by speaker in Year 1](image-url)
### Table 6.8. Descriptive statistics for BIT before glottals by speaker and CofP in Year 1

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Normalised F₁ Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised F₂ Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew</td>
<td>8.72</td>
<td>0.61</td>
<td>0.19</td>
<td>3.63</td>
<td>0.42</td>
<td>0.13</td>
</tr>
<tr>
<td>Jack</td>
<td>9.81</td>
<td>1.04</td>
<td>0.73</td>
<td>3.03</td>
<td>0.35</td>
<td>0.25</td>
</tr>
<tr>
<td>Neil</td>
<td>8.15</td>
<td>0.61</td>
<td>0.19</td>
<td>3.15</td>
<td>0.41</td>
<td>0.13</td>
</tr>
<tr>
<td>Mean</td>
<td>22</td>
<td>8.56</td>
<td>0.75</td>
<td>0.17</td>
<td>3.36</td>
<td>0.47</td>
</tr>
<tr>
<td>Mark</td>
<td>8.86</td>
<td>0.60</td>
<td>0.20</td>
<td>3.13</td>
<td>0.29</td>
<td>0.10</td>
</tr>
<tr>
<td>Nathan</td>
<td>9.26</td>
<td>0.53</td>
<td>0.17</td>
<td>3.65</td>
<td>0.51</td>
<td>0.16</td>
</tr>
<tr>
<td>Phil</td>
<td>8.59</td>
<td>0.20</td>
<td>0.10</td>
<td>4.38</td>
<td>0.22</td>
<td>0.11</td>
</tr>
<tr>
<td>Mean</td>
<td>23</td>
<td>8.99</td>
<td>0.82</td>
<td>0.12</td>
<td>3.57</td>
<td>0.59</td>
</tr>
<tr>
<td>Peter</td>
<td>8.96</td>
<td>0.66</td>
<td>0.21</td>
<td>3.44</td>
<td>0.79</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Before glottals, the spread and mean speaker values show no discernable pattern on either normalised F₁ or normalised F₂ (Figure 6.10). CofP means, however, do show that, despite the small number of tokens, the Alternative CofP is most lowered and fronted. Interestingly, Peter’s normalised F₁ and F₂ values fall between the overall Alternative and Sports CofP means.

### 6.1.9. Statistical Analysis of BIT in Year 1

Regression analysis with normalised F₁ as the dependent variable (the factors of Floater CofP and voiceless obstruents were held as baseline variables), the following results were found (Table 6.9).

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictor Variable</th>
<th>Coefficients</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalised F₁</td>
<td>Alternative</td>
<td>0.41</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Voiced obstruent</td>
<td>0.54</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Approximant</td>
<td>0.21</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Adjusted r-square = 0.126, df = 3, 588

Table 6.9. Results for regression analysis on normalised F₁ of BIT in Year 1

The regression coefficients show that normalised F₁ values increase for Alternative speakers, i.e. that Alternative CofP speakers show closer vowels than the Sports CofP speakers (positive coefficients correspond to raising, negative coefficients correspond to lowering). The coefficients also show that normalised F₁ values are higher before voiced obstruents and approximants, suggesting that CAT is
closer before these environments. A two-way ANOVA test showed a significant effect of CofP ($F_{1, 2} = 12.61, p = 0.000$) and of following environment ($F_{1, 4} = 8.88, p = 0.000$, adjusted r-squared = 0.15) on normalised $F_1$, with a significant interaction between these two factors ($F_{1, 8} = 3.01, p = 0.003$) such that a separation between the CofPs in terms of height was more likely to occur before voiced obstruents and approximants. Games-Howell post hoc tests reported a significant difference between the Sports and the Alternative CofPs ($p = 0.000$), between the Alternative CofP and the Floater ($p = 0.000$), but not between the Sports CofP and Peter ($p = 0.652$). The post hoc test also showed that only voiced obstruents were significantly different to all other environments ($p = 0.022$).

Regression analysis on normalised $F_2$ reported the following results (Table 6.10).

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictor Variable</th>
<th>Coefficients</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalised $F_2$</td>
<td>Voiced obstruent</td>
<td>-0.30</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Approximant</td>
<td>1.91</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Nasal</td>
<td>-0.48</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Adjusted r-square = 0.513, df = 5, 586

Table 6.10. Results of regression analysis on normalised $F_2$ of BIT in Year 1

Only linguistic factors emerged as significant, showing that although BIT before a nasal is fronted, it is more retracted before an approximant (positive coefficients correspond to retraction, negative coefficients correspond to fronting). A two-way ANOVA on the normalised $F_2$ values showed only a significant effect of following environment ($F_{1, 4} = 138.80, p = 0.000$, adjusted r-squared = 0.52). This means that 52% of the variation in BIT $F_2$ values can be accounted for by following phonetic environment. CofP membership was not significant ($F_{1, 4} = 0.64, p = 0.528$). Games-Howell post hoc tests showed that only approximants were significantly different to all other environment. There was a significant interaction between CofP
membership and following phonetic environment ($F_{1, 8} = 1.98, p = 0.05$), but post hoc tests show that this interaction was restricted to the approximant environment, meaning that the Alternative CofP were more likely to be retracted before approximants.

### 6.1.10 Summary of BIT Variation in Year 1

The acoustic and statistical analysis of BIT showed clear differences between the CofP in terms of height, with the Alternative CofP speakers having typically closer BIT vowels. Peter was more open than Alternative CofP and patterned with the Sports CofP. Statistical analysis on normalised $F_2$ showed an effect of following phonetic environment but not CofP membership, with tokens before approximants more retracted. ANOVA test reported a significant interaction between CofP membership and following phonetic environment, meaning that the Alternative CofPs were likely to be more retracted before approximants than the Sports CofP.

### 6.2. Results of (θ) Analysis in Year 1

Sections 6.2. and 6.3 present the results of the analysis of (θ) in Year 1 and Year 2 respectively. To recap from Chapter Four, section 4.5.1., the main variants are:

- **Word Initial Pattern I**: [0, f, h]
- **Word Initial Pattern II**: [0, f]
- **Word Medial**: [0, h, f, v, ?, ø]
- **Word Final**: [0, f, ø]

Pattern I are those words which take either [h], [θ] or [f] in Glaswegian (e.g. *think*, *thing*), while Pattern II are those words which take either [θ] or [f], but not [h] (e.g. *through*, *throw*). In word medial position, there were very few coda final (θ) tokens (e.g. *birthday*). Although these tokens could typically be separated from tokens with a
(θ) onset (e.g. *something*), the small number of tokens made this impractical. As a result, tokens where (θ) occurred in the middle of a word (whether across a syllable boundary or not), were treated as a ‘word medial (θ) token’. A similar approach was taken for word final (θ), where categories were collapsed so as to avoid low token counts. To this end, tokens in consonant cluster codas (e.g. *maths*) were treated like tokens which were not in consonant cluster codas (e.g. *goth*).

The results will be presented in the following order: overall pattern of variation according to CofP and then by linguistic environment (word initial, word medial, and word final position). There then follows a comparison of (θ) across CofP by linguistic environment.

### 6.2.1. Alternative CofP: Word Initial (θ): Pattern I in Year 1

![Figure 6.11. Word Initial (θ): Pattern I among Alternative CofP speakers in Year 1](image-url)

Figure 6.11. Word Initial (θ): Pattern I among Alternative CofP speakers in Year 1
In Pattern I (e.g. *think*), both Andrew and Neil have different rate of [h], in addition to different rates of [θ] (Figure 6.11). Neil has the highest rate of the standard form, followed by Andrew, while Jack has categorical non-standard [h] (Table 6.11). Andrew is the only speaker to use [f], and uses the widest range of variants.

**6.2.2. Alternative CofP: Word Initial (θ): Pattern II in Year 1**

![Figure 6.12. Word Initial (θ): Pattern II among Alternative CofP speakers in Year 1](image)

Table 6.11. Lexical distribution of word initial (θ): Pattern I among Alternative CofP speakers in Year 1

In Pattern I (e.g. *think*), both Andrew and Neil have different rate of [h], in addition to different rates of [θ] (Figure 6.11). Neil has the highest rate of the standard form, followed by Andrew, while Jack has categorical non-standard [h] (Table 6.11). Andrew is the only speaker to use [f], and uses the widest range of variants.

**6.2.2. Alternative CofP: Word Initial (θ): Pattern II in Year 1**

![Figure 6.12. Word Initial (θ): Pattern II among Alternative CofP speakers in Year 1](image)

Table 6.11. Lexical distribution of word initial (θ): Pattern I among Alternative CofP speakers in Year 1

<table>
<thead>
<tr>
<th>WORD</th>
<th>CofP</th>
<th>Alternative</th>
<th>Overall Variant</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Speaker</td>
<td>Andrew</td>
<td>Jack</td>
<td>Neil</td>
</tr>
<tr>
<td>Variant</td>
<td>[θ]</td>
<td>[f]</td>
<td>[h]</td>
<td>[θ]</td>
</tr>
<tr>
<td>think</td>
<td>2</td>
<td>4</td>
<td>14</td>
<td>-</td>
</tr>
<tr>
<td>thing</td>
<td>-</td>
<td>5</td>
<td>11</td>
<td>-</td>
</tr>
<tr>
<td>thingwy</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>thinking</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>thinks</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>9</td>
<td>34</td>
<td>-</td>
</tr>
<tr>
<td>Overall Total</td>
<td>45</td>
<td>8</td>
<td>5</td>
<td>58</td>
</tr>
</tbody>
</table>
Table 6.12. Lexical distribution of word initial ([]) in Pattern II among Alternative CoP speakers in Year 1

<table>
<thead>
<tr>
<th>WORD</th>
<th>CoP</th>
<th>Alternative</th>
<th>Overall Variant</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variant</td>
<td>Andrew</td>
<td>Jack</td>
<td>Neil</td>
<td></td>
</tr>
<tr>
<td>three</td>
<td>[0] 15</td>
<td>[f] 2</td>
<td>[0] 3</td>
<td>[f] 5</td>
</tr>
<tr>
<td>through</td>
<td>- 15</td>
<td>- 2</td>
<td>- 3</td>
<td>- 3</td>
</tr>
<tr>
<td>third</td>
<td>2 -</td>
<td>- -</td>
<td>- -</td>
<td>- 1</td>
</tr>
<tr>
<td>thought</td>
<td>- 3</td>
<td>- -</td>
<td>- -</td>
<td>- 1</td>
</tr>
<tr>
<td>theme</td>
<td>- 4</td>
<td>- -</td>
<td>- -</td>
<td>- 1</td>
</tr>
<tr>
<td>throwing</td>
<td>- 3</td>
<td>- -</td>
<td>- -</td>
<td>- 1</td>
</tr>
<tr>
<td>Thursday</td>
<td>- 2</td>
<td>- 1</td>
<td>- -</td>
<td>- 1</td>
</tr>
<tr>
<td>thirty</td>
<td>- -</td>
<td>- 3</td>
<td>- -</td>
<td>- 1</td>
</tr>
<tr>
<td>throw</td>
<td>- 3</td>
<td>- -</td>
<td>- -</td>
<td>- 1</td>
</tr>
<tr>
<td>thin</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- 1</td>
</tr>
<tr>
<td>thousand</td>
<td>- 1</td>
<td>- -</td>
<td>- -</td>
<td>- 1</td>
</tr>
<tr>
<td>throttle</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- 1</td>
</tr>
</tbody>
</table>
Total | 3 46 | 1 9 | 5 10 | 9 65 | 74 74 |

The most typical variant in Pattern II (e.g. throw) is non-standard [f] (Table 6.12), but all three speakers use also use standard [0] (Figure 6.12). Similar to Pattern I, Neil has the highest rate of standard [0] while Andrew has the lowest. Andrew and Jack are the two most alike speakers, using similar rates of [0] and [f].

**6.2.3. Alternative CoP: Word Medial ([]) in Year 1**

![Figure 6.13. Word Medial (0) among Alternative CoP speakers in Year 1](image)
Table 6.13. Lexical distribution of word medial (0) among Alternative CofP speakers in Year 1

The distribution of word medial (0) showed a spread of variants (Figure 6.13), but the majority of variance was comprised of [?] in the TH-pro set (Table 6.13). This resulted in pronunciations like [saʔən] (something) and [enʔən] (anything). Jack and Andrew were the only speakers in the Alternative CofP who used a variant other than [?] in the TH-pro set, and this was standard [0], but only in one word for each speaker (Jack in everything and Andrew in nothing). The main variant otherwise was [f] (n = 10, e.g. without, gothic). The only deviation from this pattern was Jack's use of [0] in the word pathetic. Interestingly, in this position it is Jack who leads in the use of standard (0), while for word initial (0) (both Pattern I and II), Neil led in the use of standard (0).
6.2.4. Alternative CofP: Word Final (\(0\)) in Year 1

Figure 6.14. Word Final (\(0\)) among Alternative CofP speakers in Year 1

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Andrew</th>
<th>Jack</th>
<th>Neil</th>
<th>Overall</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variant</td>
<td>Word</td>
<td>[f]</td>
<td>[∅]</td>
<td>[f]</td>
<td>[∅]</td>
</tr>
<tr>
<td>with</td>
<td>3</td>
<td>12</td>
<td>-</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>fourth</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>goth</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>maths</td>
<td>3</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>month</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>months</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>mouth</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>south</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
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<tr>
<td>both</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>goths</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>sixth</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>45</td>
<td>8</td>
<td>12</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 6.14. Lexical distribution of word final (\(0\)) among Alternative CofP speakers in Year 1

The bulk of the variance comprises of \([∅]\) (Figure 6.23), and is the result of one common lexical item: *with*. This token accounts for 70% of the total (68/97, Table 6.14), and most speakers use \([∅]\) (65/68), a pronunciation which is the traditional
Scots form of *with* ([we]). Only three tokens have [f] and this variant is used only by Jack.

6.2.5. Summary for (θ) in the Alternative CofP in Year 1

The analysis of (θ) in the Alternative CofP in Year 1 showed that in word initial (θ) Pattern I, there appeared to be no agreement in the use of variants across the three speakers, although Andrew and Neil both used [θ]. In Pattern II, all three speakers used both [θ] and [f], with Neil leading in the use of [θ]. Word medial (θ) showed a large effect of lexical category, with [θ] being the most common variant in the TH-pro set. In word final (θ), a similar effect of lexical item was found, with most of the tokens consisting of *with* which was realised as the traditional Scots form *wi’*.

6.2.6. Sports CofP: Word Initial (θ): Pattern I in Year 1

![Figure 6.15. Word Initial (θ): Pattern I among Sports CofP speakers in Year 1](image)
Table 6.15. Lexical distribution of word initial (0) : Pattern I among Sports CofP speakers in Year 1

<table>
<thead>
<tr>
<th>WORD</th>
<th>Speaker</th>
<th>Mark</th>
<th>Nathan</th>
<th>Phil</th>
<th>Overall Variant</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Variant</td>
<td>[0]</td>
<td>[f]</td>
<td>[h]</td>
<td>[0]</td>
<td>[f]</td>
</tr>
<tr>
<td>think</td>
<td></td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>thing</td>
<td></td>
<td>1</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>thingy</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>thingy</td>
<td></td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>thing</td>
<td></td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>thinks</td>
<td></td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>thingie</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>thingying</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1</td>
<td>12</td>
<td>-</td>
<td>1</td>
<td>30</td>
</tr>
</tbody>
</table>

Mark and Phil have relatively similar rates of [h] realisation (92% and 96% respectively), while Phil uses 70% of [h] (Figure 6.15). Mark is the only speaker who uses standard [0] while [f] is used only by Nathan and Phil.

6.2.7. Sports CofP: Word Initial (0): Pattern II in Year 1

Figure 6.16. Word Initial (0): Pattern II among Sports CofP speakers in Year 1
Table 6.16. Lexical distribution of word initial (\(\theta\)): Pattern II among Sports CoP speakers in year 1

<table>
<thead>
<tr>
<th>WORD</th>
<th>CoP Speaker</th>
<th>Sports CoP</th>
<th>Overall Variant</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Variant</td>
<td>[(\theta)]</td>
<td>[f]</td>
<td>[(\theta)]</td>
</tr>
<tr>
<td>three</td>
<td>- 3 7</td>
<td>- 7</td>
<td>- 7</td>
<td>7</td>
</tr>
<tr>
<td>third</td>
<td>- 6 6</td>
<td>- 6</td>
<td>- 6</td>
<td>6</td>
</tr>
<tr>
<td>through</td>
<td>- 2 2</td>
<td>- 2</td>
<td>- 2</td>
<td>2</td>
</tr>
<tr>
<td>thought</td>
<td>- 2 2</td>
<td>- 2</td>
<td>- 2</td>
<td>2</td>
</tr>
<tr>
<td>threw</td>
<td>- 2 2</td>
<td>- 2</td>
<td>- 2</td>
<td>2</td>
</tr>
<tr>
<td>thirty</td>
<td>- 1 1</td>
<td>- 1</td>
<td>- 1</td>
<td>1</td>
</tr>
<tr>
<td>threaten</td>
<td>- 1 1</td>
<td>- 1</td>
<td>- 1</td>
<td>1</td>
</tr>
<tr>
<td>throwing</td>
<td>- 1 1</td>
<td>- 1</td>
<td>- 1</td>
<td>1</td>
</tr>
<tr>
<td>Thursday</td>
<td>- 1 1</td>
<td>- 1</td>
<td>- 1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>- 23 23</td>
<td>- 23 23</td>
<td>- 23 23</td>
<td>23</td>
</tr>
</tbody>
</table>

Although this position has a low number of tokens, Pattern II words show categorical use of [f] in the Sports CoP, with no variation across speaker (Figure 6.16).

6.2.8. Sports CoP: Word Medial (\(\theta\)) in Year 1

Figure 6.17. Word Medial (\(\theta\)) among Sports CoP speakers in Year 1
The majority of the variation is made up of [ʔ] (Figure 6.17), and every instance of this variant was found in the TH-pro set (Table 6.17). The remaining five tokens all took [f]. The use of [ʔ] in the TH-pro set and [f] in all other lexical items is a similar finding to that in the Alternative CofP.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Speaker</th>
<th>Mark</th>
<th>Nathan</th>
<th>Phil</th>
<th>Overall</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>something</td>
<td>TH-pro</td>
<td>[f]</td>
<td>[ʔ]</td>
<td>[f]</td>
<td>[ʔ]</td>
<td>14</td>
</tr>
<tr>
<td>anything</td>
<td></td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>nothing</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>everything</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>12</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>TH-pro total</th>
<th>5</th>
<th>12</th>
<th>10</th>
<th>27</th>
<th>27</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Variant</th>
<th>non-TH-pro</th>
<th>[ʔ]</th>
<th>[f]</th>
<th>[ʔ]</th>
<th>[f]</th>
<th>[ʔ]</th>
<th>[f]</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gotham</td>
<td>non-TH-pro total</td>
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<td>3</td>
<td>1</td>
<td>5</td>
<td>5</td>
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<td></td>
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<tr>
<td>birthday</td>
<td>Overall total</td>
<td>6</td>
<td>15</td>
<td>11</td>
<td>32</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6.17. Lexical distribution of word medial (0) among Sports CofP speakers in Year 1
## 6.2.9. Sports CofP: Word Final (ɓ) in Year 1

![Figure 6.18. Word Final (ɓ) among Sports CofP speakers in Year 1](image)

<table>
<thead>
<tr>
<th>WORD</th>
<th>Speaker</th>
<th>Mark</th>
<th>Nathan</th>
<th>Phil</th>
<th>Overall</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variant</td>
<td>ɓ</td>
<td>ẻ</td>
<td>ɓ</td>
<td>ẻ</td>
<td>ɓ</td>
<td>ẻ</td>
</tr>
<tr>
<td><em>with</em></td>
<td>-</td>
<td>9</td>
<td>-</td>
<td>40</td>
<td>2</td>
<td>26</td>
</tr>
<tr>
<td><em>fifth</em></td>
<td>1</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><em>fourth</em></td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td><em>south</em></td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><em>month</em></td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
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<td>-</td>
</tr>
<tr>
<td><em>mouth</em></td>
<td>-</td>
<td>-</td>
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<td>-</td>
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</tr>
<tr>
<td><em>youth</em></td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><em>months</em></td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><em>sixth</em></td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><em>underneath</em></td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5</td>
<td>9</td>
<td>14</td>
<td>40</td>
<td>3</td>
<td>26</td>
</tr>
</tbody>
</table>

Table 6.18. Lexical distribution of word final (ɓ) among Sports CofP speakers in Year 1

The main variant appears to be deletion of /ɓ/ (Figure 6.18), but closer analysis shows that the results are highly constrained by lexical item. Specifically, the Sports CofP had 97 tokens of word final (ɓ), 77 of which were *with* (Table 6.18). The principal
realisation of this lexical item was *wi’* (75/77). Only Phil uses two instances of [f], and this speaker also had the highest rate of [f] for word initial (θ) Pattern I.

6.2.10 Summary for (θ) in the Sports CofP in Year 1

The results for (θ) in the Sports CofP show that they tend to use more [h] in word initial Pattern I words and categorical [f] in Pattern II words. In word medial position we see again the effect of lexical item, with most of the tokens consisting of TH-pro forms. All of these tokens took [ʔ]. A similar effect of lexical item was also observed in word final position, with the majority of tokens consisting of *with*. Nearly every instance of *with* was realised as the traditional Scots form *wi’,* although Phil used two instances of [f] in *with*. All other tokens which were not *with* used [f].

6.2.11. (θ) across all CofPs in Year 1

Having discussed the pattern of variation within each CofP, (θ) will now be compared across all CofPs (Alternative, Sports, and Floater).
6.2.12. Word Initial (θ): Pattern I across all CofPs in Year 1

Figure 6.19. Word Initial (θ): Pattern I by speaker in Year 1

n = 141

Alternative Speakers
Andrew Jack Neil Peter Mark Nathan Phil

Percentage

[ ] [θ]
[ ] [f]
[ ] [h]
<table>
<thead>
<tr>
<th>WORD</th>
<th>CofP</th>
<th>Alternative</th>
<th>Floater</th>
<th>Sports</th>
<th>Overall Variant</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Variant</td>
<td>[0]</td>
<td>[f]</td>
<td>[h]</td>
<td>[0]</td>
<td>[f]</td>
</tr>
<tr>
<td>think</td>
<td>2</td>
<td>4</td>
<td>14</td>
<td>-</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>thing</td>
<td>-</td>
<td>5</td>
<td>11</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>thingy</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>things</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>thinks</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>thinking</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>thingied</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>thingying</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Overall Total</td>
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<td>8</td>
<td>5</td>
<td>14</td>
<td>13</td>
<td>31</td>
</tr>
</tbody>
</table>

Table 6.19. Lexical distribution of word initial (0): Pattern I among all speakers in Year 1
For word initial (0) Pattern I, the Alternative CofP speakers tend to use a lower rate of [h] (particularly in the lexical item *think*, Table 6.19), although Jack is the exception to this with his categorical use of [h]. Moreover, Phil uses a slightly lower rate of [h], making him more like Andrew and Neil. In the Sports CofP, Nathan and Phil use [f], but Andrew is the only Alternative CofP member to use it. With the exception of Jack, there is a higher use of the standard variant [0] by the Alternative CofP speakers. Peter uses only non-standard variants (43% [f] vs. 57% [h]).

**6.2.13. Word Initial (0): Pattern II across all CofPs in Year 1**

![Figure 6.20. Word Initial (0): Pattern II by speaker in Year 1](image)
Table 6.20. Lexical distribution of word initial (\(\theta\)): Pattern II among all speakers in Year 1

<table>
<thead>
<tr>
<th>Variant</th>
<th>Andrew</th>
<th>Jack</th>
<th>Neil</th>
<th>Peter</th>
<th>Mark</th>
<th>Nathan</th>
<th>Phil</th>
<th>Overall Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>three</td>
<td>1</td>
<td>15</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>through</td>
<td>-</td>
<td>15</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>third</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
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<td>-</td>
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<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>theme</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>1</td>
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</tr>
<tr>
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<td>-</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>thirty</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
<td>1</td>
</tr>
<tr>
<td>threw</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>thousand</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>trash</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>threaten</td>
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<td>-</td>
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</tr>
<tr>
<td>throttle</td>
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<td>-</td>
<td>-</td>
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<td>-</td>
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<td>-</td>
</tr>
<tr>
<td>Overall Total</td>
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<td>10</td>
<td>15</td>
<td>4</td>
<td>3</td>
<td>8</td>
<td>12</td>
<td>101</td>
</tr>
</tbody>
</table>
There is a clear division according to CofP membership in Pattern II words (Figure 6.20). Sports CofP speakers lead in the use of [f] while the Alternative CofP use the standard [θ] and non-standard [f]. Peter patterns with the Sports CofP, using categorical [f].

6.2.14. Word Initial (θ) across all CofPs in Year 1

![Graph showing word initial (θ) across all speakers in Year 1.](image)

Figure 6.21. Word Initial (θ) by speaker in Year 1

Figure 6.21. shows the overall variation for word initial (θ) independent of lexical category. We can see that there appears to be a split between the CofPs in terms of the [h], with the Sports CofP leading in the overall rate for this variant. The Alternative CofP has a slight overall increase in the use of [θ] and [f], although Phil (Sports CofP) and Peter (Floater) also have high rates of [f].
6.2.15. Word Medial (θ) across all CofPs in Year 1

Figure 6.22. Word Medial (θ) by speaker in Year 1

n = 148
<table>
<thead>
<tr>
<th>CofP</th>
<th>Alternative</th>
<th>Floater</th>
<th>Sports</th>
<th>Overall</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Speaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td></td>
<td>Andrew</td>
<td>Jack</td>
<td>Neil</td>
<td>Peter</td>
<td>Mark</td>
</tr>
<tr>
<td>Variant</td>
<td>[0] [f] [?]</td>
<td>[0] [f] [?]</td>
<td>[0] [f] [?]</td>
<td>[0] [f] [?]</td>
<td>[0] [f] [?]</td>
</tr>
<tr>
<td>something</td>
<td>- - 30</td>
<td>- - 9</td>
<td>- - 13</td>
<td>- - 9</td>
<td>- 4</td>
</tr>
<tr>
<td>anything</td>
<td>- - 20</td>
<td>- - 2</td>
<td>- - 3</td>
<td>- - 1</td>
<td>- 1</td>
</tr>
<tr>
<td>everything</td>
<td>- - 5</td>
<td>1 - 3</td>
<td>- - -</td>
<td>- - 3</td>
<td>- - 1</td>
</tr>
<tr>
<td>nothing</td>
<td>1 - 6</td>
<td>- - 2</td>
<td>- - -</td>
<td>- - -</td>
<td>- - 1</td>
</tr>
<tr>
<td>Total</td>
<td>1 - 61</td>
<td>1 - 16</td>
<td>- - 16</td>
<td>- - 13</td>
<td>- 5</td>
</tr>
<tr>
<td>TH-pro</td>
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<td>17</td>
<td>16</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
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<td>Variant</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>without</td>
<td>-</td>
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<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>gothic</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>pathetic</td>
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<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>birthday</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Gotham</td>
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<td>-</td>
<td>-</td>
<td>-</td>
</tr>
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<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>non-TH-pro total</td>
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<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Overall total</td>
<td>68</td>
<td>20</td>
<td>17</td>
<td>14</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 6.1. Lexical distribution of word medial (0) among all speakers in Year 1
The majority of tokens in this environment are from the TH-pro set (135/151), constituting nearly 90% of the tokens (Figure 6.22. and Table 6.21). While most speakers use [ʔ], Jack and Andrew use the standard [0] (although only in one token each, *nothing* and *everything*). In non TH-pro words, the main variant is [f], but Jack has one token of standard [0] in *pathetic*. Peter follows the pattern of categorical [ʔ] in the TH-pro set and [f] in all other lexical items.

**6.2.16. Word Final (0) across all CofPs**

![Bar chart](image)

*Figure 6.23. Word Final (0) across all speakers in Year 1*
<table>
<thead>
<tr>
<th>WORD</th>
<th>CofP</th>
<th>Alternative</th>
<th>Floater</th>
<th>Sports</th>
<th>Overall</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Speaker</td>
<td>Andrew</td>
<td>Jack</td>
<td>Neil</td>
<td>Peter</td>
<td>Mark</td>
</tr>
<tr>
<td>Variant</td>
<td>[f]</td>
<td>[Ø]</td>
<td>[f]</td>
<td>[Ø]</td>
<td>[f]</td>
<td>[Ø]</td>
</tr>
<tr>
<td>with</td>
<td>-</td>
<td>45</td>
<td>3</td>
<td>12</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>fourth</td>
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<td>-</td>
<td>2</td>
<td>-</td>
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<td>-</td>
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<tr>
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<tr>
<td>goth</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>month</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>months</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>mouth</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
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<td>-</td>
<td>-</td>
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<tr>
<td>both</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>goths</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>fifth</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>sixth</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Total</td>
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<td>45</td>
<td>8</td>
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<td>8</td>
</tr>
<tr>
<td>Overall total</td>
<td>63</td>
<td>20</td>
<td>14</td>
<td>32</td>
<td>14</td>
<td>32</td>
</tr>
</tbody>
</table>

Table 6.22. Lexical distribution of word final (Ø) among all speakers in Year 1
The bulk of the variance comprises of [ə] (Figure 6.23). This is the result of one predominant lexical item: *with*, which accounts for nearly 76% of the total tokens (173/226, Table 6.22). Deletion of /θ/ in this word is the most common variant. While most speakers use the traditional Scots form *wi’* (168/173), Jack and Phil use *wif* (Jack has three instances while Phil has two). For the remaining 55 tokens of word final (θ), every speaker uses [f].

