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LANGUAGE, MIGRATION AND  
IDENTITY AT SCHOOL: A  
SOCIOLINGUISTIC STUDY WITH  
POLISH ADOLESCENTS IN GLASGOW



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Submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

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## Abstract

When young migrants enter a new community, are they able to acquire the community's sociolinguistic norms? In this thesis, I examine the speech of 14 adolescents who were born in Poland, and who now attend a high school in the East End of Glasgow. I spend two years in this high school, conducting ethnographic analysis and collecting speech recordings. The linguistic behaviour of these young migrants is compared to that of a matched group of seven of their classmates who were born in Glasgow. Focusing on several sociolinguistic variables from different levels of the grammar, I use quantitative analysis to ask whether the Polish speakers are matching the local patterns of use shown by their Glaswegian peers. I use quantitative and qualitative analysis to explore why some individuals are matching these patterns to a greater extent than others.

The results show that as a group, the Polish speakers come close to matching the rates of use shown by the Glaswegian speakers. They have successfully replicated some of the native constraints on the variation, although not all. They have also innovated some constraints on use which are not significant for the Glaswegian speakers. I suggest that these innovations represent a type of hypercorrection in some cases, and a lexical diffusion effect in others.

I find that the individual learners are not all acquiring sociolinguistic variation to the same extent or in the same way. The individual differences observed are not explained by the length of time an individual has spent in Glasgow. Neither are they explained by the age at which an individual arrived in Glasgow, or by an individual's gender. Instead, I suggest that friendship networks may play a role in the acquisition of more highly-constrained, 'under-the-counter' variables, and individual speaker agency and identity may play a role in the acquisition of the variables which are higher in speaker awareness.

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This thesis is dedicated to the pupils at St John's high school.

Some Polish people said to me when I ask them, out of pure curiosity, “can you even-do you find it strange speaking English?” I’ve asked Zofia, and a few others, Polish people and that. Some say they can’t notice, it’s like a pure switch from other languages to that. If I was saying Polish words, right, like “love you”, “*kocham cie*”, I’d say it in English in my head. But they don’t. They say English and Polish. They think Polish but they say it in English. And some even said that they hate that they’re Polish. I don’t know why, it’s just they’d never liked it. They’ve always wanted to be Scottish or something. It’s a bit odd.

- *Matt*

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## **List of abbreviations**

L1: first language

L2: second language

SLA: second language acquisition

SSE: Scottish standard English

AAVE: African American vernacular English

EAL: English as an additional language

CPD: continuing professional development

PVG: protection of vulnerable groups

AaO: age at onset

LoR: length of residency

IM: integrative motivation

## List of frequently used local forms

This thesis quotes extensively from a variety which readers may not be familiar with. Below, I provide a gloss of frequently occurring forms. Other forms which occur only occasionally are glossed in the footnotes.

*Aye* = *yes*

*Cannae / didnae / doesnae* = *can't / didn't / doesn't* (this pattern extends across most auxiliary verbs)

*No'* = *not* (*no'* is transcribed as so, to differentiate it from standard *no*)

*Pure* is a commonly used local intensifier (= *really / very / totally / total*)

...*And that* is a general extender commonly used at the end of an utterance

*Carry on* = *mess about / misbehave*

*Wee* = *small*

*Pal* = *friend*

*Ma* = *mum*

*Like* is used very frequently as a discourse marker

*I'm / he's / they're like "X"* is often used as a quotative

*But* can be used in the place of *though* at the end of a clause

# 1. Introduction

Acquiring a new language within a new community means more than just learning the sounds and structures; it also means learning about the social meanings of these sounds and structures. For a learner in a Glasgow high school, it means learning the word *what*, but also learning that *what* can be realised as /wɒt/ or /wɪt/. These two forms have the same lexical meaning, but different social meanings: /wɒt/ is the standardised form, and is often used in more formal situations. /wɪt/ is the local non-standard form, and is often used in more informal situations. In the following extract, Cameron,<sup>1</sup> a high school pupil from Glasgow, tells me about the social meaning of the different forms of *what*, and the perils of using the ‘wrong’ form.

*Cameron:* Sometimes I just say “/wɪt/”, but when I’m in school I say “/wɒt/”, not “/wɪt/”. ’Cause I’m a nice boy.

*Me:* Do the teachers mind if you say “/wɪt/”?

*Cameron:* No. Beca- well, it depends who you get. Yeah, some teachers don’t really care, but if you say, like- if they ask you a question and you say “/wɪt/” to them they go crazy. Whoa! Because- uh, they take it as an insult. Because you were cheeky<sup>2</sup> to them.

*Me:* Do you think it’s cheeky to say “/wɪt/”?

*Cameron:* No. But, yeah. Yeah because- well it depends how you say it. If somebody’s talking to you, like, a teacher, and they go “Cameron”, and you don’t hear them and you go “/wɪt/”? That’s quite cheeky. Yeah, but if you go “/wɪt/’s your name?” or something, that’s alright. Because you’re just asking a question.

---

<sup>1</sup> Pseudonyms employed throughout the thesis.

<sup>2</sup> The word *cheeky* has quite a strong meaning in Glasgow: it could be glossed as *rude* in this context.

*Me:* What if you don't notice, though, if you're saying "/wɒt/" or "/wɪt/"?

*Cameron:* Well then you're in trouble!

*Me:* So what teachers'll give you a row for that?

*Cameron:* Oh I don't know. Maybe the posh ones. Like, Mr Stevenson, he was brought up in [the East End]. So he wouldn't really care. Yeah, so. See, the /wanz/ that- woah! See what I did there? Instead of "/wʌnz/" I said "/wanz/"! Did you hear that microphone?

Cameron presents a highly complex argument on the social function of variation. He suggests that the selection of /wɒt/ or /wɪt/ in a given instance is dependent on an understanding of how the variants relate to the social backdrop. He initially suggests that /wɪt/ is not appropriate for school, or at least it is not appropriate for a 'nice boy' to use in school. However, he goes on to imply that this rule isn't universal. The appropriateness of the form also depends on the type of sentence it occurs in, and also on the interlocutor – not only whether the person is a teacher, but whether the teacher is a community insider or not.

Cameron is able to understand and articulate a great deal about the social meaning of /wɒt/ and /wɪt/, but previous sociolinguistic research shows that variation is also highly structured below the level of consciousness. When a speaker moves between different linguistic variants, there are rules governing their variation - some of which they are aware of, and some of which they are not aware of. Take, for example, the variable (ing). In many communities, this variable can be realised as [ɪŋ] or [ɪn]. 'Selecting' which form to use in a given instance requires an understanding of the social backdrop: [ɪn] is associated with more informal speech contexts. However, Meyerhoff & Schlee (2014: 115) note that for their participants, the 'choice' is also conditioned by grammatical category ([ɪn] is used most frequently in discourse markers and verbs), by the number of syllables in the word ([ɪn] is used more frequently in words with fewer syllables), and by proximity to a previous [ɪŋ] or [ɪn] realisation ([ɪn]



is used more frequently when preceded by another [in] realisation). This is just one variable within a patchwork of variation which exists across the levels of the grammar, as shown in examples (1a: lexical), (1b: morphophonological), (1c: phonetic), and (1d: morphosyntactic).

1. a. *Aye, yeah*, I'm sure, I don't know. - *Callum*
- b. She's like "I *don't* care." I'm like - it was like she *didnae* care. - *Skye*
- c. Some facial structures are the same and tha[?]. Bu[t]... - *Matt*
- d. I don't remember what *he did* [...] but I think *he done* it like that. - *Candice*

Native speakers follow these rules without necessarily knowing about them, having acquired them in early childhood through interaction with their caregivers (Smith et al 2007). But what happens when someone enters a new community after early childhood? Are they able to acquire the intricate sociolinguistic norms of the community, even when they are not taught about them explicitly? Or will they struggle to negotiate not only a new language, but also the subtle nuances of variation in this new language?

It is clear that non-native speakers do use local variants, as in the following extract, where Wiktorja, who was born in Poland and now attends Cameron's high school in Glasgow, discusses the issue of unwanted pregnancy (local variants are italicised).

Wiktorja: I would have the *wean*<sup>3</sup> and make - bring it up to think *my ma's the ma*. Like, if I had a *wean* I'd, like, make it up as if I'm its sister. Do you know that can happen? *Aye*, I would *do* (/de/)<sup>4</sup> that. Then I'd know I'm still part of its life and *no'* - like, I *wouldnae* give it up to somebody who I don't know, and 'cause you're *no'* going to see it, *int you?*<sup>5</sup> Oh, people *arenae* careful enough these days. Babies are *pure* falling everywhere.

---

<sup>3</sup> Local variant: *wean* = *baby / child*

<sup>4</sup> Local variant: /de/ = /du/

<sup>5</sup> Local variant: *int you?* = *aren't (isn't) you?*

Wiktoria has clearly acquired many local Glaswegian forms; but until we examine her speech using quantitative variationist methods, we can't know for sure whether her use of these forms is governed by the same unwritten constraints which govern their use in native speech. We might observe the presence of local variants in L2 speech, perhaps even used at the same overall rates as native speakers, but it is the replication of the linguistic and social constraints on the variation (e.g. the tendency to use [in] more frequently in informal contexts, and the tendency to use [in] more frequently in discourse markers and verbs) that indicates that a learner has truly acquired sociolinguistic competence (Howley 2015: 71).

Are learners like Wiktoria acquiring the conscious and unconscious sociolinguistic norms of the community? In this thesis, I examine the speech of 14 adolescents who were born in Poland, and who now attend a high school in the East End of Glasgow. I spend two years in this high school, running an after-school club where I collect speech recordings and engage in a period of participant observation. Comparing a range of sociolinguistic variables from different levels of the grammar, I use quantitative analysis to ask whether the Polish speakers are replicating the constraints in the speech of their Glaswegian peers. I record the participants across a range of speech contexts: in an informal, playground-like after-school club setting, but also in a formal, classroom-like interview setting, and in a conversational setting which provides a midpoint between the two. This allows me to examine whether the speakers alter their rates of use in response to different social situations.

I also explore why some individuals have acquired local forms to a greater extent than others. I ask whether a learner's length of residency in Glasgow, age at the time of arrival in Glasgow and gender predict the extent to which they use local linguistic forms. I also use a combination of ethnography and quantitative analysis to explore whether 'integrative motivation' plays a role: i.e. whether a learner's feeling of belonging in Glasgow, identity and friendship network correlate with the extent to which they have acquired local linguistic forms.

Migrants entering a Glasgow high school are entering a complex sociolinguistic situation. In Glasgow schools, the official language of the classroom is usually Scottish standard English (SSE), and the use of local Glaswegian variants is often discouraged (Macaulay & Trevelyan 1977: 92). Young migrants are likely to have SSE presented to them as the target of language learning, and to be taught about the rules and structures of the standardised variety only. However, they are also likely to be surrounded by sociolinguistic variation, particularly outside of the classroom. Although the use of local variation may be officially stigmatised, it also has important social value: it is tightly bound with identity, and is used to create social bonds between speakers. In answering questions on the acquisition of sociolinguistic norms by non-native speakers, this thesis will contribute to our knowledge of sociolinguistic variation, and our knowledge of the mechanics of second language acquisition. However the findings are also relevant to EAL (English as an additional language) teachers and to classroom teachers; understanding the important social role played by variation, and the ways in which language use connects with identity, is potentially useful to all those who support migrant teenagers as they learn to live their lives in a new language.

## 2. Acquiring sociolinguistic variation in an L2

Traditionally, research on second language acquisition (SLA) has ‘tended to assume that standardised varieties are the target of learning’ (Nestor et al 2012: 328). However, for many language learners, standardised varieties are not the only target (Goldstein 1987). They may be explicitly taught standardised language norms in the classroom, but outside of the classroom they will encounter local non-standard varieties.

McGonigal & Arizpe (2007) state that in Scotland ‘immigrant pupils must learn to read and write Standard English in the classroom, but also have to learn to understand a different accent and lexis in the playground, on the street and in the media’ (6).

There is a relatively small, but growing, body of research exploring how L2 speakers come to understand and reproduce the sociolinguistic variation in their input. In this chapter, I outline this research context. I focus on three questions which previous research has touched on:

Section 2.1. Are L2 learners able to replicate native speaker constraints on use?

Section 2.2. What are the external factors predicting the acquisition of sociolinguistic variation by individual L2 learners?

Section 2.3. Do L2 learners acquire different sociolinguistic variables in different ways?

Much of this research involves taking the methods of quantitative variationist sociolinguistics, usually used to examine variation in L1 (first language) speech, and applying them to L2 (second language) speech. The field of variationist sociolinguistics usually explores the (conscious or unconscious) rules, or constraints, which govern native speaker variation. Relatively few studies have examined sociolinguistic variation in non-native speech, despite its implications for our understanding of how language use relates to identity, friendship and social integration, and how language learning works.

Addressing each of the above questions involves examining the rules, or constraints, present in L2 speech. Addressing question (1) involves comparing the

constraints found in L2 speech to the constraints found in the speech of their native peer-group, and asking whether the L2 speakers have replicated native speaker constraints on use. Addressing question (2) involves identifying the constraints which predict the acquisition of sociolinguistic variation by individual L2 learners: e.g. have the female learners acquired the variation to a greater extent than the male learners? In this thesis I refer to these constraints as ‘predictors of acquisition’. Addressing question (3) involves comparing findings across a number of sociolinguistic variables which differ from each other, and asking whether there are differences in the way different variables are acquired, and if so, why.

In setting out the research context, I focus on the findings of L2 variationist sociolinguistics. Where necessary, I also draw on findings from L1 variationist sociolinguistics and from second language acquisition (SLA) research (this field focuses on how learners acquire standardised varieties, rather than how they acquire native variation patterns).<sup>6</sup>

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<sup>6</sup> The term SLA, as well as the terms ‘L1’ for first language and ‘L2’ for second language have been criticised on the grounds that they often over-simplify complex situations (Rampton 2013: 361-362; Howley 2015: 43). As they remain the dominant terminology, and as they are relevant to the participants in my own research (who all began their lives speaking Polish, learned English on moving to Glasgow, and have no significant knowledge of any other language), they are used in this study.

## 2.1. The acquisition of native speaker constraints on use

Sociolinguistic variation is highly structured, and is subject to linguistic and social constraints, some of which speakers are aware of, and some of which they are not. In the L1, speakers acquire these constraints in early childhood. From the earliest stages of L1 acquisition, children's speech contains sociolinguistic variation replicating the patterns in the input they receive from their caregivers. Smith et al (2007) find that two- and three-year-olds from the North East of Scotland have acquired a range of complex linguistic constraints on the use of -s in third person plural contexts. These match the constraints in the speech of their caregivers and in the speech of their community. These are constraints which are low in speaker awareness, and which have never been taught to the children, but the children have been able to replicate them all the same.

Young children are able to replicate the constraints in the speech of their caregivers. But what happens when a person enters a new community later in life? Are language learners able to replicate the constraints found in native speech? Major (2004) suggests that some constraints are more easily replicated than others: he finds that learners are generally more able to replicate gender constraints than style constraints (178). Regan (1995) describes instances in which L2 learners over-generalise' native speaker constraints, so that the constraints are stronger for the learners than they are for the native speakers (258). Schlee (2013b: 209) and Meyerhoff & Schlee (2014: 105) describe how in their data, a variety of constraint acquisition patterns can be observed. The learners in their study studies replicate some native speaker constraints, reject (i.e. do not acquire) others, and re-order some (i.e. acquire them with a constraint ranking which differs from that found in native speech). They also innovate constraints on use: their speech shows some constraints which are not significant for the native speaker control group. They suggest that this structured reinterpretation of constraints may be an inherent step in the acquisition of variation in an L2.

The range of possible constraint acquisition patterns are summarised in table 1, below.

Comparison of native and non-native speech	Constraint acquisition pattern
similar constraint found in native speech and non-native speech	constraint has been replicated
constraint found in native speech; constraint weaker in non-native speech	constraint has been under-acquired
constraint found in native speech; constraint absent from non-native speech	constraint has been rejected
constraint found in native speech; constraint stronger in non-native speech	constraint has been over-acquired
constraint absent from native speech; constraint found in non-native speech	constraint has been innovated
constraint found in native speech and non-native speech, but with different constraint rankings	constraint has been re-ordered

*Table 1: Summary of possible constraint acquisition patterns*

In the present study, I conduct a quantitative variationist analysis of L2 speech, and also of the speech of a native control group. I ask whether the participants replicate all of the constraints observed in the speech of the native control group, or whether, as in the studies described above, a variety of constraint acquisition patterns can be observed.

My first research question is: are L2 learners able to replicate native speaker constraints on use?

## **2.2. Predictors of the acquisition of sociolinguistic variation**

Not all individuals acquire sociolinguistic variation at the same rate in the same way. What are the external factors predicting the acquisition of sociolinguistic variation by individual speakers?

### ***2.2.1. Social context***

In the L1, sociolinguistic variation is constrained by social context. As a general rule, speakers tend to use higher rates of standardised variants in formal contexts, and higher rates of non-standard variants in informal contexts (Labov 1972: 79). L2 learners acquire sociolinguistic variation from native speaker input. Therefore it is no surprise that those learners whose exposure to native speech is limited to formal contexts (e.g. classroom-only learners) do not tend to acquire non-standard variants to the same extent as learners who have naturalistic exposure to native speech in a variety of contexts (e.g. migrants who socialise with native speakers). The extent to which a learner will acquire non-standard variants is predicted by the social context of their acquisition: specifically, their exposure to native speech in informal contexts as well as formal contexts. Regan et al (2009: 136) find that learners acquire sociolinguistic variation to the greatest extent when they acquire the language outside of the classroom by being exposed to the everyday speech of their peers.

The importance of social context is highlighted by the very different results of Mougeon et al's (2004) and Nagy et al's (2003) studies of the acquisition of sociolinguistic variation by L2 French immersion students in Canada. Mougeon et al describe a group of immersion students in Toronto. These students speak the standardised variety of French they have been taught in school, and some have a very high level of L2 attainment (409-410). However, their acquisition of sociolinguistic variation is minimal (428). Because Toronto is predominantly Anglophone, these learners have little interaction with native speakers, and therefore limited access to sociolinguistic variation and little opportunity to feel part of the Canadian Francophone community (411). Nagy et al describe a group of L2 French immersion students in



Montreal. As Montreal is predominantly Francophone, they are in the minority as L1 English speakers, and have extensive opportunities for contact with Quebecois French speakers (76). All of the speakers in this study have acquired subject doubling, a local sociolinguistic variable found in the L1 French of Montreal residents, but not taught to learners in educational contexts (100). The crucial difference between these two learning contexts is that the Montreal learners have more opportunity for naturalistic exposure, and contact with the Francophone community. The learners who have undergone naturalistic exposure are the ones who have acquired sociolinguistic variation. The results of these studies show that learners are more likely to acquire sociolinguistic variation when they are learning an L2 in an area where it is a dominant, majority language, and when they are exposed to everyday native speech in a naturalistic, non-classroom setting.

### ***2.2.2. Length of residency***

It may seem like a common-sense assumption that when a speaker moves to a region where the L2 is the dominant language, their length of residency (LoR) in that region predicts the extent to which they will have acquired native-like variation in the L2. This is indeed the finding reported by Drummond (2010: 216) in his study of Polish migrants in Manchester: those of his participants who have spent longer in Manchester are more likely to show local variation patterns across all four of the variables he examines. Regan (1995) similarly reports that during a year spent studying in France, the sociolinguistic variation in the L2 French of her participants increases (261). These findings may appear to be so common-sense as to hardly be worth reporting, but LoR does not always emerge as a significant predictor of the acquisition of sociolinguistic variation: Howley reports that, surprisingly, with increased time spent in Manchester her participants are *not* more likely to reproduce local variation patterns in their L2 English (2015: 135, 151 and 180).

### ***2.2.3. L2 attainment***

SLA research traditionally compares L2 ‘attainment’ across learners, and this ‘attainment’ tends to be a measure of how fully the speaker has learned the rules of a standardised variety (I hereafter use the term ‘attainment’ in this sense). In SLA, attainment is measured in various ways: language learners may have their speech judged for the presence of a detectable foreign accent (Oyama 1976), may be given grammatical judgement tests (Johnson & Newport 1989), or may be tested on the intelligibility of their L2 vowel production (Flege et al 1999). Generally, attainment tends to be aligned with the invariant use of a standardised variety.

Drummond (2010) measures L2 attainment in the traditional sense, and also measures the acquisition of sociolinguistic variation; he tests whether there are links between these different aspects of L2 ability: i.e. are the speakers who score highly for attainment also the speakers who have acquired sociolinguistic variation to the greatest extent? He assesses attainment based on ‘overall fluency, accuracy and use of vocabulary’ (81). This measure emerges as a significant predictor of the acquisition of sociolinguistic variation for three of the four variables studied (218). This indicates that the use of sociolinguistic variation may develop in tandem with other aspects of L2 ability.<sup>7</sup>

### ***2.2.4. Age at onset***

Very young children are able to acquire their L1 from the input of their caregivers. They acquire the sounds and structures of the languages they are exposed to, including sociolinguistic variation and its constraints. As children grow, their ability to acquire new language declines, meaning that the acquisition of an L2 after early childhood is not as straightforward, automatic or inevitable as early acquisition. Older children and adults who begin to learn a new language will probably never master certain aspects of

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<sup>7</sup> Provided that the social context is favourable (see Mougeon et al 2004, where some learners have high attainment in their L2 French but minimal acquisition of sociolinguistic variation, as they have acquired their L2 in a classroom situation without a great deal of naturalistic exposure).

the new language. The younger a child is when they begin the L2 acquisition process, the easier this process will be (Hyltenstam & Abrahamsson 2003: 572).

The role played by age at onset (AaO) has been investigated most extensively in relation to L2 attainment: e.g. how does AaO correlate with the presence of a detectable foreign accent (Oyama 1976), grammatical judgement (Johnson & Newport 1989) and vowel intelligibility (Flege et al 1999)? In these studies, a low AaO correlates with high attainment fairly consistently across different aspects of L2 attainment. Although some empirical studies have found that ‘adults proceed through early stages of morphological and syntactic development faster than children’ (Krashen et al 1979: 573), there has been no major challenge to the finding that ‘child starters outperform adult starters in the long run’ (573). Debate continues about why early starters are the most successful, at what age their special abilities decline or disappear, whether age effects make it impossible for older learners to ever gain native-like competence in a new language, and whether they make it certain that younger learners will always gain native-like competence.

What emerges from the empirical research is that learners with an AaO of 6 or under are for the most part found to reach native-like attainment,<sup>8</sup> and those with an AaO beyond puberty are for the most part found never to reach native-like attainment: they tend to retain some degree of foreign accent or other features which mark their speech as non-native (Oyama 1976: 268; Johnson & Newport 1989: 79; Flege et al 1999: 85).<sup>9</sup> Between the age of 6 and the beginning of puberty, it is not clear from age alone whether or not a learner will reach native-like competence. These findings are fairly consistent across SLA research, and also across research on learners acquiring a second dialect in the L1 (Payne 1980: 155; Chambers 1992: 689; Kerswill 1996: 187). Whether these age effects are due to the existence of a critical period (Lenneberg 1967: 175) in which children have an enhanced ability for acquiring new linguistic systems, or due to a gradual decline in language learning abilities across the lifespan (Hyltenstam & Abrahamsson 2003: 572) remains under debate. Table 2, below, summarises the predictions on AaO and L2 attainment.

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<sup>8</sup> Exceptions include Thompson (1991), Flege et al (1995) and Sebastián-Gallés & Soto-Faraco (1999).

<sup>9</sup> Exceptions include Bongaerts et al (2000) and Ioup et al (1994).

Age group	Prediction
learners with AaO below 6	will (probably) gain native-like competence
learners with AaO between 6 and puberty	will vary in their ability to gain native-like competence
learners with AaO beyond puberty	(probably) won't gain native-like competence

*Table 2: Summary of predictions on AaO and L2 attainment*

SLA research shows that younger children have an advantage in acquiring the sounds and structures of a standardised variety. But do they also have an advantage in acquiring native variation patterns? Does AaO also emerge as a significant predictor of the acquisition of sociolinguistic variation in the L2?

In her study of Roma adolescents living in Manchester, Howley finds that AaO does not emerge as a significant predictor of the acquisition of sociolinguistic variation, despite the fact that her participants have AaOs of between one and 13 (2015: 135, 151 and 180). Similarly, in her study of L1 Spanish speakers living in Utah, Baker (2008: 194) finds that AaO is not a significant predictor of the acquisition of variation, despite the fact that her participants have AaOs of between two and 14. These results are surprising in relation to the consistent finding in the SLA research that AaO is a strong predictor of L2 attainment, particularly within these age brackets. However, they may be explained by the findings from L1 variationist sociolinguistics on the role of adolescence.

While young children use L1 sociolinguistic variation at rates roughly equivalent to their parents (Smith et al 2007: 73), with the onset of adolescence they shift their language away from that of their caregivers and towards that of their peer-group.

In adolescence, young people are exposed to a greater inventory of linguistic variants because they are exposed to a wider circle of acquaintances. [...]

Conformity to peer-group norms and separation from adult norms leads to the

adoption of regional linguistic variables beyond the neighborhood and sometimes a preference for variants not favored by adults (Chambers 2009: 184).

This increase in the use of sociolinguistic variation, with increased rates of non-standard variants and the incorporation of new non-standard variants, is referred to as ‘the adolescent peak’ (Tagliamonte 2011: 48). Sankoff (2004) writes that ‘people form their basic linguistic systems as children [...] Studies focusing on adolescents, however, suggest that linguistic alterations carried out at this stage in people’s lives may be of considerable sociolinguistic importance’ (4). While children lose L2 acquisition abilities as they leave early childhood and approach puberty, they retain the ability to acquire new sociolinguistic variants during adolescence. If adolescents have the same drive to acquire sociolinguistic variation in the L2 that they have in the L1 - the drive to conform to peer-group norms - then this might counteract the effects of having a later AaO. While learners with later AaOs may have a disadvantage in developing some aspects of L2 ability (e.g. grammatical judgement), this disadvantage may not extend to the acquisition of sociolinguistic variation.

### ***2.2.5. Gender***

In the L1, male and female speakers often show differing sociolinguistic variation. Male speakers are often found to show higher rates of non-standard variants (Fasold 1990: 92), although this differs for different variables in different places and at different times, and across different social classes (Tagliamonte 2011: 32-34). Gender constraints in the native speaker input may be replicated in L2 speech. If so, a comparison of L2 speech and the speech of their native peers will show similar gender constraints (Major 2004: 178).

However, to complicate matters, previous research has also found that gender sometimes emerges as a predictor of the acquisition of sociolinguistic variation, i.e. females may acquire the variation faster than male learners, or vice versa. Schleef (2013b) presents evidence that for Polish adolescents in London, the male learners are acquiring sociolinguistic variation in (ing) to a greater extent than the female learners

(205). Conversely, Drummond (2010: 219) reports that for Polish adults in Manchester, the female learners are acquiring sociolinguistic variation to a greater extent than the male learners. He suggests that this may be linked to differences in the employment of the male and female speakers, which provide the female participants with more opportunity to acquire sociolinguistic variation through exposure to native speech (149). In her study of the acquisition of sociolinguistic variation by Roma adolescents, Howley also reports that the female learners are more likely to replicate local variation patterns than the male learners (2015: 213). She similarly suggests that this may be related to the different ways that the male and female participants socialise (213-215). If gender effects are related to the different social positions and networks of male and female learners, then it follows that these effects may be community specific. This may explain why Schleeff finds that male learners have an advantage in the acquisition of variation, and Drummond and Howley find that female speakers have an advantage.

Comparing the speech of L2 learners and the speech of their native peers may show similar gender constraints for both speaker groups. If so, this can be taken as evidence that the L2 speakers are replicating a native speaker gender constraint. If a gender constraint emerges for the L2 speakers which is not present in the speech of their native peers, this might be evidence that gender is a predictor of the acquisition of sociolinguistic variation for these speakers.

#### ***2.2.6. Integrative motivation***

L1 sociolinguistic variation is strongly linked to social networks and identity. The use of local non-standard variants is often higher within dense, multiplex social networks (Milroy 1980: 154). Core group members often use higher levels of these variants than peripheral members (Mendoza-Denton 2008: 250). Speakers can use sociolinguistic variation to mark out group identities and to differentiate themselves from members of other social groups (Eckert 2000: 67). The extent to which we are integrated into our L1 groups and communities correlates with our language use.

This is also true of L2 learners: previous research has suggested that the extent to which a speaker will become native-like in the L2 correlates with the extent to which

they feel a part of the L2 community or group. In Gardner & Lambert's (1959: 267) SLA research, they found that a learner's L2 attainment can be predicted by their level of 'integrative motivation' - the extent to which they identify with the L2 group whose language they are acquiring. I borrow this term from them, and investigate whether it also plays a role in predicting a learner's acquisition of sociolinguistic variation. I hereafter abbreviate it to IM.

In research on L2 sociolinguistic variation, IM has been found to correlate with the acquisition of local variation patterns. In a study of the acquisition of L2 English in Ireland, Diskin (2012) describes the acquisition of a range of local features by two individuals, Agnieska and Mei Hua. These individuals are demographically very similar (73), but they have acquired local variation patterns to different extents (86). Diskin suggests that 'the degree to which they felt integrated into Irish society played a role in their acquisition of vernacular forms' (86).

Investigations of IM are often conducted alongside or through investigations of learners' friendship networks. Friendship networks are sometimes taken as a measure of IM, with many close ties to native speakers in a community indicating higher IM. Having social ties with native speakers consistently correlates with the acquisition of L2 sociolinguistic variation. In Howley's description of the acquisition of sociolinguistic variation by Roma adolescents in Manchester, she finds that those speakers who have what she terms 'open' friendship networks, i.e. friendship networks with members from outside of the Roma community, are much more likely to replicate the variation shown by native Manchester speakers than those with 'closed' friendship networks made up entirely of other Roma adolescents (2015: 216). Baker (2008) examines the acquisition of sociolinguistic variation by L1 Spanish speakers who moved to Utah between the ages of two and 14. Also focusing on their vowel production, she finds that those learners with more friends from their own L1 group are less likely to reproduce the variation shown by native Utah speakers (194). Meyerhoff & Schleaf (2014: 117) also find that, in their study of Polish adolescents in Edinburgh, friendship network is a significant predictor of the acquisition of glottal replacement.<sup>10</sup>

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<sup>10</sup> They divide their Polish speakers into groups based on self-report proficiency levels. The social network finding is only significant for those speakers in the 'high proficiency' group.

Drummond (2010) does not extensively investigate the role of social networks, but does find that having a partner who is a native speaker is a significant predictor of whether a speaker will exhibit local variation patterns for one of the four phonetic variables he studies, the *STRUT* vowel (126). He also finds that the acquisition of local variation patterns correlates with other details indicating the participants' IM: the acquisition of variable (ing) correlates with whether or not the speaker plans to settle in the UK or to return to Poland (168), and the acquisition of the local *STRUT* vowel correlates with a positive attitude towards Manchester and its people (137).

Goldstein (1987) describes a group of L1 Spanish speakers who have learned English in a New York high school. For many of these learners, their L2 English speech contains features associated with African American vernacular English (AAVE), an ethnically-marked variety used by their African American peers. Goldstein finds a significant correlation between the acquisition of AAVE features by her participants and their amount of reported contact with their AAVE-speaking peers (426): i.e. those who spend time with AAVE speakers and have AAVE-speaking friends are more likely to be acquiring the variety. However, she also notes that not all of the participants who have a high degree of contact with AAVE speakers are acquiring the variety (427-428); she suggests that having a friendship network which includes AAVE speakers is necessary for a learner to acquire AAVE features, but that identification with the group is also important (430). Goldstein suggests that the acquisition of AAVE is not only about contact with AAVE speakers, but also whether the learners identify with the AAVE speakers at the school and feel themselves to be part of this group, or whether they have a desire to be part of this group.<sup>11</sup> For Goldstein, friendship networks may be a measure of IM, but IM goes beyond friendship networks.

Although the terminology used, the methods of measurement and the theoretical framework vary, previous research is consistent in its finding that the acquisition of sociolinguistic variation correlates with a speaker's degree of identification with the people who use that variation.

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<sup>11</sup> Goldstein tests for a correlation between AAVE use and identification with the African American community and does not find this to be statistically significant (427); however, these data are based on a self-report attitudes survey, and she suggests that the lack of correlation might be because of the difficulty of measuring attitudes and the unreliability of self-report data (430).



### ***2.2.7. Relevance to the current study***

A number of factors emerge from previous research as potential predictors of the acquisition of sociolinguistic variation. Below, I outline which of these are relevant to the current study.

The participants in the current study are Polish migrants acquiring English in a high school in Glasgow. They are all acquiring the L2 in an area where it is the dominant language, and they are doing so primarily through naturalistic exposure to the language of their Glaswegian peers. On these grounds, we can predict that they are likely to be acquiring sociolinguistic variation. As the social context is the same for all learners, it is not investigated as a potential predictor of acquisition in chapters 5 - 7. All of the participants in the current study also have relatively high attainment in English. For this reason, and in line with Rampton's (2013) comments that judgements of attainment may not be reliable measures as they 'are themselves always relational and socio-ideologically positioned' (362), L2 attainment will not be tested as a potential predictor.

As will be described in chapter 3, the participants in the current study have a wide range of LoRs in Glasgow: the two newest arrivals have been in the city for 1.5 years, and two of the participants have been in the city for 10 years. In chapters 5 - 7, LoR will be tested to see whether it emerges as a significant predictor (as in Drummond 2010: 216 and Regan 1995: 261), or whether it fails to emerge as a significant predictor (as in Howley 2015).

The participants also have a wide range of AaOs, from three to 13. Half have an AaO below 6 (between 3 and 5), and half have an AaO of between 8 and 13. Previous SLA research predicts that the former group, hereafter referred to as the 'early starters', will reach native-like attainment in their L2, and the latter group, hereafter referred to as the 'later starters', may not. However, they are also currently aged between 11 and 16, meaning that they are all in the adolescent life stage (or at least, in the case of the younger participants, beginning to enter this stage). If we were examining their L1 language use, we would expect to see them acquiring new non-standard variants and increasing their use of existing non-standard variants. I investigate whether or not this adolescent drive to acquire and use sociolinguistic variation is carried into the L2.

The speaker sample is designed to have a roughly even gender split, with eight participants who are female and six who are male. Because of the roughly even gender split, it will be possible to test for gender differences in their use of sociolinguistic variation. The L2 speech of the Polish group will be compared to the L1 speech of a native speaker control group. If similar gender constraints emerge for both speaker groups, this will be taken as evidence that the L2 speakers are replicating a native speaker gender constraint. If a gender constraint emerges for the L2 speakers which is not present in the speech of their native peers, this may suggest that gender is a predictor of the acquisition of sociolinguistic variation.

As will be described in chapters 3 and 4, in the current study I use ethnographic methods to investigate and compare the participants' IM. Using the results from the ethnographic analysis, I group the speakers into three categories: those who have high IM (i.e. those who identify strongly with Glasgow), those who have medium IM, and those who have low IM. I then test whether IM emerges as a predictor of the acquisition of sociolinguistic variation for these speakers.

To summarise, in the current study I investigate the potential roles played by LoR, AaO, gender and IM in predicting the acquisition of sociolinguistic variation in the L2. My second research question is: what are the external factors predicting the acquisition of sociolinguistic variation by individual L2 learners?

### 2.3. Comparing the acquisition of different variables

When young children are acquiring sociolinguistic variation in the L1, not all variables are acquired at the same time or in the same way. Kerswill (1996: 200) predicts that variables with more complex constraints will be acquired later, but Smith et al (2007) find that in their data this is not the case. Constraint complexity does not appear to present a problem for the children in their study (90), and they find ‘the mastery of complex linguistic constraints from the earliest stages of the acquisition process’ (91). However, Smith et al suggest that the level of speaker awareness associated with a variable may be important. In their data, the acquisition of -s in third person plural contexts, a variable which is low in speaker awareness, differs in character from the acquisition of the *house* variable, which is higher in speaker awareness. They suggest that the acquisition of the high-awareness variable is shaped by its social meaning (as parents ‘teach’ their children how the variation is constrained by speech context), whereas the acquisition of the low-awareness variable is not (91).

In L2 variationist sociolinguistics, Meyerhoff & Schlee write that ‘some variation is more or less “easy” to acquire as a [non-native speaker]’ (2014: 17). Like Kerswill (1996), they suggest that variables with complex constraints may be more difficult for learners to acquire. Like Smith et al (2007), Howley (2015: 119) suggests that if a variable is higher in speaker awareness, its acquisition is more likely to be shaped by its social meaning. These two suggestions are elaborated on below.

#### 2.3.1. *Constraint complexity*

Meyerhoff & Schlee write that: ‘[t]he acquisition process varies from variable to variable and seems to be dependent on its character and the complexity of constraints on the variable’ (2014: 105). Of the three variables they examine, their non-native participants come closest to matching native speaker patterns for word-final glottal replacement, then for variable (ing), and then for quotative *be like*. In the cases of the latter two - the apparently more difficult-to-acquire variables – the researchers suggest that the difficulty may be related to the fact that they are subject to many complex

constraints. They suggest that the complexity of the constraints on a variable might determine how difficult it is for learners to acquire.

The role of constraint complexity has also been highlighted in studies of second dialect acquisition and dialect contact, when speakers acquire new features in their L1 after early childhood. In examining the acquisition of new L1 features, Payne (1980: 175), Chambers (1992: 702) and Kerswill (1996: 187) all suggest that variables which are more highly constrained are more difficult for speakers to acquire. They suggest that the acquisition of highly-constrained variables takes longer than the acquisition of low-constraint variables, and that the acquisition of very highly-constrained variables can only occur at a young age. Milroy (2007) suggests that variables with complex constraints may require a high degree of contact with native speakers, and dense social network ties, if they are to be incorporated into a speaker's system. She calls variables which are difficult to acquire, and inaccessible without a high degree of contact with native speakers, 'under-the-counter' variables: she suggests that highly-constrained variables are likely to be 'under-the-counter'. Conversely, she calls variables which are easy to acquire, and accessible without a high degree of contact or dense social network ties, 'off-the-shelf' variables: she suggests that low-constraint variables are more likely to be 'off-the-shelf' (170).

The role of native speaker contact in the acquisition of highly-constrained variables may explain why Smith et al (2007) find that constraint complexity does not delay the acquisition of complex, highly-constrained variables when young children are acquiring an L1 from their caregivers (90). Although the use of -s in third person plural contexts may be an 'under-the-counter' variable, it is accessible to the children they observe via contact with their caregivers. Where a high degree of contact with native speakers and dense social network ties are present, it appears that constraint complexity does not act as a block on acquisition. However, this high degree of contact may be a necessary condition for the acquisition of highly-constrained variables.

It is worth noting that, across the literature on this subject, definitions of constraint complexity are not completely consistent or clear. Meyerhoff & Schlee define a variable as high in constraint complexity if its constraints 'relate to different

grammatical levels' (2014: 115); e.g. in the case of quotative *be like*, its constraints relate to both the syntactic level and the discourse-pragmatic level (122). Chambers defines a phonological variable as high in constraint complexity if its acquisition has 'opaque outputs, that is [...] exceptions or variant forms, or [...] a new or additional phoneme' (682). Payne defines a phonological variable as high in constraint complexity if it is 'conditioned by factors of an abstract nature; for example, boundaries, grammatical categories, and individual lexical items' (14). Kerswill defines a phonological variable as high in constraint complexity if it is lexically conditioned.

In the current study, I simply define a variable as high in constraint complexity if a high number of constraints emerge as significant when the variable is subjected to quantitative analysis, and I define a variable as low in constraint complexity if a low number of constraints emerge as significant. This simplified use of the concept allows for a straightforward and meaningful comparison of the relative constraint complexity of a range of variables, and an investigation into whether the acquisition of variables with a higher number of constraints differs from the acquisition of variables with a lower number of constraints.

As noted, I will be testing whether IM, AaO and LoR emerge as predictors of acquisition across a range of variables. I will be investigating IM using ethnographic methods, which will include observation of learners' friendship networks: I suggest that many close ties to native speakers indicates high IM. I note that as well as acting as a measure of identity, in the current study IM also acts as a measure of a learner's degree of contact with native speakers. Given the heightened importance of native speaker contact in the acquisition of more highly-constrained variables, we might expect IM to play a particularly important role in the acquisition of more highly-constrained variables. Given the predictions of Payne (1980: 175), Chambers (1992: 702) and Kerswill (1996: 187), we might also expect LoR and AaO to play a particularly important role in the acquisition of more highly-constrained variables, as they suggest that highly-constrained variables take longer to acquire, and some can only be acquired through very early exposure.

### 2.3.2. *Speaker awareness*

In his discussion of the sociolinguistic monitor, Labov (1993) suggests that lexical variation is highest in speaker awareness, phonological and phonetic variation is lower in speaker awareness, and morphosyntactic variation is lower still. He suggests that variation which is higher in speaker awareness is more available for sociolinguistic monitoring, and that it is therefore more likely to be subject to social constraints and to be involved in identity marking. Examining the acquisition of sociolinguistic variation in the L2, Tarone (2007: 844) and Howley (2015: 119) have similarly suggested that the acquisition of variation which is higher in speaker awareness is more likely to be shaped by its social meaning and is more likely to be involved in identity marking.

Howley's (2015) participants are Roma adolescents attending a high school in Manchester. She compares the acquisition of local linguistic variables by these adolescents, focusing on the lettER vowel and the happY vowel. She asks how many of her individual participants come close to matching the variation shown by Manchester speakers (for both rates and constraints), and finds that 25% of her participants come close to replicating the variation patterns for lettER (203), while only 19% come close to replicating the variation patterns for happY (204). As a possible explanation, she turns to the relative level of speaker awareness for each of the variables. She notes that of the variables examined, lettER appears to be higher in speaker awareness (167). The local production of this vowel exists as a stereotype of Manchester speech, and is overtly commented on by two of her participants during the course of the research. She adds that 'In contrast to [lettER], none of the participants overtly commented on the lax Manchester [happY] variant' (204). She suggests that 'The feature's salience could be both an encouraging factor or a hindrance to acquisition depending upon participants' attitudes' (119). In other words, the acquisition of variables which are high in speaker awareness may be dependent on the social evaluation of these variables by the learners. Variables which are high in speaker awareness will be acquired if they are socially desirable and rejected if they are not. Variables which are low in speaker awareness are acquired more automatically, regardless of their social desirability.

In the current study, I investigate acquisition across a range of variables which differ in their associated levels of speaker awareness and in their constraint complexity. I ask whether the acquisition of low-awareness variables differs from the acquisition of high-awareness variables, and I ask whether the acquisition of low-constraint variables differs from the acquisition of high-constraint variables. My third research question is: do L2 learners acquire different sociolinguistic variables in different ways?