6.2.17. Statistical Analysis of (θ) in Year 1

The chi-square test reported a significant association between CofP membership and realisation of word initial (θ) ($\chi^2(4) = 2.56, p = 0.000$). This reflects the fact that the Alternative CofP speakers are more likely to use standard [θ]. It also reflects that the Sports CofP use more instances of [h] than the Alternative CofP. Cramer’s V value of 0.230 was significant ($p = 0.000$), representing a medium-low relationship between CofP membership and word initial (θ) realisation.

6.3.18. Summary of (θ) Variation in Year 1

There was separation of (θ) according to CofP membership such that, overall, the Alternative CofP were more standard (uses more [θ]), while the Sports CofP is less standard (uses less [θ]). This was particularly the case in word initial (θ) Pattern II, where the Sports CofP (with whom Peter patterns) used categorical [f] while the Alternative CofP use low rates of [θ] in addition to [f]. In word medial position, there was a large effect of lexical category. Most of the tokens in this position were from the TH-pro set (*anything, everything, nothing, something*), and almost every token had [ʔ]. Only within the Alternative CofP did speakers use a different variant, the main of which was [θ]. For those tokens which were not members of the TH-pro set, the
default variant was non-standard [f]. The one exception to this pattern is Jack's use of [0] in *pathetic*. Peter's pattern of variation here follows the same patterning as the other CofPs, namely using [?] in the *TH-pro* set and [f] otherwise.

A similar effect of lexical category affected word final (0), since many of the tokens in this position were *with*. The vast majority were realised by speakers as the traditional Scots form *wi’* ([we]), but two speakers in the Alternative CofP (Andrew and Jack) used [f] on several occasions. More importantly, however, was the finding that no speakers used [0] in this position, with all speakers rejecting the standard variant.

**6.3. Results of (0) Analysis in Year 2**

We now move to an analysis of (0) in Year 2, showing the pattern of variation across three CofPs: Alternative (Kevin, Mathew, Peter), Sports (Mark, Nathan, Phil), and Ned (Danny, Max, Noah). Year 2 represented a period in the fieldwork where CofP membership was reconfigured. As a result of this reconfiguration, Peter (the Floater from Year 1), became a core member of the Alternative CofP instead of a peripheral one. The Sports CofP maintained a stable membership, while the Ned CofP was newly encountered in Year 2.
6.3.1. Alternative CofP: Word Initial (0): Pattern I in Year 2

![Figure 6.24. Word Initial (0): Pattern I among Alternative CofP speakers in Year 2](image)

Table 6.23. Lexical distribution of word initial (0): Pattern I among Alternative CofP speakers in Year 2

<table>
<thead>
<tr>
<th>WORD</th>
<th>CofP</th>
<th>Kevin</th>
<th>Matthew</th>
<th>Peter</th>
<th>Overall Variant</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Speaker</td>
<td>[0]</td>
<td>[f]</td>
<td>[h]</td>
<td>[0]</td>
<td>[f]</td>
</tr>
<tr>
<td>think</td>
<td></td>
<td>11</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>thing</td>
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<td>2</td>
<td>1</td>
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<tr>
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<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
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<td>-</td>
<td>-</td>
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</tr>
<tr>
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<td>2</td>
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<td>-</td>
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<tr>
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<td>-</td>
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<td>19</td>
<td>5</td>
<td>5</td>
<td>13</td>
<td>3</td>
</tr>
</tbody>
</table>

In word initial (0) Pattern I (e.g. *think*), Kevin and Mathew have a similar rate of [0] and [h], and all three speakers have similar rates for [f] (Figure 6.24). Peter, however, uses far more [h], while Kevin and Mathew appear to reject this variant (Table 6.23).
6.3.2. Alternative CofP: Word Initial (0): Pattern II in Year 2

![Figure 6.25. Word Initial (0): Pattern II among Alternative CofP speakers in Year 2](image)

<table>
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<tr>
<th>WORD</th>
<th>CoP Speaker</th>
<th>Kevin</th>
<th>Matthew</th>
<th>Peter</th>
<th>Overall Variant</th>
</tr>
</thead>
<tbody>
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<td>[f]</td>
<td>[0]</td>
<td>[f]</td>
<td>[0]</td>
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<td>8</td>
<td>9</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
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<td>-</td>
</tr>
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<td>third</td>
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<td>-</td>
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<td>2</td>
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<td>-</td>
<td>-</td>
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</tr>
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<td>17</td>
<td>19</td>
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<td>8</td>
<td>3</td>
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</tbody>
</table>

Table 6.24. Lexical distribution of word initial (0): Pattern II among Alternative CofP speakers in Year 2

All three speakers use both standard and non-standard variants in Pattern II words (e.g. *throw*). Peter uses [f] most and [0] least, while Kevin uses similar rates of both
variants (Figure 6.25). Mathew shows a slight preference towards [f], although he also uses approximately 40% of [θ].

6.3.3. Alternative CofP: Word Medial (θ) in Year 2

![Bar chart showing the distribution of [θ] for Kevin, Mathew, and Peter.]

Figure 6.26. Word Medial (θ) among Alternative CofP speakers in Year 2

n = 42
Table 6.25. Lexical distribution of word medial (θ) among Alternative CofP speakers in Year 2

<table>
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</thead>
<tbody>
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<td>Variant</td>
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<td>[t]</td>
<td>[2]</td>
<td>[Ø]</td>
<td>[0]</td>
<td>[t]</td>
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<td>2</td>
<td>-</td>
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<td>3</td>
</tr>
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<td>40</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variant</td>
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<td>[0]</td>
<td>[t]</td>
<td>[Ø]</td>
<td>[0]</td>
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<td>-</td>
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<td>1</td>
<td>-</td>
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<td>2</td>
<td></td>
</tr>
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<td>14</td>
<td>8</td>
<td>42</td>
<td>42</td>
<td></td>
</tr>
</tbody>
</table>
As in Year 1, the bulk of the tokens (40/42) are from the TH-pro set (e.g. *something*, *everything*, Table 6.25). For TH-pro words, Peter uses categorical [ʔ], but Kevin and Mathew use a spread of variants, including standard [0]. Mathew almost completely rejects [ʔ], instead preferring both [0] and [f] (Figure 6.26).

### 6.3.4. Alternative CofP: Word Final (0) in Year 2

**Figure 6.27. Word Final (0) among Alternative CofP speakers in Year 2**

<table>
<thead>
<tr>
<th>WORD</th>
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<th>Mathew</th>
<th>Peter</th>
<th>Overall</th>
</tr>
</thead>
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<tr>
<td></td>
<td>[0]</td>
<td>[f]</td>
<td>[∅]</td>
<td>[0]</td>
</tr>
<tr>
<td>with</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>goth</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>month</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
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<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>fifth</td>
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<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>fourth</td>
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<td>-</td>
</tr>
<tr>
<td>goths</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
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<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>filth</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
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<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
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<td>-</td>
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n = 111
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<td>26</td>
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<td>19</td>
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<td>111</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6.26. Lexical distribution of word final (Ø) among Alternative CofP speakers in Year 2

As in Year 1, the majority of the tokens of word final (Ø) in Year 2 are with (85/111), constituting nearly 77% of the tokens (Table 6.26). While all three speakers show a preference for [we], each speaker has one instance of [f], and Kevin has two tokens which have [Ø]. Kevin has the highest rate of [Ø] while Mathew has the lowest, a reversal of the results found in word medial position where Mathew used the most (Ø). Peter has the lowest rate of [Ø] (one instance in goth), preferring to use [f] (Figure 6.27).

6.3.5. Summary for (Ø) in Alternative CofP in Year 2

The finding in Year 1 that the Alternative CofP was more standard appears to hold out in the analysis of data from Year 2. In word initial (Ø) pattern I, there was a high rate of [Ø] use by both Kevin and Mathew, although Peter tended to use a high rate of [h] instead. In Pattern II, we also found that use of [Ø] was high, with Kevin leading in the use of this variant. The use of [f] was also high, and accounted for approximately 50% of the overall variation in Pattern II. Analysis of (Ø) in word medial position again found a large effect of lexical item, with most of the tokens coming from the TH-pro set. While many of these tokens were realised with [ʔ], both Kevin and Mathew had several instances of [Ø]. The effect of lexical item was also apparent in word final position, with many of the tokens consisting of with. Although the main variant in this position was [Ø], all three speakers used [f], while Kevin and Mathew also used [Ø].
6.3.6. Sports CofP: Word Initial (0): Pattern I in Year 2

![Figure 6.28. Word Initial (0): Pattern I among Sports CofP speakers in Year 2](image)

n = 67 Speakers

Table 6.27. Lexical distribution of word initial (0): Pattern I among Sports CofP speakers in Year 2

<table>
<thead>
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<th>WORD</th>
<th>CoP Speaker</th>
<th>Sports</th>
<th>Overall Variant</th>
<th>n</th>
</tr>
</thead>
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<td></td>
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<td>Nathan</td>
<td>Phil</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Variant</td>
<td>[0]</td>
<td>[f]</td>
<td>[h]</td>
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</tr>
<tr>
<td>thing</td>
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<tr>
<td>thingwy</td>
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<tr>
<td>things</td>
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<td>-</td>
</tr>
<tr>
<td>things</td>
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<td>1</td>
<td>-</td>
</tr>
<tr>
<td>thingy</td>
<td>-</td>
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<td>-</td>
</tr>
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<td>thingwied</td>
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<td>-</td>
<td>24</td>
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</tr>
</tbody>
</table>

In Pattern I (e.g. think) all three speakers use a high rate of non-standard variant [h] (categorical in the case of Nathan, Table 6.27), and low rates of [f] and [0] (Figure 6.28). Mark and Phil have similar values for the standard [0], while Phil is the only speaker to use innovative [f], although less than Year 1 (due to the low number of
tokens, however, this result must be taken cautiously). The results for the Sports CofP speakers are similar to their results from Year 1 in terms of the high use of [h].

6.3.7. Sports CofP: Word Initial (0): Pattern II in Year 2

![Figure 6.29. Word Initial (0): Pattern II among Sports CofP speakers in Year 2](image)

<table>
<thead>
<tr>
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<th>CoP Speaker</th>
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<th>Overall Variant</th>
<th>n</th>
</tr>
</thead>
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<td>Nathan</td>
<td>Phil</td>
</tr>
<tr>
<td></td>
<td>Variant</td>
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<td>[f]</td>
<td>[0]</td>
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<td>9</td>
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<td>9</td>
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</table>

Table 6.28. Lexical distribution of word initial (0): Pattern II among Sports CofP speakers in Year 2
In Pattern II (e.g. *throw*), all three speakers use high rates of non-standard [f] (Figure 6.29). This is categorical for Phil and almost categorical for Nathan (Table 6.28). For Mark, however, [θ] accounts for over 35% of his overall variation and he uses less [f] than either Nathan or Phil. This result is slightly different to Year 1 where all three speakers had categorical [f].

6.3.8. Sports CofP: Word Medial (θ) in Year 2

![Graph showing percentage of [θ] in Word Medial (θ) among Sports CofP speakers in Year 2]

Figure 6.30. Word Medial (θ) among Sports CofP speakers in Year 2
<table>
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<th>Speaker</th>
<th>Mark</th>
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<th>Phil</th>
<th>Overall</th>
<th>n</th>
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<td>[0]</td>
<td>[f]</td>
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<td>[v]</td>
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<td>[f]</td>
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<td>within</td>
<td>-</td>
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<td>-</td>
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</tr>
<tr>
<td></td>
<td>Total</td>
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<td>3</td>
<td>1</td>
<td>8</td>
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</tr>
<tr>
<td>non-TH-pro total</td>
<td></td>
<td>5</td>
<td>8</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall total</td>
<td></td>
<td>11</td>
<td>18</td>
<td>31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6.29. Lexical distribution of word medial (0) among Sports CofP speakers in Year 2
As in Year 1, most of the tokens of word medial (θ) are from the TH-pro set (43/60, Table 6.29). The most common variant in this set of words is [ʔ] (Figure 6.30), but Nathan uses one token of [f] in something. Mark is the only speaker who uses the standard variant [θ] in one token (Catholic), as well as one instance of [v] (within).

6.3.9. Sports CofP: Word Final (θ) in Year 2

![Graph showing the distribution of word final (θ) among Sports CofP speakers in Year 2.]

Figure 6.31. Word Final (θ) among Sports CofP speakers in Year 2

n = 128
<table>
<thead>
<tr>
<th>Speaker</th>
<th>Variant</th>
<th>Mark</th>
<th>Nathan</th>
<th>Phil</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[0]</td>
<td>[f]</td>
<td>[∅]</td>
<td>misc</td>
<td>[0]</td>
</tr>
<tr>
<td>with</td>
<td>-</td>
<td>-</td>
<td>28</td>
<td>-</td>
<td>-</td>
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<tr>
<td>month</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>fifth</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>mouth</td>
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<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>sixth</td>
<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
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<td>fourth</td>
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<td>-</td>
</tr>
<tr>
<td>bath</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>goth</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>goths</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>10</td>
<td>31</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 6.30. Lexical distribution of word final (0) among Sports CofP speakers in Year 2
As in Year 1, the bulk of word final (θ) tokens are \textit{with} (87/128, Table 6.30), with deletion of /θ/ categorical in the Sports CofP (Figure 6.31). All remaining tokens tend to have [f], although Mark and Phil also have one instance of [θ] each (\textit{month} and \textit{mouth}).

6.3.10. Summary of (θ) in Sports CofP in Year 2

The analysis of (θ) in the Sports CofP in Year 2 showed clear results. In word initial (θ) Pattern I, there was a high use of [h] across all three speakers, and very low use of [f] and [θ]. For Pattern II, there was a high use of non-standard [f], although there was low use of [θ] in two speakers. The lexical item effect was observed again in word medial position, with many of the tokens coming from the TH-pro set. As noted in previous analyses of the Banister Academy data, the most typical variant in the TH-pro set is [ʔ], and the results for the Sports CofP in Year 2 continued this trend. For all other lexical items, the usual variant was [f]. Lastly, word medial position maintained an effect of lexical item with most of the tokens consisting of \textit{with}. As expected, the only variant was [∅], while the majority of words which were not \textit{with} took [f].
6.3.11. Ned CofP: Word Initial (0): Pattern I in Year 2

![Figure 6.32. Word Initial (0): Pattern I among Ned CofP speakers in Year 2](image)

Table 6.31. Lexical distribution of word initial (0): Pattern I among Ned CofP speakers in Year 2

<table>
<thead>
<tr>
<th>WORD</th>
<th>CofP</th>
<th>Ned</th>
<th>Overall</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Variant</td>
<td>Danny</td>
<td>Max</td>
<td>Noah</td>
</tr>
<tr>
<td>thingy</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>thingwy</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>think</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>thing</td>
<td></td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>things</td>
<td></td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>thinking</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>thinks</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>-</td>
<td>-</td>
<td>14</td>
</tr>
</tbody>
</table>

Although we must note the low number of tokens, in Pattern I words (e.g. think), all three Ned CofP speakers use categorical [h] (Figure 6.32). Although the most common lexical item within pattern II words is thingy, this is only from one speaker (Danny). All thing derivatives, however, take [h] (Table 6.31).
6.3.12. Ned CofP: Word Initial (0): Pattern II in Year 2

The low token count means that the results should be taken cautiously, but the main tendency in Pattern II (e.g. *throw*) appears to be for Ned CofP speakers to use [f], with Danny and Noah having categorical [f] (Figure 6.33). Although Max had only two instances of [0], his low token count meant that these two tokens account for 40% of his variation. He does, however, use both [f] and [h] for the lexical item *three* (Table 6.32).
6.3.13. Ned CofP: Word Medial (θ) in Year 2

Figure 6.34. Word Medial (θ) among Ned CofP speakers in Year 2
<table>
<thead>
<tr>
<th>Speaker</th>
<th>Danny</th>
<th>Max</th>
<th>Noah</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variant</td>
<td>[0]</td>
<td>[f]</td>
<td>[?]</td>
<td>[0]</td>
</tr>
<tr>
<td>TH-pro</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>something</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>anything</td>
<td>-</td>
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<td>1</td>
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</tr>
<tr>
<td>TH-pro total</td>
<td>6</td>
<td>1</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>non-TH-pro</td>
<td>Variant</td>
<td>[0]</td>
<td>[f]</td>
<td>[0]</td>
</tr>
<tr>
<td>without</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>non-TH-pro total</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Overall total</td>
<td>6</td>
<td>2</td>
<td>9</td>
<td>17</td>
</tr>
</tbody>
</table>

Table 6.33. Lexical distribution of word medial (0) among Ned CofP speakers in Year 2
Like the results found in previous word positions, the very low number of tokens means that the results for word medial position must be taken cautiously. Nearly every token is from the TH-pro set (16/17, Table 6.33), with [?] being the most common variant (Figure 6.34), although Danny and Noah have several instances of deletion for the word *everything*. Since Max has only two tokens (*nothing* and *without*), his results appear markedly different. His choice of variants, however, is typical of other speakers, having [?] in *nothing* (TH-pro) and [f] in *without* (non-TH-pro).

### 6.3.14. Ned CofP: Word Final (0) in Year 2

![Graph](image)

Figure 6.35. Word Final (0) among Ned CofP speakers in Year 2

n = 43
Like word final position in other CofPs, the majority of the tokens are *with* (40/43, Table 6.34). Deletion of */θ/* is categorical here (Figure 6.35), with all speakers using *wi’*. The few words which are not *with* all take non-standard [f].

### 6.3.15. Summary of (θ) in the Ned CofP in Year 2

The analysis of (θ) showed categorical use of [h] in word initial Pattern I and near-categorical use of [f] in word initial Pattern II words. The number of tokens for word medial position was very low and must be treated with caution, but there still appeared to be an effect of lexical item, with the most common variant being [ʔ] in the TH-pro set. Similarly, there were very low numbers of tokens in word final position, but the results still show that the most common token in this position is *with*.

Like previous analyses have shown, the most common variant in this word is [∅], and the results from the Ned CofP continues this trend.
For Pattern I (e.g. think), the Alternative CofP appears to use the least [h], the Sports CofP uses more [h], and finally the variant becomes categorical in the Ned CofP. Moreover, the Alternative CofP lead in the use of [θ], the Sports use less [θ], and the Ned CofP reject it (Figure 6.36 and Table 6.35). This suggests that the Alternative CofP is the most standard while the Ned CofP is the least standard.
<table>
<thead>
<tr>
<th>WORD</th>
<th>CoP</th>
<th>Alternative</th>
<th>Sports</th>
<th>Ned</th>
<th>Overall Variant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Kevin</td>
<td>Matthew</td>
<td>Peter</td>
<td>Mark</td>
</tr>
<tr>
<td>Variant</td>
<td>[0]</td>
<td>[f]</td>
<td>[h]</td>
<td>[0]</td>
<td>[f]</td>
</tr>
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<td>2</td>
<td>2</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
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<td>1</td>
</tr>
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<td>-</td>
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</tr>
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</tr>
<tr>
<td>Overall Total</td>
<td>19</td>
<td>5</td>
<td>5</td>
<td>13</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 6.35. Lexical distribution of word initial (0): Pattern I across all speakers in Year 2
6.3.17. Word Initial (θ): Pattern II across all CofPs in Year 2

In Pattern II words (e.g. *throw*), there is the tendency for the Alternative CofP to use more [θ] overall, while the Sports and Ned CofP tend to use more [f] (Figure 6.37). The use of [f] is lowest in the Alternative CofP, increases in the Sports CofP, and is categorical for two Ned CofP speakers.

---

**Figure 6.37. Word Initial (θ): Pattern II across all speakers in Year 2**

In Pattern II words (e.g. *throw*), there is the tendency for the Alternative CofP to use more [θ] overall, while the Sports and Ned CofP tend to use more [f] (Figure 6.37). The use of [f] is lowest in the Alternative CofP, increases in the Sports CofP, and is categorical for two Ned CofP speakers.
Table 6.36. Lexical distribution of word initial (0): Pattern II across all speakers in Year 2

<table>
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<th>CofP</th>
<th>Alternative</th>
<th>Sports</th>
<th>Ned</th>
<th>Overall Variant</th>
<th>n</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td>Matthew</td>
<td>Peter</td>
<td>Mark</td>
<td>Nathan</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
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<td>9</td>
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</tr>
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<td>4</td>
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</tr>
<tr>
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<td>1</td>
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</tr>
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<td>17</td>
<td>19</td>
<td>5</td>
<td>8</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>

Overall Total | 36 | 13 | 12 | 36 | 22 | 38 | 2 | 5 | 6 | 170 170
6.3.18. Word Initial across all CofPs in Year 2

Figure 6.38. shows the overall distribution of variants in word initial position independent of lexical item. Although the Alternative CofP uses both [f] and [h], it is within this CofP that the highest overall rate of [θ] occurs. The use of [θ] decreases across the Sports and Ned CofPs. The Ned CofP appears to have the highest overall rate of [h], while the Sports CofP has the highest overall rate of [f].
6.3.18. Word Medial (θ) across all CofPs in Year 2

As in Year 1, the bulk of word medial (θ) tokens are from the TH-pro set (99/119, Table 6.37\(^29\)). The main tendency is for speakers to use [ʔ], although the Alternative CofP speakers Kevin and Mathew use a high rate of [θ] (Figure 6.39). With the exception of Max, the Ned CofP speakers only use TH-pro set words, resulting in their high rates of [ʔ]. In words which are not TH-pro, the usual variant is [f].

\(^{29}\) Table 6.37. shows 86 TH-pro tokens because only the main variants are presented.
<table>
<thead>
<tr>
<th>TH-pro</th>
<th>CoP</th>
<th>Alternative</th>
<th>Sports</th>
<th>Ned</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Kevin</td>
<td>Mathew</td>
<td>Peter</td>
<td>Mark</td>
</tr>
<tr>
<td><strong>Variant</strong></td>
<td><strong>0</strong></td>
<td><strong>[f]</strong></td>
<td><strong>[f]</strong></td>
<td><strong>[f]</strong></td>
<td><strong>[f]</strong></td>
</tr>
<tr>
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</tr>
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<td>3</td>
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<td>18</td>
<td>9</td>
</tr>
<tr>
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<td><strong>[f]</strong></td>
<td><strong>[f]</strong></td>
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<td>-</td>
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<td>-</td>
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</tr>
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</tr>
<tr>
<td>jonathan</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>southeast</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>s'wards</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>non-TH-pro</strong></td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>17</td>
<td>13</td>
<td>8</td>
<td>-</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 6.37. Lexical distribution of main variants of word medial (0) across all speakers in Year 2

Due to lack of space, only the variants [0, f, ?] in the TH-pro set are presented. Consequently, totals may not be indicative of the more detailed results presented according to CoP
6.3.19. Word Final (0) across all CofPs in Year 2

In word final position, we find the most typical variant is [ə] (Figure 6.40). As noted in the analysis of each individual CofP, however, the majority of the tokens are the lexical item *with* (212/282, Table 6.38), realised as the traditional Scots form *wi’* (207/212). This form is categorical in the Sports and Ned CofP, but the Alternative CofP has five tokens of *with* which take either [f] or [0]. In words other than *with*, most speakers opt for [f], although the Alternative CofP speakers also tend to use [0]. The use of [0] appears to decrease across CofP, with the Sports CofP producing only a few instances of [0], and the Ned CofP producing none. While this is partly an effect of the low number of tokens in the Ned CofP (and consequently the range of lexical items), such a result mirrors the general pattern of low use of [0] among the Ned CofP found in other positions.

Figure 6.40. Word Final (0) across all speakers in Year 2
Table 6.38. Lexical distribution of word final (0) across all speakers in Year 2

Due to lack of space, only the variants [0, f, Ø] are presented. Consequently, totals may not be indicative of the more detailed results presented according to CoFp.
6.3.20. Statistical Analysis of (0) in Year 2

Testing if CofP membership had an effect on word initial (0), the chi-square test reported a significant association between CofP membership and realisation of word initial (0) \( \chi^2 (4) = 8.625, p = 0.000 \). Cramer’s V was significant (\( V = 0.364, p = 0.000 \)), representing a medium association between CofP membership and word initial (0) realisation. The findings show three main patterns in the variation. Firstly, the Alternative CofP speakers are more likely to produce the standard variant [0] than either the Ned or Sports CofP. Secondly, the Ned CofP are more likely to use [h] than the Alternative or Sports CofP. Finally, the Ned and Sports CofP speakers use higher rates of the non-standard variant [f].

6.3.21. Summary of (0) Variation in Year 2

The main finding for (0) in Year 2 was that the variation appeared to be related to CofP membership, with the Alternative CofP more standard and the Ned CofP the least. In word initial (0): Pattern I, the Alternative CofP were the most standard and used [0]. The use of [0] decreased quite dramatically in the Sports CofP and was used at a very low rate. The predominant variant in the Sports CofP was [h], but this was found alongside other variants including [f] and [0]. The Ned CofP was the most non-standard since [h] was categorical for all three speakers. A similar result of Alternative CofP standardness was also found in Pattern II, where [0] accounted for nearly 50% of their variants. The Alternative CofP did, however, also use [f]. The use of [f] in Pattern II increased in the Sports CofP, and this variant became near-categorical in the Ned CofP.

Although the pattern of Alternative CofP as standard and Ned CofP as non-standard was also alluded to in word medial position, the use of specific variants was
strongly tied to lexical item. This was particularly the case in the TH-pro set (e.g. nothing, something) where the main variant used by the Sports and Ned CofPs was [ʔ]. The Alternative CofP, however, appeared to be more standard by using a higher rate of [θ]. For words which were not TH-pro, however, the typical variant was [f].

Due to their use of a range of variants in word final position, the Alternative CofP was standard, innovative, and local. Although most tokens were with (a factor which heavily influenced the high rate of the [ʔ] variant), the Alternative CofP used [θ], [f] and the traditional Scots form wi’ ([we]). The Sports and Ned CofP, however, only used wi’ and no other form. For words other than with, the typical variant in the Sports and Ned CofPs was [f], but only in the Alternative CofP was [θ] used.

6.4. Summary of (θ)

The underlying assumption in the analysis of (θ) in Banister Academy was that CofP membership would be reflected in linguistic variation, and that membership of a particular CofP would be a factor in the patterning of variants of (θ). Specifically, more locally engaged CofPs would be more non-standard than CofPs who were not. Since the analysis found a robust effect of CofP membership across all three word positions (initial, medial, and final), this hypothesis was partly validated, although some unexpected results were also found. Overall, the Alternative CofP was the most standard in both years, while the Sports and Ned CofPs were more non-standard.

The separation between the CofPs was most striking in word initial position (both Pattern I, e.g. think, and Pattern II, e.g. throw), where use of [θ] was highest in the Alternative CofP and lowest in the Ned CofP. Consequently, the Alternative CofP was the most standard in this position, while the Ned CofP (and to a lesser extent the Sports CofP) was the most non-standard through the categorical use of [h] and [f]. In
word medial position, the Alternative CofP was also the most standard, but unlike
word initial (0), there was a robust effect of lexical item. The bulk of word medial (0)
tokens consisted of tokens from the TH-pro set, and the most typical variant across all
three CofPs was [ʔ]. The Alternative CofP, however, used the highest rate of [θ] in the
TH-pro set than any other CofP. This effect of lexical item also extended to word final
position, where most of the tokens were with. The traditional pronunciation in
Glaswegian Vernacular is wi’ ([we]), and while most speakers used this
pronunciation, the Alternative CofP was simultaneously innovative, standard and
local by using [θ], [f] and [Ø].

6.5. Results of CAT Analysis in Year 1

This section will present the results of the third linguistic variable CAT, analysed
across three years of data (Year 1, Year 2, and Year 3) within the Alternative, Sports,
Ned, and Schoolie CofPs. The first part of the analysis presents the quantitative
results according to following phonetic environment, according to CofP membership,
and then according to CofP membership and phonetic environment together in Year 1,
Year 2, and Year 3. These results form the foundation for the next stages of analysis:
the first focusing on the variation of CAT over time in the speech of three speakers
(Mark, Neil, and Peter). The final section of this chapter focuses on CAT within
‘violent’ discourse (hereafter referred to as Negative Affect discourse or N.A.
discourse). This type of discourse is typically marked by violent, anti-social, and
confrontational conversational topics (such as talk about fighting or bullying). By
comparing tokens of CAT in N.A. discourse with tokens in other types of discourse
(i.e. non-negative affect discourse), we will be able to observe whether ‘violent’ talk
is quantitatively different to ‘non-violent’ talk.
6.5.1. Overall Pattern of CAT Variation According to Phonetic Environment in Year 1

![Graph](image1)

Figure 6.41. Mean of CAT tokens by following phonetic environment in Year 1

![Graph](image2)

Figure 6.42. Spread of all CAT tokens by following phonetic environment in Year 1
Table 6.39. Descriptive statistics for all tokens of CAT by phonetic environment in Year 1

Figures 6.41. and 6.42. show the mean and spread of CAT tokens according to following phonetic environment. Like BIT, before /r/ CAT is very retracted, while it is fronted before nasals and glottals. The height of CAT is relatively consistent regardless of following environment.

6.5.2. Overall Pattern of CAT Variation According to CofP in Year 1

Figure 6.43. Mean of CAT tokens across all speakers in Year 1
The mean values of cat in Year 1 tend towards a separation between the CofPs on normalised F₁ axis (Figure 6.43. and 6.44). Nathan is the most raised speaker within the Sports CofP (he falls within the values for Andrew and Jack), while Mark and Phil have fairly similar vowel heights. For normalised F₁, Peter mean value falls in between both CofPs, but his spread values pattern more with the Sports CofP (Table 6.40).

The mean values for normalised F₂ in the Sports CofP suggests that they are
more retracted, although this value is heavily influenced by Nathan’s extreme mean score. His spread values also tend to be slightly more raised. The rest of the speakers are more fronted, but there is a large amount of overlap.