### **3. Conducting the fieldwork at St John's high school**

My fieldwork took place at St John's high, a Glasgow school which is attended by many pupils who have migrated to the area from overseas. The majority of my research took place at an after-school club, set up and run by myself for the purposes of the project. Running this after-school club allowed me to simultaneously record a large quantity of naturalistic speech data using mobile recording devices, and engage in a period of participant observation (in which I attended the after-school club as a member, and took part in activities with the participants). Combining methods in this way allows me to investigate the details of how the Polish pupils at St John's are acquiring Glaswegian speech norms (via quantitative analysis of the speech data), and how this acquisition relates to integrative motivation - i.e. the learners' identity, friendship networks, and feelings of belonging (via ethnographic observation).



### 3.1. Choosing a research site: Glasgow's East End

Previous research has described sociolinguistic variation in native Glaswegian speech (Macaulay & Trevelyan 1977; Macafee 1994; Stuart-Smith 1999; Stuart-Smith et al 2007), including the speech of ethnically Asian speakers who were born in Glasgow (Alam & Stuart-Smith 2011). However, to my knowledge, there has been no research to date on the acquisition of L2 sociolinguistic variation by migrants living in Glasgow, despite the fact that the city is an ideal test site for examining what happens when migrants move to a new place and are tasked with learning a standardised variety in the classroom, but also faced with a variety which is radically different from it outside of the classroom.

Native Glaswegian speech is made up of a continuum between Scottish Standard English (SSE) and Glaswegian Scots. Speech in Glasgow is strongly tied to class-based identities, with working-class speakers tending to locate their speech closer to the Glaswegian Scots end of the continuum, and middle-class speakers tending to locate their speech closer to the SSE end (Stuart-Smith et al 2007: 227). SSE and Glaswegian Scots variants coexist in the everyday speech of the city, and within the speech of individuals; speakers can often shift along the continuum in response to social context (Macaulay & Trevelyan 1977: 53) Stuart-Smith 1999: 190; Stuart-Smith et al 2007: 236-241). While the use of Glaswegian Scots is often officially stigmatised, particularly in formal contexts, it also carries covert prestige and is used to mark localised identities and to build relationships between speakers, making the ability to code-shift a vital social skill.

In Glasgow schools, the official language of the classroom is usually SSE; this is the standardised variety which learners of English are likely to be encouraged to use. The treatment of Glaswegian Scots in education is complex. Historically, school pupils have been discouraged from (and even punished for) using Glaswegian Scots (Macaulay & Trevelyan 1977: 92). More recently, there have been national attempts to rehabilitate the role of Scots in education, and one of the key aims of the Scottish Executive's Cultural Strategy is '[p]romoting Scotland's languages [including Scots] as

cultural expressions and as means of accessing Scotland's culture' (Scottish Executive 2000: 23). However (as I observed during the research period, and as my participants told me), the use of Glaswegian Scots is still discouraged by many teachers. The Glaswegian adolescents I spoke to in the current study tend to refer to Glaswegian Scots as 'slang'. They generally say that they are not supposed to use slang, but that they do anyway. Sometimes they express shame or embarrassment about using slang; however, their discussion of slang also suggests it has important social value, showing friendliness and expressing aspects of identity (e.g. one participant tells me that he uses slang 'when I'm with my friends' and 'when I want to act Scottish').

Glasgow has hosted several large waves of immigration over the past 200 years: a large number of Irish migrants in the 19<sup>th</sup> century, Jewish migrants from mainland Europe in the 19<sup>th</sup> and 20<sup>th</sup> centuries, Italian migrants in the early 20<sup>th</sup> century, Polish migrants after World War II, and migrants from China, India, Pakistan and Bangladesh in the latter part of the 20<sup>th</sup> century (Edward 1993). However, different areas of the city have become home to different migrant groups, and not all areas have seen sustained immigration. In 1994, when Macafee published a large sociolinguistic study of the East End of Glasgow, she wrote that the population of the East End at this time was 'relatively immobile, both socially and geographically' (12). From around 2004, a decade after Macafee's study was published, the East End saw a sudden rise in migration. Some of these migrants were refugees and asylum seekers dispersed to the area from London, and many others were from the Eastern European countries which had recently joined the EU; the largest group came from Poland. These migrants entered (and continue to enter) into a settled, largely monolingual community, in which the majority of residents use Glaswegian Scots, a variety radically different from the standardised English they may have encountered before migrating. In order to explore what happens when a migrant population is exposed to this type of sociolinguistic variation, I chose Glasgow's East End as a research site.

In particular, I wanted to explore this encounter amongst adolescent migrants. Questions of identity and integrative motivation are particularly pertinent during adolescence, when young people are experimenting with sociolinguistic variation and

constructing identities in relation to their peer-group. Does this experimentation and identity construction have the same characteristics in the L2 as it does in the L1? In order to explore this, I chose to conduct my research with adolescents in an East End high school.

### **3.2. Initial planning**

The first stage of any sociolinguistic study is gaining access to the community under investigation. This can be challenging when the community under investigation is a potentially vulnerable group, for example school-age adolescents (Lawson 2009: 117-118). Researchers working with this group have legal and ethical responsibilities, and so I had to carefully plan out my research and seek permission from multiple sources before I entered the fieldwork site.

First, I sought, and was granted, the approval of the University of Glasgow College of Arts research ethics committee (see appendix 1). At the same time, I also sought approval from the Glasgow City Council education authority, who ask that anyone conducting research in a Glasgow City Council school submit a research evaluation questionnaire. This questionnaire balances the usefulness of the research against demands on the resources of the school and teachers' time. This approval was also granted (see appendix 2). I was also required to join the PVG (protection of vulnerable groups) scheme, for which I was subject to a background check to ensure that I didn't have relevant criminal convictions (see appendix 3): in Scotland, every adult working with people under the age of 18 or other vulnerable groups must be a member of this scheme. As a member of the PVG scheme, in the event that I become concerned about a young person's safety or well-being, I am obliged to pass that information on. Therefore, if anything in the recordings, or anything said by a participant off-tape, were to cause concern at any point, I would pass the information on to the school's pastoral care team (this obligation overrides the confidentiality of the speech recordings).

On the advice of the university ethics committee and Glasgow City Council education authority, I put a privacy and data protection policy in place before beginning the fieldwork, to ensure that the participants' anonymity would be maintained. Participants' contact details were not kept on file: contact was through the school only. Consent forms, which contained participants' and caregivers' real names and signatures, were kept in a locked box in my office. They were also scanned and stored in a single digital file, which was kept on a password-protected computer, accessible

only by myself. During the project, the raw data (unedited sound files) were stored on a password-protected computer, and access was restricted to myself, my supervisors and a team of three transcribers, who were contracted by the university and who signed a confidentiality agreement before beginning work (see appendix 4). The transcribers were not given the raw data to work on at home, but were asked to work in my office during allocated hours, in order to restrict movement of the data. The data was anonymised during the transcription phase (Rock 2001) (this process is described in more detail in section 3.8.2.).

My first point of contact within Glasgow City Council education authority was Maria Walker, the head of the English as an Additional Language (hereafter referred to as EAL) service. This is a centralised service which has teachers based in many schools and other educational establishments in Glasgow, providing support to pupils whose L1 is not English. They also provide CPD (continuing professional development) support for teachers and other school staff who work with EAL pupils, and they provide ‘advice and support for schools on all issues to do with children and young people with EAL’ (quotation from the EAL service’s webpage: <https://www.glasgow.gov.uk/index.aspx?articleid=8692>, accessed 11 March 2015). Staff from the EAL service acted as gatekeepers for my research (Bryman 2012: 85). They both facilitated my initial contact with schools, and helped me to formulate a research strategy.

Together with the EAL service, I decided to set up an after-school club and conduct my research there. In order to answer my research questions, I needed to record the most naturalistic speech data possible. Setting up an after-school club meant that rather than simply having sit-down interviews or conversations with my participants, I could record them interacting with each other for long periods of time, while they were engaged in activities in an informal, playground-like setting. It also meant that I could simultaneously engage in a period of participant observation, as I could attend the after-school club as a member (the after-school club set-up will be discussed in more detail in section 3.6.). This strategy also had several other practical benefits. Conducting my research at an after-school club run by myself meant that the demands on the staff at the school would be minimal. It also meant that the majority of my research could take

place outside of school time, minimising disruption to staff and pupils. Finally, it ensured that the participants would experience an immediate and tangible benefit from the research. The EAL service staff suggested that it might even help the newer migrants make friends and settle into their new school.

### 3.3. St John's high school

My contact with the Glasgow EAL service led to a recommendation that I speak to the staff at St John's, one of the high schools serving Glasgow's East End. In 2005, this school had only 11 pupils who spoke English as an additional language, and in 2015 it had 164, while the overall number of pupils at the school remained roughly the same (937 in 2005, 922 in 2015). This meant that the number of EAL pupils in the school had multiplied by 18 in a decade.

Because of the large number of EAL pupils now attending the school, St John's houses an EAL unit as part of its support services. When I began my research, the school had one full-time and one part-time EAL teacher, although in my second year of research this dropped to one full-time teacher. Language learners are supported by the EAL staff when they first arrive, but instruction takes place only in English: their language learning experience is what Cummins refers to as 'submersion' education (2001c: 65), taking place in the dominant language of the region they are living in.

The EAL learners at St John's have a variety of L1s, including Spanish, Urdu and Yoruba. However, it was important for the analysis that the participants all shared an L1. Controlling for L1 keeps this factor constant in the data (Flege et al 1999: 82), making it possible to disentangle and examine other factors which might predict an individual's acquisition of sociolinguistic variation (i.e. length of residency, age at onset, gender and integrative motivation). Of the EAL pupils attending St John's at the time, 40 (24% of the EAL register) were L1 Polish speakers; this was the largest L1 group, and the only single L1 group large enough to provide me with a workable sample. Therefore, I decided that I would only recruit participants who had been born in Poland and whose L1 was Polish.

The Polish speakers at St John's form a sizeable group. The benefits of this include access to support networks and the opportunity to use the L1 in their new city. At St John's, new arrivals from Poland are supported by pupils who arrived in Glasgow several years ago and are already bilingual; many of the bilingual pupils in the school are happy to act as interpreters for new arrivals, helping to facilitate communication

with the teachers, who do not generally speak any Polish. The Polish pupils at St John's tend to know who all of the other Polish pupils are: they are aware of the presence of a Polish community in the school, and choose the degree to which they engage with it. Each year group contains one or two exclusively Polish friendship groups, who socialise in their L1 Polish. One of the native Glaswegian pupils I spoke to, Cameron, thought that having an established Polish community at the school meant that Polish pupils had a slightly easier time on arrival than other migrant groups.

*Cameron:* The Polish people, obviously it'd be easier because, like, they obviously know each other and stuff and then there's been a lot of them and, like, they always go near the door<sup>12</sup> and stuff and they meet very easily, like, I don't know why but one minute they're together and the next minute they're all best friends, you know what I mean? Em, but, like, Lithuanian and stuff, like, there's only - I think there's only, like, one person in the school that's with Lithuanian so it would be quite hard - and Slovakian - so that would be quite hard as well 'cause I think there's only, like, one or two people that are Slovakian.

The size of the Polish community at St John's offers potential support to new migrants; however, it might also be a source of hostility. I spoke with one of the staff members at St John's, Ms. Higgins, about tensions between Polish migrants and the host community, and how these play out at St John's.

*Me:* I'm wondering whether the size of the Polish community makes a difference. With there being a lot of Polish kids at the school, what effect do you think that has?

*Ms Higgins:* I think it gi- maybe gives added security, but also can, eh [...] it can maybe draw more attention to them. [...] So if maybe a - a school maybe with two or three, you know, they're not really noticeable [...] But the big community, then maybe others feel they're beginning to dominate. [...] the bigger the

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<sup>12</sup> He is referring to a specific location in the school's central hall, where Polish pupils congregate during breaks and lunchtimes.



community then maybe the others, or the teachers feel maybe a wee bit more vulnerable themselves, and they - I'm not sure. And the political - I think the media is feeding...so I'm not sure. I think it must be really positive to have that strong community, and eh, the numbers, but then at the same time maybe others do feel wee bit vulnerable because...maybe the media and the negative reporting.

Ms. Higgins notes the political climate surrounding immigration: anti-immigration sentiment across the UK, and in portions of the media, may be trickling down to affect young migrants attending school in Glasgow.

Many of the Polish pupils I spoke to - although not all of them - mentioned having experienced hostility from the host community at some point. One student describes experiencing very severe bullying based on her ethnicity when she was a young child.

*Nikola:* I got slagged.<sup>13</sup> And th- they were just calling me a Polish bastard and all that stuff. And they say that I don't belong here and I have to go back to my own country. And they throwed, eh, a brick on me, like, and it went on my head here.

It should be noted that not only do many of the native Glaswegians at St John's welcome new migrants, many actively resist hostility towards newcomers. In an exchange between Nikola and a native Glaswegian student, Laura-Kim, which was recorded with no adults present, Laura-Kim is clear that she does not tolerate this type of behaviour.

*Laura-Kim:* Do you know I battered<sup>14</sup> my wee cousin, like, before school. 'Cause she was arguing, I don't like it, she was arguing with a - she was arguing with a Polish person. And she turned round and went "Get back to your own country". I mean I full-scale, like, battered her. She went and greet- greeted<sup>15</sup> to my gran.

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<sup>13</sup> *Slagged* = severely teased / bullied

<sup>14</sup> *Battered* = beat up

<sup>15</sup> *Greeted* = cried

And my gran battered her. [...] I didnae like it. It just annoys me. Even, like, I was arguing with the other person, I still battered her but. [...] It's like, it's their country and all. They stay here, so.

*Nikola:* We won't go back anyway.

*Laura-Kim:* Hm, I know. It's like, yeah. Using all your breath for no reason.

It seems that the Polish pupils at St John's are welcomed by some, ignored by others, and actively victimised by a few.

In discussing the different experiences of different migrant groups in Glasgow over time, Edward (1993) ends on a note which is not entirely celebratory.

Ultimately [...] Glasgow's traditional reputation for friendliness has been heavily dependent, for the incomer, on an ability to blend into the surroundings with the minimum of protest: to present no "threat" either in religious or economic terms, and eventually to become indistinguishable from other Glaswegians. When all that has come to pass, Glasgow is, for you, the friendly city of repute (134).

Highlighting the fact that migration to Glasgow has been easier for some groups than others, Edward suggests that those who find it easier tend to be those who do not constitute a highly visible group - who become invisible by becoming Glaswegian. She notes that becoming invisible in Glasgow is not possible for every migrant group: 'if you are Glasgow Asian [...] the route to equality will have to be found in continued vigilance and positive actions – educational, political or social – rather than in some kind of partial and unwelcome assimilation' (134). Unlike many other migrant groups, Polish migrants in Glasgow are not made visible by any physical characteristics, for example skin colour. Interestingly, in this absence of physical markers of Polishness, a folk mythology exists in St John's that you can tell if someone is Polish by looking at their eyes. Piotr tells me that 'Polish people have darker pupils than Scottish people.

Their pupils are more round'. This belief is held by many of the pupils in the school, both Polish and non-Polish, indicating the importance of Polish identity in the school.

The main way that the Polish community is visible at St John's is in the use of the L1. Throughout my time at St John's, I was acutely aware of the discomfort around the use of Polish in the school. Some teachers actively discourage the use of Polish, voicing concerns that using the L1 might hinder the pupils' acquisition of the L2. At one point, in the school corridor, I overheard one teacher telling a Polish pupil that 'it's rude to speak a language that people don't understand'. Cummins (2001d: 181) states that creating space for pupils' L1 in the school consistently improves academic achievement; however, the belief that use of the L1 impedes the acquisition of the L2 persists in many institutions. This belief may have intensified the stigma around the use of Polish at St John's: many pupils, both Polish and non-Polish, strongly disapprove of the use of Polish, even outside of class time. At the same time, the L1 remains a necessary tool of communication for new arrivals and those who support them, and a desirable tool of communication for pupils who wish to mark Polish identity, create social bonds with other Polish speakers, or express themselves in the language they feel most comfortable in.

Many of the Polish pupils who were met with hostility when they arrived in Glasgow told me that this hostility centred around their use of Polish, their lack of English proficiency, or their foreign-sounding accent. Angelika tells me that the bullying ended when her knowledge of English developed: 'they stopped do that 'cause, eh, now my English is not that bad'. Again, it is important to note that this hostility towards the use of Polish isn't universal: several of the Glaswegian pupils I worked with were very positive about the use of Polish in the school, and some had picked up a few phrases that they used within their friendship groups; one group of Polish and Glaswegian girls use '*kocham cię*', meaning 'I love you', as a greeting.

Nevertheless, in an effort to become less visible, some of the Polish pupils at St John's refuse to use the L1, responding to questions in Polish using English. In a further effort, some also anglicise their names, so that, for example, Piotr becomes Pete. If a student takes these measures, then non-native features in their L2 English are the only marker left of migrant identity; by becoming native-like in the L2, they might be able to

‘blend into the surroundings’ and ‘eventually to become indistinguishable from other Glaswegians’ (Edward 1993: 134). In doing so, they might find themselves subject to less hostility and more welcomed by the host community. They might also risk losing their access to the Polish community, and even aspects of their former identities.

Other Polish pupils respond to the stigmatisation of Polish and the pressures to speak English by frequently and actively using Polish in school. Nikola and Angelika, two participants in the study, discuss approaching and befriending people after overhearing them speaking Polish. The fact that language choice is an important marker of identity in St John’s is evidenced by the fact that the pupils often talk about ‘Polish people’ and ‘English people’ in the school. By ‘Polish people’ they mean people who were born in Poland and speak Polish, but by ‘English people’ they mostly mean Scottish people who use the English language, rather than people who were born in England: linguistic identity subsumes national identity.

In chapter 4 I return to ethnographic observation of Polish identity at St John’s, focusing on how the individual participants in the study place themselves in relation to this identity and community.

### 3.4. Recruitment

#### 3.4.1. *Gaining informed consent*

Ensuring that participants are able to provide informed consent to the research is vital (Crowley 2007: 92), particularly when working with potentially vulnerable groups (Cameron et al 1993: 82). For this project, providing informed consent meant more than simply providing participants with the same information provided to the ethics committee and to the school. I had to provide multilingual explanations of the research, both written and verbal, avoiding difficult terminology, to ensure that participants and their caregivers<sup>16</sup> understood the research and knew what they were agreeing to. When working with participants under the age of 18, the legal responsibility for providing consent passes over to their caregivers (Maguire 2005: 6). However, in this project it was appropriate to seek the written consent of both the participants and their caregivers: although legally considered to be children, adolescents are generally capable of making independent decisions and providing informed consent, and being asked to do so might help to give them a greater sense of control and ownership over the research process.

I first provided a written explanation of the project. I produced separate information packs for caregivers and participants, with the information pack for participants written in simpler language (although I took care to ensure that the language used in the information pack for caregivers was also accessible). Each of the information packs contained an information sheet, a short questionnaire gathering basic demographic information on the participants, and a consent form (see appendices 5-8 for examples from these information packs). An additional consideration at this stage was that some participants and their parents might not have the English language proficiency required to provide fully informed consent (Maguire 2005: 1). I therefore sent information packs in the home language as well as in English (see appendix 8).

In addition to the written information, I also organised face-to-face information sessions, with an interpreter present. These information sessions were offered at several different times and on different days of the week, so that caregivers with a variety of

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<sup>16</sup> The term 'caregivers' is used throughout to refer to parents / guardians / carers, as is considered best practice in Glasgow schools.

work and care commitments would be able to attend. The information sessions had the dual benefit of giving participants and caregivers with lower literacy levels the opportunity to gain a full understanding of the project, and of giving participants and caregivers an opportunity to ask questions and raise doubts.

Where participants are recruited through institutions like schools, and with the help of authority figures like teachers, it is possible that they may feel coerced into taking part in the research (Homan 2001: 332). In the information packs and the information sessions, and throughout my time working with the participants, I made it clear that participation in the project was voluntary, and unrelated to the work of the school. I told them that they were free to leave the study at any time without giving an explanation. Although teachers helped to identify eligible pupils, I approached the pupils by myself, without teachers present. No financial incentives were offered for participation in the study, as this might act as coercion. After the above measures had been taken, I was satisfied that when consent was provided it was fully informed consent.

#### ***3.4.2. The Polish participants***

The EAL staff greatly facilitated my access to the Polish community; their knowledge of the community and their relationships with the EAL pupils in the school were invaluable during the recruitment phase.

I initially employed what Milroy & Gordon (2007: 30) refer to as judgement sampling. I began by laying out specific recruitment criteria, and then identified a number of eligible pupils with the help of the EAL staff. These were the pupils who I invited to take part in my study. Around a quarter of those invited to take part declined: this suggested that those who were agreeing to participate were doing so voluntarily and did not feel coerced. Recruitment was controlled to keep various factors constant across the participants, making it possible to disentangle and examine the role played by length of residency, age at onset, gender and integrative motivation. As noted, I decided only to recruit participants who had been born in Poland and whose L1 was Polish. I also decided not to recruit any pupils with significant experience of using an

L3 alongside Polish and English, and not to recruit any pupils who had spent a significant amount of time in a country other than Poland or the UK, or in an area of the UK other than Glasgow. In other words, potential participants must have moved from Poland to Glasgow directly. As a practical consideration, I decided to recruit only pupils who were in the first young years of secondary education, S1-S4 (ages 11 - 16), in the academic session 2014-2015. As pupils can leave school at any time after S4, working with older pupils would carry the risk that they might leave the school before I completed my research. As a final practical consideration, when asking for help from the EAL staff in identifying pupils eligible for the study, I specified that my participants must be comfortable holding a half-hour conversation in English.

In summary, my recruitment criteria were as follows:

1. In S1-S4
2. Born in Poland
3. L1 Polish, L2 English
4. No significant knowledge of languages other than Polish and English
5. Moved straight from Poland to Glasgow
6. Comfortable holding a half-hour conversation in English

Following the initial recruitment stage, several of the newly recruited pupils asked if friends could take part in the study. Some of these friends were ineligible due to the recruitment criteria, but others formed a second wave of recruits. Therefore, my initial judgement sampling strategy was followed up by an unplanned wave of snowball sampling (Milroy & Gordon 2007: 32). The second wave of recruits included pupils who were not receiving regular support from the EAL staff, and so had not been identified by them as eligible for the study.

I aimed to recruit a relatively even distribution of female and male learners across the four school years, allowing me to examine the role of gender. Achieving this even distribution proved to be challenging: those who agreed to take part in the study were disproportionately female, and it was not until the end of the recruitment process

that I was able to recruit any S3 or S4 boys. However, by utilising the already recruited participants' friendship networks, I was eventually able to access this group.

I initially recruited 21 Polish pupils. As I had anticipated, there were several pupils who left the study for various reasons before I had completed my fieldwork, or who were recorded but did not produce enough speech data for analysis. This left me with a final sample size of 14 Polish participants.

Table 3 details the 14 Polish participants. The recorded ages, year groups and lengths of time spent in Glasgow relate to the 1st of September 2014, when the recruitment phase was taking place.

Speaker	Gender	Age	Year group	Length of residency	Age at arrival
Kamila	F	11y 11m	S1	7 years	4
Dominik	M	11y 11m	S1	7 years	4
Maja	F	12y 1m	S1	7 years	4
Izabela	F	12y 8m	S2	1.5 years	11
Piotr	M	12y 10m	S2	3 years	9
Nikola	F	13y 0m	S2	10 years	3
Adam	M	13y 0m	S1	1.5 years	11
Marek	M	13y 3m	S1	8 years	5
Jan	M	13y 7m	S2	8 years	5
Anna	F	13y 8m	S2	10 years	3
Kinga	F	14y 2m	S3	4 years	10
Szymon	M	14y 11m	S4	5 years	9
Angelika	F	15y 1m	S4	2 years	13
Zofia	F	16y 0m	S4	8 years	8

Table 3: Details of the Polish participants (speakers ordered youngest to oldest)<sup>17</sup>

<sup>17</sup> It is noticeable in this table that the age of the pupil does not always map directly to the year group. This is for two reasons. Firstly, in Scottish education the age bracket for a year group is larger than one calendar year. Pupils whose birthdays fall between December and March can stay in nursery for an extra year or start school as one of the youngest in the year group. Therefore, some S2 pupils will be younger than some S1 pupils. Secondly, some of the Polish participants told me that, on starting school in Glasgow, they were placed in the year below their own age group. Adam, for example, is 13 years old but is in S1. He arrived aged 11, and was placed in Primary 6 instead of Primary 7 to give him some time to acquire the language before starting high school.



Figure 1 shows these demographic details graphically. The x-axis shows the length of time the participants have spent in Glasgow, and the y-axis shows their age at the time of arrival. Some participants share the same length of residency and age at the time of arrival (Adam and Izabela; Dominik, Kamila and Maja; Jan and Marek; Nikola and Anna). In these cases, labels giving the participants' names surround the same data point. Those who have been in Glasgow longer tend to have arrived at a younger age; however as the participants have different current ages (from 11 to 15), there is not a direct relationship between the axes.

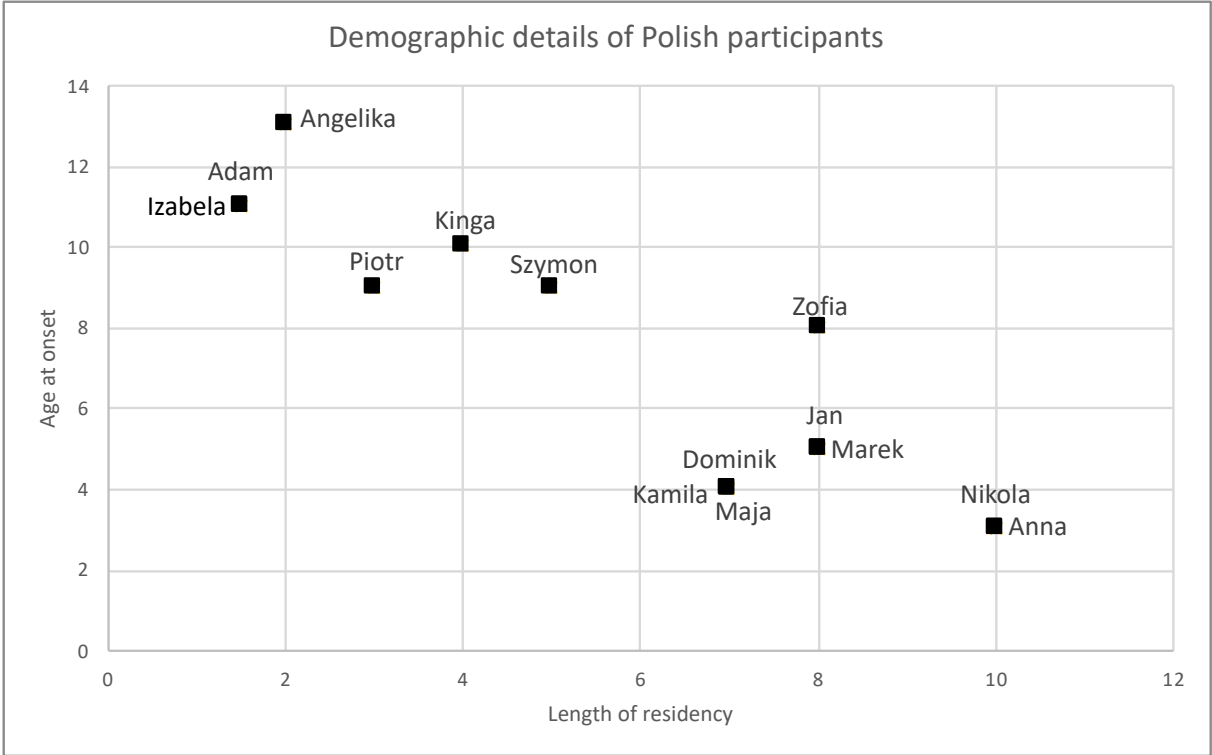


Figure 1: Details of the Polish participants: LoR and AaO

**3.4.3. The Glaswegian participants**

To allow me to examine the acquisition of Glaswegian speech norms by the Polish participants, I needed a snapshot of the speech of their native Glaswegian peers. Although previous research exists on sociolinguistic variation in Glasgow (Macaulay & Trevelyan 1977; Macafee 1994; Stuart-Smith 1999; Stuart-Smith et al 2007), this variation changes rapidly, and each new generation has its own sociolinguistic norms. I

had to ensure that I had a clear and up-to-date picture of the variation in the input my Polish participants were being exposed to. Therefore, I decided that as well as recording the speech of my Polish participants, I would also record the speech of a control group made up of their Glaswegian classmates. The comparison between the speech of the two groups will address my first research question: are L2 learners able to replicate native speaker constraints on use?

After I had recruited my Polish speaker group and invited them to attend the after-school club, I opened up membership of the club to the rest of the pupils in S1-S4, advertising at school assemblies and allocating places on a first-come-first-served basis. I decided that the club would be split into two groups, an S1-S2 group that would be held on Mondays, and an S3-S4 group that would be held on Fridays. This meant that the pupils were mixing with others of their own age-group, and it meant that it was possible to invite a large number of pupils along: 40 members were recruited in total, with 20 in each group. Members included pupils who had been born in Russia, Lithuania, Ghana, Nigeria, America and England, as well as native Glaswegians. Many of the volunteers were friends of the Polish pupils who had already been invited to attend.

From the after-school club members, I selected a subset of seven pupils to become my native Glaswegian control group. As with the Polish speaker group, I formulated a set of recruitment criteria designed to keep various factors constant across the participants. Again, my sampling technique included elements of judgement sampling and elements of snowball sampling: I chose my subset based on a set of pre-determined criteria, but I recruited partially through friendship networks. Because the after-school club had a large number of members, within its membership there was a fairly large pool of pupils who fit the criteria below. From this pool I was able to select my Glaswegian control group. The recruitment criteria for the Glasgow-born group were as follows:

1. In S1-S4
2. Born in Glasgow

3. L1 English
4. No significant knowledge of languages other than English
5. Have not spent a significant length of time living anywhere other than Glasgow

As with the Polish group, I aimed to recruit a relatively even distribution of female and male speakers across the four school years, allowing me to examine the role of gender.

Table 4 details the seven Glaswegian participants who make up the native speaker control group. Again, the participants are arranged by age.

Speaker	Gender	Age	Year group
Callum	M	11y 10m	S1
Laura-Kim	F	12y 1m	S1
Jake	M	12y 1m	S1
Candice	F	12y 5m	S1
Skye	F	13y 6m	S3
Matt	M	14y 5m	S3
Jamie	M	14y 7m	S4

*Table 4: Details of the Glaswegian participants (speakers ordered youngest to oldest)*

### 3.5. Using ethnographic methods

My second research question is: what are the external factors predicting the acquisition of sociolinguistic variation by individual L2 learners? In order to address this question, I need to examine how the participants in the Polish speaker group differ from one another. The key factors of interest are length of residency (LoR), age at onset (AaO), gender and integrative motivation (IM). During the recruitment phase I recorded the participants' LoR, AaO and gender (these are shown in table 3), but investigating IM is more difficult. It is generally quite easy to record the age at which a child began the L2 acquisition process, but it is much more difficult to measure identification with the L2 community (Diskin 2012: 85). Early attempts to tackle this problem include the Attitude-Motivation Test Battery (Gardner & Smythe 1981), a self-report questionnaire designed to assess and quantify social factors which might predict L2 attainment. It is made up of 104 statements, e.g. '[y]ou can always trust native English speakers', and participants are asked to rate their agreement with these statements from 'strongly disagree' to 'strongly agree'. The advantage of this method of measurement (and others like it) is that it allows researchers to test statistically for a correlation between social factors and L2 attainment, and to make reliable comparisons across different contexts. The main drawbacks are that (i) it relies on self-report data, which may reflect how participants want to be seen rather than reflecting their true feelings (Crookes & Schmidt 1991), and (ii) it may be reductive to measure something as complex as IM in this way. Spolsky (2000) writes that 'To attempt to reduce [the participants'] orientation, attitude and motivation to a single scale is clearly distortion. I do not deny the "truth" behind simpler models of motivational and attitudinal effects on language learning, but they remain the bare skeleton' (165).

In response to these drawbacks, in recent decades much of the empirical study of social factors in the acquisition of new languages has moved away from self-report questionnaires and towards qualitative and mixed methodologies (Spolsky & Cooper 1991; Spolsky & Amara 1997; Dittmar et al 1997), often including an ethnographic element (Watson-Gegeo & Gegeo 1988; Lamb 2004). Spolsky, a former user of self-report questionnaires, writes that in his most recent research 'we no longer use written

questionnaires but gather our linguistic data in long interviews that give us an opportunity to explore in conversation and through stories and anecdotes the attitudes, identities, and ideologies of our subjects' (2000: 162). He calls for a triangulation of research methods, including both quantitative and qualitative data in the study of IM (162).

In the current study I adopt a mixed methodology, in line with Spolsky's recommendations. As well as conducting a quantitative variationist analysis of the participants' L2 speech, I use ethnographic methods to investigate and compare their levels of IM.

Ethnography is an approach which developed in the field of anthropology as a way of studying cultures unfamiliar to the researcher (Romaine 1984: 29). Bucholtz (2011) writes that the goal of ethnography is 'to gain an insider's understanding of a local culture' (37). Ethnography tends to be deeply concerned with context, providing an analysis not only of the phenomena being observed, but of the backdrop against which they are being observed (Johnstone 2000: 82). It aims to avoid over-simplifying the messy nature of real-world observation: Eckert (2000) writes that '[s]urvey methodology is designed to avoid this mess; ethnographic methodology is designed to delve into it without losing one's way' (76).

Johnstone (2000) writes that '[e]thnography has always, implicitly or explicitly, been involved in sociolinguistic work in the Labovian quantitative paradigm' (84); however, this involvement was far less explicit prior to the work of Eckert in Belten High (2000). While the use of ethnographic methods in qualitative sociolinguistics was widely discussed in the 1960s and 1970s (Hymes 1964; Blom & Gumperz 1972), explicit discussion of the use of ethnographic methods to investigate sociolinguistic variation (work in the Labovian quantitative paradigm) began more recently, largely led by Eckert (2000). In this study, Eckert collected observations through an extended period of participant observation. She found that her ethnographically-informed analytical framework, based on the local knowledge of her participants, was more effective in explaining local language use than the broad sociodemographic categories used in many studies of sociolinguistic variation. Instead of explaining sociolinguistic

variation using e.g. social class or gender, she was able to explain it using the local identity categories of ‘jock’ and ‘burnout’, which she had become aware of through her ethnographic observation. Other studies which explicitly use ethnographic methods to investigate sociolinguistic variation include Moore (2003), Mendoza-Denton (2008) and Lawson (2009) (implicit uses of ethnography include Labov 1963; Milroy 1980 and Cheshire 1982).

Participant observation is the method most commonly used in ethnographic research. The theory behind this method is that if a researcher is to see through the eyes of the people being studied, they cannot merely observe, they also need to participate in the lives of those they are observing (Bryman 2012: 432). To do participant observation, a researcher needs to engage in activities alongside the people being studied. Romaine (1984) states that in participant observation studies:

the fieldworker attempts to become a participant in a group in order to describe the behaviour of it [...] We might say that participant observation differs from ordinary “anonymous” observation by being characterised as observation from the inside out rather than outside in (29).

By running an after-school club at St John’s, and by bringing in external staff so that I was in attendance as a member of the club rather than as an authority figure, I was able to engage in an extended period of participant observation. In doing so, I attempted to learn about the participants’ lives ‘from the inside out rather than outside in’ (Romaine 1984: 29). I took part in the after-school club activities with the participants, working alongside them. Together we learned how to play samba drums, how to create realistic bruises with make-up and how to make paper lanterns. We made a short film together, played computer games, and wrote songs. This co-activity between observer and observed is characteristic of the participant observation method used in ethnographic research. It allowed me to become a temporary part of their lives, and in doing so I was able to normalise my presence as an observer, thus mitigating the effects of the Observer’s Paradox to some extent (Lawson 2009: 85-86). I spent an extended period of time at the school (a year and a half in total, with eight months spent at the after-

school club). At all times, I aimed to follow the key principles of ethnographic observation. I tried not to oversimplify the messiness of real-world data, or to ignore internal contradictions. I aimed to learn about my participants' viewpoints instead of imposing my own.

Ethnographers are encouraged to consider their own positionality, and what they bring to the field based on their own experience (Chiseri-Strater 1996). This meant revisiting my own high school experience. My high school was in Edinburgh rather than Glasgow, but in many ways it was very like St John's. The majority of pupils at the school spoke a variety which was very different from the Scottish Standard English (SSE) we were expected to use in the classroom. With a high proportion of pupils from settled traveller backgrounds, we used some variants from Scottish Cant - e.g. the lexical variants *shan*, an adjective meaning 'unfair' and expressing sympathy, and *chore*, a verb meaning 'steal' (Kirk & Baoill 2002: 129) - as well as Edinburgh Scots. Our teachers generally disapproved of the use of language other than SSE, and they would correct us, or pretend not to understand stigmatised lexical items. Having experienced this type of sociolinguistic environment firsthand, I have some understanding of the complicated relationship the pupils at St John's have with sociolinguistic variation. We knew that many local variants were frowned upon as 'slang'; but while it was embarrassing to be told off by teachers for using them, it would be equally embarrassing to be someone who used SSE at all times. Nobody wanted to sound posh.

While at school, I had an awareness of the status and treatment of SSE and Scots; however, I rarely considered the status and treatment of other languages. In general, while I was there, I thought of the school as being relatively monolingual and monocultural. Reflecting back though, I can remember the whispered phone conversations my friend Nathan had with his dad in Cantonese; when we learned about Palestine in geography and Ally mentioned that he had been born there; when Luke, who we had all assumed was Scottish, moved back to Slovakia. At the time, these seemed like anomalies. We were all Scottish, except occasionally when we weren't. But the school wasn't monolingual or monocultural, it's just that our diversity was largely hidden from view. We didn't talk about it, most people hid it when they could, and being multilingual was definitely not cool. When we learned French, we stubbornly

spoke it through our Scottish accents, no matter how much our teacher rolled her eyes and told us that we could sound French if we just *tried* to. I had grown up with a Polish mum, and actually spoke a little Polish, but I didn't tell anyone that.

St John's differs from my own school in important ways: the most striking is that some of the Polish pupils at the school actively resist assimilation, use their L1 publicly and consider being Polish as an important part of their identities. Having experience of being a pupil in a similar, but slightly different, school environment gave me a solid framework from which to begin exploring IM at St John's. However, as an ethnographer it was important that I keep an open mind, and try to observe St John's without making assumptions based on what I expected to see. I carried my own high school experience with me, but I held it at arm's length.

I used ethnographic interviewing to supplement the qualitative data gathered using participant observation (in section 3.6. I refer to these interviews as 'the conversation context'). In ethnographic interviewing, the interviewees are encouraged to guide the topic. The aim is that some of the power and control which usually resides with the interviewer is passed to the interviewee (Eckert 2000: 80). Moore (2003) points out that asymmetries in power can block access to local knowledge in interview contexts, and particularly in educational contexts.

as the questioner, the researcher is placed in an obvious position of power over the informant. This power asymmetry may be of particular concern when the interviewee is a schoolchild. Teachers will often ask questions with a very specific answer in mind, sometimes giving the impression that the only 'right' information is that which they are seeking (despite the fact that their question may be adequately answered in a variety of ways). It is possible that this leads children to respond to adult questioning in a strategic way, and their response may very well depend upon their willingness to acquiesce with adult demands – either they may provide the answer they think the adult wants to hear (rather than what might have been an unfettered response), or they may deliberately subvert what they believe the adult's expectations are and provide a facetious response.



Either way, structured questioning involves complicated power asymmetries that a researcher might be as well to avoid (46).

In my ethnographic interviews I was careful to avoid question-and-answer format, and encouraged my participants to guide the conversation as much as possible. I also conducted these interviews after the participants had known me for around a year, and we had built up a rapport. Even with these considerations in place, my ethnographic analysis (chapter 4) maintains an awareness that the participants may have been, at times, responding to my perceived expectations of them as an adult.

Moore (2003) notes that a school can be a particularly challenging place to do ethnography: '[b]ecause of the authoritarian role of staff in the school, kids are deeply suspicious of adults who show interest in their activities' (31). This was true of some of the participants initially - particularly Dominik, Adam, Nikola and Piotr, who spent a period of time trying to work out my motivations and interest in them before they would speak to me openly. However some of the other participants opened up very quickly. Over time, even the more suspicious participants became used to my presence, and became comfortable talking to me about themselves and their lives. As my research progressed, I was able to persuade my participants that I was genuinely interested in what they had to say, and that I wanted to know about their opinions and ideas. As they became aware of this, the barrier between us decreased. Many of the participants became engaged in a process of showing me their world; accessing local knowledge and gaining an insider perspective came to be much easier than I had anticipated, as many of the participants were as eager to facilitate the process as I was to engage in it (Eckert 2000; Moore 2003).

Using ethnographic methods, I was able to find out how the Polish participants differed from one another in their identities, friendship networks and feelings of belonging in Glasgow. In chapter 4 I describe each of the participants in turn, and group them according to their levels of IM. Then, in chapters 5 - 7, I ask whether IM correlates with their acquisition of sociolinguistic variation in the L2.

### **3.6. Recording speech data**

In this study, I explore not only whether the Polish participants are using local variants in the L2, but also whether they are acquiring the patterns of use shown by their Glaswegian peers. Previous research has shown that L1 speakers ‘use different ways of speaking in different situations’ (Kiesling 2011: 90) and with different interlocutors (Bell 1984). In order to test whether the Glaswegian control group shift their rates of use in different contexts, and whether the Polish learners follow suit, I collect speech data from the following three speech contexts:

1. The peer-group context: the participants interact with their peers in an after-school club (section 3.6.1.)
2. The conversation context: ethnographic interviews in which the participants speak to me about their lives (section 3.6.2.)
3. The interview context: more formal interviews in which the participants are interviewed by Dr. Evelyn Arizpe, my second supervisor, and asked to answer more classroom-style questions (section 3.6.3.)

These three contexts are described in detail below.

#### ***3.6.1. The peer-group context***

The majority of the research was conducted at an after-school club, set up for the project. This provided an opportunity to record the participants interacting with their peers in an informal setting. Labov (1972) discusses the difficulties with recording casual speech: the very fact that a situation is being recorded or observed by a researcher makes the situation feel more formal to the participants, encouraging them to adopt a more formal speech style. He refers to this as ‘the Observer’s Paradox’ (209). When Labov was conducting his early sociolinguistic studies in the 1960s and 1970s, this problem was exacerbated by the available technology: it was necessary for sociolinguists to record their participants sitting at a table and speaking into a

microphone, a situation which is inherently formal and interview-like. As speech recording technology has developed, recording informal interaction has become easier: microphones can now be very small and lightweight, and don't need to be physically attached to a recording device, meaning that participants don't always need to be recorded sitting down with the equipment in front of them. In the peer-group recording context, I took advantage of the availability of mobile recording equipment. This allowed my participants to be recorded while moving around and engaging in various activities and interactions (Smith et al 2007: 68). I used 6 Audio-Technica 2000-series headset radio microphones, each worn by one of my participants. These microphones transmit wirelessly to receivers, which I fed into a Zoom R16 multi-track recording device. Using this set-up, I created a separate sound file for each speaker in each session. The headsets were lightweight, and the microphone could be positioned to be outside of the speaker's field of vision while still recording high-quality speech data.