### 6.5.3. Pattern of CAT Variation before Voiceless Obstruents in Year 1

![Image of a diagram showing spread of CAT tokens before voiceless obstruents by speaker in Year 1.](image)

Figure 6.45. Spread of CAT tokens before voiceless obstruents by speaker in Year 1

<table>
<thead>
<tr>
<th>CoP</th>
<th>Speaker</th>
<th>n</th>
<th>Normalised F₁ Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised F₂ Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt</td>
<td>Andrew</td>
<td>30</td>
<td>8.04</td>
<td>0.64</td>
<td>0.12</td>
<td>4.58</td>
<td>0.86</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>Jack</td>
<td>30</td>
<td>8.13</td>
<td>0.80</td>
<td>0.15</td>
<td>3.92</td>
<td>1.08</td>
<td>0.20</td>
</tr>
<tr>
<td></td>
<td>Neil</td>
<td>30</td>
<td>7.25</td>
<td>0.74</td>
<td>0.14</td>
<td>3.77</td>
<td>0.76</td>
<td>0.14</td>
</tr>
<tr>
<td>Mean</td>
<td>90</td>
<td></td>
<td>7.81</td>
<td>0.82</td>
<td>0.09</td>
<td>4.09</td>
<td>0.97</td>
<td>0.10</td>
</tr>
<tr>
<td>Sports</td>
<td>Mark</td>
<td>30</td>
<td>7.29</td>
<td>0.73</td>
<td>0.13</td>
<td>3.81</td>
<td>0.63</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>30</td>
<td>7.79</td>
<td>0.57</td>
<td>0.11</td>
<td>4.89</td>
<td>0.89</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>Phil</td>
<td>30</td>
<td>7.58</td>
<td>0.50</td>
<td>0.09</td>
<td>3.93</td>
<td>0.53</td>
<td>0.10</td>
</tr>
<tr>
<td>Mean</td>
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<td></td>
<td>7.55</td>
<td>0.64</td>
<td>0.07</td>
<td>4.21</td>
<td>0.84</td>
<td>0.09</td>
</tr>
<tr>
<td>Floater</td>
<td>Peter</td>
<td>30</td>
<td>7.66</td>
<td>0.61</td>
<td>0.11</td>
<td>4.40</td>
<td>0.66</td>
<td>0.12</td>
</tr>
</tbody>
</table>

Table 6.41. Descriptive statistics for CAT before voiceless obstruents by speaker and CoP in Year 1
For both mean and spread normalised $F_1$ values, the Alternative CofP tends to be more raised than the Sports CofP (Figure 6.45). Neil’s mean value, however, is actually the lowest of all seven speakers (Table 6.41), and his spread values appear to show a similar pattern. Peter’s mean value for normalised $F_1$ falls in between both CofPs, but his spread values align more with the Sports CofP.

The Alternative CofP appears to be slightly more fronted, but the individual speaker means are very different. Specifically, Andrew is very retracted, while Jack and Neil are fronted. Jack’s spread values, however, show him as slightly more fronted than Neil. A similar situation within the Sports CofP exists, with Nathan having a very retracted $\text{CAT}$. Mark and Phil, meanwhile, have a fronted $\text{CAT}$ vowel, very close to the mean values for Jack and Neil. The differences in degree of fronting across the Alternative and Sports CofP (excluding the extreme values from Andrew and Nathan) are actually very slight.

6.5.4. Pattern of CAT Variation before Voiced Obstruents in Year 1

Figure 6.46. Spread of $\text{CAT}$ tokens before voiced obstruents by speaker in Year 1
Table 6.42. Descriptive statistics for CAT before voiced obstruents by speaker and CofP in Year 1

<table>
<thead>
<tr>
<th>CofP</th>
<th>Speaker</th>
<th>n</th>
<th>Normalised $F_1$ Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised $F_2$ Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt</td>
<td>Andrew</td>
<td>10</td>
<td>7.99</td>
<td>0.70</td>
<td>0.22</td>
<td>4.38</td>
<td>1.20</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td>Jack</td>
<td>9</td>
<td>8.58</td>
<td>0.79</td>
<td>0.26</td>
<td>3.38</td>
<td>0.48</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>Neil</td>
<td>10</td>
<td>7.41</td>
<td>0.57</td>
<td>0.18</td>
<td>3.65</td>
<td>0.66</td>
<td>0.21</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>29</td>
<td>7.98</td>
<td>0.82</td>
<td>0.15</td>
<td>3.82</td>
<td>0.92</td>
<td>0.17</td>
</tr>
<tr>
<td>Sports</td>
<td>Mark</td>
<td>10</td>
<td>7.34</td>
<td>0.82</td>
<td>0.26</td>
<td>3.96</td>
<td>0.54</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>10</td>
<td>7.35</td>
<td>0.61</td>
<td>0.19</td>
<td>4.25</td>
<td>0.54</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>Phil</td>
<td>5</td>
<td>7.89</td>
<td>0.63</td>
<td>0.28</td>
<td>3.84</td>
<td>0.32</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>25</td>
<td>7.45</td>
<td>0.71</td>
<td>0.14</td>
<td>4.06</td>
<td>0.52</td>
<td>0.10</td>
</tr>
<tr>
<td>Floater</td>
<td>Peter</td>
<td>10</td>
<td>7.74</td>
<td>0.52</td>
<td>0.16</td>
<td>4.36</td>
<td>0.80</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Although the number of tokens before voiced obstruents is low, Andrew and Jack (Alternative CofP) appear to have higher realisations than the Sports CofP (Figure 6.46). As was the case before voiceless obstruents, however, Neil has a very low mean normalised $F_1$ value, falling close to the mean values of Mark and Nathan (Table 6.42). Within the Sports CofP, Nathan and Mark have very similar mean values for height, but Phil has a mean value which places him close to Andrew and Jack. Peter’s mean normalised $F_1$ values falls within the Sports CofP values.

The Alternative CofP tends to be more fronted, but although all three Sports CofP speakers are relatively retracted, it is actually Andrew (Alternative CofP) who is the most retracted of all seven speakers. Peter’s mean and spread normalised $F_2$ values falls within the Sports CofP in this environment.
6.5.5. Pattern of CAT Variation before Phonological /r/ in Year 1

For normalised F₁, there appears to be a large amount of overlap (Figure 6.47), although the mean values suggest that the Alternative CofP are the most raised, while the Sports CofP are slightly lowered (Table 6.43). Like before voiced and voiceless obstruents, Neil is very lowered, patterning close to Mark’s mean normalised F₁ value.

Table 6.43. Descriptive statistics for CAT before phonological /r/ by speaker and CofP in Year 1

<table>
<thead>
<tr>
<th>CofP</th>
<th>Speaker</th>
<th>n</th>
<th>Normalised F₁ Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised F₂ Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt</td>
<td>Andrew</td>
<td>20</td>
<td>8.62</td>
<td>0.50</td>
<td>0.11</td>
<td>5.66</td>
<td>0.81</td>
<td>0.18</td>
</tr>
<tr>
<td></td>
<td>Jack</td>
<td>20</td>
<td>8.97</td>
<td>0.82</td>
<td>0.18</td>
<td>5.45</td>
<td>1.11</td>
<td>0.25</td>
</tr>
<tr>
<td></td>
<td>Neil</td>
<td>20</td>
<td>7.52</td>
<td>0.56</td>
<td>0.13</td>
<td>4.32</td>
<td>0.73</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td></td>
<td>8.37</td>
<td>0.88</td>
<td>0.11</td>
<td>5.15</td>
<td>1.06</td>
<td>0.14</td>
</tr>
<tr>
<td>Sports</td>
<td>Mark</td>
<td>13</td>
<td>7.63</td>
<td>1.09</td>
<td>0.30</td>
<td>5.32</td>
<td>0.83</td>
<td>0.23</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>20</td>
<td>8.29</td>
<td>0.72</td>
<td>0.16</td>
<td>5.97</td>
<td>0.71</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>Phil</td>
<td>16</td>
<td>8.33</td>
<td>0.44</td>
<td>0.11</td>
<td>5.35</td>
<td>0.40</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>49</td>
<td>8.13</td>
<td>0.81</td>
<td>0.12</td>
<td>5.60</td>
<td>0.72</td>
<td>0.10</td>
</tr>
<tr>
<td>Floater</td>
<td>Peter</td>
<td>20</td>
<td>8.14</td>
<td>0.75</td>
<td>0.17</td>
<td>5.63</td>
<td>0.86</td>
<td>0.19</td>
</tr>
</tbody>
</table>

Figure 6.47. Spread of CAT tokens before phonological /r/ by speaker in Year 1
It is within spread normalised $F_2$ values, however, that the main separation between the CofPs occurs, with the Alternative CofP more fronted and the Sports CofP speakers show more retracted. Peter’s mean and spread values for normalised $F_2$ place him with the Sports CofP, as was the case before voiced and voiceless obstruents.

6.5.6. Pattern of CAT Variation before Nasals in Year 1

![Figure 6.48. Spread of CAT tokens before nasals by speaker in Year 1](image-url)

<table>
<thead>
<tr>
<th>CofP</th>
<th>Speaker</th>
<th>n</th>
<th>Normalised $F_1$ Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised $F_2$ Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt</td>
<td>Andrew</td>
<td>30</td>
<td>7.52</td>
<td>0.99</td>
<td>0.18</td>
<td>3.02</td>
<td>0.98</td>
<td>0.18</td>
</tr>
<tr>
<td></td>
<td>Jack</td>
<td>30</td>
<td>8.61</td>
<td>0.97</td>
<td>0.18</td>
<td>3.96</td>
<td>0.95</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>Neil</td>
<td>30</td>
<td>7.82</td>
<td>0.77</td>
<td>0.14</td>
<td>3.75</td>
<td>0.70</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>90</td>
<td>7.98</td>
<td>1.02</td>
<td>0.11</td>
<td>3.58</td>
<td>0.96</td>
<td>0.10</td>
</tr>
<tr>
<td>Sports</td>
<td>Mark</td>
<td>28</td>
<td>7.61</td>
<td>0.64</td>
<td>0.12</td>
<td>3.44</td>
<td>0.60</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>30</td>
<td>8.18</td>
<td>0.68</td>
<td>0.12</td>
<td>4.70</td>
<td>0.86</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>Phil</td>
<td>30</td>
<td>7.56</td>
<td>0.62</td>
<td>0.11</td>
<td>3.68</td>
<td>0.64</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>88</td>
<td>7.79</td>
<td>0.70</td>
<td>0.07</td>
<td>3.95</td>
<td>0.89</td>
<td>0.10</td>
</tr>
<tr>
<td>Floater</td>
<td>Peter</td>
<td>30</td>
<td>7.75</td>
<td>0.66</td>
<td>0.12</td>
<td>4.13</td>
<td>0.82</td>
<td>0.15</td>
</tr>
</tbody>
</table>

Table 6.44. Descriptive statistics for CAT before nasals by speaker and CofP in Year 1
Before nasals, the mean values show a separation between the CofPs in height, with the Alternative CofP more raised, although the spread values for all speakers show a large amount of overlap (Figure 6.48). The Sports CofP has low mean normalised $F_1$ values, but Nathan (Sports CofP) falls within the Alternative CofP mean while Andrew (Alternative CofP) falls with the Sports CofP mean (Table 6.44).

The Alternative CofP is more retracted, but Andrew again falls outside the Alternative CofP pattern, being the most fronted Alternative CofP speaker. Within the Sports CofP, Nathan produces the most retracted realisation, but Mark and Phil are very fronted.

### 6.5.7. Pattern of CAT Variation before Glottals in Year 1

![Figure 6.49. Spread of CAT tokens before glottals by speaker in Year 1](image)
<table>
<thead>
<tr>
<th>CoP</th>
<th>Speaker</th>
<th>n</th>
<th>Normalised F&lt;sub&gt;1&lt;/sub&gt; Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised F&lt;sub&gt;2&lt;/sub&gt; Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt</td>
<td>Andrew</td>
<td>10</td>
<td>7.41</td>
<td>0.49</td>
<td>0.16</td>
<td>3.48</td>
<td>0.59</td>
<td>0.19</td>
</tr>
<tr>
<td></td>
<td>Jack</td>
<td>10</td>
<td>8.47</td>
<td>1.16</td>
<td>0.37</td>
<td>4.60</td>
<td>1.05</td>
<td>0.33</td>
</tr>
<tr>
<td></td>
<td>Neil</td>
<td>10</td>
<td>7.38</td>
<td>0.85</td>
<td>0.27</td>
<td>3.78</td>
<td>1.19</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>30</td>
<td><strong>7.75</strong></td>
<td><strong>0.99</strong></td>
<td><strong>0.18</strong></td>
<td><strong>3.95</strong></td>
<td><strong>1.06</strong></td>
<td><strong>0.19</strong></td>
</tr>
<tr>
<td>Sports</td>
<td>Mark</td>
<td>10</td>
<td>7.31</td>
<td>0.54</td>
<td>0.17</td>
<td>4.08</td>
<td>1.19</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>10</td>
<td>8.02</td>
<td>0.59</td>
<td>0.19</td>
<td>4.91</td>
<td>1.12</td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td>Phil</td>
<td>8</td>
<td>7.67</td>
<td>0.60</td>
<td>0.21</td>
<td>4.52</td>
<td>1.04</td>
<td>0.37</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>28</td>
<td><strong>7.66</strong></td>
<td><strong>0.63</strong></td>
<td><strong>0.12</strong></td>
<td><strong>4.50</strong></td>
<td><strong>1.14</strong></td>
<td><strong>0.22</strong></td>
</tr>
<tr>
<td>Floater</td>
<td>Peter</td>
<td>10</td>
<td>7.90</td>
<td>0.60</td>
<td>0.19</td>
<td>4.84</td>
<td>0.89</td>
<td>0.28</td>
</tr>
</tbody>
</table>

Table 6.45. Descriptive statistics for CAT before glottals by speaker and CoP in Year 1

Although there are a relatively low number of tokens before glottals, there appears to be a split between the Alternative and Sports CoPs along normalised F<sub>1</sub> (Figure 6.49). The results, however, are a reversal of the pattern found in other environments. Specifically, it is the Sports CoP who has higher mean normalised F<sub>1</sub> values, while the Alternative CoP has a lower mean value in this environment (Table 6.45). Jack’s very high mean normalised F<sub>1</sub> value skews the overall mean value of the Alternative CoP, making it appear that the Alternative CoP is actually more raised.

The Alternative CoP spread values tend to be more fronted, while the Sports CoP are retracted. Jack (Alternative CoP), however, has a mean value which places him within the Sports CoP. Like other environments, Peter’s mean and spread values align with the Sports CoP values.

**6.5.8. Statistical Analysis of CAT in Year 1**

The reported adjusted r-squared value for the regression analysis and two-way ANOVA test with normalised F<sub>1</sub> as the dependent variable was too low for analysis, so the results cannot be reported. The regression analysis on normalised F<sub>2</sub> (Floater CoP and voiceless obstruents held as baseline) reported the following results (Table 6.46):
Adjusted $r$-square = 0.293, df = 3, 675
Table 6.46. Results for regression analysis on normalised $F_2$ of CAT in Year 1

The regression model shows that the strongest effects on normalised $F_2$ were whether the token was before an approximant, a nasal, or within the Alternative CofP. The coefficients show that before approximants CAT is retracted, and before nasals and within the Alternative CofP it is fronted. A two-way ANOVA test showed a significant effect of following phonetic environment ($F_{1, 4} = 51.00$, $p = 0.000$) and CofP membership ($F_{1, 2} = 14.31$, $p = 0.000$), but no significant interaction between these two factors ($F_{1, 8} = 0.64$, $p = 0.745$, adjusted $r$-squared = 0.291). Games-Howell post hoc tests reported a statistically significant difference between the Alternative and Sports CofP for normalised $F_2$ ($p = 0.005$), but not between Peter (Floater CofP) and the Alternative or Sports CofP ($p = 0.131$). Lastly, only approximants were significantly different to every other phonetic environment ($p = 0.000$), while nasals were significantly different to all other phonetic environments except voiced obstruents ($p = 0.011$).

6.5.9. Summary of CAT Variation in Year 1

The main finding for CAT in Year 1 tended towards a separation between the CofPs in terms of height, with higher normalised $F_1$ means (i.e. closer vowel) within the Alternative CofP and lower normalised $F_1$ means (i.e. open vowel) within the Sports CofP. In several environments (e.g. voiceless obstruents), however, Neil (Alternative CofP) fell within the Sports CofP distribution, while Nathan (Sports CofP) fell within the Alternative CofP distribution, a similar pattern to his results for BIT.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictor Variable</th>
<th>Coefficients</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalised $F_2$</td>
<td>Alternative</td>
<td>-0.36</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Approximant</td>
<td>1.23</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Nasal</td>
<td>-0.36</td>
<td>0.000</td>
</tr>
</tbody>
</table>
For normalised $F_2$, the Alternative CofP speakers were usually more fronted than the Sports CofP, and this was most visible in the spread values before /r/. The regression analysis reported following approximant and Alternative CofP membership as being statistically significant in modelling the data, while the ANOVA test showed a significant effect of CofP membership and following phonetic environment. There was, however, no interaction between these factors. Lastly, Peter’s spread of variation for normalised $F_2$ appeared to fall across both CofPs, although the post hoc ANOVA tests reported no statistically significant difference between him and the other CofPs.

6.6. Results of CAT Analysis in Year 2

In Year 2, data were collected from three CofPs: the Alternative (Kevin, Mathew, Peter), Sports (Mark, Nathan, Phil), and Ned (Danny, Max, Noah). These are the same three CofPs analysed in section 6.3, with Peter moving from a floater position in Year 1 to a central member of the Alternative CofP in Year 2. I outline the overall pattern of variation according to phonetic environment, according to CofP membership, and then by both factors.
6.6.1. Overall Pattern of CAT Variation According to Phonetic Environment in Year 2

Figure 6.50. Mean of CAT tokens by following phonetic environment in Year 2

Figure 6.51. Spread of all CAT tokens by following phonetic environment in Year 2
<table>
<thead>
<tr>
<th>Environment</th>
<th>n</th>
<th>Normalised F₁ Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised F₂ Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>VLO</td>
<td>494</td>
<td>8.00</td>
<td>0.88</td>
<td>0.04</td>
<td>4.28</td>
<td>0.87</td>
<td>0.04</td>
</tr>
<tr>
<td>VDO</td>
<td>111</td>
<td>7.98</td>
<td>0.84</td>
<td>0.08</td>
<td>4.05</td>
<td>0.72</td>
<td>0.07</td>
</tr>
<tr>
<td>/l/</td>
<td>29</td>
<td>7.99</td>
<td>0.78</td>
<td>0.15</td>
<td>4.74</td>
<td>0.82</td>
<td>0.15</td>
</tr>
<tr>
<td>/r/</td>
<td>185</td>
<td>8.48</td>
<td>0.66</td>
<td>0.05</td>
<td>5.52</td>
<td>0.77</td>
<td>0.06</td>
</tr>
<tr>
<td>Nasals</td>
<td>437</td>
<td>8.24</td>
<td>0.96</td>
<td>0.05</td>
<td>4.04</td>
<td>1.00</td>
<td>0.05</td>
</tr>
<tr>
<td>Glottals</td>
<td>506</td>
<td>8.12</td>
<td>0.89</td>
<td>0.04</td>
<td>4.37</td>
<td>0.87</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Table 6.47. Descriptive statistics for all tokens of CAT by phonetic environment in Year 2

Like CAT in Year 1, there is a separation according to phonetic environment on normalised F₁, such that CAT tokens with a following phonological /l/ or /r/ are retracted, while tokens before nasals are most fronted (Figure 6.50 and Table 6.47). In terms of the effect of following phonetic environment, the pattern of CAT mirrors BIT, suggesting a robust influence of phonetic environment on degree of fronting and retraction in Glaswegian.

**6.6.2. Overall Pattern of CAT Variation According to CofP in Year 2**

![Figure 6.52. Mean of CAT tokens across all speakers in Year 2](image)

Figure 6.52. Mean of CAT tokens across all speakers in Year 2
The Alternative and the Sports CofPs have relatively similar mean values in terms of height (Table 6.48), while the Ned CofP is very lowered (Figures 6.52 and 6.53). The Alternative CofP is retracted, while the Ned CofP is slightly fronted. Both the Alternative and Sports CofP are more raised in Year 2 than in Year 3, but they are roughly similar in terms of retraction.
6.6.3. Pattern of CAT Variation before Voiceless Obstruents in Year 2

The main division appears to be between the Alternative and Sports CofP, and the Ned CofP on normalised F₁ means (Figure 6.54). The Alternative and Sports CofP are relatively close in their normalised F₁ means, while the Ned CofP are lowered,
particularly Danny who is the lowest speaker in the Ned CofP (Table 6.49).
Moreover, the spread values from the Ned CofP are also very low, suggesting that the
speaker means reflect the overall spread of variation. The Ned CofP is the most
fronted, while the Alternative CofP are the most retracted. All three Sports CofP
speakers are only slightly more fronted than the Alternative CofP.

### 6.6.4. Pattern of CAT Variation before Voiced Obstruents in Year 2

![Figure 6.55. Spread of CAT tokens before voiced obstruents by speaker in Year 2](image)

<table>
<thead>
<tr>
<th>CofP</th>
<th>Speaker</th>
<th>n</th>
<th>Normalised F₁ Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised F₂ Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt</td>
<td>Kevin</td>
<td>14</td>
<td>7.90</td>
<td>0.43</td>
<td>0.12</td>
<td>3.80</td>
<td>0.45</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Mathew</td>
<td>10</td>
<td>8.57</td>
<td>1.02</td>
<td>0.32</td>
<td>4.53</td>
<td>0.76</td>
<td>0.24</td>
</tr>
<tr>
<td></td>
<td>Peter</td>
<td>8</td>
<td>8.33</td>
<td>1.06</td>
<td>0.37</td>
<td>4.27</td>
<td>0.93</td>
<td>0.33</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>32</td>
<td>8.22</td>
<td>0.85</td>
<td>0.15</td>
<td>4.15</td>
<td>0.75</td>
<td>0.13</td>
</tr>
<tr>
<td>Sports</td>
<td>Mark</td>
<td>14</td>
<td>8.49</td>
<td>1.03</td>
<td>0.28</td>
<td>4.11</td>
<td>0.57</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>16</td>
<td>7.91</td>
<td>0.68</td>
<td>0.17</td>
<td>4.03</td>
<td>0.64</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>Phil</td>
<td>20</td>
<td>8.14</td>
<td>0.47</td>
<td>0.11</td>
<td>4.31</td>
<td>0.57</td>
<td>0.13</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>50</td>
<td>8.16</td>
<td>0.75</td>
<td>0.11</td>
<td>4.17</td>
<td>0.59</td>
<td>0.08</td>
</tr>
<tr>
<td>Ned</td>
<td>Danny</td>
<td>4</td>
<td>7.21</td>
<td>0.27</td>
<td>0.13</td>
<td>3.69</td>
<td>0.37</td>
<td>0.19</td>
</tr>
<tr>
<td></td>
<td>Max</td>
<td>10</td>
<td>7.21</td>
<td>0.84</td>
<td>0.27</td>
<td>3.27</td>
<td>0.92</td>
<td>0.29</td>
</tr>
<tr>
<td></td>
<td>Noah</td>
<td>15</td>
<td>7.60</td>
<td>0.69</td>
<td>0.18</td>
<td>4.09</td>
<td>0.74</td>
<td>0.19</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>29</td>
<td>7.41</td>
<td>0.72</td>
<td>0.13</td>
<td>3.75</td>
<td>0.84</td>
<td>0.16</td>
</tr>
</tbody>
</table>

Table 6.50. Descriptive statistics for CAT before voiced obstruents by speaker and CofP in Year 2
For normalised $F_1$, Mathew and Peter’s (Alternative CofP) spread values are raised (Figure 6.55), although only slightly raised compared to the mean normalised values within the Sports CofP (Table 6.50). Like voiceless obstruents, the Ned CofP speakers have low normalised $F_1$ mean values, and the spread values for Danny and Max and Noah are also very low. The Ned CofP tends towards more fronted means, while the Alternative and Sports CofP normalised $F_2$ means are relatively similar in their degree of retraction.

### 6.6.5. Pattern of CAT Variation before Phonological /l/ in Year 2

<table>
<thead>
<tr>
<th>Speaker</th>
<th>n</th>
<th>Normalised $F_1$ Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised $F_2$ Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kevin</td>
<td>5</td>
<td>8.10</td>
<td>0.42</td>
<td>0.19</td>
<td>4.96</td>
<td>0.97</td>
<td>0.43</td>
</tr>
<tr>
<td>Mathew</td>
<td>3</td>
<td>7.87</td>
<td>0.24</td>
<td>0.14</td>
<td>4.83</td>
<td>0.42</td>
<td>0.25</td>
</tr>
<tr>
<td>Peter</td>
<td>4</td>
<td>8.23</td>
<td>0.86</td>
<td>0.43</td>
<td>4.31</td>
<td>0.80</td>
<td>0.40</td>
</tr>
<tr>
<td>Mean</td>
<td>12</td>
<td><strong>8.08</strong></td>
<td><strong>0.55</strong></td>
<td><strong>0.16</strong></td>
<td><strong>4.71</strong></td>
<td><strong>0.80</strong></td>
<td><strong>0.23</strong></td>
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<tr>
<td>Sports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mark</td>
<td>4</td>
<td>8.49</td>
<td>0.56</td>
<td>0.28</td>
<td>4.96</td>
<td>0.52</td>
<td>0.26</td>
</tr>
<tr>
<td>Nathan</td>
<td>1</td>
<td>9.02</td>
<td>-</td>
<td>-</td>
<td>6.73</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Phil</td>
<td>3</td>
<td>7.96</td>
<td>0.46</td>
<td>0.26</td>
<td>4.74</td>
<td>0.34</td>
<td>0.20</td>
</tr>
<tr>
<td>Mean</td>
<td>8</td>
<td><strong>8.36</strong></td>
<td><strong>0.58</strong></td>
<td><strong>0.21</strong></td>
<td><strong>5.10</strong></td>
<td><strong>0.77</strong></td>
<td><strong>0.27</strong></td>
</tr>
</tbody>
</table>

Figure 6.56. Spread of CAT tokens before phonological /l/ by speaker in Year 2
Table 6.51. Descriptive statistics for CAT before phonological /l/ by speaker and CofP in Year 2

Although the number of tokens before phonological /l/ is very low, for normalised F₁ (both means and spread values), the Ned CofP speakers appear to follow a pattern of lowering similar to their results for voiced and voiceless obstruents (Figure 6.56). The Alternative and Sports CofP speakers have similar mean values for height, although Nathan (Sports CofP) is the most raised of all nine speakers. Danny and Max (Ned CofP) are the most fronted while the Alternative and Sports CofP are more retracted.

6.6.6. Pattern of CAT Variation before Phonological /r/ in Year 2

Figure 6.57. Spread of CAT tokens before phonological /r/ by speaker in Year 2
<table>
<thead>
<tr>
<th>CoP</th>
<th>Speaker</th>
<th>n</th>
<th>Normalised F&lt;sub&gt;1&lt;/sub&gt; Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised F&lt;sub&gt;2&lt;/sub&gt; Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kevin</td>
<td>17</td>
<td>8.63</td>
<td>0.50</td>
<td>0.12</td>
<td>5.99</td>
<td>0.63</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>Mathew</td>
<td>19</td>
<td>8.49</td>
<td>0.65</td>
<td>0.15</td>
<td>5.65</td>
<td>1.12</td>
<td>0.26</td>
</tr>
<tr>
<td></td>
<td>Peter</td>
<td>22</td>
<td>8.79</td>
<td>0.53</td>
<td>0.11</td>
<td>5.63</td>
<td>0.45</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>58</td>
<td>8.64</td>
<td>0.57</td>
<td>0.07</td>
<td>5.74</td>
<td>0.78</td>
<td>0.10</td>
</tr>
<tr>
<td>Sports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mark</td>
<td>29</td>
<td>8.77</td>
<td>0.64</td>
<td>0.12</td>
<td>5.39</td>
<td>0.80</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>31</td>
<td>8.44</td>
<td>0.53</td>
<td>0.10</td>
<td>5.40</td>
<td>0.65</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Phil</td>
<td>24</td>
<td>8.62</td>
<td>0.54</td>
<td>0.11</td>
<td>5.79</td>
<td>0.72</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>84</td>
<td>8.60</td>
<td>0.59</td>
<td>0.06</td>
<td>5.51</td>
<td>0.74</td>
<td>0.08</td>
</tr>
<tr>
<td>Ned</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Danny</td>
<td>17</td>
<td>7.77</td>
<td>0.59</td>
<td>0.14</td>
<td>4.88</td>
<td>0.46</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>Max</td>
<td>7</td>
<td>8.08</td>
<td>0.82</td>
<td>0.31</td>
<td>5.73</td>
<td>0.58</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>Noah</td>
<td>19</td>
<td>8.23</td>
<td>0.75</td>
<td>0.17</td>
<td>5.63</td>
<td>0.82</td>
<td>0.19</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>43</td>
<td>8.02</td>
<td>0.72</td>
<td>0.11</td>
<td>5.35</td>
<td>0.75</td>
<td>0.11</td>
</tr>
</tbody>
</table>

Table 6.52. Descriptive statistics for cat before phonological /r/ by speaker and CoP in Year 2

The Ned CoP speakers have low mean normalised F<sub>1</sub> mean and spread values (i.e. more open vowel), while the Alternative and Sports CoP speakers have more raised values (Figure 6.57). The Alternative and Sports CoP speakers tend to have overlapping normalised F<sub>1</sub> spreads.