This recording set-up was useful for mitigating the effects of the Observer's Paradox. I was able to record the participants while they were engaging in a program of activities with their friends. The activities were designed to be as engaging, lively and fun as possible, and this distracted the participants from the fact that they were being recorded. While they were being recorded, the participants were dancing, painting 'tattoos' on each other, making sculptures out of tin foil, and engaging in a range of other activities. The after-school club sessions were also deliberately fairly long, at two hours each: in a longer recording session a participant will have more time to relax and acclimatise to the situation, potentially further mitigating the effects of the Observer's Paradox. The workshop leaders were given a mandate in planning their activities: the participants were to be given a high degree of freedom, and the activities were to be fairly unstructured, allowing the participants lots of time to talk, so that their conversation might deviate from the central tasks they had been given. The after-school club ran for two months before recording began.

It was important that the participants did not view the after-school club as an extension of the classroom. To this end, it was staffed by freelance workshop leaders who run creative projects for young people but who are not themselves classroom teachers. For the same reason, I avoided using a classroom space for the club. After

investigating spaces in the school and speaking to the participants, I decided to use the school library. This was suitable as the participants use the library as a social space during breaks and lunchtimes, meaning that they view it as a playground-like space rather than a classroom-like space.

I used the after-school club as an opportunity to record the pupils interacting with their peers in an informal setting, but also as an opportunity for me to engage in a period of participant observation with the pupils. I attended the club and took part in activities alongside the pupils, as a way of getting to know them and learning about their world, with a particular focus on integrative motivation. I didn't take a role in the organisation of the activities, and remained a member of the club only, not a member of staff.

The speech recordings from the after-school club mostly consist of interaction between the participants and their peer-group, often with no adults present. There is also some interaction with me and with the workshop leaders; however this adolescent-to-adult speech is removed from the quantitative analysis - only speech within the peer-group is marked in the transcripts as belonging to the after-school club context. The after-school club speech data, therefore, is made up of interaction within the adolescent peer-group, with the majority occurring out of earshot of myself and other adults (Reid 1978: 160; Edwards 1986: 76). Referring to data collected by Stuart-Smith et al (2007), Macaulay (2006) writes that 'The technique of recording unsupervised conversations [...] provides samples of adolescent speech that reveal patterns that might be hard to obtain from interviews conducted by adults' (281).

As more than half of the 40 pupils who attended the club were not Polish speakers, the majority of the interaction is in English, and it is the interaction in English which is analysed. Between the Polish speakers in the club, switches occur between the L1 and the L2, as is the norm in informal interaction between speakers who share multiple languages (Mendoza-Denton 2008: 109). Choices between the L1 and the L2, and switches from one to the other, are noted and discussed in chapter 4, but do not form the main part of the analysis.

My fieldwork diary contains notes on the participants' behaviour in the after-school club which strongly suggest that they viewed the setting as an informal playground-like context. They exercised the freedom they were given, often expressing

a desire to do something other than the activity suggested by the workshop leader (the workshop leaders indulged these desires whenever possible).

*Extract from fieldwork diary entry 11.09.14.*

Jan and Cameron couldn't sit still today. Craig's film-making workshop involved planning a script, but they wouldn't stop laughing and shouting and couldn't focus. They asked if they could play computer games and he agreed. Craig did the script planning with the others and I stayed with this group. Jan and Cameron played computer games at the computer bank around the corner, out of sight and mostly out of earshot (although we could hear them laughing from where we were).

In the speech recordings, the participants can be heard shouting, screaming, gossiping swearing, laughing, teasing, fighting, singing and even crying. Their conversations are animated and often unrelated to the central tasks they have been given to do. This suggests that the above methodology allowed for the successful recording of naturalistic interaction within the peer-group.

The after-school club ran from September 2014 until May 2015, with speech recording beginning in November 2014. Figures 2-13, below, are images from the after-school club, either of activities taking place or of artwork produced by the after-school club members. No photographs were taken which might identify the participants. The images are reproduced in chronological order.



Figure 2: A paper lantern by Kamila

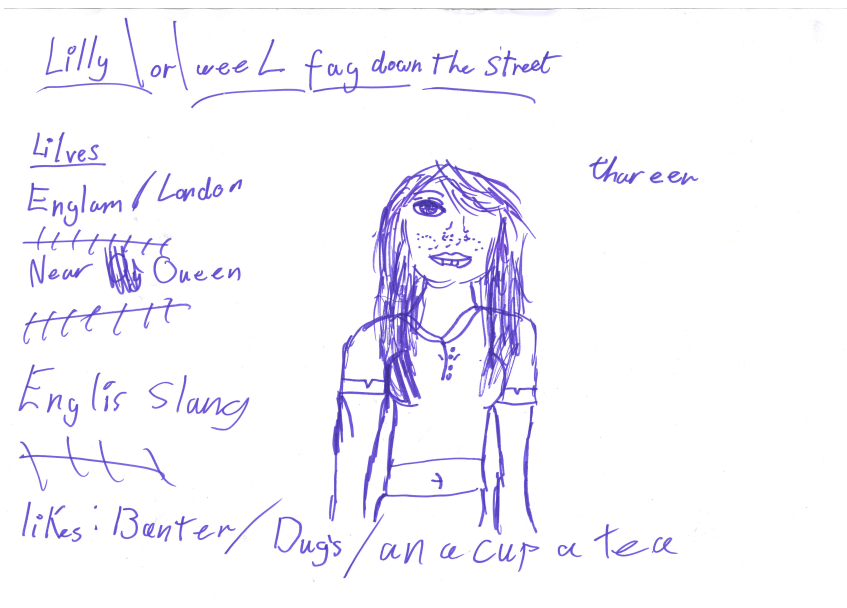


Figure 3: Notes on a character for the film project, by Candice and Laura-Kim

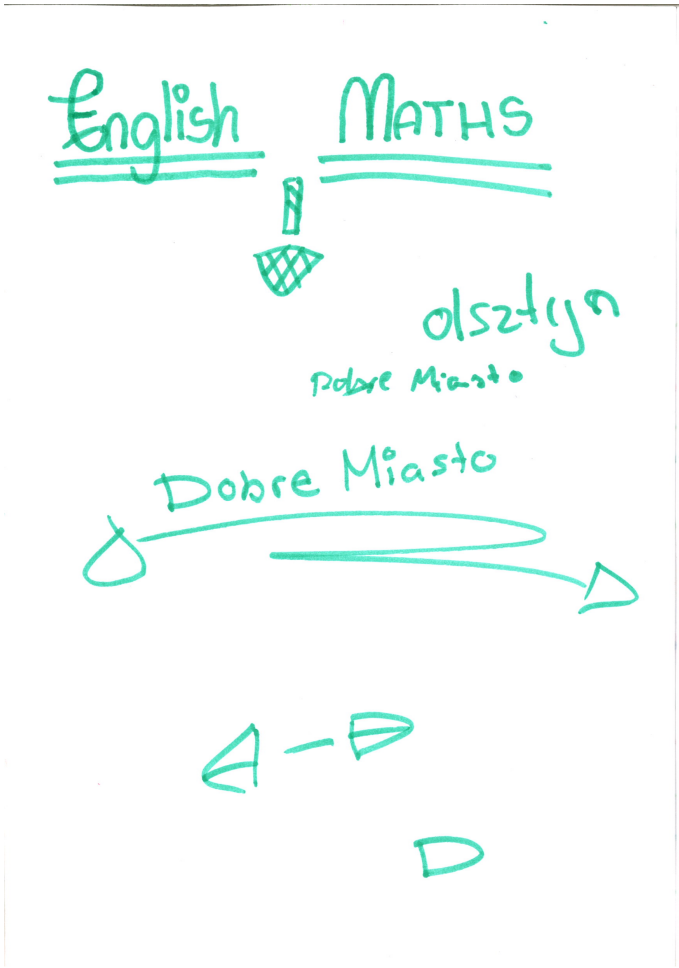


Figure 4: A multilingual doodle by Kinga

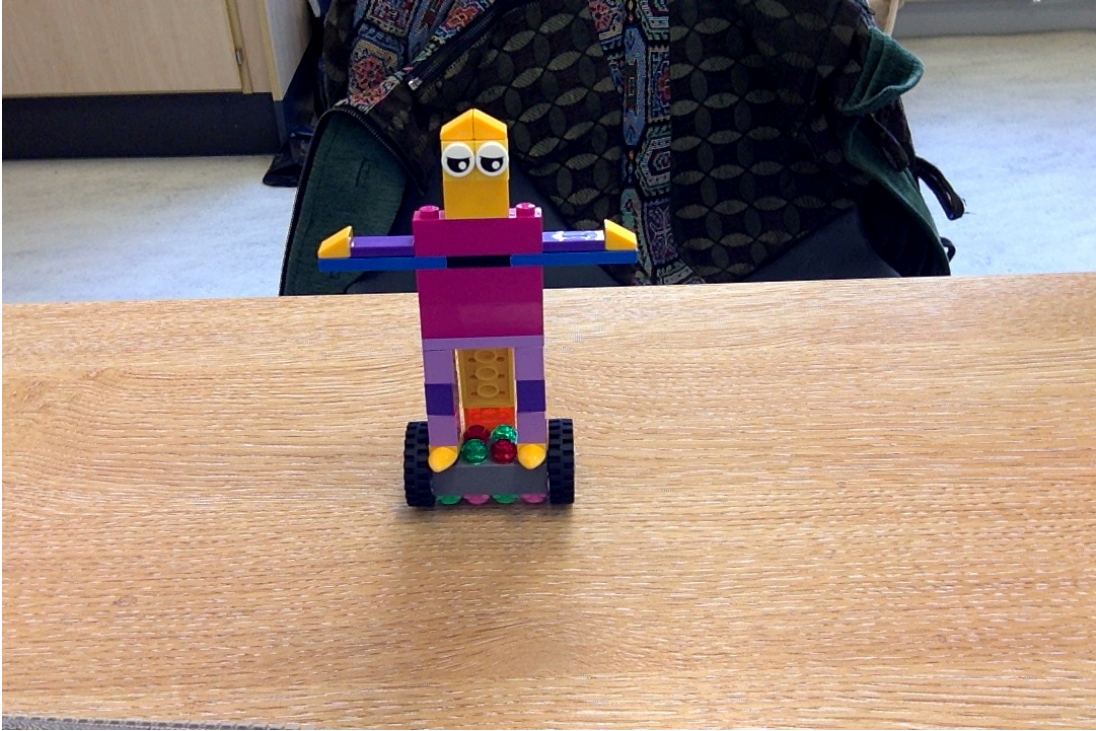


Figure 5: A 'tattoo' by Skye





*Figure 6: A workshop in how to do special effects make-up (pictured: zombie nails)*



*Figure 7: A Lego man on a Segway, by Dominik*





Figure 8: A robot built by Szymon and Jamie

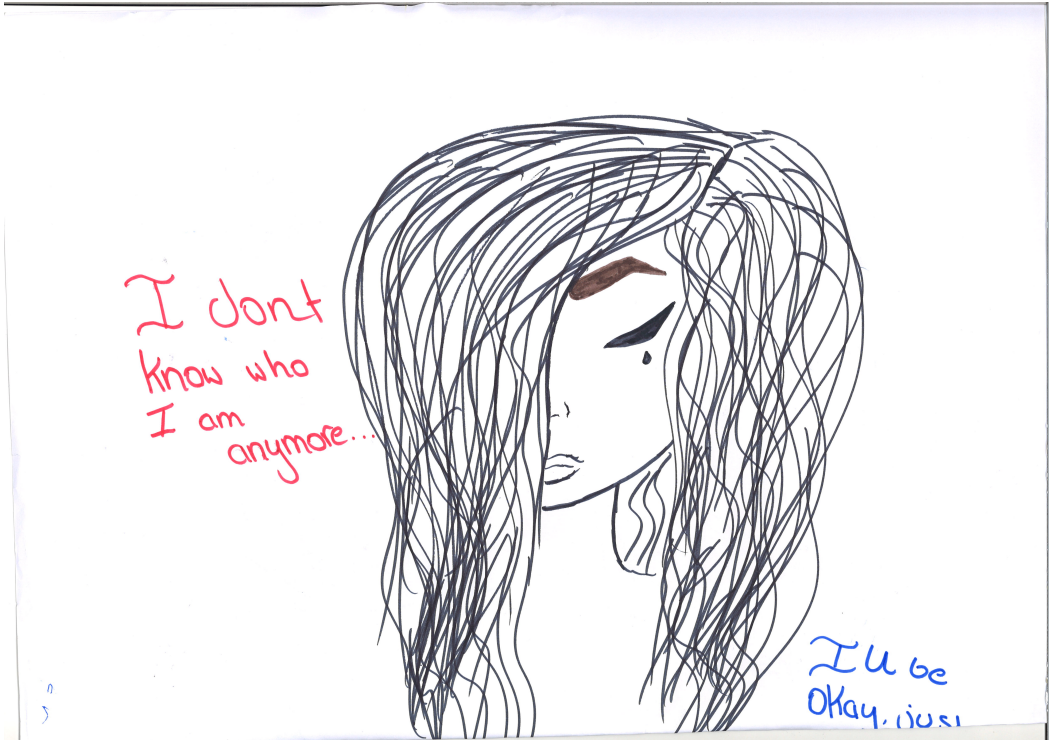


Figure 9: A drawing by Skye



*Figure 10: A tin foil flower, by Nikola, Anna and their friend Agnieszka*



*Figure 11: Monster-themed bookmarks*



Figure 12: A poster on the theme 'what is home?', by Maja and Kamila

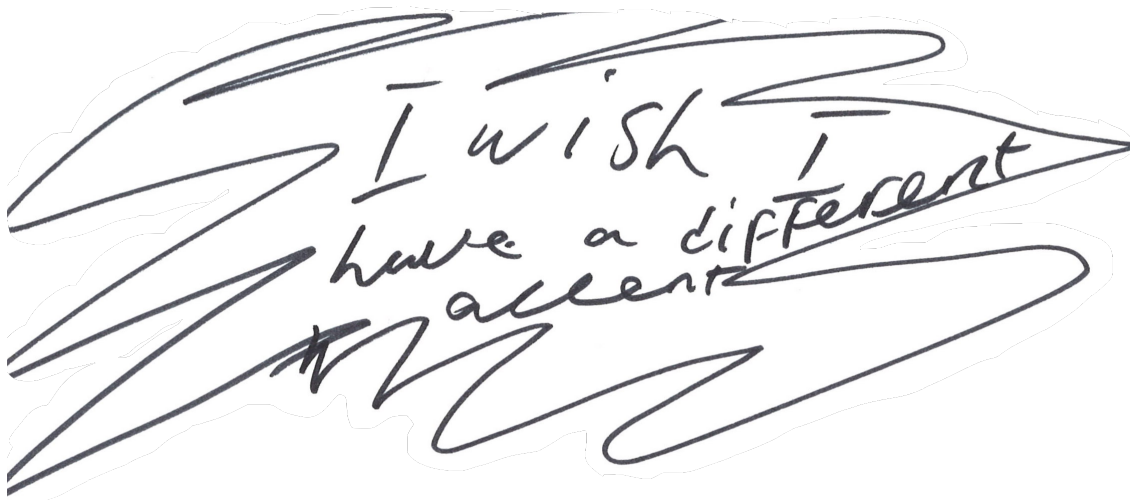


Figure 13: A doodle by an after-school club member who recently moved to Glasgow from Nigeria

### ***3.6.2. The conversation context***

The conversation context consists of a set of ethnographic interviews between me and the participants. This recording context was designed to allow me to:

1. Test whether the participants alter their rates of local variants between the peer-group interaction in the after-school club and this slightly more formal social context
2. Gather large quantities of narrative-style speech data
3. Gather qualitative data on IM to supplement that gathered through participant observation at the after-school club

In terms of formality, this interview context acts as a midpoint between the informal after-school club context and the more formal interview context.

The majority of the conversations were recorded in May 2015, after the after-school club data had been recorded. At this point the participants knew me quite well (I had first visited the school in May 2014, so most had known me for around a year). This slightly decreased the formality of the situation, as I was no longer a stranger to the participants. It made it possible to collect rich qualitative data, as the participants were happy to talk freely to me by this point. However, the techniques used in the after-school club setting to mitigate the effects of the Observer's Paradox - the participants' mobility, the activities, the length of the recording sessions, the use of a non-classroom space - were not employed in the conversational context. Instead, we sat at a table together in a small interview room.

These interviews were unstructured and I encouraged the participants to take the lead. In this sense, they might be better termed conversations than interviews. The participants were able to talk to me about whatever they wanted. They often used these recording sessions as an opportunity to update me on events in their lives, complaining about friends, teachers and family members. Each conversation lasted around 30 minutes.



Bell (1984) writes that ‘at all levels of language variability, people are responding primarily to other people. Speakers are designing their style for their audience’ (197). Another crucial difference between these recordings and the after-school club recordings is the difference in interlocutor. As noted, the after-school club speech data is made up of interaction within the adolescent peer-group. In the conversation context, the participants were interacting solely with me on a one-to-one basis; and although I was no longer a stranger to them at this point, they were still interacting with someone who was by no means a member of their peer-group. As well as this, my own speech is not Glaswegian: having grown up in Edinburgh, I sound Scottish but I don’t sound like a member of their local community.

There is evidence from my fieldwork diary to support the positioning of this speech context as a midpoint of formality, between the after-school club context and the more formal interview context. My notes show that the participants’ extralinguistic behaviour in this recording context varied widely from person to person. Some participants, particularly the younger boys (e.g. Jan and Dominik) appeared to view this context as fairly formal: they sat up straight and stayed still, and they allowed me to guide the topics of conversation rather than introducing their own. The majority of the participants, however, and particularly the older ones, appeared to view the situation as a relatively informal one: their body language suggested informality - for example they swung on their chairs - and they guided the topics of conversation, sharing details of their lives that were important to them.

*Extract from fieldwork diary entry 05.05.15.*

Recorded my conversation with Szymon. He told me all about his body-building routine, how he’s started going to (underage) clubs, how he’s thinking about becoming a YouTuber, how he might move to a different school, how he’s going to move to America one day, and lots about people he doesn’t get on with in school. Couldn’t get a word in edgeways.

### ***3.6.3. The interview context***

In this context, the participants were interviewed by Dr. Evelyn Arizpe, my second supervisor. This is the most formal of the three recording contexts; its addition allows me to examine code-shifting behaviour across a broad range of speech contexts.

These interviews were conducted between May 2015 and November 2015. Again, this context is differentiated from the others by interlocutor as well as by formality level. Evelyn came to the school as a complete stranger to the participants and a community outsider: her interviews with the participants were her first interaction with them. She is originally from Mexico and is an L1 Spanish speaker. Therefore, while the after-school club data shows the participants interacting in a group where the dominant variety is Glaswegian dialect, and the conversations with me show the participants interacting with someone using a Scottish variety other than Glaswegian, the interviews with Evelyn show the participants interacting with a non-native speaker of English.

The set-up for this recording context was similar to the conversation context: the same room and recording equipment were used. The participants were asked to sit across a table from Evelyn (in their conversations with me we often sat next to each other on one side of a table). The interview style also differed from the conversation context. In the conversation context I encouraged the participants to lead the discussion: our talk was informal, and topics were often introduced by the participants. Evelyn's interviews, on the other hand, were designed to mimic the formal classroom situations experienced by the participants. Before each interview, the interviewee was asked to look over a picture book in a waiting room next door. The picture book is one that Evelyn uses to work with younger children who are learning English in Glasgow. The participants were told that Evelyn was interested in their ideas about the book - whether it might be useful to someone learning English, and how a teacher might use it. When the participants were brought into the room, Evelyn asked them a series of questions about the book. On occasion the discussion would move on to other related areas - the participants' migration experience, their reading habits, their attitudes towards school, their social networks and their families. However, the topics tended to

stay centred around the book, and the tone tended to remain fairly formal. The situation was generally classroom-like, and the participants appeared to respond to it as such. Compared to the other contexts, in the interview context their behaviour was closer to the behaviour expected in the classroom: they sat up straight and stayed fairly still, they answered the questions asked of them, and they allowed Evelyn to guide the conversation.

Each interview lasted around 30 minutes. Laura-Kim and Matt were unable to be interviewed by Evelyn, due to absence on the days that she was visiting the school.

### 3.6.4. Summary of speech data recorded

Table 5, below, provides a summary of the data collected.

Speech context	Dates	Formality level	Interlocutor	Location	Approx. number of hours collected	Approx. number of words per hour
After-school club context	September 2014 - May 2015	Informal	Peer-group	School library	168 (8 hours per speaker)	800
Conversation context	Mostly May 2015	Midpoint	Me	Interview room	10.5 (30 minutes per speaker)	2,500
Interview context	May 2015 - November 2015	Formal	Evelyn	Interview room	10.5 (30 minutes per speaker)	1,500

*Table 5: Summary of speech data collected*

Ethnographic interviews were also conducted with some members of the after-school club who did not become part of the speaker sample (either because they did not fit the recruitment criteria or because they did not attend enough after-school club sessions), and with several teachers in the school who were involved in facilitating my research, and who were happy to tell me about their perspective on the school environment, language and social integration at St John's. The set-up for these interviews was the same as the conversation context. These interviews provide background and context, and are used in the qualitative analysis of IM. These data are not included in the above table.



### 3.7. Sociograms

I recorded participants' friendship networks using sociograms (Eckert 2000: 80; Mendoza-Denton 2008: 241). The sociograms were gathered using a self-report methodology. I sat down with each of the Polish participants and began by showing them my own sociogram, before asking them to draw theirs for me.

Below is an outline of what I asked the participants to do.

1. Write your name in the middle of a blank sheet of paper
2. Around your name, write the names of the most important people in your life<sup>18</sup>
3. Add coloured circles to indicate what languages you use with the people on the sociogram:

Yellow for people who you speak mostly Polish with

Orange for people who can't speak Polish

Bright red for people who you use Polish and English with, with a roughly even split between the two languages

Dark red for people who you speak mostly English with, even though this person can speak Polish

I recorded the conversation while the sociogram was being drawn, and added my own notes to give context to the images. This methodology (i.e. a visual diagram of names which are colour-coded) was chosen because the participants were able to easily understand and follow the instructions, and because it created a clear visual image of the participants' friendship networks and language use, easily comparable across individuals. The participants' sociograms are reproduced in chapter 4, anonymised but with the colour-coding preserved.

It is important to note that the sociograms show only what the participants have chosen to show me; however, I will treat this potential insight into how the participants want to be seen as valuable qualitative data in itself.

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<sup>18</sup> During this stage I asked for additional information and clarification, e.g. Which people are family members? Which people are at the school?

### **3.8. Preparing the data for analysis**

#### ***3.8.1. Transcription***

A large quantity of speech data was collected, 189 hours in total. The number of words per hour varied greatly across the three speech contexts, and also across the 21 speakers (14 Polish and 7 Glaswegian). I chose to transcribe a roughly equivalent number of words across each speaker and context. The transcription targets were set as follows.

For each speaker:

1. Everything from conversation and interview contexts to be transcribed, regardless of word count
2. A minimum of 2,000 words of peer-group interaction to be transcribed
3. A minimum total of 6,000 words to be transcribed across the three speech contexts

For some speakers, the two full interviews plus the minimum 2,000 words of peer-group interaction totalled more than 6,000 words. For one speaker, Dominik, the total word count is slightly below the target (Dominik was recorded over a large number of hours, but tended to speak very little). Where I was able to select which of the peer-group recordings to transcribe, I transcribed those that had been recorded later, after the participants had spent more time attending the after-school club so that it had become more a part of their routine, and after my presence in the school had been somewhat normalised.

The transcription was carried out by myself and a team of three transcription assistants, using a transcription protocol based on that used by Smith & Holmes-Elliott (2016), but adapted to the purposes of the current study. The transcription protocol is included as appendix 9. The initial transcription was orthographic. Lexical, morphological, syntactic and discourse-pragmatic variation were included in the transcripts at this stage, but not phonetic and phonological variation. The non-standard forms which were given their own representations were those which could not easily be

represented using standard orthography. This included local forms, non-dictionary items, malapropisms and idiosyncratic word forms. The transcribers were instructed to note these down and submit them with their completed transcripts, as well as any decisions taken where multiple spelling or hyphenation options were available. A list was compiled to ensure representations were consistent across the transcripts. An extract from this list is included as appendix 10.

Only the speech of the person wearing the microphone was transcribed: voices audible in the background were ignored. We used Transcriber, a free software package for segmenting, labelling and transcribing speech (Boudahmane et al 2008). A screenshot of a Transcriber file is included as appendix 11. Using Transcriber, we created a searchable text-to-sound synced corpus, linking segments of the sound files with their corresponding orthographic transcriptions. The transcription was carried out between May 2015 and April 2016.

Table 6, below, provides a summary of the data transcribed.

Speaker	Words transcribed from peer-group context	Words transcribed from conversation context	Words transcribed from interview context	Total words transcribed
Adam	5,383	995	367	6,745
Izabela	6,788	2,730	1,596	11,114
Angelika	2,881	2,144	1,781	6,806
Piotr	3,545	3,135	2,591	9,271
Kinga	5,722	981	2,100	8,803
Szymon	2,251	5,933	2,738	10,922
Kamila	7,615	1,035	1,118	9,768
Dominik	2,834	870	505	4,209
Maja	2,524	4,079	2,524	9,127
Marek	4,058	1,280	877	6,215
Jan	6,423	2,025	903	9,351
Zofia	5,806	5,069	2,642	13,517
Anna	3,716	527	1,090	5,333
Nikola	6,393	1,011	1,853	9,257
Total in Polish group	65,939	31,814	22,685	120,438
Callum	2,601	4,116	997	7,714
Laura-Kim	3,599	2,982	--	6,581
Jake	2,354	6,648	4,690	13,692
Candice	7,450	4,056	1,219	12,725
Skye	4,903	5,851	1,893	12,647
Matt	4,498	5,516	--	10,014
Jamie	3,157	3,875	1,306	8,338
Total in Glasw. group	28,562	33,044	10,105	71,711
Total in both groups	94,501	64,858	32,790	192,149

Table 6: Summary of speech data transcribed<sup>19</sup>

<sup>19</sup> As noted, Laura-Kim and Matt were not interviewed for the interview context as they were absent on the days that Evelyn visited the school

As table 6 shows, the searchable database to be used for quantitative analysis comprises of 192,149 words.

### **3.8.2. Anonymisation**

The transcription phase was also taken as an opportunity to anonymise the data (Rock 2001). The transcription team were instructed to leave out anything that might identify the speakers. This included:

1. All real names (including names of pets, which might act as local identifiers)<sup>20</sup>
2. All addresses and local landmarks (e.g. street names, the local shopping centre, the name of the school)
3. All phone numbers, email addresses, and usernames (e.g. Snapchat names, Instagram names and Facebook names)

The above steps were designed to make it impossible to identify the participants. However, as an additional consideration, we also removed anything considered to be sensitive information about the participants or about other people known to them. When something came up, myself and the transcribers discussed it to decide whether to remove it: where necessary, I also spoke to the pastoral care staff at the school about possible causes for concern. After the transcription phase, the transcribers listened to all of the sound files again in Audacity (Mazzoni 2012), and silenced the corresponding sections of the sound files, so that confidential and sensitive material would not be accessible in either the transcripts or the sound files. This step was taken in order to make the data usable for presentations, and sharable with other researchers, without damaging the participants' anonymity.

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<sup>20</sup> My name and the names of celebrities were left in.

### ***3.8.3. Selection of variables for quantitative analysis***

My third research question is: do L2 learners acquire different sociolinguistic variables in different ways? In order to ask this question, I need to compare a range of sociolinguistic variables. Section 2.3. suggested that the differences in the ways that different variables are acquired may be accounted for by constraint complexity and speaker awareness. The acquisition of variables which are highly-constrained may differ from the acquisition of variables which are not highly-constrained, and the acquisition of variables which are high in speaker awareness may differ from the acquisition of variables which are low in speaker awareness. To investigate this, I needed to select a set of variables which differ from each other in terms of constraint complexity and in terms of speaker awareness.

Trudgill (1986: 25) suggests that we may be able to predict a variable's level of speaker awareness based on its level of the grammar. He suggests that lexical variation is highest in speaker awareness, and that variation which involves a phonological contrast is likely to be higher in speaker awareness than variation which does not involve a phonological contrast. Variables from different levels of the grammar also tend to differ in constraint complexity (Milroy 2007: 170). Therefore I select variables from different levels of the grammar in order to examine the role of constraint complexity and speaker awareness in the acquisition of L2 sociolinguistic variation.

1. *Aye* (lexical)
2. Scots negation (morphophonological)
3. Word-final glottal replacement (phonetic)
4. Word-medial glottal replacement (phonetic)

I also examine a range of morphosyntactic and discourse-pragmatic variables. Predictions on speaker awareness with morphosyntactic and discourse-pragmatic variation are mixed: Kerswill & Williams (2002) suggest that these variables have ‘varying levels of salience’ (104). For the morphosyntactic and discourse-pragmatic variables examined in the current study, low token counts preclude full quantitative analysis, so that only qualitative comment is possible.

5. a. Verb formation (morphosyntactic)
- b. Agreement patterns in plural existentials (morphosyntactic)
- c. Plural demonstratives (morphosyntactic)
- d. Plural second person pronoun *youse* (morphosyntactic)
- e. Intensifiers (discourse-pragmatic)

#### ***3.8.4. Creating an NVivo database***

During the participant observation period, I kept a fieldwork diary, in which I wrote notes about incidents that occurred during my visits to the school, and interesting interactions that occurred while a speaker was not being recorded. A fieldwork diary can take whatever form is most useful to the ethnographer. Bryman (2012) writes that ‘ethnographers have to take notes based on their observations. These should be fairly detailed summaries of events and behaviour and the researchers’ initial reflections of them’ (447). I wrote these notes after the participants had gone home, so as not to draw undue attention to the observation process.

*Extract from fieldwork diary entry 26.01.15.*

I spoke to Julia, who is Swedish, and Mary, who is Nigerian. Julia arrived from Sweden in August, having learned English in Sweden. A few months on, she sounds noticeably Scottish. I commented on this and she said ‘it’s about who you surround yourself with’.

Julia and Mary commented on my accent.

Mary: ‘You don’t sound Scottish. You sound a bit English. You don’t sound like

people from here.’

Julia: ‘No, she isn’t English, she just enunciates.’<sup>21</sup>

These notes, along with the transcripts of my ethnographic interviews with the participants (the conversation context), form the qualitative data to be used in my analysis of integrative motivation.

From early in the data collection phase, I began to collate my qualitative data using QSR International’s NVivo 10 for Mac, a computer program designed to facilitate qualitative analysis. Essentially a databasing tool, NVivo works by allowing the user to input documents (in my case, my fieldwork diary and transcripts) and code them. NVivo’s system of qualitative coding involves selecting sections of text and linking them to ‘nodes’, or topic headings (e.g. *experiences of hostility* or *attitudes towards use of the LI*). Once a series of documents have been input and coded, selecting a node will bring up all of the sections of text which the user has linked to that node. The user can assign the same section of text to several different nodes, creating connections between these nodes. The nodes can also be arranged in hierarchies (e.g. *attitudes towards use of the LI* as a top-level node, with *negative* as a sub-heading on the level below) (Bryman 2012: 596-606). This coding system is designed to facilitate qualitative analysis of a large dataset; NVivo does not actually produce anything new for the user, but it allows the user to explore their data and find connections within it. See appendix 12 for a screenshot from my NVivo database.

### ***3.8.5. Summary of data to be analysed***

For quantitative analysis:

- Searchable text-to-sound synced corpus: 192,149 words

For qualitative analysis:

- NVivo database including fieldwork diaries and all of the transcripts included in the quantitative analysis, plus transcripts from ethnographic interviews with

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<sup>21</sup> I’m not English, but I don’t sound like a member for the local community.



other pupils at the school and teachers, all linked to relevant nodes and searchable by theme and by speaker

- Sociograms

#### **4. ‘We don’t count you as Polish...you’re just Scottish now’: Exploring integrative motivation using ethnographic methods**

See when, like, I’m out with my pals? And they start moaning about Polish people, they go “oh, they always annoy me” [...] I’m like “hey, I’m here!” and they’re like “oh, we don’t count you as Polish”. I’m like “right, I don’t count any more or something?” Like, “now you’re just Scottish now. We don’t count you. You just act like us.” - *Zofia*

In previous research, a learner’s feeling of identification with an L2 group has been identified as a predictor of the acquisition of sociolinguistic variation. In this thesis, I adopt the term integrative motivation (IM) to refer to this feeling of identification. Using participant observation and ethnographic interviewing, I aimed to find out about what IM means at St John’s, and in particular to describe individual differences in IM across the participants. As part of this investigation, I recorded participants’ friendship networks using sociograms, anonymised versions of which are reproduced in this chapter. I treat them as evidence of the participants’ IM, suggesting that many close ties to native Glaswegian speakers may indicate higher IM.

At the end of this chapter, I suggest that the Polish participants naturally fall into three IM groups: the high IM group, the medium IM group and the low IM group. Although these groupings are based on my own impressions, these are not superficial impressions. My analysis is based on an extended period of time spent getting to know the participants while engaging in activities with them, and speaking to them in an unstructured conversational setting. By following the principles of ethnographic research, I was able to gain an understanding of the nature of IM at St John’s. Using a survey methodology to find out about IM may have produced groupings based only on superficial details, or relying on how the participants present themselves to outsiders.

In chapters 5 - 7, I will test whether IM emerges as a significant predictor of the acquisition of sociolinguistic variation. In using my ethnographic findings alongside a quantitative analysis of variation, I employ a mixed methodology for the study of IM and its role in second language acquisition, as called for by Spolsky (2000: 162).

#### **4.1. Integrative motivation at St John's**

The St John's learning community has recently seen a large rise in the number of pupils who have an L1 other than English. These EAL pupils have a range of L1s, but by far the biggest group are L1 Polish speakers, who now make up 4% of the school community. The size of the Polish community at St John's has the potential to provide support for new arrivals, but it also means that the community is subject to a lot of attention, some of it negative. Some members of the host community feel threatened by the Polish community, and particularly by the use of the Polish language in the school.

Edward (1993) argues that being accepted as a migrant in Glasgow often means blending in and becoming 'indistinguishable from other Glaswegians' (134). The integration of migrants, where new arrivals take on new identities and become more like members of the host community, is often celebrated as a sign that migrants are being welcomed into a new community. However, it might also be a sign that they are being forced to change in order to be accepted - that they know they will not be accepted unless they minimise their difference and become as invisibly native-like as possible. Becoming Glaswegian might function in part as a defence mechanism, protecting them from unwanted attention. The desire to integrate into the L2 group might arise from positive experiences of feeling welcome in Glasgow, but it might also arise in response to hostility, negative experiences on arrival in the host country, and pressures to become invisibly native-like.

What became very clear in the course of my ethnographic observation is that the participants differ from one another in their level of desire to leave behind their migrant identities and become Glaswegian. My observations suggest that all of the participants probably experience some pressure to blend in, but they respond to this pressure in different ways. Some have a strong drive to blend in and become Glaswegian: I describe this group using the term 'high IM'. They tend to avoid using Polish in school. They avoid mixing with other Polish pupils, and they often anglicise their names by altering them slightly, so that e.g. 'Piotr' becomes 'Pete'. Whether having this drive to become Glaswegian correlates with using native-like variation in the L2 will be investigated in the following chapters. Other participants have a strong desire to remain

visible as migrants: I describe this group using the term ‘low IM’, but their orientation could also be termed ‘anti-integrative motivation’: they don’t simply lack the drive to become Glaswegian, they also have a strong desire to maintain their Polish identities. They actively resist pressures to blend in, forming tight-knit, exclusively Polish friendship groups, speaking Polish frequently, refusing to anglicise their names and expressing strong ties to their Polish heritage. They often express a desire to move back to Poland at some point in the future. In refusing to identify as Glaswegian, they are able to maintain migrant identities in their new city (Mendoza-Denton 2008). Their anti-integrative motivation persists in the face of pressures to become native-like, which come from their peers (both Polish and non-Polish), and from some of their teachers (for example, those who worry that those learners who do not mix with native English speakers will not learn English effectively).

Most of the participants are somewhere in between these two extremes, and display higher and lower IM at different times. Identity is complex and constantly shifting, particularly during adolescence. However, the participants can be reasonably arranged into three groups, with naturally occurring divisions: those with consistently higher IM, those with consistently lower IM, and those who are at a midpoint between the two, or whose orientations shifted during the participant observation period (this group is labelled ‘medium IM’). Below, I describe each of the individual participants, focusing on their level of IM. I begin with the high IM group, then the medium IM group, and then the low IM group.

## 4.2. The individual participants

### 4.2.1. *The high IM group*

#### 4.2.1.1. *Zofia*

When Zofia was eight she moved to Glasgow with her younger brother, Jan, who is also one of the participants in the study. She is now 16. Zofia and Jan started at primary school together, but they were in different classes and they had to play in separate playgrounds (there were separate playgrounds for the upper and lower school). No one else in the school spoke Polish, and she didn't know any English, so she couldn't communicate with anyone. One of the teachers asked two girls to help her and show her around, and Zofia couldn't understand why they were following her everywhere. She found the experience of starting school in Glasgow very weird, and wanted to go back home to Poland. Luckily, after a short time she got a place in a specialist language school (this school has since been closed). Once there she learned fast, and she came back to her first school six months later able to speak English fluently.

And then I came back to the Primary, everyone was like “you can speak now?” They were like - they all were, like, surprised 'cause they hadn't seen me for so long and I come back knowing English. I was like “no bother”, I finally understood them. I was, like, happy.

The two girls who'd been assigned to help her became her two best friends.

Zofia says that she didn't experience a lot of hostility when she moved from Poland, but she's aware that the other members of her family did. When I ask if they got any negative attention for being Polish, she says ‘My dad sometimes, and my mum did. Jan in Primary, he got bullied.’ She thinks that her relatively smooth transition was aided by her time at the language school.

Zofia still has friends in Poland, and keeps in touch with them by text. She talks to family over Skype too. The family don't visit Poland much: since moving they've

been only once. This is mostly due to a long-running family feud, which makes their visits to Poland very stressful. Her parents are very keen to make sure Zofia, Jan and their little sister (who was born in Glasgow) don't lose their Polish.

My dad's pure into like "don't speak English in the house, I don't like it" [...] like, we try - my wee sister, she talks English a bit. So we try to convince her it's Polish and English. But my dad says if we talk to - we've to talk each other Polish so we remember it, but if we argue yeah, it's English.

The family still engage with Polish culture at home, watching Polish TV, listening to Polish music and eating Polish food. Zofia still finds it odd going to friends' houses, where she doesn't recognise any of the TV shows and the food is unfamiliar. Zofia's best friends are all non-Polish. Her boyfriend is Matt, one of the Glaswegian participants. She speaks English almost all of the time in school. I ask if she has any Polish friends in school and she says: 'Well, best friends are Scottish. I hang about with them. I don't like Polish but, see like, classes I talk to them. But they're no' my best friends, like.'

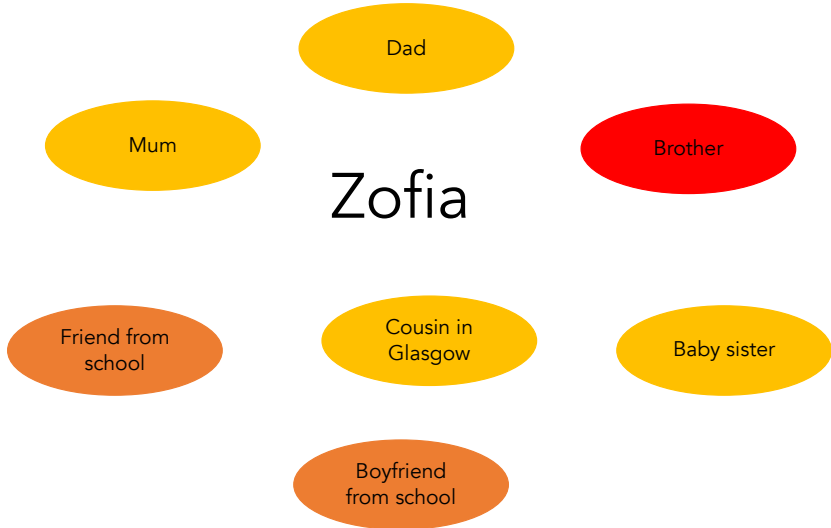


Figure 14: Zofia's sociogram

The yellow circles indicate people who she speaks mostly Polish with. The orange circles indicate people who can't speak Polish. The bright red circle indicates that she uses both Polish and English with her brother, Jan.

She says that in first year of high school she had a friendship group that was mostly Polish, but she fell out with them. I ask why.

It's all gossip. Drama and gossip, that's all I get. Eh, see, when they're all Polish I, like - I just find - drama, gossip and nothing interesting. Aye, and then when you're with, like, when you're with Scottish they just carry on, they [Scottish people] don't care what people think. They just carry on. And they [Polish people] all care, like, what they look like, what they do, what they say. And, like, I'm with my friends [...] they just carry on, they don't care. [...] my family mostly learnt not to trust most people, Polish people, because they backstab you a lot. Here in Scotland. In Poland they're nice but when you come here they start backstabbing me and stuff. But it's just some people, not most of them.

She specifically dislikes the Polish community in Glasgow, not people in Poland. Zofia tells me that she doesn't act, or dress, like the Polish people in school.

I dress like Scottish people. 'Cause Polish, like, I don't know how to explain it to you. Polish people dress differently. You already know who's Polish and who's Scottish. 'Cause they dress - dress differently. Yeah it's like - you just, it's weird, you just know.

She says that Polish people dress neatly and everything matches; she doesn't want to dress like that. I ask if she considers herself to be Polish. 'I don't - aye. Aye. I don't know.' I ask how she'll introduce herself to new people she meets after leaving school. 'I'm Poland. Yeah. I would say "from Poland, but stayed here most of my life".' I ask whether that means she's a bit of both.

Yeah. But my wee sister's like, she's born here, so she's, like, just her blood's Polish. That's it. She's nothing to do with Poland except that. She speaks Polish, but that's - and she's - my mum and my dad's Polish. But she's stayed here all the time, she's never been [to Poland].

I ask whether she would tell people she was Scottish if she got negative attention for being Polish.

I would be like "I don't care. If you don't like me I'm no' bothered". So, like, if somebody doesnae like that I'm Polish they can walk off. The door's open. I don't care. It's not going to hurt me.

Zofia anglicises her name, introducing herself as Sophia.<sup>22</sup>

Some people don't - didnae even know I'm Polish, like, see 'cause I say Sophia is my name. It's Zofia but they say it Sophia, 'cause in my Primary everyone could - no one could say my name, so the teacher went "What about Sophia?" and it just stayed with me.

I ask if she sees herself ever moving back to Poland and she says 'nope' without hesitation.

I did everything here and I really don't want to be over there. I've not got anything there. [...] Wouldnae be able to live in Poland now.

Zofia is placed within the high IM group.

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<sup>22</sup> 'Zofia' is a pseudonym, but she anglicises her real name in a comparable way.