The Alternative CoP speakers are more retracted in their means and spreads, but the Sports CoP tends to be more fronted. While the Ned CoP also appears to be fronted, if we take the Ned CoP speakers individually, Max and Noah actually have a normalised F<sub>2</sub> mean which aligns with the Alternative CoP while Danny is fronted.
6.6.7. Pattern of CAT Variation before Nasals in Year 2

![Graph showing spread of CAT tokens before nasals by speaker in Year 2](image)

Figure 6.58. Spread of CAT tokens before nasals by speaker in Year 2

<table>
<thead>
<tr>
<th>CofP</th>
<th>Speaker</th>
<th>n</th>
<th>Normalised F₁ Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised F₂ Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt</td>
<td>Kevin</td>
<td>41</td>
<td>8.60</td>
<td>0.70</td>
<td>0.11</td>
<td>4.22</td>
<td>0.90</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>Mathew</td>
<td>24</td>
<td>8.81</td>
<td>1.13</td>
<td>0.23</td>
<td>4.37</td>
<td>0.10</td>
<td>0.20</td>
</tr>
<tr>
<td></td>
<td>Peter</td>
<td>57</td>
<td>8.47</td>
<td>0.84</td>
<td>0.11</td>
<td>4.20</td>
<td>0.91</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>122</td>
<td>8.58</td>
<td>0.87</td>
<td>0.08</td>
<td>4.24</td>
<td>0.91</td>
<td>0.08</td>
</tr>
<tr>
<td>Sports</td>
<td>Mark</td>
<td>80</td>
<td>8.59</td>
<td>0.95</td>
<td>0.11</td>
<td>4.15</td>
<td>0.88</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>57</td>
<td>8.37</td>
<td>0.85</td>
<td>0.11</td>
<td>3.83</td>
<td>0.88</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Phil</td>
<td>88</td>
<td>8.23</td>
<td>0.68</td>
<td>0.07</td>
<td>3.95</td>
<td>0.73</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>225</td>
<td>8.39</td>
<td>0.84</td>
<td>0.06</td>
<td>3.99</td>
<td>0.83</td>
<td>0.06</td>
</tr>
<tr>
<td>Ned</td>
<td>Danny</td>
<td>42</td>
<td>7.42</td>
<td>0.74</td>
<td>0.11</td>
<td>4.03</td>
<td>0.86</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>Max</td>
<td>25</td>
<td>7.51</td>
<td>1.12</td>
<td>0.22</td>
<td>3.31</td>
<td>0.83</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>Noah</td>
<td>23</td>
<td>7.26</td>
<td>0.83</td>
<td>0.17</td>
<td>4.23</td>
<td>2.28</td>
<td>0.48</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>90</td>
<td>7.40</td>
<td>0.88</td>
<td>0.09</td>
<td>3.88</td>
<td>1.39</td>
<td>0.15</td>
</tr>
</tbody>
</table>

Table 6.53. Descriptive statistics for CAT before nasals by speaker and CofP in Year 2

Like previous environments, all three Ned CofP speakers have the lowest normalised F₁ mean and spread values (Figure 6.58. and Table 6.53), while the Alternative and Sports CofP speakers have more raised mean values.
For normalised $F_2$ means, the Alternative CofP speakers are retracted, and the Sports CofP speakers are the most fronted, particularly Nathan and Phil. Within the Ned CofP, Max has the most fronted mean value, a similar finding in every other environment except before /r/.

6.6.8. Pattern of CAT Variation before Glottals in Year 2

![Figure 6.59. Spread of CAT tokens before glottals by speaker in Year 2](image)

<table>
<thead>
<tr>
<th>CoP</th>
<th>Speaker</th>
<th>n</th>
<th>Normalised $F_1$</th>
<th>SD</th>
<th>SE</th>
<th>Normalised $F_2$</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alt</td>
<td>Kevin</td>
<td>56</td>
<td>8.29</td>
<td>0.70</td>
<td>0.09</td>
<td>4.47</td>
<td>0.74</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>Mathew</td>
<td>45</td>
<td>8.65</td>
<td>0.81</td>
<td>0.12</td>
<td>4.92</td>
<td>0.78</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Peter</td>
<td>63</td>
<td>8.48</td>
<td>1.09</td>
<td>0.14</td>
<td>4.53</td>
<td>0.89</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>164</td>
<td>8.46</td>
<td>0.90</td>
<td>0.07</td>
<td>4.61</td>
<td>0.83</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>Mark</td>
<td>98</td>
<td>8.33</td>
<td>0.78</td>
<td>0.08</td>
<td>4.42</td>
<td>0.75</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>70</td>
<td>8.03</td>
<td>0.67</td>
<td>0.08</td>
<td>4.26</td>
<td>0.91</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>Phil</td>
<td>73</td>
<td>8.23</td>
<td>0.59</td>
<td>0.07</td>
<td>4.59</td>
<td>0.73</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>241</td>
<td>8.21</td>
<td>0.70</td>
<td>0.05</td>
<td>4.43</td>
<td>0.80</td>
<td>0.05</td>
</tr>
<tr>
<td>Sports</td>
<td>Danny</td>
<td>56</td>
<td>7.37</td>
<td>0.58</td>
<td>0.08</td>
<td>3.90</td>
<td>0.64</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>Max</td>
<td>20</td>
<td>7.30</td>
<td>1.36</td>
<td>0.30</td>
<td>3.44</td>
<td>1.27</td>
<td>0.29</td>
</tr>
<tr>
<td></td>
<td>Noah</td>
<td>25</td>
<td>7.37</td>
<td>0.85</td>
<td>0.17</td>
<td>4.05</td>
<td>0.98</td>
<td>0.20</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>101</td>
<td>7.35</td>
<td>0.84</td>
<td>0.08</td>
<td>3.85</td>
<td>0.90</td>
<td>0.09</td>
</tr>
</tbody>
</table>

Table 6.54. Descriptive statistics for CAT before glottals by speaker and CoP in Year 2
For normalised $F_1$, we find the same pattern as was found in previous environments, with the Ned CofP lowered and the Alternative and Sports CofP raised (Table 6.54). While the Alternative and Sports CofP speaker means are relatively similar, Mathew and Peter’s spread values are slightly more raised (Figure 6.59).

For normalised $F_2$, the mean values show that the Ned CofP speakers are the most fronted, while the Alternative CofP speakers are the most retracted. Although the Sports CofP speakers have slightly more fronted normalised $F_2$ distribution, their mean values are close to that for the Alternative CofP speaker means.

### 6.6.9. Statistical Analysis of $\text{CAT}$ in Year 2

Regression analysis on normalised $F_1$ (Ned CofP and voiceless obstruents were held as baseline) returned the following results (Table 6.55).

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictor Variable</th>
<th>Coefficients</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalised $F_1$</td>
<td>Alternative</td>
<td>0.998</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Sports</td>
<td>0.833</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Approximants</td>
<td>0.378</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Nasals</td>
<td>0.181</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Adjusted $r$-square = 0.199, df = 4, 1758

Table 6.55. Results for regression analysis on normalised $F_1$ of $\text{CAT}$ in Year 2

The coefficients show that the Alternative CofP are more likely to show closer vowels than the Sports CofP (who are also quite close). Moreover, $\text{CAT}$ tokens before nasals and approximants are also close. The ANOVA test showed a significant effect of CofP ($F_{1,2} = 133.851, p = 0.000$), and a significant effect of following phonetic environment ($F_{1,4} = 12.160, p = 0.000$), but no interaction ($F_{1,8} = 1.659, p = 0.104$, adjusted $r$-squared = 0.202). This suggests that the effect of CofP membership is not found in one environment more than another. Games-Howell post hoc tests showed a statistically significant difference in normalised $F_1$ between all three CofPs, and a
significant difference between voiceless obstruents compared with approximants and nasals ($p = 0.001$). Tokens before approximants were significantly different (by being more raised) to tokens before every other environment except nasals, although this just failed to reach significance ($p = 0.069$).

Regression analysis on normalised $F_2$ (Ned CofP and voiceless obstruents were held as baseline) returned the following results (Table 6.56).

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictor Variable</th>
<th>Coefficients</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalised $F_2$</td>
<td>Alternative</td>
<td>0.568</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Sports</td>
<td>0.395</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Approximants</td>
<td>1.115</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Nasals</td>
<td>-0.286</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Voiced Obstruents</td>
<td>-0.253</td>
<td>0.004</td>
</tr>
</tbody>
</table>

Adjusted $r$-square = 0.221, df = 5, 1756
Table 6.56. Results for regression analysis on normalised $F_2$ of CAT in Year 2

The coefficients show that the Alternative CofP has a more retracted vowel than the Sports CofPs (who are also retracted, but not as much). We can thus infer that that the Ned CofP are more fronted. The coefficients also show that CAT tokens before voiced obstruents or nasals are fronted, but retracted before approximants. A two-way ANOVA reported a significant effect of CofP ($F_{1, 2} = 31.066$, $p = 0.000$) and a significant effect of following phonetic environment ($F_{1, 4} = 94.675$, $p = 0.000$), but again, no interaction ($F_{1, 8} = 1.900$, $p = 0.056$). Games-Howell post hoc tests showed a significant difference between all three CofPs ($p = 0.000$), showing a difference in normalised $F_2$. CAT tokens before approximants were significantly different to CAT tokens before all other environments by being more retracted.
6.6.10. Summary of CAT Variation in Year 2

The main finding from CAT in Year 1 was that the main separation between the different CofPs was one of height, with the Alternative CofP raised and the Sports CofP lowered. The main finding from CAT in Year 2 was also a separation between the CofPs in terms of height, with the Alternative and Sports CofP raised and the Ned CofP lowered. This finding was supported by the statistical analysis which showed that the data were constrained by both CofP membership and phonetic environment. The analysis also showed that Alternative and Sports CofP were more retracted (although the Alternative CofP had a slightly more fronted distribution), while the Ned CofP was more fronted. This was supported by the statistical analysis which showed a difference between all three CofPs in terms of fronting/retraction.

6.7. Results of CAT Analysis in Year 3

In Year 3, the data comprised of recordings from 15 speakers in four CofPs: Alternative (Neil, Peter, Ray), Sports (Mark, Nathan, Trevor, John), Ned (Ben, Max, Noah, Rick), and Schoolie CofPs (Gary, Jay, Josh, Victor). As before, I outline the overall pattern of variation according to phonetic environment, according to CofP membership, and then by both factors.
6.7.1. Overall Pattern of CAT Variation According to Phonetic Environment in Year 3

Figure 6.60. Spread of all CAT tokens by following phonetic environment in Year 3

Figure 6.61. Spread of all CAT tokens by following phonetic environment in Year 3
Table 6.57. Descriptive statistics for all tokens of CAT by phonetic environment in Year 3

As was found for CAT in Year 1 and Year 2, CAT tokens before /l/ and /r/ are the most retracted and most fronted before nasals (Figure 6.60. and Table 6.57).

6.7.2. Overall Pattern of CAT Variation According to CofP in Year 3

Figure 6.62. Mean of CAT tokens across all speakers in Year 3
There appears to be a division in the means between the Schoolie and Ned CofP speakers in height, with Ben, Max and Noah (Ned CofP) lower than each of the Schoolie CofP speakers (Table 6.58). Between the Alternative, Sports, and Schoolie
CofP speakers, the distribution and the means tend towards a diagonal split (i.e. simultaneously raised and fronted or lowered and retracted, Figures 6.62. and 6.63). The separation between the CofP on the horizontal axis is quite slight, with speaker means and spreads tending to have a large amount of overlap.

**6.7.3. Pattern of CAT Variation before Voiceless Obstruents in Year 3**

![Figure 6.64](image)

Figure 6.64. Spread of CAT tokens before voiceless obstruents across all speaker in Year 3
Table 6.59. Descriptive statistics for cat before voiceless obstruents by speaker and CofP in Year 3

The CofP means suggest that for height, the CofPs are ordered (from most raised to least raised) Schoolie > Alternative > Sports > Ned (Table 6.59). The individual speaker means and spreads in the Alternative, Sports, and Ned CofPs, however, overlap a good deal (Figure 6.64). The main separation for normalised $F_1$ appears to be between the Ned and Schoolie CofPs, with the Schoolie CofP speakers tending towards higher mean realisations than the Ned CofP speakers. There is a split in the Ned CofP speaker means, with Max and Noah lowered while the mean values for Ben and Rick fall within the Alternative and Sports CofP. Trevor (Sports CofP) is lowered with respect to the other members of the Sports CofP.

The Ned CofP have more fronted means, although Rick (Ned CofP) is retracted, falling within the Sports and Alternative CofP means. Within the Schoolie CofP, there appears to be a split in the mean values, with Gary and Josh retracted while Jay and Victor are fronted. Moreover, Jay and Victor are more fronted than any of the Ned CofP speakers. The Alternative and Sports CofP speakers have similar
mean values for normalised $F_2$, although the Sports CofP speakers are slightly more retracted.

6.7.4. Pattern of CAT Variation before Voiced Obstruents in Year 3

![Figure 6.65. Spread of CAT tokens before voiced obstruents across all speakers in Year 3](image)

Figure 6.65. Spread of CAT tokens before voiced obstruents across all speakers in Year 3
<table>
<thead>
<tr>
<th>CofP</th>
<th>Speaker</th>
<th>n</th>
<th>Normalised F₁ Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised F₂ Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt</td>
<td>Neil</td>
<td>17</td>
<td>7.39</td>
<td>0.42</td>
<td>0.10</td>
<td>3.83</td>
<td>0.48</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Peter</td>
<td>40</td>
<td>8.10</td>
<td>0.73</td>
<td>0.12</td>
<td>3.79</td>
<td>0.59</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>Ray</td>
<td>5</td>
<td>8.18</td>
<td>0.82</td>
<td>0.37</td>
<td>3.63</td>
<td>0.78</td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>62</td>
<td>7.91</td>
<td>0.73</td>
<td>0.09</td>
<td>3.79</td>
<td>0.57</td>
<td>0.07</td>
</tr>
<tr>
<td>Sports</td>
<td>John</td>
<td>6</td>
<td>7.93</td>
<td>0.49</td>
<td>0.20</td>
<td>4.39</td>
<td>0.32</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>Mark</td>
<td>9</td>
<td>8.20</td>
<td>0.43</td>
<td>0.14</td>
<td>4.13</td>
<td>0.91</td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>11</td>
<td>7.91</td>
<td>0.55</td>
<td>0.17</td>
<td>3.84</td>
<td>0.84</td>
<td>0.25</td>
</tr>
<tr>
<td></td>
<td>Trevor</td>
<td>17</td>
<td>7.45</td>
<td>0.49</td>
<td>0.12</td>
<td>4.45</td>
<td>0.64</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>43</td>
<td>7.79</td>
<td>0.56</td>
<td>0.09</td>
<td>4.22</td>
<td>0.75</td>
<td>0.11</td>
</tr>
<tr>
<td>Ned</td>
<td>Ben</td>
<td>16</td>
<td>7.74</td>
<td>0.75</td>
<td>0.19</td>
<td>3.65</td>
<td>0.50</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Max</td>
<td>10</td>
<td>6.73</td>
<td>0.90</td>
<td>0.29</td>
<td>3.19</td>
<td>0.68</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>Noah</td>
<td>34</td>
<td>7.38</td>
<td>0.81</td>
<td>0.14</td>
<td>3.53</td>
<td>0.62</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>Rick</td>
<td>17</td>
<td>7.87</td>
<td>0.53</td>
<td>0.13</td>
<td>4.18</td>
<td>0.53</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>77</td>
<td>7.48</td>
<td>0.82</td>
<td>0.09</td>
<td>3.66</td>
<td>0.65</td>
<td>0.08</td>
</tr>
<tr>
<td>Schoolie</td>
<td>Gary</td>
<td>10</td>
<td>8.80</td>
<td>0.32</td>
<td>0.10</td>
<td>4.46</td>
<td>0.42</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>Jay</td>
<td>20</td>
<td>8.78</td>
<td>0.55</td>
<td>0.12</td>
<td>3.86</td>
<td>0.66</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>Josh</td>
<td>23</td>
<td>8.57</td>
<td>0.65</td>
<td>0.13</td>
<td>3.98</td>
<td>0.69</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>Victor</td>
<td>13</td>
<td>8.45</td>
<td>0.54</td>
<td>0.15</td>
<td>3.47</td>
<td>0.78</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>66</td>
<td>8.64</td>
<td>0.55</td>
<td>0.07</td>
<td>3.92</td>
<td>0.72</td>
<td>0.09</td>
</tr>
</tbody>
</table>

Table 6.60. Descriptive statistics for CAT before voiced obstruents by speaker and CofP in Year 3

The Schoolie CofP speakers have the highest mean values and distribution while the Ned CofP speakers have the lowest (Figure 6.65), although again there is a split between Ben and Rick (raised Ned CofP speakers) and Max and Noah (lowered Ned CofP speakers, Table 6.60). The Alternative and Sports CofP means together fall midway between the Ned and Schoolie CofP means. Again, however, Trevor’s individual speaker mean places him outside the rest of the Sports CofP speaker means. The Ned CofP speakers also tend to be the most fronted (although Rick is slightly retracted), while the Sports CofP are the most retracted.
6.7.5. Pattern of CAT Variation before Phonological /l/ in Year 3

Figure 6.66. Spread of CAT tokens before phonological /l/ across all speakers in Year 3

<table>
<thead>
<tr>
<th>CofP</th>
<th>Speaker</th>
<th>n</th>
<th>Normalised F&lt;sub&gt;1&lt;/sub&gt; Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised F&lt;sub&gt;2&lt;/sub&gt; Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt</td>
<td>Neil</td>
<td>13</td>
<td>7.51</td>
<td>0.39</td>
<td>0.11</td>
<td>4.43</td>
<td>0.29</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>Peter</td>
<td>17</td>
<td>8.09</td>
<td>0.68</td>
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<td>4.17</td>
<td>0.64</td>
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</tr>
<tr>
<td></td>
<td>Ray</td>
<td>12</td>
<td>8.07</td>
<td>0.75</td>
<td>0.22</td>
<td>4.97</td>
<td>0.49</td>
<td>0.14</td>
</tr>
<tr>
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<td>4.48</td>
<td>0.60</td>
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</tr>
<tr>
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</tr>
<tr>
<td></td>
<td>Mark</td>
<td>2</td>
<td>8.35</td>
<td>0.18</td>
<td>0.13</td>
<td>5.10</td>
<td>0.19</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Trevor</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td></td>
<td>Mean</td>
<td>2</td>
<td>8.35</td>
<td>0.18</td>
<td>0.13</td>
<td>5.10</td>
<td>0.19</td>
<td>0.13</td>
</tr>
<tr>
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<td>Max</td>
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<tr>
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<td>4.49</td>
<td>0.81</td>
<td>0.16</td>
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<tr>
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<td>Rick</td>
<td>7</td>
<td>7.92</td>
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<td>0.12</td>
<td>5.07</td>
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</tr>
<tr>
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<td>0.09</td>
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<td>0.75</td>
<td>0.12</td>
</tr>
<tr>
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<td>Gary</td>
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<td>9.75</td>
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<td>5.92</td>
<td>0.23</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>Jay</td>
<td>2</td>
<td>9.16</td>
<td>1.12</td>
<td>0.87</td>
<td>4.70</td>
<td>1.78</td>
<td>1.26</td>
</tr>
<tr>
<td></td>
<td>Josh</td>
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<td>8.39</td>
<td>0.58</td>
<td>0.16</td>
<td>4.95</td>
<td>0.71</td>
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<tr>
<td></td>
<td>Victor</td>
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<td>-</td>
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</tr>
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<td>0.19</td>
<td>5.03</td>
<td>0.84</td>
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</tr>
</tbody>
</table>

Table 6.61. Descriptive statistics for CAT before phonological /l/ by speaker and CofP in Year 3
For CAT tokens before phonological /l/, there are a low number of tokens. More importantly, some CoPs are distinctly underrepresented in the data (particularly the Sports CoP). Consequently, the following results must be taken very cautiously.

There is a repeat of the results found before voiced and voiceless obstruents, with the Schoolie CoP speakers having more raised distributions than the Ned CoP speakers (Figure 6.66). The Alternative CoP speaker means appear to fall between the Ned and Schoolie mean values (Table 6.61), although the Alternative spread values fall across the Ned and Schoolie spread values.

The Alternative CoP speakers tend to be the most fronted, although Max (Ned CoP) is also very fronted. Rick (Ned CoP) falls outside the main Ned CoP distribution by being more retracted, a similar finding to his results before voiceless and voiced obstruents.

6.7.6. Pattern of CAT Variation before Phonological /r/ in Year 3

![Figure 6.67. Spread of CAT tokens before phonological /r/ across all speakers in Year 3](image)
Table 6.62. Descriptive statistics for cat before phonological /r/ by speaker and CofP in Year 3

<table>
<thead>
<tr>
<th>CofP</th>
<th>Speaker</th>
<th>n</th>
<th>Normalised F₁ Mean</th>
<th>SD</th>
<th>SE</th>
<th>Normalised F₂ Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt</td>
<td>Neil</td>
<td>29</td>
<td>7.81</td>
<td>0.69</td>
<td>0.13</td>
<td>4.72</td>
<td>0.63</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Peter</td>
<td>48</td>
<td>8.79</td>
<td>0.85</td>
<td>0.12</td>
<td>5.68</td>
<td>0.77</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>Ray</td>
<td>16</td>
<td>8.18</td>
<td>0.66</td>
<td>0.17</td>
<td>5.00</td>
<td>0.78</td>
<td>0.20</td>
</tr>
<tr>
<td>Mean</td>
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<td>0.88</td>
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<td>5.26</td>
<td>0.85</td>
<td>0.09</td>
</tr>
<tr>
<td>Sports</td>
<td>John</td>
<td>91</td>
<td>8.67</td>
<td>0.60</td>
<td>0.06</td>
<td>5.81</td>
<td>0.69</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>Mark</td>
<td>10</td>
<td>8.46</td>
<td>0.63</td>
<td>0.20</td>
<td>5.68</td>
<td>0.45</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>14</td>
<td>8.32</td>
<td>0.42</td>
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<td>5.61</td>
<td>0.89</td>
<td>0.24</td>
</tr>
<tr>
<td></td>
<td>Trevor</td>
<td>25</td>
<td>7.51</td>
<td>0.56</td>
<td>0.11</td>
<td>4.47</td>
<td>0.75</td>
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</tr>
<tr>
<td>Mean</td>
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<td>0.72</td>
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<td>5.54</td>
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<tr>
<td>Ned</td>
<td>Ben</td>
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<td>8.00</td>
<td>0.77</td>
<td>0.20</td>
<td>4.55</td>
<td>1.09</td>
<td>0.28</td>
</tr>
<tr>
<td></td>
<td>Max</td>
<td>14</td>
<td>7.72</td>
<td>1.02</td>
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<td>5.07</td>
<td>1.10</td>
<td>0.29</td>
</tr>
<tr>
<td></td>
<td>Noah</td>
<td>37</td>
<td>8.07</td>
<td>0.86</td>
<td>0.14</td>
<td>5.51</td>
<td>0.78</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>Rick</td>
<td>21</td>
<td>7.99</td>
<td>0.48</td>
<td>0.10</td>
<td>4.93</td>
<td>0.62</td>
<td>0.14</td>
</tr>
<tr>
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<td>7.98</td>
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<td>0.09</td>
<td>5.13</td>
<td>0.92</td>
<td>0.10</td>
</tr>
<tr>
<td>Schoolie</td>
<td>Gary</td>
<td>29</td>
<td>9.24</td>
<td>0.50</td>
<td>0.09</td>
<td>5.95</td>
<td>0.62</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Jay</td>
<td>13</td>
<td>9.03</td>
<td>0.45</td>
<td>0.13</td>
<td>5.27</td>
<td>0.63</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>Josh</td>
<td>36</td>
<td>8.79</td>
<td>0.61</td>
<td>0.10</td>
<td>5.49</td>
<td>0.91</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>Victor</td>
<td>21</td>
<td>8.55</td>
<td>0.96</td>
<td>0.21</td>
<td>4.39</td>
<td>1.24</td>
<td>0.27</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>99</td>
<td>8.90</td>
<td>0.70</td>
<td>0.07</td>
<td>5.36</td>
<td>1.04</td>
<td>0.10</td>
</tr>
</tbody>
</table>

For normalised F₁ means and spread, we again find that the Schoolie CofP speakers are more raised than the Ned CofP speakers (Figure 6.67). The Sports CofP speakers also tend to be raised, although the mean value for Trevor shows him as lowered, the same result as before voiceless and voiced obstruents. The Alternative CofP speakers tend to be lowered, but Peter’s raised mean value is very different to the mean value for Neil and Ray (Table 6.62).

The Sports and Schoolie CofP speakers are more retracted and the Alternative and Ned CofP speakers more fronted. However, each CofP has one outlier who does not follow the main CofP pattern. The Sports and Schoolie CofP speakers tend to be retracted, but within these CofPs both Trevor (Sports CofP) and Victor (Schoolie CofP) are fronted. Similarly, the Alternative and Ned CofP speakers tend to be fronted, yet Peter (Alternative CofP) and Noah (Ned CofP) are retracted.
6.7.7. Pattern of CAT Variation before Nasals in Year 3

![Figure 6.68. Spread of CAT tokens before nasals across all speakers in Year 3](image)

Table 6.63. Descriptive statistics for CAT before nasals by speaker and CofP in Year 3
The Schoolie CofP speakers tend to be more raised than the Ned CofP speakers (Figure 6.68), although again there is a split in the Ned CofP, with Ben and Rick raised and Max and Noah lowered (Table 6.63). There is also a split between the Schoolie CofP speakers, with Gary and Jay raised and Josh and Victor lowered. This result mirrors the Schoolie CofP results before /r/. Like his results for voiceless and voiced obstruents, the mean value for Trevor places him outside the Sports CofP distribution.

The Alternative and Sports CofP speakers tend to be more retracted, while the Ned and Schoolie CofP speakers tend to be the more fronted. Rick, however, is the most retracted Ned CofP speaker, aligning with the Sports and Alternative CofP speakers. This mirrors his results before voiceless and voiced obstruents.

6.7.8. Pattern of CAT Variation before Glottals in Year 3

Figure 6.69. Spread of CAT tokens before glottals across all speakers in Year 3
As for previous environments, the main separation between the CofPs appears to be one of height, with the Schoolie CofP speakers raised and the Ned CofP lowered in both mean and spread values (Figure 6.69 and Table 6.64). The Sports and Alternative CofP speakers overlap a good deal in their mean and distribution, although Trevor (Sports CofP) is again the lowest Sport CofP speaker.

The Ned CofP tends to be more fronted, although Rick is retracted, a similar result before voiceless and voiced obstruents. Victor (Schoolie CofP) is very fronted in both his mean and spread values, but the other three Schoolie CofP speakers are more retracted, almost aligning with the Alternative and Sports CofP speaker means.

**6.7.9. Statistical Analysis of CAT in Year 3**

Regression analysis on normalised F₁ (Schoolie CofP and voiceless obstruents were held as baseline) reported following results (Table 6.65).
Adjusted r-square = 0.196, df = 6, 3743
Table 6.65. Results for regression analysis on normalised $F_2$ of CAT in Year 3

The coefficients show that the Alternative, Sports, and Ned CofPs have lowered (i.e. open) vowels, with the Ned CofP more open and the Alternative CofP the least. We can thus infer from this result that the Schoolie CofP would have a more raised (i.e. close) vowel. ANOVA tests reported a significant effect of CofP membership ($F_{1, 3} = 221.44, p = 0.000$) and following phonetic environment ($F_{1, 3} = 28.38, p = 0.000$), with a significant interaction between these two factors ($F_{1, 12} = 5.18, p = 0.000$, adjusted r-squared = 0.21). This interaction shows that the effect of CofP membership is more likely before approximants and nasals than before other environments, with the Ned CofP lowered and all other CofPs raised. Games-Howell post hoc tests showed a significant difference between all four CofPs ($p = 0.000$), and tokens before approximants were significantly raised in comparison to tokens before other environments ($p = 0.010$).

Regression analysis on normalised $F_2$ values returned the following results (Table 6.66).

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictor Variable</th>
<th>Coefficients</th>
<th>Significance</th>
</tr>
</thead>
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<td>Normalised $F_1$</td>
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<td>-0.66</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Sports</td>
<td>-0.78</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Ned</td>
<td>-1.10</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Approximants</td>
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<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Nasals</td>
<td>0.27</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Glottals</td>
<td>0.24</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Adjusted r-square = 0.218, df = 5, 3744
Table 6.66. Results for regression analysis on normalised $F_2$ of CAT in Year 3
The coefficients decrease for the Ned CofP, indicating more fronted vowels, while the coefficients increase for Sports CofP, indicating more retracted vowels. With regards to following phonetic environment, the coefficients show that CAT tokens before approximants are retracted, while CAT tokens before voiced obstruents and nasals are fronted. ANOVA tests on the normalised F$_2$ data showed a significant effect of CofP ($F_{1, 3} = 37.19, p = 0.000$) and following phonetic environment ($F_{1, 4} = 216.60, p = 0.000$). There was a significant interaction between these two factors ($F_{1, 12} = 1.91, p = 0.028$, adjusted r-squared = 0.221), with the effect of CofP membership on normalised F$_2$ more likely before voiced obstruents (fronting) and approximants (retraction) in the Alternative and Schoolie CofPs. Games-Howell post hoc tests showed a significant difference between the raised Alternative and Sports CofP and the lowered Ned CofP ($p = 0.000$), but not between the Alternative and Schoolie CofPs ($p = 0.989$). Tokens before voiced obstruents and nasals were significantly fronted ($p = 0.000$) compared to tokens before other environments, while tokens before approximants were significantly retracted compared all other environments ($p < 0.05$).

6.7.10. Summary of Variation CAT in Year 3

The main finding for CAT in Year 3 was a division between the CofPs in terms of height, a result which aligns with the analysis of the Year 1 and Year 2 data. Specifically, the Schoolie CofP was consistently more raised than the Ned CofP, particularly before approximants, and statistical testing showed a significant difference in height between all four CofPs. For vowel retraction/fronting, the Ned CofP tended to be more fronted while the Alternative and Sports CofP were more retracted. The analysis also showed that Trevor (Sports CofP) and Rick (Ned CofP) usually fell outside their respectively CofP pattern, although in different ways. Trevor
was typically the lowest Sports CofP speaker, while Rick was the most retracted Ned CofP speaker.