#### 4.2.1.2. *Maja*

Maja has been in Glasgow since she was four, and is now 12. She doesn't remember the move being scary or traumatic, although she says that it was strange starting school in a foreign language. 'I remember my first day of school I was like "what - what about if I need to go to the toilet what I'm going to say?"'

Maja lives with her parents, gran and sister, who can all speak some English, and a grandad who doesn't speak any English at all. Because of this, her family are keen for the kids to keep their Polish, and Maja says that they are trying to encourage her little sister, who was born in Glasgow, to speak Polish as well as English. Despite this, she thinks she's forgetting some of her Polish. 'I started forgetting Polish, more and more, so. I can speak a bit of Polish now but I forget words. Like, then they come to me after and I'm just like "oh".' She still remembers Poland, and goes there quite regularly during the school holidays (although she mentions that the family can't afford to go as often as they would like). Most of her extended family have now moved to the UK.

Most of Maja's friends aren't Polish. In the after-school club she speaks almost exclusively English, and when Jan tries to speak to her in Polish she often replies in English. Her best friend is Laura-Kim, one of the Glaswegian participants.

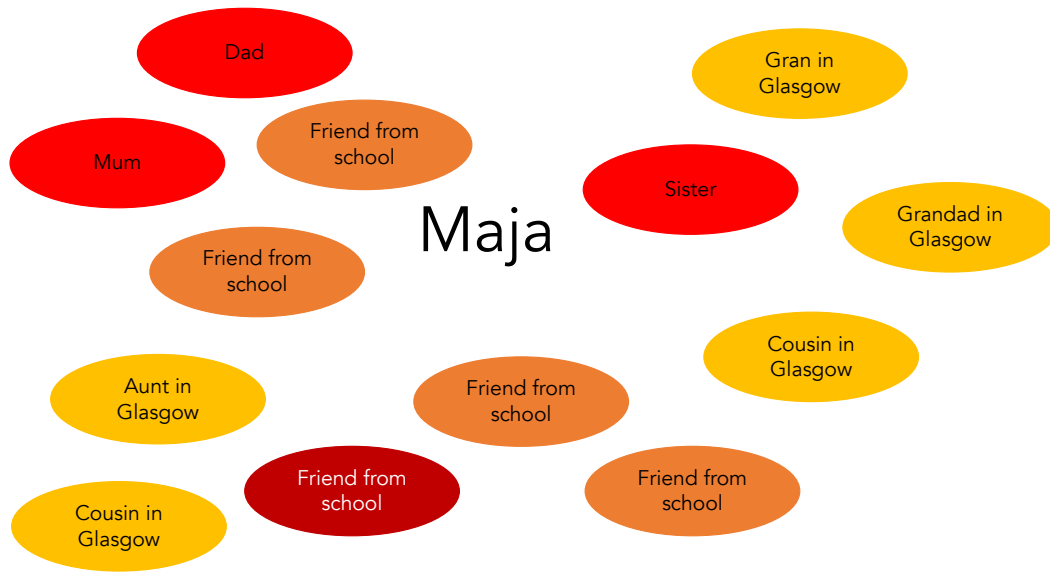


Figure 15: Maja's sociogram

The yellow circles on her sociogram indicate people who she speaks mostly Polish with. The orange circles indicate people who can't speak Polish. The bright red circles indicate people who she uses both Polish and English with. The dark red circle indicates someone who can speak Polish, but who she uses mostly English with.

Maja talks about playing with people's perceptions of her ethnicity. 'I speak with a Scottish accent, so people don't know I'm Polish. I just like seeing people's faces when I tell them I'm Polish. And they're just like "what?" ' She doesn't ever try to hide the fact that she's Polish, and she says that she's never had any reason to: she hasn't ever experienced hostility related to her Polish ethnicity.

Maja is placed within the high IM group.

#### 4.2.1.3. Kamila

Like Maja, Kamila was four when she moved and is now 11. She doesn't remember the move as being traumatic. On starting school, she says 'the teacher just mixed me up with people who did speak English and then I could learn from them somehow'.



#### 4.2.1.4. Szymon

Szymon's mum moved to Glasgow when he was seven. He stayed in Poland with his dad and older sister for two years, and then the three of them moved over to join her when he was nine. He is now 14.

When he first came to Glasgow, Szymon wasn't told that the family were migrating.

My ma didnae tell me we were moving over. We moved over, and, like, we came back ever so often, like, see where, like, eventually I was there for, like, couple of weeks, and, like, she never told me,<sup>23</sup> and then she says "right since you're here you have to start going to school here, even if you're not going to stay". So I started going to school, I made friends, and then she told me. Eh, so I wasnae as upset, if you know what I mean, because I already had friends. I think - I think that was a good way of doing it.

Szymon's migration experience wasn't traumatic, and he partly attributes the smoothness of the move to six months spent in a specialist language school near Glasgow before he entered mainstream education (the same one attended by Zofia, which has now been closed). He thinks this helped him a lot. Szymon is proud of having learned English quickly, and of his academic achievement in Scotland.

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<sup>23</sup> *She never told me = she didn't tell me*

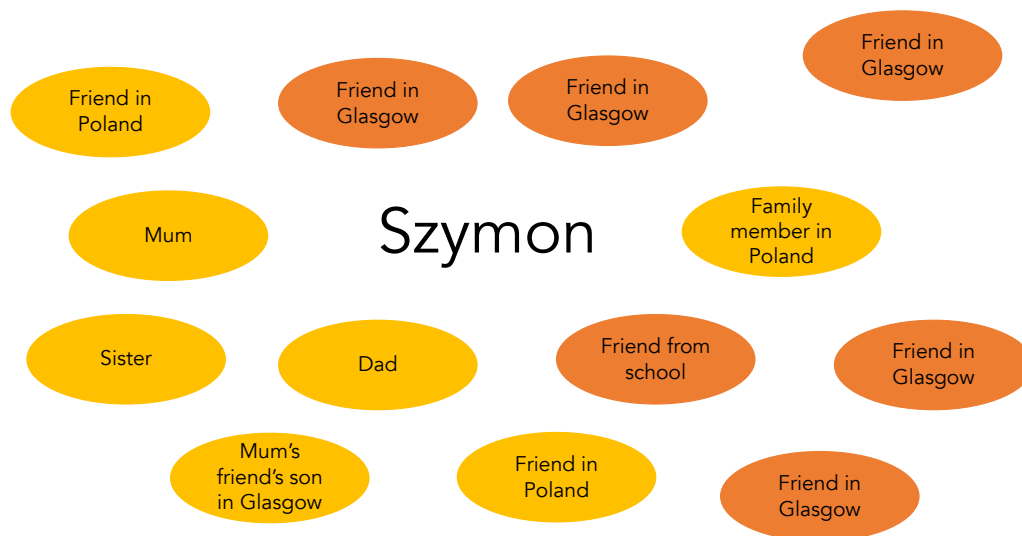


Figure 17: Szymon's sociogram

Szymon's best friend is Jamie, one of the Glaswegian participants in the study. His wider circle of friends is mostly non-Polish, and he speaks mostly English during the school day. He is friends with people who he shares interests with - parkour and metal music - rather than people who he shares an L1 with. He does have some Polish friends outside of school, but these are family friends. The yellow circles indicate people who he speaks mostly Polish with. The orange circles indicate people who can't speak Polish.

Szymon says that people often don't believe he's Polish, because his accent sounds Glaswegian. 'If I was to - if I was to not tell anybody I was - I could do that, and not tell anybody I was Polish, and just never hear them - never let them hear me speak Polish.' However, he says that pretending to be Glaswegian is a tactic that carries risks, and he tells me about someone who tried this and was teased when people found out what he was doing.

Now everybody's kind of gone at him<sup>24</sup> for it, because - he pretended not to be Polish. [...] Maybe he just used to speak Polish, but he n- he wanted to change in

<sup>24</sup> Gone at him = turned against him

high school, I don't know what it was. [...] I don't know the actual, like, story behind it, but I know that he never wants to, like - I remember when I was in third year and second year I used to walk past him when I was - he was himself,<sup>25</sup> and if I was to say in Polish "hi", he wouldnae say it back. If I was to say it in Scottish he would. [...] I mean, I guess because probably maybe he had bad experiences when he said he was Polish.

Szymon doesn't tell me about having had similar bad experiences himself. He does mention hostility from other boys, but this hostility seems to be mostly based on his perceived goth identity rather than his Polish identity. Like Adam, Szymon's name is anglicised by other people in the school, and he doesn't resist this, although when he tells me his name he uses the Polish pronunciation. He says that he can't be bothered telling everyone how to say his name properly. Szymon doesn't want to move back to Poland or stay in Glasgow when he's older: he's determined to move to America.

Szymon is placed within the high IM group.

#### 4.2.1.5. Piotr

Piotr is 12, and moved to Glasgow aged nine. Before that he'd lived with his gran in Poland for four years, while his parents worked in the UK. He didn't want to move, because he would have to start at a new school and he wouldn't have any friends.

They just told me I had, like, a month or something to get ready, so yeah. I didnae do anything anyway, so. I thought they were going to change their mind but then they came out "No, we're going" so, yeah, I was like "okay".

He arrived in Glasgow with no knowledge of English at all. It felt weird not being able to communicate with people at first, but he says that it was 'alright [...] aye, it wasnae bad'. He learnt English mostly from his peers, and doesn't feel like he got as much out of classroom learning as he did out of socialising with native speakers.

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<sup>25</sup> *He was himself* = *he was by himself*

I started off with, like, playing football. So I got, like, most of them<sup>26</sup> words, like “pass”, “go there”, “go on goals” and all that, so yeah. Yeah, so I started off with that. I looked up stuff and then I learned from there, so yeah.

Although he was reluctant to leave Poland, Piotr says that once he arrived in Glasgow he settled in fine. He found people really friendly and he felt welcome. It was exciting to move to a big city, because his home in Poland was very rural. He still spends a lot of time in Poland during the school holidays, and has friends and family there. He speaks to these friends about twice a week over the internet. He says that he’s closer to his friends in Glasgow than to his friends in Poland. This year he’s thinking of staying in Glasgow over the summer instead of going back to Poland.

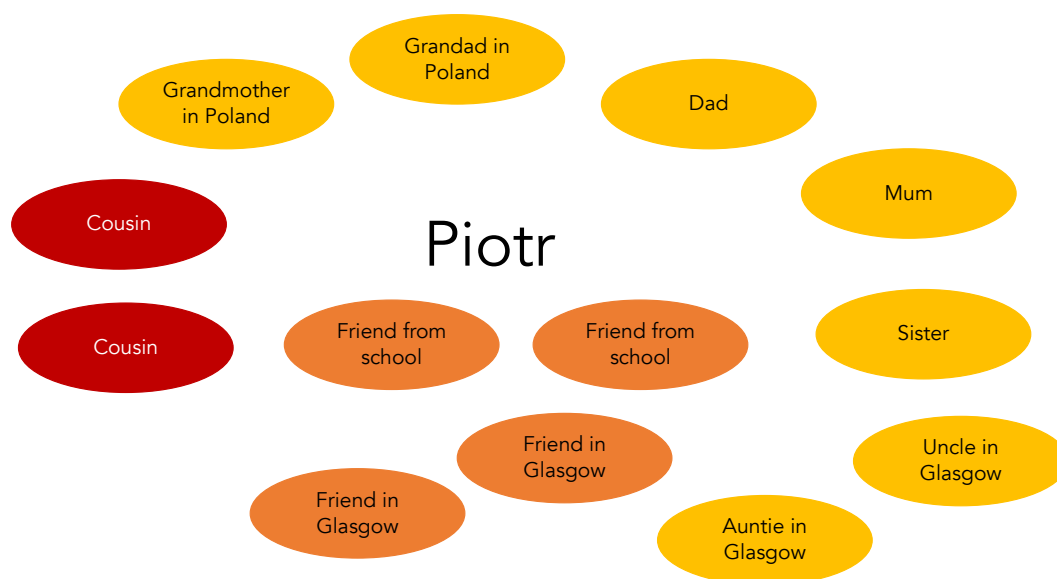


Figure 18: Piotr’s sociogram

Piotr’s best friend is Matt (one of the Glaswegian participants). He doesn’t have any Polish friends in Glasgow, and he speaks ‘English everywhere’. He thinks that the best way to learn English is to make English-speaking friends, so he says that it’s important

<sup>26</sup> *Them = those*

for new migrants to make sure to do this. His friends who don't speak Polish are represented by the orange circles on the sociogram. He uses mostly Polish with his family, and they are indicated by the yellow circles. However, he says that he doesn't really speak to his family that much because he's always out with his friends. The dark red circles indicate two cousins who can speak Polish, but who he uses mostly English with.

Piotr is very critical of the Polish kids who have formed exclusively Polish friendship groups and who speak Polish in school. He strongly dislikes the fact that these groups exist. He says that the other Polish kids in school tend to hang out only with each other, and he's unusual in having non-Polish friends. I ask him why he thinks people form exclusively Polish groups. 'Keep company, or basically, it's literally the fact that I do know English, so. They would probably not - they can't be bothered learning it. So yeah, probably that's why.' Piotr tells me 'I get on better with Scottish people than Polish people'. When I ask why, he says 'the fact that most of the Polish people [...] maybe just jealous because I know English and all that so - probably'. He actively avoids contact with the Polish community in the school. He tells me that 'Polish people, they're just pure idiots sometimes'. Later he clarifies that people who live in Poland are OK; it's the Polish community in Glasgow that he has a problem with.

When Piotr was in Poland over the summer, he was nearly fined for jay-walking, which is illegal in Poland but not in the UK. He'd spent so long in the UK that he'd forgotten the Polish laws.

The police started speaking English to me at first. I was like "wow, I'm Polish".  
[...] I started to laugh when I was talking to the policeman and he's like that:  
"Guessing you're on holiday from Scotland?"

To give further evidence of how much he's changed since moving to Scotland, he tells me that because he's used to the cold in Glasgow now he finds it easy to go out without



a coat, and people in Poland are shocked by this (he tells me that the part of Poland he's from is much warmer than it is in Glasgow).

Piotr actively anglicises his name, calling himself Pete<sup>27</sup> in school. This is the name he uses with friends, to introduce himself to me, and on social media. I ask him if it's weird having two names and he says that he's used to it now. When I ask if he thinks of himself as being Polish or Scottish he says 'it doesn't matter'.

I ask Piotr whether he plans to move back to Poland when he's older.

No. My mum said that before, and I was like "I'm no' going back". She wanted to go back. And I was like "no". And it, like, turned into a big argument, and I said "I've got nothing to go back to". 'Cause I forgot - I already forgot [...] - I forgot the Polish and all that, so I said "I'm no' going back, I'm staying here". And then she just decided we're staying, so I was like "yessss".<sup>28</sup>

Piotr tells me that he's forgotten some Polish, and he can't really read or write in Polish any more, so going back would be very difficult. Despite his initial reservations about leaving Poland, he doesn't want to leave Glasgow.

Piotr is placed within the high IM group.

#### ***4.2.2. The medium IM group***

##### *4.2.2.1. Anna*

Anna moved to Glasgow when she was three, and is now 13. She doesn't remember the move from Poland as being difficult. She says that she remembers starting nursery in Scotland and not speaking the language. It was scary, but the teachers helped her. When I ask her what the hardest thing about moving country is, she says that for people who moved at an older age it would be hard to leave your friends and move to a place you don't know. She doesn't feel that this was the case for her. She thinks that moving at a

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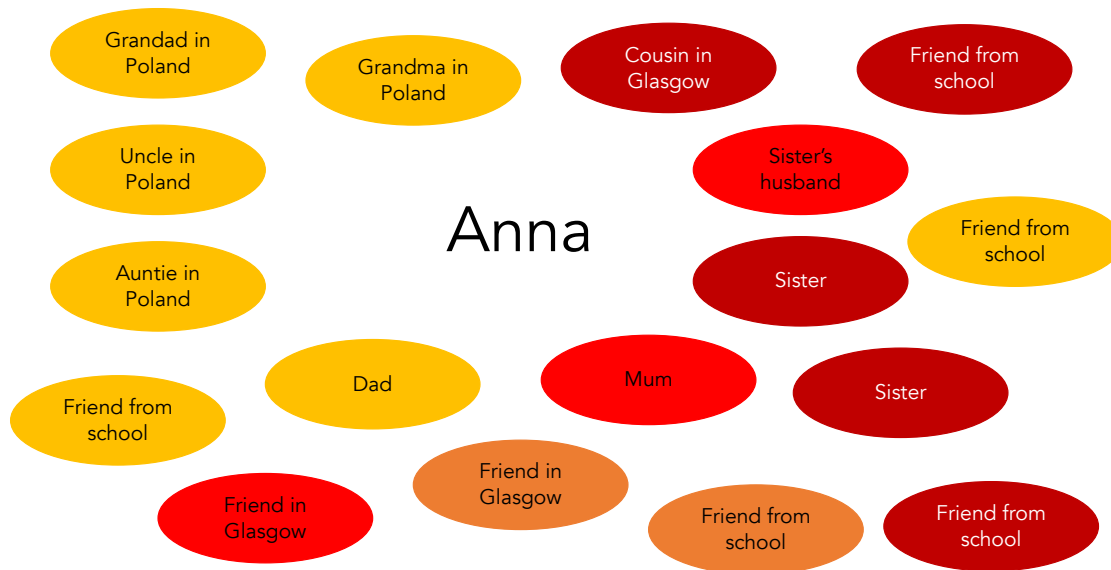
<sup>27</sup> 'Piotr' is a pseudonym, but he anglicises and shortens his real name in a comparable way.

<sup>28</sup> *Yassss* = triumphant *yes*

younger age is easier. She has family in Poland, but she doesn't really miss them; she moved when she was young, so she doesn't have so many close ties or friends in Poland. Her parents found it hard to leave people behind, and they miss them.

Anna has several close friends in school who are Polish and who she speaks Polish with, including Nikola (another participant in the study), and two other girls, Agnieszka and Wiktoria. She helps out new arrivals from Poland in the school, and spends a lot of time interpreting for people. However, she also has several close friends who aren't Polish. While she is part of a tight-knit Polish friendship group, she also socialises outside of this group with people who aren't Polish. She says that she used to hang out with non-Polish people only and speak English all of the time, but recently she's started to have more Polish friends and use Polish more. Anna thinks that Scottish people and Polish people are quite different, but she doesn't necessarily prefer Polish people. She thinks Glasgow is friendlier than her home town, Gdansk, which she still visits sometimes during the school holidays. She says that Scottish people make better friends and she is closer to her Scottish friends. She has had Scottish boyfriends but not Polish boyfriends, and she doesn't like the idea of going out with a Polish boy.

Anna includes several people on her sociogram who can speak Polish, but who she uses English with: these people include her two sisters and some members of her extended family. One of her older sisters has a Scottish husband, who's learning Polish at the moment, so she speaks Polish with him in order to help him learn. Although she uses Polish a lot in school, she says that she sometimes forgets Polish words, and her family laugh at her for speaking Polish with a Glaswegian accent. When her family speak to her in Polish she often replies in English.



*Figure 19: Anna's sociogram*

The yellow circles on her sociogram indicate people who she speaks mostly Polish with. The orange circles indicate people who can't speak Polish. The bright red circles indicate people that she uses both Polish and English with. The dark red circles indicate people who can speak Polish, but who she uses mostly English with.

Anna says she's never experienced hostility because of her ethnicity or language use. However, she has noticed this hostility towards other newer arrivals. 'It's 'cause some people and - like, some Scottish people in the school don't really, like, accept Polish people.' Evelyn asks her if this bullying is ever serious. 'Sometimes it is. It's half and half. It's not everyone, it's just some people.' Evelyn asks whether the conflict goes away when people lose their Polish accents. Anna says 'Not always...Not always'. Anna sometimes hides the fact that she's Polish: not with teachers but with other people her age. She can't explain why. If someone asks her if she's Polish she'll often say no, and claim that she was born in Glasgow.

She definitely sees herself staying in Scotland when she's older. She mentions that in Scotland it'll be easier for her to get a good education and a job, hinting that her motivations for staying in the UK may be economic as well as social.

Anna is placed within the medium IM group.

#### 4.2.2.2. Jan

When Jan was five he moved to Glasgow with his older sister, Zofia. He is now 13. His favourite band are a Polish rap collective, Paktofonika. He plays Polish games online with Polish speakers. He prefers to watch TV in Polish because ‘it’s easy and it has more interesting stuff’.

Jan doesn’t talk to me about having been bullied when he first came to Glasgow, but Zofia tells me that he was. Jan tells me that he’s never experienced hostility because of his Polish ethnicity, but he says that ‘sometimes I hide the fact that I’m Polish. Like, or somebody who I don’t really know, or who is, like, some Ne- a Ned<sup>29</sup> or something’.