6.8. Summary of CAT

Like the analysis of bit and (θ), the principal hypothesis was that CofP membership would be reflected in linguistic variation. The analysis of cat over the three years of data seems to lend credence to this hypothesis. The most important axis of differentiation between the different CofPs in Banister Academy appeared to be normalised F₁ (corresponding to vowel height). In Year 1, the Alternative CofP tended to be more raised while the Sports and Floater CofPs were lowered. A similar result was found in Year 2, but in this case it was the Ned CofP who was consistently lower and Alternative and Sports CofPs raised. Differences in vowel height between the Ned CofP and the Alternative/Sports CofP were found in every phonetic environment. In Year 3, the acoustic results again showed a separation between the CofPs in terms of height, with the Ned CofP typically lower than the Schoolie, Alternative, and Sports CofP in all environments, all of whom had different degrees of raising. In Year 2 and Year 3, the results of the acoustic analysis were supported by statistical testing which showed a significant effect of CofP membership on vowel height, in addition to a significant difference in vowel height between all of the CofPs.

For normalised F₂, the main effect across all three years of data was following phonetic environment, with tokens before approximants more retracted and more fronted before voiced obstruents. In Year 2 and Year 3, however, there was also an effect of CofP membership, with the Ned CofP typically more fronted than the other CofPs who were all more retracted. The factors of following phonetic environment
and CofP membership only interacted in Year 3, showing that retraction of \textit{CAT} was more likely before approximants in the Alternative and Schoolie CofPs, and fronting of \textit{CAT} was more likely before voiced obstruents.

**6.9. Results of Longitudinal \textit{CAT} Analysis for three Speakers**

We now move to focus on a specific set of speakers over time (Mark, Neil, and Peter). The ethnographic data showed that some speakers changed their social identity over the course of the fieldwork. Specifically, Peter was a ‘floater’ in Year 1 (i.e. he moved between the Alternative and Sports CofPs), but in Year 2 and Year 3, he became a fully-fledged core member of the Alternative CofP. Mark (Sports CoP) and Neil (Alternative CoP), however, maintained a relatively stable social identity throughout the fieldwork (as Alternative and Sports CofP members respectively).

In order to investigate if vocalic variation was influenced by a change in the social identity of these speakers, \textit{CAT} was analysed in real time to test whether or not a change in social identity was accompanied by a corresponding change in \textit{CAT}. Due to how much the individual speaker distributions overlap in each year, only speaker means will be shown.
6.9.1. Longitudinal Pattern of Variation of CAT in three Speakers over three Years

<table>
<thead>
<tr>
<th></th>
<th>Norm</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Norm</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
<td></td>
<td>F2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neil</td>
<td>7.50</td>
<td>-</td>
<td>7.62</td>
<td>3.86</td>
<td>-</td>
<td>3.96</td>
<td>-</td>
<td>3.96</td>
</tr>
<tr>
<td>Mark</td>
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<td>8.42</td>
<td>8.35</td>
<td>3.96</td>
<td>4.40</td>
<td>4.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peter</td>
<td>7.82</td>
<td>8.51</td>
<td>8.47</td>
<td>4.60</td>
<td>4.53</td>
<td>4.40</td>
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<td></td>
</tr>
</tbody>
</table>

The main change in direction for both Peter and Mark is a raising of CAT, while Neil remains relatively consistent between Year 1 and Year 3 (Figure 6.70 and Table 6.67). There is, however, no major change in the mean values for normalised F2 across the three years.
6.9.2. Pattern of Variation before Voiceless Obstruents in three Speakers over three years

Before voiceless obstruents, the main difference between the means is along normalised F1, with all three speakers more raised in Year 2 and Year 3 than in Year 1 (Figure 6.70. and Table 6.68).
6.9.3. Pattern of Variation before Voiced Obstruents in three Speakers over three years

![Figure 6.72: Means of CAT tokens before voiced obstruents in three speakers over three years](image)

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
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<td>7.39</td>
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<td>3.83</td>
</tr>
<tr>
<td>Mark</td>
<td>7.34</td>
<td>8.49</td>
<td>8.20</td>
<td>3.96</td>
<td>4.11</td>
<td>4.13</td>
</tr>
<tr>
<td>Peter</td>
<td>7.74</td>
<td>8.33</td>
<td>8.10</td>
<td>4.36</td>
<td>4.27</td>
<td>3.79</td>
</tr>
</tbody>
</table>

Table 6.69. Means of CAT tokens before voiced obstruents in three speakers over three years

The results for Peter and Mark mirror their results before voiceless obstruents, with both speakers more raised in Year 3 than in Year 1 (Figure 6.72 and Table 6.69). Like before voiceless obstruents, Peter is slightly lowered in Year 3 than in Year 2. Neil is relatively consistent across Year 1 and Year 3.
6.9.4. Pattern of Variation before Approximants across in Speakers over three years

Figure 6.73. Means of CAT tokens before approximants in three speakers over three years

Due to the small number of tokens before /l/ and /r/, these two environments were combined into one. For Peter and Mark, their overall pattern is similar to before voiceless and voiced obstruents in that they are more raised before approximants in Year 3 than in Year 1 (Figure 6.73. and Table 6.70). Both speakers are more fronted in Year 3 than in Year 2, but unlike other environments, Neil is more retracted in Year 3 than in Year 1.
6.9.5. Pattern of Variation before Nasals in three Speakers over three years

Figure 6.74. Means of CAT tokens before nasals in three speakers over three years

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Normalised F1 Mean</th>
<th>Normalised F2 Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 1</td>
<td>Year 2</td>
</tr>
<tr>
<td>Neil</td>
<td>7.82</td>
<td>-</td>
</tr>
<tr>
<td>Mark</td>
<td>7.61</td>
<td>8.59</td>
</tr>
<tr>
<td>Peter</td>
<td>7.75</td>
<td>8.47</td>
</tr>
</tbody>
</table>

Table 6.71. Means of CAT tokens before nasals in three speakers over three years

As for previous environments, the main change is in normalised F1, with Mark and Peter more raised in Year 3 than in Year 1 (Figure 6.74. and Table 6.71). Neil is lower in Year 3 than in Year 1, an opposite pattern to that found before voiceless obstruents. Mark has noticeable retraction in Year 3, although this is not the case for Peter or Neil.
6.9.6. Pattern of Variation before Glottals in three Speakers over three years

Figure 6.75. Means of CAT tokens before glottals across three speakers over three years

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neil</td>
<td>7.38</td>
<td>-</td>
<td>7.74</td>
<td>3.78</td>
<td>-</td>
<td>3.88</td>
</tr>
<tr>
<td>Mark</td>
<td>7.31</td>
<td>8.33</td>
<td>8.79</td>
<td>4.08</td>
<td>4.42</td>
<td>4.18</td>
</tr>
<tr>
<td>Peter</td>
<td>7.90</td>
<td>8.48</td>
<td>8.56</td>
<td>4.84</td>
<td>4.53</td>
<td>4.66</td>
</tr>
</tbody>
</table>

Table 6.72. Means of CAT tokens before glottals in three speakers over three years

All three speakers are more raised in Year 3 than in Year 1 (Figure 6.75 and Table 6.72). Normalised F₂ stays relatively consistent across all three years.

6.9.7. Statistical Analysis of CAT over time

As before, the linguistic and social factors outlined in previous regression analyses of BIT and CAT are included in the regression model, with the extra factor of ‘year’ also
included. Regression analysis on normalised $F_1$ (Mark, voiceless obstruents, and Year 1 data, were held as baseline), the following results were obtained (Table 6.73).

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictor Variable</th>
<th>Coefficients</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalised $F_1$</td>
<td>Peter</td>
<td>0.44</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Neil</td>
<td>-0.24</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Approximants</td>
<td>0.26</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Year 2</td>
<td>0.77</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Year 3</td>
<td>0.42</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Adjusted $r$-square = 0.147, df = 5, 1849
Table 6.73. Results for regression analysis on normalised $F_1$ of CAT over time

The coefficients show that Peter has a close CAT vowel while Neil’s is more open. The coefficients also show that CAT tokens before approximants are close, and that CAT is closer in Year 2 than in Year 3. ANOVA tests showed a significant effect of following phonetic environment ($F_{1, 4} = 5.60$, $p = 0.000$), speaker ($F_{1, 2} = 40.57$, $p = 0.000$), and year of data ($F_{1, 2} = 65.02$, $p = 0.000$, adjusted $r$-squared = 0.254). There was also an interaction between year of data and speaker ($F_{1, 3} = 11.62$, $p = 0.000$), with Mark and Peter more raised in Year 2 and Year 3 compared to Year 1. Games-Howell post hoc tests reported all three years as significantly different to one another.

Regression analysis on normalised $F_2$ (Mark, voiceless obstruents, and Year 1 data, were held as baseline), the following results were obtained (Table 6.74).

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictor Variable</th>
<th>Coefficients</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalised $F_2$</td>
<td>Peter</td>
<td>0.30</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Neil</td>
<td>-0.16</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Approximants</td>
<td>1.08</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Glottals</td>
<td>0.20</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Year 2</td>
<td>0.23</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Adjusted $r$-square = 0.195, df = 5, 1849
Table 6.74. Results for regression analysis on normalised $F_2$ of CAT over time
The coefficients show that Peter has a more retracted CAT vowel while Neil is more fronted. Tokens before approximants are very retracted but less retracted before glottals. Lastly, tokens from Year 2 are retracted. ANOVA tests showed only a significant effect of following phonetic environment ($F_{1,4} = 78.53$, $p = 0.000$) and speaker ($F_{1,2} = 38.51$, $p = 0.000$), but not of year ($F_{1,2} = 2.05$, $p = 0.129$, adjusted $r$-squared = 0.240). There was no significant interaction between following phonetic environment and year ($F_{1,8} = 0.888$, $p = 0.534$), but there was a significant interaction between year and speaker ($F_{1,3} = 5.90$, $p = 0.001$), with Mark in particular more fronted than Peter or Neil in Year 2 and 3 than in Year 1. There was also a significant interaction between following phonetic environment and speaker ($F_{1,8} = 3.70$, $p = 0.000$), with Mark more retracted before voiceless obstruents and approximants. Games-Howell post hoc tests showed significant retraction between Year 1 and Year 2, but not between Year 2 and Year 3. CAT tokens before voiceless obstruents, voiced obstruents and nasals were not significantly different to one another ($p = 0.958$), but CAT tokens before approximants and glottals were significantly different compared to every other environment ($p = 0.000$).

6.9.8. Summary of Longitudinal Analysis of CAT in three Speakers over three years

The analysis of variation of CAT over time showed that Mark and Peter changed their realisations of this vowel over the three years of data. Specifically, both speakers were more raised in Year 2 and Year 3 compared to Year 1. This was different to the results for Neil who showed a relatively consistent CAT vowel in terms of height. For normalised $F_2$, Mark was more fronted in Year 1 than in Year 2 or 3, but only Year 2 was a significant factor in the regression model. Moreover, year was not reported as
having a significant effect in the ANOVA tests, although it did have a significant interaction with speaker.

**6.10. CAT according to Discourse Type in Year 2**

The previous sections have provided a quantitative description of the linguistic variation of (θ), BIT, and CAT across the different CofPs within Banister Academy. This analysis, however, did not show how these variables were patterned in different types of discourse, particularly those discourses which might be identified as ‘violent’. If we want to examine the potential relationships between language and violence, one approach is to compare those tokens which occur in discourse about violence, fighting, bullying, and verbal abuse (i.e. Negative Affect Discourse, N.A. discourse hereafter) with those tokens which do not (i.e. non-N.A. Discourse). Since CAT has been analysed in most detail, it is this variable which we will focus on in the following section of analysis. Due to the fact that the number of CAT tokens taken for analysis in Year 1 is relatively small compared to Year 2 and Year, this year of data will not be considered in the following analysis.

As before, the results of CAT tokens in N.A. and non-N.A. discourse will be presented according to following phonetic environment\(^{30}\) and CofP membership. Given the low number of N.A. tokens, the concentration in this analysis will be on the CofP rather than speaker, and due to the overlapping distribution only mean values will be presented.

\(^{30}\) Due to the low number of tokens, CAT tokens before phonological /l/ are not presented.
6.10.1. Overall CAT means according to Discourse Type in Year 2

With regards to N.A. and non-N.A. tokens, there appears to be very little difference between realisations of CAT in these two types of discourse (Figure 6.76), although both the Ned and Sports CofP retract CAT during N.A. discourse, while the
Alternative CofP fronts. The number of N.A. tokens is similar across CofP (Table 5.75), although the Alternative CofP has slightly more tokens overall.

Figure 6.77. Means of N.A. and non-N.A. cat tokens before voiceless obstruents by CofP in Year 2

Table 6.76. Frequency and means of N.A. and non-N.A. cat tokens before voiceless obstruents across speaker and CofP in Year 2
Both the Ned and Sports CofPs do not appear to distinguish between N.A. and non-N.A. tokens (Figure 6.77. and Table 6.76). This finding is different from the Alternative CofP which shows more fronted cat tokens in N.A. discourse.

6.10.3. CAT tokens according to Discourse Type before Voiced Obstruents in Year 2

Table 6.77. Frequency and means of N.A. and non-N.A. CAT tokens before voiced obstruents across speaker and CofP in Year 2
Within both the Ned and Sports CofPs, there does not appear to be any difference between N.A. and non-N.A. tokens, a similar finding as before voiceless obstruents (Figure 6.78). The Alternative CofP tends to be more fronted and lowered in N.A. discourse compared to non-N.A. discourse, but it is important to note that all the N.A. discourse tokens within the Alternative CofP are all from Kevin (Table 6.77).

### 6.10.4. CAT tokens according to Discourse Type before Phonological /r/ in Year 2

<table>
<thead>
<tr>
<th>CofP</th>
<th>Speaker</th>
<th>Negative Affect n</th>
<th>Negative Affect %</th>
<th>N.A. F1</th>
<th>N.A. F2</th>
<th>Non-Negative Affect n</th>
<th>Non-Negative Affect %</th>
<th>non-N.A. F1</th>
<th>non-N.A. F2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alt</td>
<td>Kevin</td>
<td>4</td>
<td>23.53</td>
<td>8.62</td>
<td>5.89</td>
<td>13</td>
<td>76.47</td>
<td>8.51</td>
<td>5.86</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Mathew</td>
<td>6</td>
<td>31.58</td>
<td>8.42</td>
<td>5.22</td>
<td>13</td>
<td>68.42</td>
<td>8.75</td>
<td>5.73</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Peter</td>
<td>2</td>
<td>9.09</td>
<td>8.56</td>
<td>5.85</td>
<td>20</td>
<td>90.91</td>
<td>8.74</td>
<td>5.78</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>12</td>
<td>20.69</td>
<td>8.51</td>
<td>5.55</td>
<td>46</td>
<td>79.31</td>
<td>8.68</td>
<td>5.79</td>
<td>58</td>
</tr>
<tr>
<td>Sports</td>
<td>Mark</td>
<td>5</td>
<td>17.24</td>
<td>8.55</td>
<td>5.96</td>
<td>24</td>
<td>82.76</td>
<td>8.73</td>
<td>5.79</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>3</td>
<td>9.68</td>
<td>8.57</td>
<td>5.50</td>
<td>28</td>
<td>90.32</td>
<td>8.62</td>
<td>5.41</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Phil</td>
<td>5</td>
<td>20.83</td>
<td>8.63</td>
<td>5.30</td>
<td>19</td>
<td>79.17</td>
<td>8.44</td>
<td>5.22</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>13</td>
<td>15.48</td>
<td>8.59</td>
<td>5.60</td>
<td>71</td>
<td>84.52</td>
<td>8.61</td>
<td>5.49</td>
<td>84</td>
</tr>
</tbody>
</table>

Figure 6.79. Means of N.A. and non-N.A. CAT tokens before phonological /r/ by CofP in Year 2
For N.A. tokens, both the Ned and Sports CofP appear to retract CAT, although it is very slight (Figure 6.79 and Table 6.78). In contrast, the Alternative CofP appears to front, falling close to the Sport CofP mean value for N.A. and non-N.A. tokens.

6.10.5. CAT tokens according to Discourse Type before Nasals in Year 2

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Negative Affect</th>
<th>N.A. F1</th>
<th>N.A. F2</th>
<th>Non-Negative Affect</th>
<th>Non-N.A. F1</th>
<th>Non-N.A. F2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kevin</td>
<td>11</td>
<td>26.83</td>
<td>8.61</td>
<td>4.20</td>
<td>30</td>
<td>73.17</td>
<td>41</td>
</tr>
<tr>
<td>Mathew</td>
<td>11</td>
<td>45.83</td>
<td>8.69</td>
<td>4.52</td>
<td>13</td>
<td>54.17</td>
<td>24</td>
</tr>
<tr>
<td>Peter</td>
<td>7</td>
<td>12.28</td>
<td>8.33</td>
<td>4.00</td>
<td>50</td>
<td>87.72</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>23.77</td>
<td>8.57</td>
<td>4.27</td>
<td>93</td>
<td>76.23</td>
<td>122</td>
</tr>
</tbody>
</table>

Table 6.78. Frequency and means of N.A. and non-N.A. CAT tokens before phonological /r/ across speaker and CofP in Year 2

Figure 6.80. Means of N.A. and non-N.A. CAT tokens before nasals by CofP in Year 2
Table 6.79. Frequency and means of N.A. and non-N.A. CAT tokens before nasals across speaker and CofP in Year 2

The Alternative and Ned CofPs show no difference between N.A. and non-N.A. tokens, but the Sports CofP shows raised N.A. tokens (Figure 6.80 and Table 6.79).

This finding is different before other environments, where the Sports CofP had either no difference between N.A. and non-N.A. tokens, or had more retracted N.A. tokens.

6.10.6. CAT tokens according to Discourse Type before Glottals in Year 2

![Figure 6.81. Means of N.A. and non-N.A. CAT tokens before glottals by CofP in Year 2](image)
Within the Ned CofP, there does not appear to be a major difference between N.A. and non-N.A. tokens, although there does appear to be a difference between these two types of tokens within the Alternative and Sports CofP (Figure 6.81. and Table 6.80). Specifically, both CofPs have more retracted N.A. tokens and more fronted non-N.A. tokens.

6.10.7. Statistical Analysis of cat tokens according to Discourse Type in Year 2

Linear regression analysis was performed on cat Year 2 data, entering the same social and linguistic factors into the model, but with an additional factor of topic, coded as ‘negative affect topic’ or ‘non-negative affect topic’. Regression analysis with normalised $F_1$ as the dependent variable (Ned CofP and voiceless obstruents were held as baseline) returned the following results (Table 6.81).
Table 6.81. Results for N.A. regression analysis on normalised $F_1$ of \textsc{cat} in Year 2

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictor Variable</th>
<th>Coefficients</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalised $F_1$</td>
<td>Alternative</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Sports</td>
<td>0.83</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Approximants</td>
<td>0.38</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Nasals</td>
<td>0.18</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Negative Affect</td>
<td>0.01</td>
<td>0.83</td>
</tr>
</tbody>
</table>

Adjusted $r$-square = 0.199, df = 4, 1757

As before, the coefficients show that \textsc{cat} tokens within the Alternative and Sports CofP, and before approximants and nasals, are close. The model also shows that N.A. discourse was not significant, and the \textsc{ANOVA} test showed no significant effect of N.A. discourse ($F_{1,2} = 1.53, p = 0.216$). It did report a significant effect of CofP membership ($F_{1,2} = 112.31, p = 0.000$) and following phonetic environment ($F_{1,4} = 9.34, p = 0.000$, adjusted $r$-squared = 0.203), a result which was also found in previous sections. There was a significant interaction between CofP and following phonetic environment ($F_{1,8} = 2.24, p = 0.022$), but no interaction between N.A. discourse and CofP ($F_{1,2} = 1.53, p = 0.216$) or between N.A. discourse and following phonetic environment ($F_{1,4} = 1.41, p = 0.227$).

Regression analysis with normalised $F_2$ as the dependent variable returned the following results (Table 6.82).

Table 6.82. Results for N.A. regression analysis on normalised $F_2$ of \textsc{cat} in Year 2

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictor Variable</th>
<th>Coefficients</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalised $F_2$</td>
<td>Alternative</td>
<td>0.57</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Sports</td>
<td>0.40</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Approximants</td>
<td>1.12</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Nasals</td>
<td>-0.29</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Voiced Obstruents</td>
<td>-0.25</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Negative Affect</td>
<td>0.01</td>
<td>0.82</td>
</tr>
</tbody>
</table>

Adjusted $r$-square = 0.221, df = 5, 1756
The coefficients show that within the Alternative and Sports CofP and before approximants, CAT is retracted, and before nasals and voiced obstruents, CAT is fronted. Similar to the results found for normalised $F_1$, the regression model shows that N.A. discourse was not significant. Additionally, ANOVA tests showed no significant effect of N.A. discourse ($F_{1,1} = 0.11, p = 0.745$), but did show a significant effect of CofP ($F_{1,3} = 24.74, p = 0.000$) and following phonetic environment ($F_{1,4} = 66.49, p = 0.000$, adjusted r-squared = 0.224). There was no significant interaction between any of the factors, although there was a near significant interaction between CofP and following phonetic environment ($p = 0.070$).

6.10.8. Summary of CAT tokens according to Discourse Type in Year 2

The main finding for the analysis of CAT according to discourse type was that there were slight quantitative differences between tokens in N.A. discourse and tokens in non-N.A. discourse, but that this was non-significant in both the regression and ANOVA analysis. Within the Ned and Sports CofPs, however, both CofPs tended to retract CAT in N.A. discourse and front in non-N.A. discourse, although the difference was only slight. Conversely, the Alternative CofP tended to front CAT during N.A. discourse.

6.11. CAT according to Discourse Type in Year 3

We move now to the final section of analysis, focusing on CAT tokens in N.A. and non-N.A. discourse in Year 3. The structure is as in the previous sections on N.A. discourse, with the data presented initially for the overall means, and then by CofP membership within each phonetic environment.
6.11.1. Overall CAT means according to Discourse Type in Year 3

![Figure 6.82. Means of N.A. and non-N.A. CAT tokens by CofP in Year 3](image)

Table 6.83. Frequency and means of N.A. and non-N.A. CAT tokens across speaker and CofP in Year 3
The analysis of N.A. and non-N.A. tokens in Year 3 show a slight quantitative difference between the two types of tokens across all four CofPs (Figure 6.82. and Table 6.83). The Alternative, Ned, and Sports CofP have more retracted N.A. tokens, but the Schoolie CofP reverses this pattern and has more fronted N.A. tokens.

6.11.2. CAT according to Discourse Type before Voiceless Obstruents in Year 3

![Figure 6.83. Means of N.A. and non-N.A. CAT tokens before voiceless obstruents by CofP in Year 3](image_url)
### Table 6.84

Frequency and means of N.A. and non-N.A. CAT tokens before voiceless obstruents across speaker and CofP in Year 3

<table>
<thead>
<tr>
<th>CofP</th>
<th>Speaker</th>
<th>Negative Affect</th>
<th>Non-Negative Affect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Alt</td>
<td>Neil</td>
<td>13</td>
<td>10.92</td>
</tr>
<tr>
<td></td>
<td>Peter</td>
<td>55</td>
<td>31.25</td>
</tr>
<tr>
<td></td>
<td>Ray</td>
<td>4</td>
<td>8.33</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>72</td>
<td>20.99</td>
</tr>
<tr>
<td>Sports</td>
<td>John</td>
<td>11</td>
<td>13.92</td>
</tr>
<tr>
<td></td>
<td>Mark</td>
<td>15</td>
<td>39.47</td>
</tr>
<tr>
<td></td>
<td>Nathan</td>
<td>10</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>Trevor</td>
<td>8</td>
<td>12.70</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>44</td>
<td>19.13</td>
</tr>
<tr>
<td>Ned</td>
<td>Ben</td>
<td>7</td>
<td>11.67</td>
</tr>
<tr>
<td></td>
<td>Max</td>
<td>6</td>
<td>20.69</td>
</tr>
<tr>
<td></td>
<td>Noah</td>
<td>19</td>
<td>18.27</td>
</tr>
<tr>
<td></td>
<td>Rick</td>
<td>22</td>
<td>33.33</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>54</td>
<td>20.85</td>
</tr>
<tr>
<td>School</td>
<td>Gary</td>
<td>5</td>
<td>10.20</td>
</tr>
<tr>
<td></td>
<td>Jay</td>
<td>4</td>
<td>7.69</td>
</tr>
<tr>
<td></td>
<td>Josh</td>
<td>5</td>
<td>9.62</td>
</tr>
<tr>
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<td>Victor</td>
<td>11</td>
<td>42.31</td>
</tr>
<tr>
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<td>Total</td>
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</tr>
<tr>
<td>Overall Total</td>
<td>195</td>
<td>19.29</td>
<td>8.00</td>
</tr>
</tbody>
</table>

Before voiceless obstruents, N.A. and non-N.A. tokens appear to be slightly different, with the Ned and Sport CofP retracted in N.A. tokens and fronted in non-N.A. tokens (Figure 6.83. and Table 6.84). The Alternative CofP is slightly different in that CAT is raised in N.A. tokens and lowered in non-N.A. tokens, while the Schoolie CofP is different again and both fronts and lowers CAT for N.A. tokens, although only slightly.
6.11.3. **CAT according to Discourse Type before Voiced Obstruents in Year 3**

![Figure 6.84. Means of N.A. and non-N.A. CAT tokens before voiced obstruents by CofP in Year 3](image)

Table 6.85. Frequency and means of N.A. and non-N.A. CAT tokens before voiced obstruents across speaker and CofP in Year 3

<table>
<thead>
<tr>
<th>CofP</th>
<th>Speaker</th>
<th>Negative Affect</th>
<th>N.A.</th>
<th>Non-Negative Affect</th>
<th>non-N.A.</th>
<th>non-N.A.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n</td>
<td>%</td>
<td>F1</td>
<td>n</td>
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<td>7.33</td>
<td>3.98</td>
<td>15</td>
<td>88.24</td>
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<td>62.50</td>
<td>7.96</td>
<td>3.73</td>
<td>15</td>
<td>37.50</td>
</tr>
<tr>
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<td>Ray</td>
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<td>60.00</td>
<td>8.11</td>
<td>3.58</td>
<td>2</td>
<td>40.00</td>
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<td>3.73</td>
<td>32</td>
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<td>7.17</td>
<td>4.58</td>
<td>5</td>
<td>83.33</td>
</tr>
<tr>
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<td>8.14</td>
<td>3.59</td>
<td>5</td>
<td>55.56</td>
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<td>7.90</td>
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<tr>
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<td>8.10</td>
<td>3.19</td>
<td>14</td>
<td>82.35</td>
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<td>7.95</td>
<td>4.06</td>
<td>28</td>
<td>65.12</td>
</tr>
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<td>0.00</td>
<td>-</td>
<td>-</td>
<td>16</td>
<td>100.0</td>
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<td>Max</td>
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<td>50.00</td>
<td>6.54</td>
<td>3.43</td>
<td>5</td>
<td>50.00</td>
</tr>
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<td></td>
<td>Noah</td>
<td>14</td>
<td>41.18</td>
<td>7.51</td>
<td>3.76</td>
<td>20</td>
<td>58.82</td>
</tr>
<tr>
<td></td>
<td>Rick</td>
<td>4</td>
<td>23.53</td>
<td>7.71</td>
<td>3.71</td>
<td>13</td>
<td>76.47</td>
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<td>7.33</td>
<td>3.68</td>
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<td>70.13</td>
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<td>Gary</td>
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<td>0.00</td>
<td>-</td>
<td>-</td>
<td>10</td>
<td>100.0</td>
</tr>
<tr>
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<td>Jay</td>
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<td>0.00</td>
<td>-</td>
<td>-</td>
<td>20</td>
<td>100.0</td>
</tr>
<tr>
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<td>Josh</td>
<td>0</td>
<td>0.00</td>
<td>-</td>
<td>-</td>
<td>23</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Victor</td>
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<td>7.69</td>
<td>8.28</td>
<td>3.55</td>
<td>12</td>
<td>92.31</td>
</tr>
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<td></td>
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<td>3.55</td>
<td>65</td>
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<td>27.82</td>
<td>7.87</td>
<td>3.76</td>
<td>179</td>
<td>72.18</td>
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</tbody>
</table>

Table 6.85. Frequency and means of N.A. and non-N.A. CAT tokens before voiced obstruents across speaker and CofP in Year 3
Before voiced obstruents, there are very few tokens of N.A. tokens from any of the CofPs, but most particularly from the Schoolie CofP (Table 6.85). Consequently, the results in this environment should be treated with caution. The results show that both the Alternative and the Sports CofPs are more retracted in N.A. tokens, although in the Sports CofP the difference between N.A. and non-N.A. tokens is very slight (Figure 6.84). The Schoolie CofP appears to be more fronted in N.A. tokens, but since there is in fact only one token, this result is unlikely to be indicative of the general pattern of the variation of N.A. tokens. Lastly, the Ned CofP appears to have lower N.A. tokens and raised non-N.A. tokens, a different finding to that before voiceless obstruents.

6.11.4 CAT according to Discourse Type before Phonological /r/ in Year 3

![Graph](image-url)

Figure 6.85. Means of N.A. and non-N.A. CAT tokens before phonological /r/ by CofP in Year 3
In N.A. discourse, both the Alternative and Sports CoPs have similar normalised $F_1$ values for N.A. and non-N.A. tokens (Figure 6.85 and Table 6.86). The Ned and Schoolie CoP are separated on the normalised $F_1$ axis, with the Ned CoP lowered and the Schoolie CoP raised, but both CoPs have the same direction separation of N.A. and non-N.A. tokens. Specifically, N.A. tokens are fronted in both CoPs, while non-N.A. tokens are retracted.

Table 6.86. Frequency and means of N.A. and non-N.A. CAT tokens before phonological /r/ across speaker and CoP in Year 3
### 6.11.5. CAT according to Discourse Type before Nasals in Year 3

![Graph showing means of N.A. and non-N.A. CAT tokens before nasals by CofP in Year 3](image)

**Figure 6.86.** Means of N.A. and non-N.A. CAT tokens before nasals by CofP in Year 3

<table>
<thead>
<tr>
<th>CofP</th>
<th>Speaker</th>
<th>Negative Affect</th>
<th>N.A. F1</th>
<th>N.A. F2</th>
<th>Non-Negative Affect</th>
<th>non-N.A. F1</th>
<th>non-N.A. F2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alt</td>
<td>Neil</td>
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<td>8.11</td>
<td></td>
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<td>3.45</td>
<td>102</td>
<td>91.89</td>
</tr>
<tr>
<td></td>
<td>Peter</td>
<td>60</td>
<td>43.80</td>
<td></td>
<td>8.67</td>
<td>4.15</td>
<td>77</td>
<td>56.20</td>
</tr>
<tr>
<td></td>
<td>Ray</td>
<td>6</td>
<td>13.04</td>
<td></td>
<td>8.41</td>
<td>3.06</td>
<td>40</td>
<td>86.96</td>
</tr>
<tr>
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<td>Total</td>
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<td>8.52</td>
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<td>219</td>
<td>74.49</td>
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</tr>
<tr>
<td>Sports</td>
<td>John</td>
<td>5</td>
<td>10.87</td>
<td></td>
<td>7.91</td>
<td>4.30</td>
<td>41</td>
<td>89.13</td>
</tr>
<tr>
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<td>Mark</td>
<td>7</td>
<td>18.42</td>
<td></td>
<td>7.83</td>
<td>4.52</td>
<td>31</td>
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<td></td>
<td>7.48</td>
<td>4.10</td>
<td>13</td>
<td>81.25</td>
</tr>
<tr>
<td></td>
<td>Trevor</td>
<td>3</td>
<td>4.23</td>
<td></td>
<td>7.26</td>
<td>4.06</td>
<td>68</td>
<td>95.77</td>
</tr>
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<td>10.53</td>
<td>7.70</td>
<td>4.31</td>
<td>153</td>
<td>89.47</td>
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</tr>
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<td>Ben</td>
<td>11</td>
<td>8.94</td>
<td></td>
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<td>3.22</td>
<td>112</td>
<td>91.06</td>
</tr>
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<td>Max</td>
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</tr>
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<td>7.71</td>
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<td>63</td>
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<td>Rick</td>
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<td>41.10</td>
<td></td>
<td>8.35</td>
<td>4.17</td>
<td>43</td>
<td>58.90</td>
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<td>3.85</td>
<td>239</td>
<td>77.35</td>
<td>7.95</td>
</tr>
<tr>
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<td></td>
<td>9.06</td>
<td>2.92</td>
<td>62</td>
<td>96.87</td>
</tr>
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<td>3.85</td>
<td></td>
<td>8.37</td>
<td>4.13</td>
<td>25</td>
<td>96.15</td>
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<tr>
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<td>Josh</td>
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<td>10.00</td>
<td></td>
<td>8.04</td>
<td>4.13</td>
<td>36</td>
<td>90.00</td>
</tr>
<tr>
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<td>Victor</td>
<td>1</td>
<td>9.09</td>
<td></td>
<td>7.79</td>
<td>2.20</td>
<td>10</td>
<td>90.91</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>8</td>
<td>5.67</td>
<td>8.30</td>
<td>3.58</td>
<td>133</td>
<td>94.33</td>
<td>8.94</td>
</tr>
<tr>
<td>Overall Total</td>
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<td>18.69</td>
<td>8.10</td>
<td>3.92</td>
<td>744</td>
<td>81.31</td>
<td>8.20</td>
<td>3.96</td>
</tr>
</tbody>
</table>

**Table 6.87.** Frequency and means of N.A. and non-N.A. CAT tokens before nasals across speaker and CofP in Year 3
Both the Alternative and Ned CofPs have retracted N.A. tokens, while the Sports CofP have raised N.A. tokens (Figure 6.86. and Table 6.87). The Schoolie CofP are again more fronted in N.A. tokens, although before nasals there is also lowering.

### 6.11.6. CAT according to Discourse Type before Glottals in Year 3

![Figure 6.87. Means of N.A. and non-N.A. CAT tokens before glottals by CofP in Year 3](image)

<table>
<thead>
<tr>
<th>CofP</th>
<th>Speaker</th>
<th>Negative Affect</th>
<th>Non-Negative Affect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>F₁</td>
<td>F₂</td>
</tr>
<tr>
<td>Alt</td>
<td>Neil</td>
<td>16</td>
<td>12.40</td>
<td>7.68</td>
</tr>
<tr>
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<td>Peter</td>
<td>73</td>
<td>48.03</td>
<td>8.47</td>
</tr>
<tr>
<td></td>
<td>Ray</td>
<td>4</td>
<td>11.76</td>
<td>7.81</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>93</td>
<td>29.52</td>
<td>8.31</td>
</tr>
<tr>
<td>Sports</td>
<td>John</td>
<td>6</td>
<td>7.32</td>
<td>8.10</td>
</tr>
<tr>
<td></td>
<td>Mark</td>
<td>4</td>
<td>16.67</td>
<td>8.67</td>
</tr>
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<td>Nathan</td>
<td>9</td>
<td>28.13</td>
<td>8.29</td>
</tr>
<tr>
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<td>Trevor</td>
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<td>6.25</td>
<td>7.87</td>
</tr>
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<td>11.01</td>
<td>8.22</td>
</tr>
<tr>
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<td>Ben</td>
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<td>Max</td>
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<td>22.58</td>
<td>6.69</td>
</tr>
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<td>23.47</td>
<td>7.67</td>
</tr>
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<td>Rick</td>
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<td>36.92</td>
<td>8.27</td>
</tr>
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<td></td>
<td>Total</td>
<td>60</td>
<td>20.41</td>
<td>7.83</td>
</tr>
<tr>
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<td>Gary</td>
<td>4</td>
<td>5.06</td>
<td>8.89</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
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<td>Jay</td>
<td>8</td>
<td>12.12</td>
<td>9.32</td>
<td>3.80</td>
</tr>
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<td>2.22</td>
<td>6.34</td>
<td>3.62</td>
</tr>
<tr>
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<td>15.00</td>
<td>8.00</td>
<td>2.87</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>8.26</td>
<td>8.65</td>
<td>3.73</td>
</tr>
<tr>
<td>Overall Total</td>
<td>196</td>
<td>18.54</td>
<td>8.25</td>
<td>4.31</td>
</tr>
</tbody>
</table>

Table 6.88. Frequency and means of N.A. and non-N.A. CAT tokens before glottals across speaker and CoP in Year 3

The difference between N.A. and non-N.A. tokens is very slight within the Alternative CoP, but appears to be more pronounced within the other three CoPs. The Ned and the Sports CoP have retracted CAT tokens in N.A. discourse and fronted tokens in non-N.A. discourse, while this pattern is reversed in the Schoolie CoP (Figure 6.87. and Table 6.88).

### 6.11.7. Statistical Analysis of CAT tokens according to Discourse Type in Year 3

Linear regression analysis was performed on CAT Year 3 data, entering the same social and linguistic factors into the model, but with an additional factor of topic, coded as negative affect topic or non-negative affect topic. Regression analysis with normalised F₁ as the dependent variable (Schoolie CoP and voiceless obstruents were held as baseline) returned the following results (Table 6.89).

<table>
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<tr>
<th>Dependent Variable</th>
<th>Predictor Variable</th>
<th>Coefficients</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
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<td>Alternative</td>
<td>-0.68</td>
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<td></td>
<td>Sports</td>
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<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Ned</td>
<td>-1.12</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Approximants</td>
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<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Nasals</td>
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</tr>
<tr>
<td></td>
<td>Negative Affect</td>
<td>0.10</td>
<td>0.003</td>
</tr>
</tbody>
</table>

Adjusted r-square = 0.198, df = 7, 3742

Table 6.89. Results for N.A. regression analysis on normalised F₁ of CAT in Year 3
The first six coefficients reflect similar results for CofP and following phonetic environment as the regression analysis in section 6.7.9. Additionally, the regression model shows N.A. tokens as a significant factor, with the coefficients indicating that N.A. tokens are closer. ANOVA tests showed a significant effect of CofP membership ($F_{1,3} = 61.11, p = 0.000$) and following phonetic environment ($F_{1,4} = 16.12, p = 0.000$, adjusted $r$-squared = 0.216), but no effect of N.A. discourse ($F_{1,1} = 0.039, p = .844$).

There was no significant interaction between following phonetic environment and N.A. discourse ($F_{1,4} = 0.489, p = 0.549$), but there was a significant interaction CofP membership and N.A. discourse, showing that overall, N.A. tokens were more likely to be raised in the Alternative CofP but lowered in the Schoolie CofP (the Sports and Ned CofPs tended to have similar values for vowel height irrespective of whether it was N.A. or non-N.A. discourse). There was also a third order interaction between CofP membership, following phonetic environment, and N.A. discourse ($F_{1,12} = 2.456, p = 0.003$), showing that the raising of N.A. tokens in the Alternative CofP and lowering in the Schoolie CofP was more likely before nasals, but that N.A. tokens before approximants were likely to be raised in both CofPs. Games-Howell post hoc tests showed that all four CofPs were significantly different to one another in height ($p = 0.015$), and only approximants were significantly different to all other environments ($p = 0.013$).

Regression analysis with normalised $F_2$ as the dependent variable (Schoolie CofP and voiceless obstruents were held as baseline) returned the following results (Table 6.90).
Table 6.90. Results for N.A. regression analysis on normalised $F_2$ of CAT in Year 3

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictor Variable</th>
<th>Coefficients</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
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<td>0.000</td>
</tr>
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<td>Ned</td>
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<td>0.000</td>
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<td>Voiced obstruents</td>
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<td></td>
<td>Approximants</td>
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<td>0.000</td>
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<td>Nasals</td>
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<tr>
<td></td>
<td>Glottals</td>
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<td>0.051</td>
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<tr>
<td></td>
<td>Negative Affect</td>
<td>0.11</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Adjusted r-square = 0.222, df = 7, 3742

The coefficients show a similar finding as section 6.7.9., with the Ned CofP more fronted and the Sports CofP more retracted. Moreover, CAT tokens before approximants are retracted, but fronted before voiced obstruents and nasals. The coefficients also show that N.A. tokens are more retracted. ANOVA tests showed a significant effect of CofP membership ($F_{1,3} = 26.43, p = 0.000$) and following phonetic environment ($F_{1,4} = 117.18, p = 0.000$), but no significant effect of N.A. discourse ($F_{1,1} = 0.136, p = 0.713$). There was, however, a near-significant second order interaction between following phonetic environment and N.A. discourse ($F_{1,4} = 3.43, p = 0.008$), such that N.A. tokens are likely to be more fronted before voiced obstruents and approximants. A third order interaction between following phonetic environment, CofP membership, and N.A. discourse was also reported ($F_{1,12} = 2.17, p = 0.011$). Specifically, N.A. tokens were likely to be more fronted in the Schoolie CofP and Ned CofP before approximants.

**6.11.8. Summary of CAT tokens according to Discourse Type in Year 3**

The main finding for CAT according to discourse type in Year 3 was that there existed systematic differences between tokens in N.A. and non-N.A. discourse. Overall, the Alternative, Ned, and Sports CofP all tended to have more raised and retracted N.A.
tokens. The Schoolie CofP, however, had more lowered and fronted N.A. tokens. But within specific environments, the Schoolie and Ned CofPs had the same pattern of variation, with both CofPs having more fronted N.A. tokens before approximants. The statistical analysis showed that N.A. discourse was a significant factor in the regression model, specifically that N.A. tokens were both more closed and more retracted than tokens in non-N.A. discourse, and interacted with following phonetic environment and CofP membership.

6.11.9. Overall Summary of CAT according to Discourse Type

In Year 2, there was a tendency towards a difference between CAT tokens of N.A. and non-N.A. discourse, with the Ned CofP having more retracted CAT tokens in N.A. discourse and the Sports CofP having more fronted CAT tokens in N.A. discourse. The statistical analysis, however, showed no effect of N.A. discourse in the regression model or the ANOVA tests. Overall in Year 3, the Alternative and Sports CofP had more raised and more retracted N.A. tokens (although in the Ned CofP there was no difference in height between N.A. and non-N.A. tokens). The Schoolie CofP, however, did not follow this general pattern and used more fronted and lowered N.A. tokens. These findings were supported by statistical analysis which showed that N.A. discourse was a significant factor in the regression analysis for both height and retraction/fronting. Moreover, the ANOVA tests showed that N.A. discourse was interacted significantly with both CofP membership and following phonetic environment. This indicated that the Schoolie CofP was more likely to have lowered N.A. tokens before approximants, but both the Schoolie and Ned CofPs were likely to be more fronted in N.A. discourse before approximants.
6.12. Overall Summary of all Linguistic Variables

One of the main predictions of this chapter was that membership to particular CofPs in Banister Academy would show particular linguistic reflexes. More specifically, that speakers would demonstrate fine-grained differences in the linguistic variables of \textit{BIT}, \textit{CAT}, and \((0)\), and that patterns of linguistic variation would map onto the ethnographically uncovered and locally constituted categories of Alternative, Sports, Ned, Schoolie, and Floater CofPs. The results of the linguistic analysis of these variables showed that CofP membership was often a significant predictor of variable realisation. Importantly, however, the results showed that social factors often intersected with specific linguistic constraints, particularly in the case of \((0)\) and \textit{CAT}.

For the analysis of \((0)\), the main finding was that the Alternative CofP was most standard while the Ned CofP was the least. There was a separation between the CofPs in almost every word position. In word initial position, the Alternative CofP typically used more standard \([\emptyset]\) than either the Sports or Ned CofP who used high rates of both \([h]\) and \([f]\) (Peter, the Floater informant, typically patterned with the Sports CofP for \((0)\) in Year 1). In word medial and word final position, lexical category was an important factor in the choice of variant. In word medial position the lexical constraint was the TH-pro set (e.g. \textit{something, nothing}) where the usual variant was \([?]\) across the Sports and Ned CofP. The Alternative CofP also used several instances of \([\emptyset]\). The majority of word final \((0)\) tokens were \textit{with} and typically had the traditional Scots \textit{wi’}. The results showed that the Sports and Ned CofPs were categorical in their use of the traditional form, while The Alternative CofP was simultaneously local (traditional form), standard ([\emptyset]), and non-local ([f]).
The analysis of *bit* showed a tendency for the CofPs to separate on normalised $F_1$, with the Alternative CofP typically more raised. The Alternative and Sports CofPs were also significantly different from one another in terms of vowel height. The main effect on vowel fronting/retraction was following phonetic environment, with tokens before approximants the most retracted and most fronted before nasals.

For *cat* in Year 1, there was no statistically significant separation between the CofPs in terms of normalised $F_1$ (although there was a tendency), but for normalised $F_2$, the regression analysis showed that Alternative CofP was more retracted. The effect of following phonetic environment, however, was typically stronger, with *cat* tokens before approximants the most retracted. Following phonetic environment also had a significant effect on *cat* in Year 2 and Year 3, with approximants the most retracted and nasals the most fronted, but there was also a separation between the CofPs on normalised $F_1$, with the Ned CofP the most lowered and fronted, while the Alternative, Sports, and Schoolie CofPs the most raised.

The longitudinal analysis of *cat* showed that Neil was relatively consistent in his realisation of *cat*, but Mark and Peter were significantly different across the three years of data, with both speakers more raised in Year 2 and Year 3 than in Year 1.

Lastly, the analysis of *cat* according to discourse type in Year 2 showed slight quantitative differences between ‘violent’ and ‘non-violent’ tokens. In Year 3, these differences were statistically significant. The overall mean values showed that the Alternative, Ned, and Sports CofP had more retracted *cat* tokens during N.A. discourse, while the Schoolie CofP used more fronted *cat* tokens. Although the overall finding did not occur within specific environments, there remained differences between N.A. and non-N.A. tokens, especially within the Ned and Schoolie CofP.
Chapter Seven:
Discussion of the Linguistic Results:
Bringing the Qualitative and Quantitative Together

7. Introduction

Chapter Six outlined the patterns of linguistic variation for the variables BIT, CAT, and (0), and the analysis of these variables showed statistically significant correlations with CofP membership. The analysis of (0) showed an effect of CofP membership, with the Alternative CofP the most standard (use of [0] was highest overall in this CofP), the Sports CofP less standard, and the Ned CofP the most non-standard. For BIT, the main difference between the Alternative and Sports CofPs was one of height, with the Alternative CofP raised and the Sports CofP lowered. CAT also showed a tendency of CofP membership on vowel height, with the Ned CofP lowered, the Schoolie CofP raised, and the Alternative and Sports CofPs falling in between these extremes. Chapter Six then examined the longitudinal patterns of CAT across three speakers (Mark, Neil, and Peter), showing how speaker identity interacted with vocalic variation. Both Mark and Peter raised their CAT vowel over the course of the three years of data, while Neil remained relatively stable. Lastly, Chapter Six concluded by focusing on the realisation of CAT according to discourse type, showing that the quality of this vowel changed during ‘violent’ talk. Specifically, the Schoolie CofP were more fronted and the Ned CofP more retracted in ‘violent’ discourse.

This chapter will now discuss these quantitative results in light of the qualitative data from Chapter Five. To this end, it is necessary to first recap both the ethnographic and linguistic results independently before discussing how we can obtain an understanding of the linguistic results by way of reference to the ethnographic data. I will then discuss the acoustic and qualitative analyses of CAT
tokens in N.A. discourse, focusing on the relationship between language and violence among adolescent male speakers in Glasgow. Ultimately, this chapter brings together the quantitative linguistic results, ethnographic observations, and the analysis of specific types of discourse to show how the participants in this research project use multivalent strategies in the construction of their sociolinguistic identities.

7.1. Returning to the Field: Recap of the Ethnography

Chapter Five outlined the main findings of the ethnographic fieldwork, demonstrating that differentiation between the participants ran along several axes. Such processes of differentiation included (but were not limited to) aspects of dress, involvement in various types of sports, orientation towards the school, engagement in the subcultural economy, use of ‘violent’ social practices, and attitudes towards the local area. Many of these social practices marked alignment towards one of four distinct CofPs: Alternative, Sports, Ned, and Schoolie, and each of these CofPs had a particular constellation of social practices which provided members with resources to construct a salient social identity.

The CofPs in Banister Academy were unlike those represented by the Jocks and Burnouts (Eckert 2000), the Sureñás and the Norteñas (Mendoza-Denton 2008), or the Eden Village Girls, the Townies, the Populars, and the Defaults (Moore 2003). Each of these CofPs differentiated itself through explicit contrast to ‘another group’. For example, the CofPs in both Eckert and Moore’s work distinguished themselves from one another via a range of social practices, including engagement with the school and orientation towards the local culture, while the participants in Mendoza-Denton’s research identified themselves through exclusive association with American

31 There was also one participant (Peter) who was identified as a ‘floater’ member in Year 1, but who moved into the Alternative CofP in Year 2 and Year 3.
or Mexican identity. Each of these studies showed CofPs maximally differentiating itself from other groups. Conversely, the Alternative, Sports, and Schoolie CofPs of Banister Academy relied less on explicit contrast between one another for purposes of identification (those within the Alternative CofP usually did not say they were not Schoolies and vice versa). But all of these CofPs used the Ned CofP as a contrastive pole of identity, with many of the Alternative, Sports, and Schoolie CofP members identifying themselves as not being a ned. Even those individuals who engaged in (or used to engage in) many of the social practices they defined as ‘neddy’ (such as Danny and Rick) usually did not identify as a ‘ned’.

1 Rick: It-
(2.3)
A ned’s just basically, (0.8)

5 somebody you don’t want tae know, somebody you don’t want tae be. (0.6)

10 RL: Even though you were one? (0.9)

15 Rick: It’s like in America years ago, (0.9)
if you were a black person just, (1.1)
nothing would, (0.8)
go right for you. (0.4)

RL: Mhmmm. (0.7)

20 Ben: You (h)ink that’s what it’s like, (0.5)
[bein a ned noo?]

Ben: [Aye. (Excerpt 7.1. Ben and Rick, Ned CofP, Year 3)

In terms of ‘identity practices’, Bucholtz (1999: 211) describes two main categories which are relevant to our discussion here:
NEGATIVE IDENTITY PRACTICES are those that individuals employ to distance themselves from a rejected identity, while POSITIVE IDENTITY PRACTICES are those in which individuals engage in order actively to construct a chosen identity.

We can see then that other CofPs utilise negative identity practices to distance themselves from the rejected identity of ‘ned’, but importantly, even those who might be identified as ‘neds’ also use negative identity practices to distance themselves from the identity.

One of the main reasons adolescents assumed to be ‘neds’ are so denigrated is because their social practices are expected to be violent and anti-social in nature. The ethnographic discussion in Chapter Five, however, showed that violence was a typical and expected part of life for all the participants in the research study. There were differing levels of engagement with violence, and it was clear that orientations towards violence were part of the collective social practices of the CofPs such that it was more acceptable within the Alternative, Sports and Ned CofP, but less acceptable within the Schoolie CofP. I return to this point in section 7.5. when I discuss how orientations towards violence intersect with vocalic variation.

7.2. Sociolinguistic Distribution of bit in Banister Academy

The acoustic analysis of bit showed no effect of CofP membership on normalised F2, but there was a robust effect of following phonetic environment, with tokens before approximants retracted (cf. Eremeeva and Stuart-Smith 2003: 1207) and tokens before nasals fronted (cf. Macaulay 1977: 36). There was, however, an effect of CofP membership on vowel height such that the Alternative CofPs speakers typically had closer (i.e. more raised) realisations than the Sports CofPs speakers. Post hoc testing reported a statistically significant difference between the Alternative and Sports CofPs and the Alternative CofP and Peter, but Peter aligned with the Sports CofP.
Within the Sports CofP, however, Nathan was typically very raised, tending to fall outside the mean Sports CofP speaker values and closer to the Alternative CofP.

With regards to vowel frontness/backness, previous research showed following phonetic environment to be an important linguistic constraint, and the quantitative results presented here shows that this remains an important factor. Moreover, previous research showed a robust effect of class and gender on vowel fronting/retraction, with lower social class speakers more retracted than speakers from a higher social class (Macaulay 1977: 31; Stuart-Smith 1999b: 208; Eremeeva and Stuart-Smith 2003: 1207). Macaulay (1977: 32) also demonstrated that females of all classes used the most fronted and raised variants while males in the lowest social class used the most retracted variants. Using data collected in 1997, Eremeeva and Stuart-Smith (2003: 1207) argue that their analysis of BIT shows signs of a potential change in progress, particularly among working-class and middle-class adolescent male speakers. These speakers appear to disfavour retracted variants and favour more fronted realisations, with middle-class adolescent males more fronted than the working-class adolescent males. One possible explanation for this is that these speakers are rejecting local and traditional vernacular norms in place of innovative non-standard forms which relate to a more ‘modern’ social identity (Eremeeva and Stuart-Smith 2003: 1207; cf. Foulkes and Docherty 1999: 13 – 14).

The results presented in Chapter Six, however, did not appear to pattern according to a dimension of frontness/backness, but rather, in terms of vowel height (Figure 7.1).
Figure 7.1. presents a continuum for showing the placement of each speaker depending on their mean realisation of BIT, with Alternative CofP speakers raised and Sports CofP speakers lowered (Peter is not included in this diagram). While this diagram does not account for following phonetic environment, it does offer an overall abstraction of the relationship between CofP membership and BIT realisation. From this basic pattern, we can then begin to explain potential outliers in the data, of which Nathan (Sports CofP) is one.

Chapter Five showed that Nathan was a member of the Sports CofP. He played football and rugby and wore trainers to school, but in Year 1 he viewed himself (and claimed an identity) as a ‘mosher’ (or a wanna-be Alternative), offering up several reasons as to why he felt this to be the case: he listened to rock music and he socialised with some of the prominent members of the Alternative CofP. His level of integration (as viewed by the rest of the Alternative CofP), however, was not particularly successful, mostly because he did not engage with the social practices effectively enough (Eckert 2000: 224). He did not have the same level of music consumption, he did not wear any branded clothing associated with bands, and he maintained links with the Sports CofP. Although he claimed ‘Alternative’ membership, he never acquired the social practices which would have supported his
claim. Although Nathan has a higher mean realisation for BIT than Andrew and Neil (Alternative CofP), we should be wary in categorising him as an Alternative CofP member purely by virtue of his linguistic variation. It is possible that Nathan’s ‘vocalic overshoot’ was due to him viewing BIT as a linguistic resource through which he could construct a sense of an ‘Alternative’ identity (cf. Mendoza-Denton 1997). In this way, Nathan is similar to ‘Jennifer’ from Moore’s (2003) research of female adolescent speakers in Manchester. Both Jennifer and Nathan had linguistic results which outstripped many of the core CofP members within their respective CofPs (Jennifer was originally a Default CofP member who was attempting to gain access to the more anti-school orientated Popular CofP). Nathan and Jennifer’s lack of engagement with the social practices which made up the CofP to which they wanted to gain access could be one reason for their relative lack of success in achieving status as ‘Alternative’ or ‘Popular’. It seems to be the case that although both attempted to consolidate their peripheral position by using the linguistic variants considered to be emblematic of each CofP, their engagement with the social practices did not coincide with their linguistic behaviour.

The results for BIT also show that of all seven speakers, Jack was the most extreme speaker. Over the course of the fieldwork, Jack was viewed as an ‘emo kid’, a style which he consciously developed over the course of Year 2 and Year 3, rejecting the more hardcore Alternative style espoused by Neil (and later in the fieldwork by Kevin and Peter). His positioning as a different kind of ‘Alternative’ from Neil and Andrew was marked not only by his fledgling stylistic practices, but also by his extreme variant of BIT. Jack falls in with the other Alternative CofP speakers in that he is more raised than the Sports CofP speakers, but he also positions himself outside the general pattern of the Alternative CofP by being extremely raised.
It is interesting to note that Jack removed himself completely from the Alternative CofP in Year 2 and Year 3, speaking and socialising with them only occasionally. Instead, he became a member of a different CofP which appeared to align more with his emerging ‘emo’ social practices from Year 1. As a result of his departure from the Alternative CofP, my interactions with Jack fell off quite dramatically, and he did not appear willing to facilitate my progress through this new CofP. Informal observations suggested that his new CofP was predominately comprised of female students, and how much this played a part in my unsuccessful attempts to establish myself within the new CofP is unknown, although as Moore (2003: 41) notes, ethnographic work with members of the opposite sex can be extremely difficult. Consequently, I was unable to follow Jack’s social trajectory through Banister Academy in later years.

7.3. Sociolinguistic Distribution of (θ) in Banister Academy

The encroachment of TH-fronting (i.e. ‘the replacement of the dental fricatives [θ, ð] by labiodentals [f] and [v] respectively’ Wells 1982: 328) has been noted as a major supra-local change in Glaswegian (Stuart-Smith and Timmins 2006), with the non-local, non-standard, and innovative variant [f] existing alongside the traditional vernacular form [h] and the educated standard form [θ] (Stuart-Smith and Timmins 2006: 172). The spread of [f] in Glaswegian is indicative of the general pattern of dialect levelling which characterises many urban dialect areas (Foulkes and Docherty 1999: 17), and appears to be restricted solely to working-class adolescents (Stuart-Smith and Timmins 2006: 174). The analysis of (θ) in Banister Academy, however, shows that even within an apparently homogenous group of working-class adolescent male speakers, there were fine-grained patterns of (θ) variation which related to CofP
membership, with the Alternative CofP the most standard, the Ned CofP the least standard, and the Sports CofP in between.

While previous research on (θ) in word initial position conflates Pattern I and Pattern II words (e.g. Stuart-Smith and Timmins 2006; Stuart-Smith et al. 2007; Stuart-Smith and Timmins f.c.), making it difficult to directly compare the Banister Academy results, we can confirm existing trends on the progress of TH-fronting on a more general level.

The overall results from Banister Academy show that when compared against the data collected by Stuart-Smith and Timmins, the use of [f] increases while [h] decreases (Table 7.1), but when we look at the local patterns of variation in Banister Academy, we see that there are fine-grained distinctions across the CofPs in word initial position.

The Alternative CofP uses the highest rate of [f] where [h] is possible (i.e. Pattern I words). Whether TH-fronting is more advanced in this CofP is debatable, but such a finding accords with the discussion in Stuart-Smith and Timmins (f.c.) who show that those speakers who self-identify as ‘goth’ (analogous to the Alternative CofP) are more likely to be ‘innovators’ and use higher rates of [f] (in word list data at least). In the Sports and Ned CofPs, [h] appears to be more common in Pattern I words (e.g. think, thing), and by being both high in frequency and taking [h], such words function as a ‘lexical brake’ which restricts the spread of [f] (Stuart-Smith and
It is not enough, however, to describe the lexical restraints in order to explain variant choice. Since variants have specific social statuses within Glasgow, we have to account for why different CoPs use these variants in different ways.

Since Glasgow is a post-industrial city with a high concentration of working-class communities, it is reasonable to assume that the views of the males in Banister Academy about what ‘makes a man a man’ would be influenced in part by the historical and socioeconomic reality of the city in which they live. Indeed, one specific conceptualisation of masculinity in Glasgow typically involves relying on behavioural traits which would be considered as hegemonically masculine (e.g. physical toughness, willingness to fight).

(Excerpt 7.2. Neil and Trevor, Year 3)
Chapter Five showed that it was the Ned CofP members in particular who were most likely to be engaged in aspects of the subcultural economy and most engaged in the presentation of a particular masculine ideal. One important question to ask, then, would be ‘how far is the use of categorical [h] within the Ned CofP related to the fact that these speakers are engaged in particular performances of identity?’ Given the status of [0] as the ‘standard’ (and all the indexical associations with middle-class ‘ness’ this variant has), is it the case that the use of the non-standard variants has particular social meaning?

One possible interpretation is that speakers engaged in the local subculture have to use ‘valid’ linguistic resources in order to avoid social censure (this is not unusual since most speakers have to use linguistic resources which are ‘valid’ within their speech community in order to avoid censure). The ‘valid’ linguistic resources in the case of the Ned CofP would be those non-standard variants which avoid any indexical association with the standard language. Such ‘variation rights’ (Mendoza-Denton 2008) are an important aspect to take into consideration in how we understand the kinds of features speakers use within particular types of interactions and social contexts. Since the local subculture (the culture in which the Ned CofP orientates towards) is in opposition to the ‘establishment culture’, it would perhaps be unusual for the Ned CofPs to use the standard variant [0] since this would potentially align them with ‘middle-class’ values. For example, [x] indexes middle-class in Glasgow (Stuart-Smith et al. 2007: 253), and it appears to be the case that [0] also indexes middle-class in Banister Academy (and Glasgow more generally). This was confirmed to me by an off-tape conversation with a female member of the Ned CofP who commented that ‘only posh people say think’ (with [0] rather than [f]). Stuart-
Smith and Timmins (f.c.) comment that [f] = ‘local kids’ while [0] = ‘posh’ or ‘school’, and it appears that this is also the case in Banister Academy.

Moreover, that the non-standard status of [h] contrasts quite markedly with the status [0] is acknowledged within the Ned CofP, and it appears that the Ned CofP takes advantage of this status. Contrastingly, those speakers who are more engaged with the establishment culture of the school maintain higher levels of standardness (cf. Moore 2003: 214), such as those the speakers in the Alternative CofP. The high rate of [0] within the CofP accords with the fact that for the most part they engage with more non-local social practices, as well as being more ‘establishment’ orientated than either the Sports or the Ned CofPs.

The Ned CofP also uses the highest rate of [f] in Pattern II words (two speakers are categorical), which shows that not only do they have access to this more recent variant, they are also actively using it, and at an overall higher rate than any of the other CofPs in Pattern II. The fact that [f] is used almost categorically by the Ned CofP suggests that they are participating in the supra-local change of **TH**-fronting, but only in very specific circumstances where the use of [h] is not linguistically permissible and for specific social purposes. The Ned CofP completely rejects [0], and since [h] is not available in Pattern II words, [f] is the only variant which has any kind of non-standard associations. This finding is in line with Stuart-Smith et al. (2007: 235) who show that working-class adolescent speakers use high rates of [h] and [f] together, and I suggest that the reason the Ned CofP uses both [h] and [f] simultaneously is to demonstrate their orientation towards the local and the non-local. By not using the local variant [h], speakers face the possibility that they would not be seen as ‘Glaswegian’, and for the Ned CofP (and less so within the Sports CofP), an association of Glaswegian is an important part of their masculine identities. Not only
are they drawing on the prototypical idea of the ‘hard man’ (discussed in Chapter One), they are also drawing on the idea of the urban masculine ideal (McDowell 2002). While the use of [h] is clearly correlated with the Sports and the Ned CofPs in particular, we have to posit why this should be the case. Why is [h] not statistically correlated with the Alternative CofP? I argue that [h] and its association with Glasgow is more important to those speakers who are engaged in the local and subcultural economy, and less important to those who reject this type of engagement (i.e. the Alternative CofP). The use of [f] and their rejection of [θ] by the Ned CofP fulfils the function of establishing their distance from both the ‘establishment’ and the traditional Glasgow Vernacular, and allows them to engage with the broader social world outside of Glasgow (cf. Eckert 2000: 222; Eremeeva and Stuart-Smith 2003; Stuart-Smith et al. 2007). An analysis of (θ) within the Schoolie CofP (who are most closely associated with ‘the establishment’) would offer further corroboration of this claim, particularly if the use of [h] is far lower than any of the other three CofPs, and indeed preliminary impressions of the data suggest that the Schoolie CofP use far higher rates of [f] and [θ] (which would align with the Schoolie CofP orientation towards both the non-local and the standard market), and less instances of [h]. Future work will focus on this aspect of the analysis.

Word medial (θ) (e.g. birthday, something) and word final (θ) (e.g. goth, with) tended to relate to CofP membership, but there was also a considerable effect of lexical category. Tokens from the TH-pro set (e.g. something, nothing) generally took [ʔ]. All other words tended to take [f], although it was only the Alternative CofP who used [θ] in any considerable amount in non-TH-pro words. As for word initial position, the Alternative CofP was the most standard while the Sports and Ned CofPs were the least standard.
Lastly, in word final position we found that the bulk of the tokens were *with*, and while the Sports and Ned CofPs used the traditional Scots form of *wi’* almost categorically, the Alternative CofP used a range of variants, including standard [0], innovative [f] (*wif*), and local *wi’*. This shows that the Alternative CofP is not only ‘alternative’ in social practice, but are also ‘alternative’ in their linguistic practice. The use of such a wide range of variants (each with its own social valency) suggests that the Alternative CofP are the most innovative speakers with regards to TH-fronting (cf. Stuart-Smith and Timmins f.c.)

The results for (θ) in the Banister Academy data complement the results found by Stuart-Smith et al. (2007) by adding an extra layer of local description to this variable, demonstrating that the patterning of (θ) is not simply related to issues of class or age, and factors such as projected local social identity are important factors to consider.

**7.4. Sociolinguistic Distribution of CAT in Banister Academy**

The analysis of CAT showed two statistically significant factors affecting variation. The first factor was following phonetic environment, and this typically affected normalised F₂ in all years such that tokens before approximants were retracted and fronted before nasals (although voiceless obstruents, voiced obstruents, and glottals also had the effect of fronting). The second factor was CofP membership, and this affected normalised F₁ (the addition of the Ned and Schoolie CofPs appeared to define the outer extremes of variation in terms of vowel height). CofP membership also affected F₂, with the Ned CofP the most fronted and the Alternative, Sports, and Schoolie CofP more retracted.
In Year 1, CAT showed a tendency towards height as a feature of CofP membership, although the adjusted r-squared value was very low (less than 5% of the variance was accounted for in the regression or ANOVA models). CofP membership was also significantly correlated with vowel retraction/fronting, so although the Alternative and Sports CofP were not different on vowel height, they were different on vowel retraction. In Year 2 and Year 3, both vowel height and retraction were statistically significant, with the Ned CofP typically the most lowered and fronted while speakers from the other three CofPs were more raised and retracted in Year 2 and Year 3. Figures 7.2. and 7.3. are diagrammatic representations of the axes of differentiation over Year 1/2 and Year 3.

![Figure 7.2. Axis of differentiation for CAT in Year 1 and Year 2](image-url)
In terms of height, Figure 7.3. shows how the extreme edges of vocalic variation are filled by the Schoolie and Ned CofPs, with the Alternative and Sports CofPs functioning as ‘in betweens’ (Eckert 1989, 2000). The position of the Ned and Schoolie CofPs CAT vowel can be related to their social practice by virtue of the fact that within the school they operate as the most extreme agents of social practice (i.e. the Schoolie CofP is everything the Ned CofP is not). Such a result appears to manifest in their patterns of linguistic variation as well. The separation between the Alternative and Sports CofPs is not as marked, but they are clearly different to the Ned and Schoolie CofPs. Members from the Alternative, Sports, and Schoolie CofP actively distance themselves from the category of Ned not only by their social practices, but also by their linguistic system. Although Labov (2001: 167) argues for the ‘social pre-eminence of the second formant’, it appears that in Glasgow $F_1$ is an important aspect in determining CofP membership. How far this is related to social identity would only be possible by examining the range of variants within interaction,
in order to determine whether speakers change alter their vowel realisation in particular types of discourse. Preliminary analysis of data collected for a project focusing on Glaswegian Asian adolescent speech (informally called Glaswasian, Alam 2007; Lambert, Alam, and Stuart-Smith 2007) also appears to show an effect of $F_1$ on FACE and GOAT (Jane Stuart-Smith, personal communication).

Variation in $F_1$ also appeared to mark relative engagement within a CofP, most noticeable with the Ned CofP. For example, although Danny did not consider himself to be a Ned (cf. Stuart-Smith 2005: 11; Stuart-Smith and Timmins forthcoming also note self-identification as ‘ned’ is atypical among adolescents in Glasgow), he was viewed by many of the other pupils in Banister Academy as one. Moreover, his own description of the social practices which would define a ‘ned’ covered many of the practices in which he described himself engaging, including drinking, minor drug use, anti-school stance, and occasionally fighting. When asked about his assumed social identity, Danny immediately draws on discourses about violence, a common social practice within the Ned CofP:

1    Danny:  I’m no a fuckin ned I know that wan.  
      I’m a mosher, so I am.
      RL:  Are you?
      Will:  Neds-
5    Danny:  What?
      Will:  I was gaunae say neds.
      Danny:  I fuckin hate them.
      RL:  You hate neds?
5    Danny:  Aye.
10   RL:  Right.
      Danny:  I get on awright wi some of them,  
      but maist of them I fuckin always try and attack.
(Excerpt 7.3, Danny, Ned CofP, Year 2)

The fact that Danny’s CAT vowel aligns with the other Ned CofP members suggests that even though he did not identify as a ‘ned’, his social and linguistic practices tell a different story. He follows the standard societal rubric towards ‘neds’
in Glasgow, but at the same time follows those linguistic and social practices which typically identify such individuals. By way of contrast, Rick falls outside the Ned CofP distribution and is the most raised speaker in the Ned CofP sample (he falls close to the Alternative and Sports CofP speakers). Rick actively denies being a Ned (he had quit smoking and drinking and had become involved again with football), and he did not seem particularly invested in the idea of being a Ned.

1 Rick: If I have weans I’m hopefully no gaunae raise them as neds cause I was wan at wan point and,
(1.6)
5 I’ve just seen what it’s like now that I’m no.
(3.1)
But if I was still a ned my son would probably be a ned cause,
(0.8)
10 he probably will go the same-
(f)rough the same stage as me but,
(0.9)
I’ll tell him no tae but,
(1.6)
15 it’s just-
It’s just something you dae (f)rough family.
(Excerpt 7.4, Rick, Ned CofP, Year 3)

In line 2, Rick admits that he used to be a Ned, but line 5 shows us that he has since rejected that particular type of identity. His admission that being a Ned is ‘something you do through family’ highlights his view that ‘Neddy’ social practices are traditionally transmitted through the family. His past identity as a ned links him to the friendship groups he established during that time and even though he now does not view himself as a ‘ned’, he still has friends within the Ned CofP. So even though both Danny and Rick reject the identity of Ned, the ethnographic observations suggest that only Rick is actively engaged in that particular endeavour. The fact that their linguistic variation for CAT appears to reflect their engagement with the Ned CofP seems to suggest that self-identification is less of an important factor to consider in
our understanding of linguistic variation than actual engagement with those social practices (Eckert 2000: 224).

The variation of $F_1$ was also a factor in the longitudinal analysis of CAT. This analysis focused on three speakers (Mark, Peter, and Neil) and charted their realization of this vowel over the three sets of data. Since one of the predictions of this thesis was that social identities would be linked to linguistic variation, one hypothesis would be that as a speaker’s social identity changes, their pattern of linguistic variation should change as well (Moore 2003: 234 - 239). It is here that an understanding of the ethnographic context helps us explain and describe the social processes operating on speakers’ linguistic systems. Given that Peter altered his social identity so significantly, it would be expected that his pattern of CAT would change as well. Moreover, given that Neil and Mark did not alter their social identity as much as Peter, it would be expected that their pattern of CAT would be consistent over the three years of data.

Lave and Wenger (1993) note that individuals who wish to learn the relevant social practices within a particular CofP must have access and opportunity to interact with individuals who actually use these practices. Since Peter interacted with the Alternative CofP in a restricted form by virtue of his ‘floater’ status, he nevertheless had the opportunity to observe and participate in many of the social practices which constituted an Alternative style. The linguistic results for CAT in Year 1 showed that Peter was very low, falling close to the Sports CofP mean distribution. This would align with his relatively peripheral position within the CofP. By the end of Year 3, Peter was very much one of the most Alternative CofP members in Banister Academy, and in doing so was able to shift from the periphery in Year 1 to the core in Year 3. Although Peter was criticized by Kevin (one of the most visibly Alternative
CofP members in Year 2) for his lack of engagement in the Alternative CofP enterprise (specifically the consumption of music), by leaving school at the end of Year 2, Kevin actually smoothed Peter’s entry to the core in Year 3 by providing a social space which Peter then filled. Peter’s social change was manifest by significant alterations in his personal style. He grew his hair long, wore markedly Alternative clothing, spoke more openly and more often about his musical tastes, and associated less and less with his friends in the Sports CofP. He also became something of a point of orientation for other members of the Alternative CofP, issuing advice to other people on ‘how to be Alternative’ (McConnell-Ginet 2008: 506).

1 Peter: Mair than last year for a start. He’s basically mair gothic since- I’ve actually interested [Ray] in a couple of bands, it’s quite fun.

5 RL: Uh-huh, [so you-] Ray: [Aye, eh, (inaudible), kiddin on.]
RL: So you introduced him to?
Peter: I’ve introduced him to mair heavier stuff than what he used tae listen tae.

10 RL: Uh-huh.
Ray: (inaudible), Neil introduced me.
Peter: Eh, naw, 
Ray: (inaudible) Lamb of God was yours right but see the other bands I’ve got intae some heavier-
Peter: (inaudible)

15 Peter: I got you intae heavier stuff, like, (Devilmoon) and stuff, like pure metal.

(Excerpt 7.5. Peter and Ray, Year 3)

The linguistic results show that Peter is the most raised speaker in the Alternative CofP sample in Year 3. This result accords with the overall results for the Alternative CofP being raised (for both BIT and CAT), and in Year 3, Peter completes his journey from peripheral to core member. His main social change happened in Year 2, and his linguistic results reflect this, showing a large difference between Year 1 and Year 2. This difference became markedly smaller between Year 2 and Year 3, suggesting that as his social identity stabilised, his linguistic variation followed suit.
Mark and Neil, however, never changed their social practices as dramatically as Peter over the course of the fieldwork, maintaining their social identities as ‘Sports’ and ‘Alternative’. While data was collected from Neil only for Year 1 and Year 3, the analysis showed that his pattern of CAT over the two sets of data did not change. Since his social identity was relatively stable, the consistent patterning of CAT is expected. Mark, however, was the one speaker who did not appear to have a consistent pattern of variation across the three batches of data. He maintained his social identity as a Sport CofP member for the duration of the fieldwork, leaning slightly more towards the school ethos than some other Sports CofP members. The analysis showed a large shift in his realisation of CAT between Year 1 and Year 2, which then settled down between Year 2 and Year 3 (i.e. a similar pattern to Peter). Since Mark’s social identity was stable, it would be expected that his pattern of linguistic variation would also be stable, yet this is not the case. Why would a stable social identity manifest in two different patterns of variation? One possible explanation is that Mark was more socially mobile than the ethnography was able to determine. Even though I spent a great deal of time in the school, there were many parts of the informants’ lives I was not able to observe, but the fact that Mark was one of the more scholastically engaged participants in the Sports CofP suggests that he was orientating towards more establishment values than the rest of his Sports CofP peers, and this was possibly marked by a large change in his CAT vowel.

To turn now to vowel frontness/backness, previous research has shown that the sociodemographic category of class is an important descriptive factor for CAT variation in Glasgow. Labov states that ‘English speech communities appear to use… differences in F2 for establishing social identity’ (Labov 2001: 168), and both Macaulay (1977) and Stuart-Smith (1999b: 208) point out that retraction is more
common among working-class speakers and fronting more common among middle-class speakers. Although only qualitative observations were taken for class, it is sensible to suggest that the Ned CofP (and possibly the Sports CofP) are equivalent to Stuart-Smith’s working-class adolescent speakers (and potentially equivalent to Macaulay’s class III speakers, glossed by Macaulay 1977: 18 as ‘semi-skilled and unskilled manual [labour]).

Comparison of the Banister Academy data with the results presented in Stuart-Smith et al. (ERSC R000239757: 16) and Stuart-Smith (1999b: 207) suggest that overall, CAT appears to relatively stable on the dimension of retraction/fronting among working-class speakers. More socially-sensitive analysis of the kind shown in Figure 7.3., however, shows that retraction is more common within the Alternative, Sports, and Schoolie CofPs while fronting is more common within the Ned CofP. Variations in F2 tend not to differentiate the Alternative, Sports, and Schoolie CofPs from one another as much as it differentiated all three CofPs from the Ned CofP, but with CofP membership being significantly correlated with vowel retraction/fronting, we have to posit a possible explanation as to why the Ned CofP is more fronted than the other three CofPs.

As has been argued throughout this thesis, those who identify (or are identified) as ‘neds’ are typically socially marginal. Such speakers embody a particular type of extreme masculinity from which other CofPs explicitly distance themselves, and it is this form of masculinity which outsiders typically expect from ‘neds’. Although comparing the Banister Academy results for CAT with those from Stuart-Smith’s studies suggests that CAT is stable within working-class adolescent groups, it is possible that fronting of CAT is used as a fine-grained sociolinguistic marker of engagement with the local subculture (cf. Eckert 2000: 225) and a resource
used in the construction of particularly ‘tough’ masculine social identity. Fronting of CAT would dovetail with impressionistic reports of ‘ned speech’ as having tenser vowels (Jane Stuart-Smith, personal communication).

7.5. The Social Meaning of Variation in Banister Academy

One of the difficulties in determining the social meaning of variation is that a variable has the potential to signify meaning on a number of different levels. For example, a variable can have a particular social meaning in one context and a different meaning in another, depending on a number of interactional, situational, and contextual factors (Eckert 2002; Podesva 2003). A variable can have a particular social meaning when used by one speaker and a different meaning when used by another, depending on the speaker’s level of integration in the community, their assumed social characteristics, and their relationship with their interlocutors (Eckert and Wenger 2005). For example, Kiesling’s study (1997) of the relationship between male speakers, power, and the variable (ING) showed that men who used the ‘non-standard’ alveolar nasal variant drew on the idea of physical dominance to create powerful identities, while those who used the standard velar nasal variant drew on the idea of intellectual or economic dominance to create their powerful identities. Kiesling argues that ‘no variant or strategy has a specific meaning until it is used in context – until speaker and hearer attach meaning in use’ (Kiesling 1997: 3). Therefore, the social meaning of variation is dependent on its interaction with other social practices, and it is the patterning of a linguistic variable with other resources (both linguistic and non-linguistic) in a particular context which leads to the development of social meaning (Eckert 2002).

In addition to this ‘clustering’ effect (Podesva, Roberts, and Campbell-Kibler 2001), the use and interpretation of a variant is conditioned by the speaker’s own
social input and the relationship between the speaker and the listener (Eckert and Wenger 2005). I argue that multiple social meanings have the potential to develop because a speaker brings to the table (and imbues a variable with) their own social history and personal character (Eckert and Wenger 2005). A speaker’s social position in the school, the range of social and linguistic practices found alongside the use of [f] (or any other variable), their orientation towards and engagement in different kinds of social practice all impact on the eventual deconstructed meaning of that variable. If a speaker is not ‘permitted’ to use a particular variant, then this impacts on the way that variant is interpreted and read. For example, my own attempts at using the sociolinguistic marked heavy as an adverb (as in that’s heavy cool, see Macaulay 2006 for a discussion of adolescent adverbial innovations) resulted in strict censure by my interlocutor. Similarly, Mendoza-Denton (1997) shows how non-gang girls who did not know the rules which determined when /ɪ/ raising/lowering was permissible were criticised by their peers. When the use of a variant is not conjoined with a range of other social practices (as in my own example and that from Mendoza-Denton) that a listener would expect to find in the context of that variant (bricolage, Hebdige 1979), this has implications on the social meaning of that variable by virtue of the fact that the use of that variant has to be interpreted in a different context. There is the danger that the speaker will establish themselves as a linguistic ‘lame’ outside the central group and its culture (Labov 1972: 258), or the speaker might face some sort of community censure. Alternatively, it is possible that the speaker might bring new meaning to a long-standing linguistic (or social) practice (Eckert 2000: 37). The relationship between meaning and linguistic is mediated through social practice (both assumed and real) and this is one possible explanation as to why Glaswegian adolescent language has such a negative reputation.
The analysis of CAT, BIT and (θ) has shown that the variant realisations of these variables are not available to every speaker in the sample. But as Podesva (2006) argues, there is typically no one-to-one correlation between linguistic form and social meaning. Rather, variants are involved in webs of multi-layered social meaning. For example, the use of [f] by a speaker can be associated with ‘ned’ (since they are the leaders of this variant), as well as ‘anti-establishment’, ‘non-local’, ‘non-posh’, ‘innovative’ and a range of other indexical associations, all contingent on both the speaker and the listener. More specifically, the availability of ‘mock ned’ speech to the social community of Banister Academy (and Glasgow more generally) means that as social actors, individuals are aware of the phonetic differences between the different speech styles. When ‘mock ned’ is utilised in a conversational setting, not only does the speaker draw on a particular set of linguistic resources, they also draw on a particular ideology of anti-social behaviour (including drinking, drug use, and physical violence).

1   RL: So, what makes a ned a ned?
Andrew: They hink they’re smart
RL: Right.
Andrew: And the way they talk,
and their- the stupid swagger.
5   Neil: Aye, the swagger.
Andrew: (((laughs)))
And the way they talk.
(begins ‘mock ned’)
10   ‘Aw what man?
Aw, what’s up way you man?
(((laughs)))
That’s pure smashing man!
I’ll smash you!’
15   Neil: They’re no talking about smashing somebody,
it’s their drinking-
it’s hash they’re talking aboot.

Jack: [Hash an aw that]
Neil: (begins ‘mock ned’)
‘I’m gaunae get a quarterpounder this weekend’.
(in his own voice)
A quarterpounder’s a burger mate.

Andrew: ((laughs))
Neil: ((laughs))
There’s yer burger.
(begins ‘mock ned’)
‘A hauf ounce then.’
(Excerpt 7.6. Andrew, Jack, and Neil, Alternative CofP, Year 1)

Stuart-Smith et al. (2007: 247) suggests the use of non-local vernacular linguistic forms (including TH-fronting, DH-fronting, and L-vocalisation) by working-class adolescents is a measured identity practice which serves to ‘display [to the fieldworker] “their” speech’. Working-class adolescents are the leaders of linguistic change in Glasgow by virtue of their increased rates of these non-local variants, and their use of these linguistic resources is intended to ‘construct identities which are as anti-middle-class, and anti-establishment as possible’ (Stuart-Smith et al. 2007: 251). The meanings behind these variables are mediated through the adolescents’ orientations towards the global idea of ‘the establishment’ (of which the school is a part), and their engagement with social practice is what allows this meaning to develop. While this may be true, an analysis of (Ø) within the Schoolie CofP would show how far such an explanation can go.

Engagement with ‘violent’ social practices is one major factor in how Glaswegian Vernacular as used by adolescent males is assumed to be violent, and in the last section of this chapter, I discuss the intersection between language, identity, and violence in Banister Academy.
7.6. Language and Violence among Glaswegian Adolescent Males

One of the major tenets of this thesis has been the idea that Glaswegian Vernacular is conceived by listeners as naturally sounding violent (Pollner 1987), and that in particular, speakers who are labelled as ‘ned’ have a distinctive linguistic system which marks them as ‘violent’ compared to other groups of adolescent males. Such a claim seems to rest on the idea that ‘violence’ (typically physical violence) is an inherent part of Glaswegian Vernacular culture, and that someone using Glaswegian Vernacular will be violent. While negative attitudes are common towards urban varieties of English more generally (see the collected essays in Bauer and Trudgill 1998 for a discussion of the kinds of negative stereotypes urban varieties face), these negative associations are examples of indexicality (Silverstein 1992, separated into two parts: first-order and second-order). First-order indexicality refers to the ‘association of linguistic form with social category’ while second-order indexicality is the ‘noticing, discussion, and rationalisation of first-order indexicality’ (Milroy 2004: 167). It is these second-order indexicalities which develop into language ideologies, where the relationship between linguistic form and social category becomes essentialised, and this is apparent in the case of Glasgow, as demonstrated by Macaulay’s informant who reports that ‘the accent of the lowest state of Glaswegians is the ugliest one can encounter, but that is partly because it is associated with the unwashed and the violent’ (middle-class lecturer, quoted in Macaulay 1977: 94). Here, the speaker highlights the idea that it is the association with the ‘unwashed and the violent’ which leads to Glaswegian having such a negative reputation, rather than ‘violence’ being an inherent part of Glaswegian Vernacular.

We should also, however, be aware of the fact that the relationship between language and violence in Glasgow is mediated through the social identity of
Glaswegian Vernacular speakers (Ochs 1993: 290). Individuals identified as ‘neds’ are accorded the lowest social evaluation within Glasgow due to their association with violence, and they are assumed to have a specific form of language which marks them out. The presupposition is that if one is a ‘ned’, one is both violent and linguistically identifiable as such, but the ethnographic discussion in Chapter Five made it clear that violent physical encounters were a core part of life for all the participants in the study, not just those who expressed an active engagement with fighting, or even those adolescent males who were pejoratively labelled as ‘neds’. Indeed, most speakers viewed physical violence as a necessary part of being a young male in Glasgow, including speakers who took an active stance against physical violence (for example, the Schoolie CofP). Physical violence and engagement with other ‘negative’ social practices is not the exclusive domain of one particular group of adolescent males, and this assumption has two serious limitations. The first is that it loses sight of the fact that other adolescent males are also involved in these types of social practices. The ethnographic data showed that the Alternative CofP speakers consumed alcohol and fought with one another, while the Sports CofP members regularly engaged in prolonged displays of physical and verbal aggression. While one can argue that the distinction between the CofPs is because of different attitudes towards particular activities (for example, attitudes towards drinking were markedly different in the Alternative CofP compared to the Ned CofP), it is important to recognise that those who identify (or are identified) as ‘ned’ are not the only ones who are engaged in ‘questionable’ or even violent social practices. The second is that it loses sight of the fact that those adolescents labelled as ‘ned’ are burdened by an acute social judgement. The fact that both Danny and Rick recognise the social baggage which comes along with the label of ‘ned’ shows that they are able to resist aligning
themselves with these associations. Similarly, a statement by Mark points to the disjunct between behaviour and labelling among adolescent males in Glasgow.

1 Peter: [Neds] dae practically everything bad.

RL: Right.

Peter; They dae everything-

Mark: Be bad in class,

5 but I’m bad in class,

but I’m no a ned.

Peter: Everybody’s bad in class,

but none of us are neds.

(Excerpt 7.7. Mark and Peter, Sports CofP, Year 1)

Both Mark and Peter admit that while they both misbehave in class (a typical marker of ‘ned’ behaviour), the label does not apply to them. Both speakers emphasise the fact that they are not ‘neds’, distancing themselves from the negative value judgements the label denotes. What Peter and Mark achieve in this dialogue is they simultaneously set out their anti-school stance (Willis 1977), but carefully craft their social identities as individuals who are not ‘out-of-control’ like they assume ‘neds’ to be.

To turn now to the linguistic characteristic of ‘neds’, the analysis in Chapter Six showed that there was a clear linguistic differences between those the ethnographic fieldwork identified as ‘neds’ and speakers from other CofPs. Most dramatically, the main difference was between those who occupy the extreme edges of variation for \( \text{CAT} \), the Ned (fronted and lowered \( \text{CAT} \)) and Schoolie CofPs (raised \( \text{CAT} \)) (although ‘ned’ and ‘schoolie’ are not directly comparable to working-class and middle-class, this finding is similar to the results discussed in Stuart-Smith 1999b who suggests middle-class speakers have more raised realisations than working-class speakers). If we take linguistic practices as a constitutive part of social identity (following Eckert 2000), then it should be no surprise that those on the margins of
vocalic activity should also be those on the margins of the school. This was characterised by the fact that the Schoolie CofP was the most actively engaged in the school ethos while the Ned CofP was the most actively opposed.

1 RL: Have youse ever-
       Have you ever enjoyed school?
       (0.7)
       Or is it just always—

5 Noah: =Aye, when I was in primary school.

RL: Uh-huh.

Noah: When I was in first year,
       but I’ve hated it fae second year upwards.

RL: So what happened tae make you hate it?

10 (0.5)

Noah: Just comin tae school.

(0.9)

Just,

(1.0)

15 comin tae school.

I dinnae-

I was n- debatin no comin this mornin.

RL: Right.

(Excerpt 7.8. Noah, Ned CofP, Year 3)

Here, Noah states he dislikes coming to school, and his oppositional acts towards institutional authority accords well with similar findings by Willis (1977: 12) who suggests that ‘such [opposition] is an almost ritualistic part of the daily fabric of life for the [lads]’. Indeed, conversations with the Ned CofP showed that oppositional stances towards the school were played out in numerous ways, both big and small. These ranged from the theft of school stationary to verbal insults directed towards teachers. The Schoolie CofP, however, not only accepted the authority of the teachers (and by extension the school), but actively embraced it.

1 RL: How- how’s this school then for anyone-
       the kind of person that you are?

   (1.5)

Josh: Good, cause [the teachers] push you.

5 RL: Mhmmm.

Josh: They let you do-

(0.8)
Well, I was allowed to do my Standard Grade a year early and all that kind of stuff.
(Excerpt 7.9., Josh, Schoolie CofP, Year 3)

Not only does Josh allow the teachers to push him on to new scholastic heights, he actively seeks out opportunities which allow him to do this. This is in stark opposition to the position held by the Ned CofP who take the view that any teacher interference in their every day activity is a limitation on their relative independence and personal autonomy.

Although the linguistic results show that the Ned CofP had a particular distribution of CAT and a different patterning of (0), it must be noted that this finding also applies to a lesser extent in other CofPs (cf. Stuart-Smith et al. 2007). The analysis shows that at a fine-grained level, speakers within different CofPs all have slightly different patterns of variation, and that the fact the Ned CofP has a specific pattern of variation should not strike us as odd. But it is also important to note that the position of the Ned CofP on the periphery of social acceptance impacts on how their patterns of linguistic variation are interpreted. While other pupils in Banister Academy find themselves involved in fighting, it is those speakers identified as ‘neds’ who are the most heavily censured for their behaviour. Their anti-school and anti-authority stance precludes them from engaging in ‘positive’ social behaviours which could potentially influence societal perception of them, and it was clear from many of the off-tape conversations I had with the Ned CofP speakers that active rejection of the authority of the school was something which was pursued at all costs (even to the point of being suspended from school). Although other CofPs were involved in ‘negative’ social practices (including fighting), I believe that the level of supposed engagement with these activities should be considered a major part of why the language of ‘neds’ is so negatively evaluated. ‘Neds’ are expected to fight therefore
their linguistic system is denigrated by outside constructs (typically middle-class society). ‘Schoolies’ are not expected to fight therefore their linguistic system is elevated. Those who fall midway between these two points have access to both types of behaviours, and depending on the direction of their orientation (for example, pro or anti-school), can use the relevant social practices depending on context. If required to fight or engage in ‘fighting talk’ (part of which includes insults and arguing which contribute positively to the speaker’s sense of masculinity, Eliasson 2007), the Alternative and Sports CofP speakers were more than able to do (like the Ned CofP), but if required to engage in school activities (like the Schoolie CofP), they were also able to do this. It appeared to be more difficult for those in either the Ned or Schoolie CofP to cross the gap in their social practices, and I believe that the difference in their CAT vowel is one example of the opposition these CofPs embody.

The fact that the Schoolie and Ned CofPs are on the periphery of the vocalic distribution also appears to manifest in CAT variation in specific types of discourse. Having a different vowel quality in marked discourse topics was reported by Eckert (2000: 218) who noted that backing of [a] was more likely in ‘utterances that are directly related to key burnout cultural themes: alienation from school, restricted substances, trouble, [and] fights and disagreements’, and the results here suggest that the Schoolie and the Ned CofPs were the most likely to have a different vowel quality in ‘violent’ and ‘non-violent’ talk than either the Alternative or the Sports CofP.

I believe that the variation of CAT according to discourse type operates on a number of different levels within Banister Academy. The Alternative and Sports CofP tend not to distinguish between N.A. and non-N.A. tokens as explicitly on vowel height or vowel fronting/retraction. I suggest that for the Alternative and Sports CofPs, violence is an unremarkable part of their lives. They can act and talk about
violence accordingly, but most members in these CofPs do not need to demonstrate their capabilities. Within the Schoolie CofP, these speakers have fewer resources to draw on when faced with a violent physical encounter (for example, some lack the appropriate level of skill), and the fact that different types of discourse are so differentiated could be one resource through which these speakers show that they have access to and are partly able to engage with specific kinds of talk about violent social practices (cf. Elisson 2007 argues that males who are viewed as less masculine or tough have reduced levels of insults, and informal analysis suggests that this finding would also hold for the Schoolie CofP who appeared to use verbal violence far less than other CofPs). By drawing on the idea of masculine toughness which is exhibited in the Ned CofP, the Schoolie CofP are able to use linguistic resources as a means to present themselves as masculine, even though this presentation is unlikely to be supported by any form of physical power (cf. Kielsing 2005: 21).

It is also possible that the Ned CofP also use differentiation of N.A. and non-N.A. tokens for the same function (i.e. as part of a masculine display), but in their case, they lay their claim to hegemonic masculinity through toughness and violent physicality informed in part by their involvement in the local subcultural norms. Moreover, the differentiation within the Ned CofP of ‘violent’ and ‘non-violent’ topics can be likened to Anderson’s claim that adolescent males engaged in the ‘code of the streets’ are more likely to use non-physical means to signal their willingness to use aggressive actions.

Individuals whose very appearance – including their clothing, demeanour, and way of moving – deter transgressions they feel they possess, and may be considered by others to possess, a measure of respect. With the right amount, for instance, such individuals can avoid being bothered in public. If they are bothered, on the other hand, not only may they be in physical danger, but they will have been disgraced or ‘dissed’ (disrespected). (Anderson 1997: 2)
In this way, individuals limit potential violent events through non-violent means. For the Ned CofP, violence is a core part of their lives, and it is a major part of their identity which has to be constantly valued and evaluated.

1 Rick There’s been a search done in Scotland and (0.8) the Parkton Young Team, (0.7)
5 Ben: We’re [s- (0.9) Rick: ]=is the four(f)- Naw it’s the four(f). (0.8) Four(f) maist feared gang in Scotland.
10 Ben: How, who’s second noo? (0.7) Rick: I don’t know. (0.6)
15 Ben: We were second the last time. (0.9) Rick: I don’t know. (0.6) We were second in L- We were second and then, (0.4)
20 Ben: we’re doon tae four(f). Cause it kind of calmed [doon but. ... Rick: Last time I seen it we were four(f) and, (1.6)
25 that was it. (0.4) RL: And is it better- Would you prefer tae be first, (0.8)
30 or= (0.4) Ben: Aye. (0.5) RL: =fourth?
35 Ben: [[First. (0.8) Rick: [[I don’t know. Cause it’s got its advantages and disadvant- (0.8) You’re first, (1.0) you’ve got two options, well other people’ve got options. They’ll either go and try and beat you and say, (0.5) ‘If youse’re first youse arenae very good at fightin’. (0.7)
Or youse wullnae get touched, because you’re first, naebody’ll go, people waant tae pals wi you cause you’re first. (0.9)
But I wudnae take a chance cause knowin the gangs it wud probably turn oot tae be the first wan.

RL: Mhmmm.

Rick: And you’ll get jumped and just say, ‘Right, you’re no very good for a Parkton Young Team fighter, you’re no- you’re no very good for wan of the maist feared gangs in Scotland members’. (1.7)
But if you were like twenty(f) or something, (1.2)
you could get battered aw the time or you could get left and slagged.

RL: Right.

Rick: I don’t know cause I don’t like bein slagged. (2.4)
If I had- (0.7)
If I had tae choose, (1.2)

RL: What aboot you?

Ben: What? (2.0)
RL: Eh? (laughs)

Ben: What aboot you, dae you (h)ink you’d be-prefer tae, (0.6)
get slagged and left alone no fightin or tae fight and get battered? (laughs)

RL: Really? (0.6)

Ben: I’d fight. (0.5)

RL: Even if it meant you were gaunae get battered?

Ben: Mhmmm. (0.4)
Rick: Yes. (0.6)

RL: How come?
This excerpt shows us several things of importance. Firstly, Ben and Rick are heavily invested in the social status of the gang towards which they abstractly orientate themselves. Even though they are not active gang members, they use it as a point of reference which highlights their knowledge of the local subculture. The fact that the see the gang situation in Glasgow as a hierarchy dominated by physical ability shows us how valuable this status is in within the city (and Scotland more generally). Ben and Rick state that even when faced with the potential of being beaten up, they would rather fight than lose face in front of their friends. Fighting is a matter of pride (Wolfgang 1958; Polk 1994). For those in the Schoolie CofP, however, violence is a core part of their lives for very different reasons. They attempt to distance themselves from violent physical events, and view violence as something both undesirable but sometimes unavoidable.

The fact that in Year 3 the difference between N.A. and non-N.A. discourse becomes statistically significant is also worth commenting on. In Year 2 the regression analysis showed no effect of N.A. discourse on CAT tokens, but this result changed in Year 3 where it became highly significant. One possible explanation for this is that as the speakers age, they become more aware of the difference between the two different types of discourse. As they move towards leaving school, it is necessary for speakers to re-evaluate their potential position in the workplace, and there is the danger that they stand to lose out on the job-market if the language they use is interpreted as ‘violent’ (for example, Macaulay 1977 talks about the problems faced by adolescents who use Glaswegian Vernacular during job interviews). By making
their style of speech during ‘violent’ and ‘non-violent’ speech markedly different, the Schoolie and the Ned CofPs show that they recognise both the standard and the non-standard markets, and are able to tailor their speech accordingly.

7.7. Summary

This chapter has attempted to contextualise the results of the linguistic analysis through the ethnographic observations discussed in Chapter Five. By locating the speakers in a specific social space, it has been possible to show how linguistic variation functions as a core part of a speaker’s construction of their sociolinguistic identity on a number of levels. The social profile of the Ned and Schoolie CofP speakers show them at the periphery of the social space of Banister Academy (and Glasgow more generally), and the linguistic profile showed that such speakers were also at the extreme edges of variation. By contrast, the Alternative and Sports CofP usually fell mid-way between these two extremes, a fact which was also discovered in their social practices. In essence, the Alternative and Sports CofPs occupied the ‘grey areas’ (cf. Moore 2003: 220) of Banister Academy, while the Ned and Schoolie CofPs occupied the margins.
Chapter Eight:
Summary and Conclusions

8. Introduction

Using ethnographic and quantitative methodology, this study has explored the linguistic and social practices of several adolescent male groups in a Glaswegian high school, showing how the fine-grained phonetic variation of CAT, BIT and (θ) was part of a wider system of differentiation among adolescent males in Glasgow. By examining this variation from an ethnographic perspective, I have been able to show that adolescent males in Glasgow do not form one homogenous group of speakers, but rather that they use subtle differences in their linguistic practices to show alignment (and misalignment) with general CofP identities. I also explored the relationship of Glaswegian Vernacular with violence and criminality (cf. Macaulay 1977: 94), and through an analysis of CAT in both ‘violent’ and ‘non-violent’ discourse, showed how the differences between these two forms of discourse mapped on to specific orientations towards a particular type of masculinity, that of a physically tough and ably-violent masculinity.

In Chapter One, I outlined the general research questions which guided this thesis, before discussing the general social context in which the research takes place. By demonstrating the negative reputation of the city of Glasgow, Glaswegian Vernacular, and working-class adolescent males (both in Scotland and the UK more generally), I motivated the need for a detailed linguistic analysis of the speech of adolescent male speakers from Glasgow. More specifically, I talked about how such negative reputations of Glaswegian Vernacular are concentrated on a specific subset of adolescent speakers in Glasgow known as ‘neds’. These speakers are typically assumed to be involved in criminal and anti-social behaviour, but are also accorded a
stereotypical sociolinguistic profile which includes nasalization, tense vowel production, and higher pitch range. I also argued in Chapter One that there had been a lack of sociolinguistic work which has looked at ‘ned language’ (and other locally constituted groupings of adolescent males), and that the research offered here would fill such a gap in the sociolinguistic work on Glaswegian.

In Chapter Two, I set out the discussion of the sociological and anthropological underpinnings of the thesis, particularly focusing on the development of the city, criminological theories on adolescent deviancy, and the intersection of masculinity with violence. The appeal to contemporary urban ecology allowed us to better understand the social segregation, territorial divides, and differential access to places and spaces which affect Glasgow, and the effect of the dissolution of social networks (and consequently social control) on adolescent deviancy. This discussion then provided a departure point to focus on theories of urban adolescent criminality, particularly with regards to adult expectations of adolescent behaviour, and how stereotypes of particular groups of adolescent males negatively impact on other groups of adolescent males. Chapter Two also discussed specific theories of masculinity, drawing heavily on the idea of ‘hegemonic masculinity’ (Connell 2005). Using this concept, I was able to trace how an orientation towards violence was a central part of the construction of masculinity, particularly in working-class urban areas. This then led us to a discussion of masculinity and language which looked at the dearth of research where male speakers are the central focus. These strands of research (masculinity, language, and violence) were brought together in the final section of Chapter Two, where I argued that not only was there limited research on each of these areas in sociolinguistics, but that there were very few fine-grained phonetic studies of masculinity, language, and violence. This point was of particular
relevance since these three aspects are assumed to be related in Glasgow, yet we have no empirical work which has brought to bear quantitative sociolinguistic methods on the issue of ‘language and violence’ in Glasgow.

Chapter Three moved away from the sociological/anthropological basis of the thesis towards discussing the relevant linguistic motivations for the study. By conceptualising style as a speaker-derived phenomenon, we were able to see how speakers actively used linguistic resources, in conjunction with other contextual and social resources, in their pursuit of creating particular sociolinguistic styles. This stance moved away from conceptualising speakers as static respondents in conversation to active constructors of social meaning. Chapter Three then looked at a select number of case studies and how adolescent language use had been treated in the sociolinguistic literature from both the UK and the US. By tracing the intellectual development of research on adolescent linguistic variation within sociolinguistics, I was able to show how this research aligned with previous studies of adolescent linguistic variation, including Eckert (2000), Moore (2003) and Mendoza-Denton (2008).

Chapter Four covered the methodology used in this research, justifying the use of ethnography as a way to look at the local (as opposed to global) social categories which were meaningful to the participants. Since the ideologies surrounding language and violence are played out at the local level (and then disseminated at the global level via media sources), I argued that survey methodology would have been less useful for answering the research questions set out at the beginning of this thesis. The use of ethnography also allowed us to observe more fine-grained and textured local social distinctions less visible to traditional Labovian studies of Glaswegian where the focus is on global sociodemographic categories. The tension between the global and
the local was resolved by appealing to the construct of the Community of Practice, a framework which allows us to see how group identities are constructed at the local level. Chapter Four then outlined and justified the variable selection of CAT, BIT, and (0), arguing how the methodology used in this research would complement existing research on these variables in Glasgow by offering more a more nuanced interpretation of the social and linguistic data. Chapter Four concluded with an overview of a particular type of discourse in the data which I named Negative Affect Discourse. Such discourse focused on ‘violent’ language and as such attempted to provide an empirical basis through which we could categorise ‘violent’ and ‘non-violent’ discourse. By then comparing CAT tokens (chosen because it represented the greatest number of data points across the three years of data) across these two types of discourse, it would be possible to determine if there were acoustic differences between tokens in ‘violent’ and ‘non-violent’ speech. As such, I argued that this study contribute to our understanding of Glaswegian from both an ethnographic and sociolinguistic perspective.

In Chapter Five, I provided a detailed ethnographic account of a number of CofPs in Banister Academy, a high school located in the south side of Glasgow. By tracing the social practices across the Alternative, Sports, Ned, and Schoolies CofPs, I showed how an apparently homogenous group of adolescent males at the global level actually comprised of individual constellations of different social identities at the local level. Although the adolescents in the CofPs never explicitly used the labels I used in this thesis, it was nonetheless clear that their deployment of particular social practices were bound up with individual and group pursuits of identity. The main distinction was between the Schoolie and the Ned CofPs who appeared to be diametrically opposed to the values each CofP represented (although the Alternative
and Sports CofPs also participated in this system of opposition). While the Ned CofP predominately engaged in the subculture of the local area, the Schoolie CofP were not. The Ned CofP participated in age-restricted behaviours including alcohol and smoking, while the Schoolie CofP did not. The Ned CofP held an anti-school stance while the Schoolie CofP actively supported the authority of the school. The Alternative and Sports CofPs also took particular stances towards these social practices, but generally the Ned CofP functioned as a pole of opposition against which all other CofPs contrasted themselves. This was most obvious in one particular social practice: violence.

Violence (covering not only physical violence, but also verbal violence such as insults, arguing, and disagreements) showed widespread deployment across the Alternative, Sports, and Ned CofPs, and was generally bound up with the notion of a particular kind of ‘tough’ masculinity. While all the CofPs recognised the tools necessary to attain this kind masculinity (including physical ability, a willingness to fight, and showing no fear during a violent physical encounter), only a few individuals actually positively orientated towards it. The members of Alternative and Sports CofPs were, for the most part, capable of engaging and succeeding in violent physical encounters, but they were not invested in the local subculture which typified such a ‘tough’ masculinity as much as the Ned CofP did. The Schoolie CofP orientated towards violence in a radically different way. While they were cognisant of a hegemonic masculine ethos which involved physical power, they were not at all invested in it. Willing to admit fear and a lack of fighting ability, most members of the Schoolie CofP did not subscribe to the ‘tough’ masculinity represented by other CofPs. Instead, they relied more on technical knowledge as a way to embody a different kind of masculinity (cf. Barrett 2001).
Chapter Six offered the results of the linguistic analysis for the variables CAT, BIT, and (θ), showing how CofP membership significantly correlated with linguistic variation. The main axis of differentiation between the CofPs for the vocalic variables was vowel height. For BIT in Year 1, the Alternative CofP was more raised than the Sports CofP. Such a result was also suggested for CAT in Year 1, but it was not statistically significant. Instead, the main significant separation between the Alternative and Sports CofPs was on the front/back dimension, with the Sports CofP more retracted. For CAT in Year 2, the Ned CofP was included in the analysis, and the results showed that this CofP was significantly more lowered and fronted. The Alternative and Sports CofP were relatively close to one another in terms of vowel height, although on vowel fronting/retraction, the Sports CofP was slightly more retracted. In Year 3, the Schoolie CofP was added to the three CofPs from Year 2, and the distinctions between the CofPs became even more clear, with the Schoolie CofP more raised, the Ned CofP more lowered, and the Alternative and Sports CofPs falling in between these two extremes. The pattern of the Ned CofP as the most extreme speakers was also found in the analysis of (θ), which showed the Ned CofP to be the most non-standard with their almost categorical rates of [f] and [h] in word initial position. The Alternative CofP, however, was simultaneously the most standard (the use of [θ] was the highest in this CofP in all positions) and the most innovative (the use of [f] in word final position for with was typically only found in Alternative CofP). The Sports CofP utilised both standard and non-standard variants, falling in between the Alternative and Sports CofPs.

Chapter Six also provided an analysis of CAT across three speakers (Mark, Neil, and Peter), longitudinally comparing each speaker’s data across three years. I showed that both Mark and Peter raised their CAT vowel between Year 1 and Year 3,
while Neil remained relatively consistent. I argued that social identity would be reflected in patterns of linguistic variation. This argument explained how Peter’s CAT vowel was changed in response to the changes in his social identity (in terms of him being a ‘floater’ in Year 1 to a fully-fledged Alternative CofP member in Year 2 and Year 3), while Neil’s lack of vocalic change was reflected in his social stability. Such an explanation, however, failed to account for the raising of CAT Mark exhibited, suggesting that there were other potential explanatory factors beyond the scope of the ethnography.

The last part of Chapter Six then focused in on a particular subset of CAT tokens within ‘violent’ and ‘non-violent’ discourse (Negative Affect and non-Negative-Affect discourse). Since one of the principle aims of this research was to offer a quantitative analysis of ‘language and violence’ in Glasgow, analysing CAT tokens in this way allowed us to obtain an empirical picture of vocalic variation according to discourse type. The analysis showed that in Year 2, there was very little in the way of distinction between tokens in N.A. and non-N.A. discourse, but that the distinctions grew in Year 3. The main difference between CAT tokens across these two types of discourse appeared to be in terms of vowel fronting/retraction, and was concentrated most particularly within the Ned and Schoolie CofPs. While the Ned CofP had more retracted tokens in ‘violent’ discourse, the Schoolie CofP reversed this pattern and had more fronted vowels.

Chapter Seven united the ethnographic findings from Chapter Five to provide social texture to the quantitative results from Chapter Six. I argued that the fact the Ned and Schoolie CofPs represented the extreme edges of CAT variation was a reflection of their positioning at the edges of the social order of Banister Academy. I also suggested that the differences in variation according to violence and discourse
were so great in these two CofPs because they represented those speakers who were differentially orientated towards ‘violence’ and its relation to masculinity.

8.1. Implications for Adolescent Males in Glasgow

The ethnographic and sociolinguistic results offered here have implications for how we understand both adolescent males (generally) and adolescent male language use (specifically) in Glasgow. One of the assumptions detailed at the outset of this thesis was that working-class adolescent males in Glasgow are assumed to be the same: criminal, violent, and anti-social. This characterisation places those adolescent males who are not engaged in anti-social or criminal social practices at a severe disadvantage when attempting to negotiate their entry away from the school and into the workplace (cf. Willis 1977). But as the ethnographic discussion in Chapter Five argued, not all adolescent males in Glasgow are the same. While adolescent Glaswegian males may recognise (and sometimes participate in) a set of shared cultural expectations, it would be naïve to suggest that those speakers in the Alternative and the Ned CofPs believe themselves to be ‘the same’. The differential deployment of a range of social practices showed that each adolescent male is an individual who uses particular constellations of social practice to not only set themselves apart from other adolescent males, but also to align themselves with shared group identities. The ethnographic account of Banister Academy (partial as it is) is one of the first accounts of adolescent male activity since the late 1970s, and alongside ethnographic research conducted by Fraser (forthcoming) on Glasgow gang culture, should help us better understand how adolescent Glaswegian males conceive of their own place within Glaswegian society.
8.2. Implications for Studies of Language Variation

This research represents one of the few sociolinguistic studies to use the CoP framework in an analysis of adolescent male speech. Moreover, it represents one of the few ethnographically-informed sociolinguistic studies to examine Glaswegian using non-researcher defined categories (although Stuart-Smith and Timmins f.c. uses terms such as ‘ned’ and ‘goth/mosher’ to describe adolescent language use in Glasgow, these categories are not typically used in place of meta-categories such as ‘working-class’). As Eckert (2000) argues, linguistic resources function as part of the wider repertoire of social practices, and the results presented in this thesis suggest that within Glasgow, adolescent males use linguistic variation as a means to construct their social identities. This study adds an extra layer of social description that has allowed us to not only see individual patterns of variation, but also how an apparently homogenous group of adolescent males can actually have different patterns of linguistic variation. In this way, the research builds on Stuart-Smith et al. (2007) by focusing on more local categories from an ethnographic perspective.

The results for the analysis of Negative Affect discourse also complement the finding by Eckert (2000: 218) that specific variants can be used during key conversational topics such as ‘trouble, fights, and disagreements’. That such fine-grained phonetic variation can be correlated with topic choice is a finding which has implications for our understanding of how adolescent males (and possibly other groups of speakers) indicate specific conversational stances, and deserves further study in the future (cf. Kiesling 2005).
8.3. Limitations and Future Directions

One fundamental limitation of this study is that the link between masculinities and linguistic variation has not been as fully explicated as it might have been. Part of this is due to the fact that in order to achieve this aim, linguistic variation has to be examined in interaction. This is more detailed an approach than that of broad based correlational patterns which are emblematic of traditional quantitative sociolinguistic studies, and positions such research within a framework which views identity as an emergent social process. While Kiesling (2005) and Mendoza-Denton (2008) have examined the use of specific variants within subsets of discourse in an attempt to explore how linguistic variation functions as a resource a speaker can exploit, the results presented in this thesis are very much the beginning of a more detailed exploration into specific instantiations of variation and how linguistic variation is deployed in interaction.

More practically, another limitation of this study is the lack of speakers in the earlier years of the fieldwork. By interviewing a greater range of speakers, it would have been possible to see if the social and linguistics distinctions of Year 3 were also in Year 1. It would have also been preferable to have interviewed the same speakers over the three years to allow for a better comparison in terms of longitudinal analysis. It is also worth noting that the lack of analysis of BIT in Year 2 and Year 3, and (ð) in Year 3 is a major drawback of the study. Given that in Year 2 and Year 3 the linguistic gaps between the CofPs began to widen alongside their social positioning, it is possible that both BIT and (ð) would also have been a part of how the CofPs marked themselves as different from one another. Although BIT in Year 1 showed some evidence of being used as a sociolinguistic resource, with the addition of the Ned and Schoolie CofPs in Year 2 and Year 3, there is every possibility that this variable could
be involved in the system of differentiation as much as \textit{cat}. Moreover, an analysis of \((\emptyset)\) in the Schoolie CofP in Year 3 would have allowed us to see how (or if) the process of \text{th}-fronting in Glasgow was restricted to a specific subset of working-class speakers (such as the Ned CofP), or if it had extended beyond these CofPs. Future work in this area would concentrate on increasing the coverage of the variables analysed here to all the CofPs encountered in Banister Academy.

A study of the role of voice quality is also another potential future research route, and one which would dovetail with the limited sociolinguistic research of voice quality in Glaswegian. Studies of voice quality within the domain of sociolinguistics are relatively rare (although see Esling 1978 for a discussion of voice quality among Edinburgh speakers), but as Laver (1980) argues, voice quality has the potential to index membership to particular sociolinguistic groups. In a study of voice quality in Glasgow, Stuart-Smith (1999b) demonstrates how working-class Glaswegian speakers tend to have a voice quality characterised by more open jaw, raised and backed tongue body, and whispery voice. Importantly, however, Stuart-Smith (1999: 215) argues that there is little evidence for a stereotypical ‘Glasgow voice’, and given that one assumption on ‘ned voice’ is the existence of nasalization, I believe it would be profitable to subject the Banister Academy data to an acoustic and auditory analysis of voice quality.

8.4. Conclusion

In Chapter One, I stated that this thesis aimed to provide a sociolinguistic account of adolescent male language use in Glasgow using ethnographic methodology to uncover locally meaningful social categories, and to investigate the quantitative linguistic differences within these groups. I also stated that I aimed to investigate the
relationships between ‘violence’, expressions of masculinity, and language within a specific adolescent male community in Glasgow. Tied to this was the question of why specific groups of adolescent males were so marginalised within Glaswegian society, and how specific varieties of Glaswegian were so negatively valued. It is clear that all of these aspects are closely related to one another, and it has been my intention throughout this thesis to integrate these areas in such a way I was able to trace the statistical correlations (discussed in Chapter Six) to a socially embedded ‘grounded theory’ explanation of linguistic variation.

While it is true that there are areas which are require further refinement in future work, this thesis represents one of the first sociolinguistic studies of Glaswegian Vernacular which has tried to answer many of the stereotypical criticisms levelled at the variety using an empirically-motivated and socially-informed approach. These social stereotypes are very much alive and well within modern-day Glasgow, and the social difficulties faced by adolescent males in Glasgow are real and obvious. Indeed, the time I spent in Banister Academy proved to me that much work has to be done to reduce the gap between our assumed and our actual knowledge (both linguistic and social) of adolescent males. That those speakers within the Ned CofP have a characteristic linguistic profile is not at all surprising given that they mark themselves out from other CofPs through more general social practices, but more importantly, the other three CofPs considered in this thesis also have characteristic linguistic profiles. Although these CofPs are perhaps not as denigrated within Banister Academy (or even Glasgow more generally), it is clear that societal assumptions impact on the social evaluation of many working-class adolescent males in Glasgow. It is hoped that the discussion presented in this thesis offers an alternative reading of adolescent male behaviour, both linguistic and otherwise.
Appendix A

Transcription Conventions

[[ Simultaneous utterances

[ Overlapping speech which does not start simultaneously

= Contiguous utterance

( ) Orthographical transcription

(( )) Paralinguistic item

(number) Silences timed to tenth of a second

(.) Pause less than 0.2 seconds

TEXT Upper case letters denote higher volume speech

text Italic font denotes emphasis

- Speech stops abruptly

: Sound is prolonged
Appendix B

Distribution of BIT and CAT

<table>
<thead>
<tr>
<th>Env.</th>
<th>Andrew</th>
<th>Jack</th>
<th>Neil</th>
<th>Peter</th>
<th>Mark</th>
<th>Nathan</th>
<th>Phil</th>
</tr>
</thead>
<tbody>
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<td>20</td>
<td>30</td>
<td>18</td>
<td>30</td>
<td>29</td>
</tr>
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<td>12</td>
<td>16</td>
<td>16</td>
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<td>10</td>
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</tr>
<tr>
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<td>10</td>
<td>10</td>
<td>10</td>
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<td>72</td>
<td>95</td>
<td>79</td>
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<td>78</td>
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<td>13.34</td>
<td>15.88</td>
<td>13.18</td>
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Total number of BIT Year 1 tokens = 592
Distribution of BIT tokens by environment and speaker in Year 1

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<thead>
<tr>
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<th>Andrew (Alt)</th>
<th>Jack (Alt)</th>
<th>Neil (Alt)</th>
<th>Peter (Floater)</th>
<th>Mark (Sport)</th>
<th>Nathan (Sport)</th>
<th>Phil (Sport)</th>
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<td>30</td>
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<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>VDO</td>
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<td>10</td>
<td>10</td>
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<td>100</td>
<td>91</td>
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<td>89</td>
</tr>
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<td>13.4</td>
<td>14.73</td>
<td>13.1</td>
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Total number of CAT Year 1 tokens = 679
Distribution of CAT tokens by environment and speaker in Year 1

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<th>Kev (Alt)</th>
<th>Matt (Alt)</th>
<th>Peter (Alt)</th>
<th>Mark (Sport)</th>
<th>Nathan (Sport)</th>
<th>Phil (Sport)</th>
<th>Danny (Ned)</th>
<th>Max (Ned)</th>
<th>Noah (Ned)</th>
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<tr>
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<td>10</td>
<td>8</td>
<td>14</td>
<td>16</td>
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<td>4</td>
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<td>57</td>
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<td>70</td>
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<td>238</td>
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Total number of CAT Year 2 tokens = 1762
Distribution of CAT tokens by environment and speaker in Year 2
Distribution of CAT tokens by environment and speaker across Alternative and Sports Communities of Practice in Year 3

<table>
<thead>
<tr>
<th>Env.</th>
<th>Neil (Alt)</th>
<th>Peter (Alt)</th>
<th>Ray (Alt)</th>
<th>John (Sport)</th>
<th>Mark (Sport)</th>
<th>Nathan (Sport)</th>
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Distribution of CAT tokens by environment and speaker across Ned and Schoolie Communities of Practice in Year 3

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<th>Noah (Ned)</th>
<th>Rick (Ned)</th>
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<th>Jay (School)</th>
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<th>Victor (School)</th>
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Total number of CAT Year 3 tokens = 3750

Distribution of CAT tokens by environment and speaker for across Ned and Schoolie Communities of Practice in Year 3
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