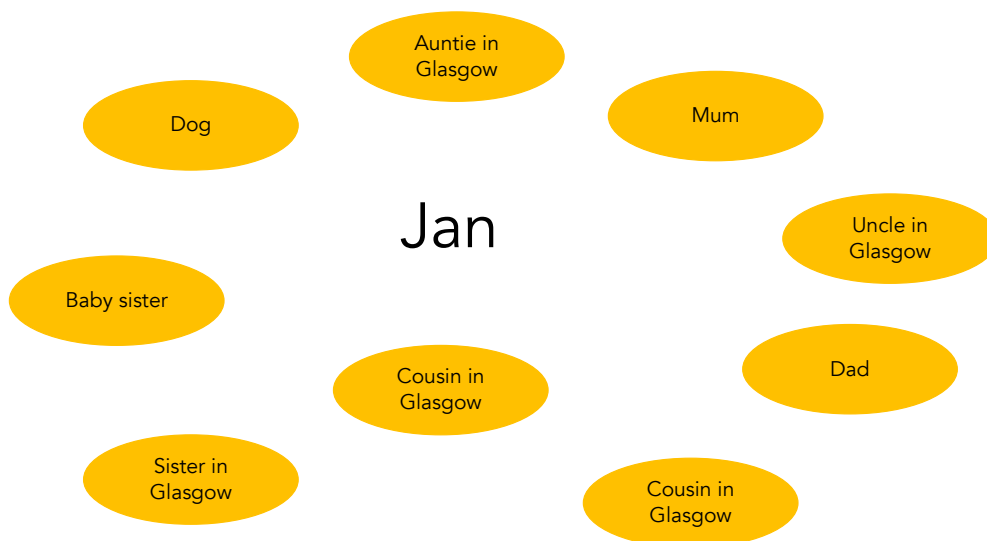


Figure 20: Jan’s sociogram

On Jan’s sociogram he lists only family members, and the yellow circles indicate that he uses mostly Polish with all of them. His sister, Zofia, reports that they use a mixture

<sup>29</sup> A term referring to a certain type of adolescent in Glasgow; connotations of aggression and violent behaviour (Lawson 2009: 11).

of Polish and English together, but Jan reports that they use mostly Polish. Although they aren't included on his sociogram, Jan's friendship group in school is made up of a mixture of Polish and non-Polish people in the year group, so that he uses a mixture of Polish and English during the school day. He says that he doesn't have any friends in Poland now, only in Scotland.

Jan anglicises his name, making it 'John'.<sup>30</sup> He introduces himself to me using the anglicised version of his name. When I ask if he plans to move back to Poland he says 'no'. Like most of the others, he cites economic reasons rather than social reasons.

'Cause things have changed s- I've heard things have changed so much in Poland and it's - like - kind of poorer in Poland and all that. [...] There are quite a lot of jobs out there but just like - like people are - the gover- coun- council is making you pay for like stuff you don't need.

He later says that he would go back to Poland if he was offered a good job there. He thinks that Poland and Scotland are 'all the same, like — the two countr- countries are similar, except the money value and that'. He also thinks that Polish people and Scottish people are the same. 'It's only a difference with the language.'

Jan is placed within the medium IM group.

#### 4.2.2.3. *Dominik*

Dominik moved to Glasgow when he was four, and is now 11. He isn't sure whether or not he remembers living in Poland. He remembers that he was really excited about the move, and loved his new house in Glasgow. He loved the parks in Glasgow, especially the big slides. He's glad that he lives in Scotland now because he's heard that school work is harder in Poland, and because of this he thinks he'd have less freedom in Poland.

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<sup>30</sup> 'Jan' is a pseudonym, but he anglicises his real name in a comparable way.

Dominik says that learning English was hard at first, but he learnt quickly because there was no one in his primary school class who spoke Polish. The family still speak Polish at home and watch TV in Polish. Despite this, Dominik says that he's forgetting some Polish. 'My mum says it's, like, my first language now is Scottish.' I ask him if Polish people and Scottish people are different, and he says yes.

Like, they behave different. 'Cause in Poland, like, like, when you want to carry on with somebody in school, like, they don't - they just learn to sit and do the work, but in here [Glasgow] there's people who want to carry on.

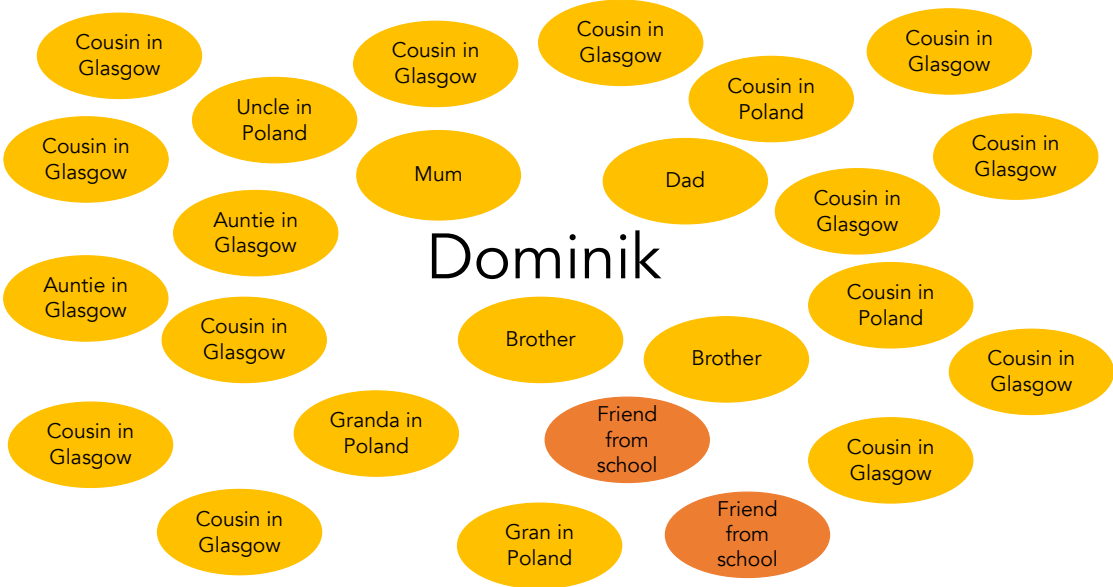


Figure 21: Dominik's sociogram

Dominik still has friends in Poland, although his best friends are at St John's. His two best friends aren't Polish (indicated by the orange circles on the sociogram), and he doesn't speak Polish at all during the school day. On his sociogram, he lists two best friends and 14 cousins alongside his nuclear family. Some of his cousins and extended family are in Poland and some are in Scotland, but he speaks Polish with all of them. He speaks to the family in Poland over Skype when he's in Glasgow.

Dominik doesn't ever try to hide the fact that he's Polish. When I ask if he's ever experienced any negative attention because he is Polish he is reluctant to answer, or finds it difficult to understand the question, saying 'em, I don't know'. When I ask if people ever bully the kids who've just arrived from Poland he says 'em, sometimes'.

When he introduces himself to me, Dominik says: 'I stay<sup>31</sup> in Poland. And - but I stay here.' Although he has been in Glasgow since he was a small child, he seems unsure of whether to tell me that he lives in Poland or Scotland. He still spends a lot of time in Poland during the school holidays, so it might be that he still considers Poland to be a second home. Like Szymon, Dominik wants to live in America when he's older, not Poland or Scotland. He says that he does miss his friends and family back in Poland, but when I ask if he would move back to see them he says 'I don't know', sounding doubtful. I ask if he would ever consider moving back to Poland for any reason. 'If I, like, was a footballer, and if I would get, like, lots of money I would probably move.' Like many of the others, when talking about moving country his focus is on economic motivations, not social motivations. Dominik doesn't anglicise his name, although there is an obvious English-language equivalent.<sup>32</sup>

Dominik is placed within the medium IM group.

#### 4.2.2.4. Kinga

Kinga was 10 when she moved, and is now 14. 'I was like "I don't want to go". 'Cause of my friends and family. I don't want to move.' Despite this, after she arrived in Glasgow she was quite happy, and settled in well. She enjoyed learning a new language and meeting new people: 'it's better schools, teachers, friends'. Kinga still speaks to some friends in Poland, but she says that some of them have forgotten about her or 'don't get me'. She still sees them when she goes to Poland for visits during the school holidays. Recently the family took her baby sister, who was born in Glasgow, to be baptised in Poland.

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<sup>31</sup> *Stay = live*

<sup>32</sup> 'Dominik' is a pseudonym, but this is also true of his real name.

For the most part, though, Kinga’s social life is in Glasgow. She has lots of friends in school, and is very close to them. About half of her school friends are Polish, and about half are not. She tells me that: ‘I usually hang out with Scottish people than Polish. ’Cause better for me to speak the language.’ Even with her friends who can speak Polish, she tends to use a mixture of Polish and English rather than just Polish. She is disapproving of exclusively Polish friendship groups in the school, or any exclusive friendship groups based on a shared linguistic or ethnic identity: ‘Because some people actually, like, don’t like to be, like, friends with other countries.’ She thinks it’s good to be friends with people from lots of different backgrounds.

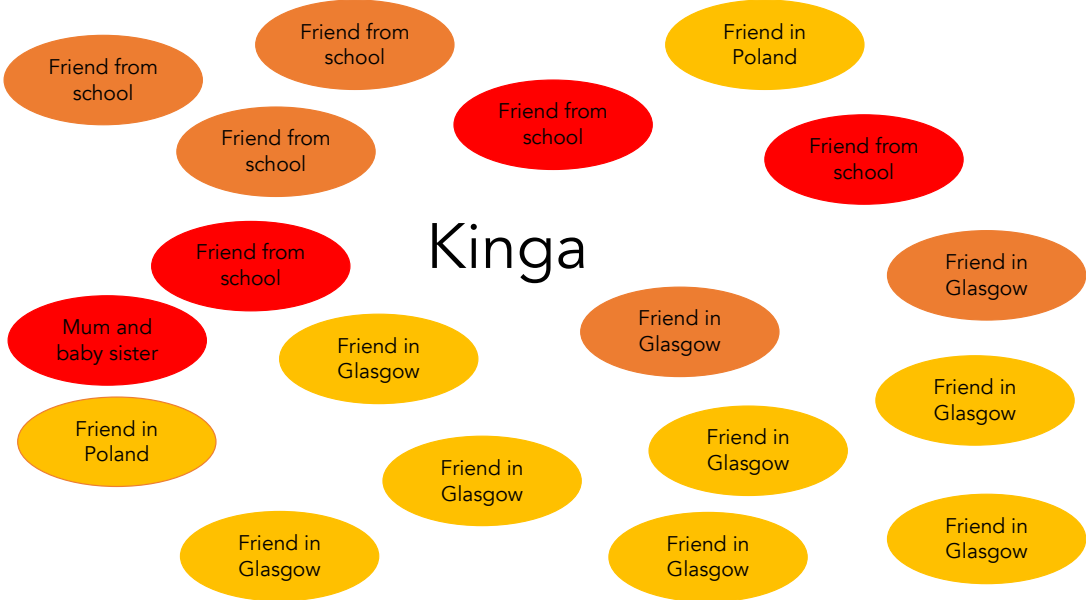


Figure 22: Kinga’s sociogram



A lot of Kinga's social life in school takes place in English, but she uses Polish too, and proudly teaches phrases of Polish to her non-Polish-speaking friends (this group use '*kocham cię*', meaning 'I love you' as a greeting). The bright red circles on her sociogram indicate people who she uses both Polish and English with, and the orange circles indicate people who can't speak Polish. One of her non-Polish friends has a new Polish stepdad, and Kinga is helping her to learn Polish. Another friend is teaching Kinga some Russian. She is enthusiastic about sharing informal language teaching with her friendship group. She proudly interprets for new arrivals at the school, and would like to work as an interpreter or translator one day.

Kinga also has a Polish friendship group outside of school, and she speaks mostly Polish with them; they are indicated by the yellow circles on the sociogram. Although she does use Polish regularly and continues to use it at home, like Maja she mentions forgetting some words, and notes that she can't read or write well in Polish, because she does all of her schoolwork in English.

When I ask her whether she likes Scotland, she replies with an enthusiastic 'I love it!' She says that she's found people generally very welcoming, but adds that 'some Scottish people are like - don't like Polish people, don't know why'. At one point in the peer-group recording context, Kinga says, unprompted: 'I don't like Poland. I don't like my country. I love this country.' On another occasion she comments that there are too many Polish people in the school.

Like many of the others, Kinga cites economic reasons for building a life for herself in the UK. 'It's better to live here, actually. 'Cause in Poland it's so hard to get work. In here you just go to school and then work.'

Kinga is placed within the medium IM group.

#### 4.2.2.5. *Izabela*

Izabela was 11 when she moved to Glasgow, and is now 12. She was excited about the move ('I really wanted to live in Scotland'), but she was sad to leave her extended

family behind. Starting school in Scotland was, in her words, 'terrible'. She was badly bullied in her primary school.

Um, they would push me - sort of like - and kick me and, you know, I had a lot of problems 'cause of them. [...] I didn't want to come to school and when I did I - 'cause of being I'm nervous, um, my stomach feel sore so I used to, like - got sent home, like, every week.

She's sure that the bullying happened because she didn't speak much English, and later, when she had learned some English, because of her Polish accent. She thinks that it might have been easier to migrate at a younger age, because 'the small kids, like, they don't even realise, like, that there's someone from a different country, you know'.

Things changed when she got to high school and made new friends: she says that starting at a new school felt like a fresh start. She came to high school 'really shy', but then 'I got really confident [...] it made me really stronger'. At high school she still experiences some hostility due to her ethnicity, but she says 'I'm proud of being Polish!', and tells me that she would never try to hide it now.

Izabela is proud of being able to speak English well, and although she does speak a lot of Polish, she suggests that English is becoming her dominant language.

Sometimes I talk with Nikola in English. When we don't know how to say something in Polish, 'cause we forget, like, in school we, like, for so many hours in there, like, we forget how to speak Polish so we say, like, yeah. And I'm asking my mum, like, "mum, how do you say that in Polish?" She's always laughing at me. And then she th- tells me to read books in Polish.

She is still very self-conscious about sounding non-native in English, and mentions her accent often. She asks Candice (one of the Glaswegian participants, a girl of the same age): 'Do you think my accent is really strong? Do you? [...] What do you think - do you think, like, I'm here for a, like, a long time? How many years? No, actually, I want

to know.’ Later in the same conversation, she adds: ‘Why’s my voice so bad? I hate my voice. Do you like your own voice?’

Izabela is doing very well in school, and is proud of this. She only started learning English 1.5 years ago, but she recently came top of her class (which is mostly made up of L1 English speakers) in an English test. She says that the schoolwork was much more advanced in Poland, and says ‘I feel smart here!’ She also says that she is glad that her school in Glasgow has better resources than her school in Poland. When I ask Izabela what the best thing is about having moved country, she replies: ‘I don’t know, like, there’s, like, more money and, you know, bet- I think it’s a better life here.’ When I ask if she thinks she’ll ever want to move back to Poland, she answers ‘no’. I ask if she likes it better here and she says ‘yeah’. I ask why.

I don’t know I just really like it here. I have like - like Nikola, Agnieszka, and, you know, um, they’re like, the closest people to me, like, I don’t know why. Well, my mum obviously, but she - I think she’s going to stay here. So I’m allowed to stay here. And Nikola will stay here too I will obviously want to stay here. Um, I don’t know, I think it’s ’cause, like, better jobs and that, and...

Izabela’s social network was in flux at the time of the study. After her bad experience at primary school, in her first year of high school she fell in with a loose mixed network of Polish and non-Polish kids. In her second year, she became part of a tight-knit and exclusively Polish friendship group. In particular, she became best friends with Nikola. During the first part of the ethnography, Izabela and Nikola were inseparable. Around halfway through the participant observation period they had a major fallout and Izabela became friends with an English-speaking group instead.

I fell out with the Polish crowd and now I don’t talk to the Polish people. They all hate me. [...] because they’re all, like, all the Polish people are together. [...] as I said before, like, for me doesn’t matter where you’re from I always, like, I can still like you. Eh, but, like, they don’t think that.

After her change of friendship group, Izabela became very negative about the exclusively Polish friendship groups in the school. Like Kinga, she thinks people shouldn't form their friendships around having a shared ethnic or linguistic identity.

Izabela had to leave behind some close friends when she moved. She still speaks to them 'all day, every day' on the internet, especially her 'best pal'. She comments on the connection you have with someone when you know them from a young age over a long period of time. Her friendship groups in Glasgow have shifted, but her relationships with her friends in Poland are more stable.

Izabela carried out the sociogram task after her change in friendship group. Of the people she lists on her sociogram, all but her nuclear family live in Poland. She speaks mostly Polish with everyone on her sociogram (the yellow circles) apart from her mum (the bright red circle), who she uses a mixture of Polish and English with.

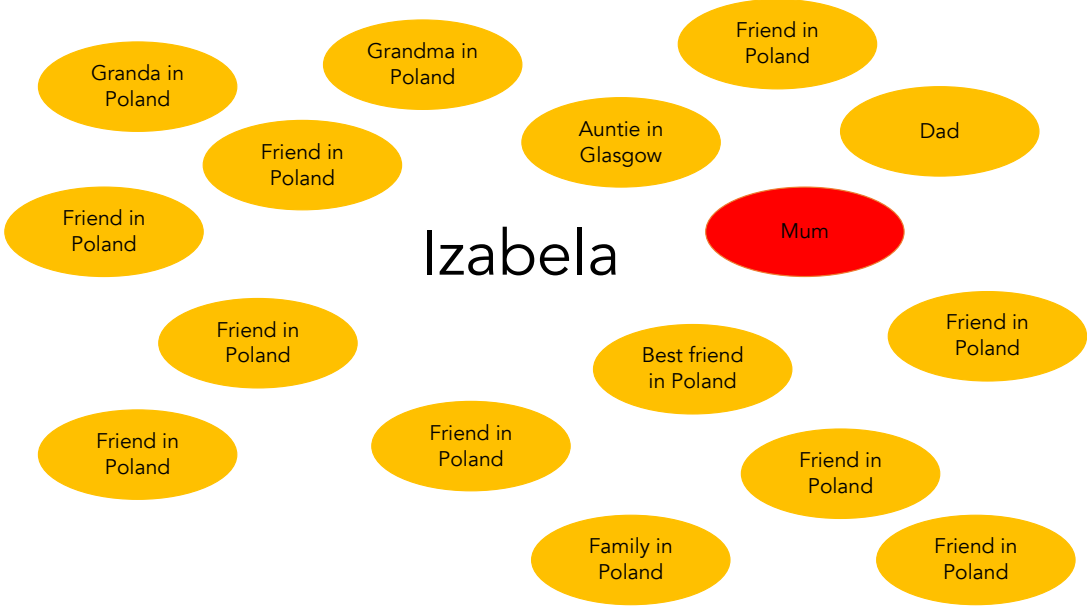


Figure 23: Izabela's sociogram

Izabela is placed within the medium IM group.

#### 4.2.2.6. Adam

Adam moved to Glasgow when he was 11, and he is now 13. His experience of moving to Glasgow was fairly positive. He tells me that only the first three days of school were scary, and then it was fine. His first impressions were how much easier schoolwork is in Scotland, and that the city was ‘really cool’, with thousands of parks and shops. He had had mixed feelings before the move: he was excited to move to Glasgow, but sad to be leaving behind friends and family. He makes no mention of hostility or bullying from his new classmates. He says that he’s never experienced any negative attention because of his Polish ethnicity.



Figure 24: Adam's sociogram

On his sociogram Adam lists mostly family members, alongside three friends from school. He uses mostly Polish with his family and two of his friends from school (the yellow circles). The orange circle represents his best friend Jake (one of the Glaswegian participants), who doesn't speak Polish. Adam spends a large portion of his daily life with Jake, speaking English. He also has a Glaswegian girlfriend, although she doesn't appear on his sociogram. Adam says that he is equally happy using Polish and English: 'It doesnae matter to me. I feel the same.'

Adam's name is often anglicised by others in the school, partly because it has an obvious English-language equivalent: the Polish and English versions of the name are spelt the same and differ only in stress pattern.<sup>33</sup> He doesn't resist this anglicisation, although when he tells me his name he uses the Polish stress pattern.

Adam isn't sure whether he wants to move back to Poland when he's older or not. He says that it's harder to get a job over there, and money doesn't go as far.

Adam is placed within the medium IM group.

### ***4.2.3. The low IM group***

#### *4.2.3.1. Marek*

Marek moved to Glasgow when he was five, and is now 13. Despite having spent a relatively long time in Glasgow, he is the least comfortable of the participants speaking in English. He chooses to use Polish whenever possible.

Marek's friends are mostly Polish speakers in his year group, and he knows who all of the Polish kids in the school are.

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<sup>33</sup> 'Adam' is a pseudonym, but this is also true of his real name.



*Figure 25: Marek's sociogram*

The yellow circles indicate that he speaks mostly Polish with everyone close to him, including family, friends in Poland and friends from school.

Marek is very engaged with Polish culture. He reads in Polish, watches Polish TV and listens to Polish music. His favourite genre is Disco Polo - Polish party music - and he also listens to Polish rap. He prefers watching Polish films because he says that they're better than English-language films.

Marek's family lived on a farm before coming to Glasgow. His move to Glasgow, therefore, was both a move to a different country and a move from the countryside to a big city. He still spends a lot of time in Poland, going there during the school holidays. He still has friends and family in Poland who he speaks to over Skype.

Marek is placed within the low IM group.

#### 4.2.3.2. Angelika

Angelika moved to Glasgow when she was 13, and is now 15. She didn't want to move to Glasgow: she wanted to stay in Poland with her grandma, but she wasn't allowed.

She arrived in Glasgow with very little English, and some of her new Glaswegian classmates were very hostile. She says: ‘I didn’t speak English because I was in Scotland for, maybe, one month? So, my English, it - it wasn’t well. And they were like, em, “oh my god you can’t speak English!” “Go away! Oh!” ’

On her first day, some of the Polish girls in her class approached her and took her under their wing. They helped her out, showed her round and translated for her until she had picked up enough English to get by. Two of them became her best friends - Patricja and Marta. She remains very much a part of the Polish community at St John’s: she says ‘I know all Polish people in the school’.

Angelika has a boyfriend in Poland, and misses him a lot. She also misses her grandma, and has many friends in Poland who she speaks to every day over the internet. She visits Poland during all of the school holidays, and says that this feels like going home; she says that she doesn’t like living in Glasgow because she misses people in Poland so much. She plans to move back to Poland as soon as possible. Her nuclear family plan to stay in Glasgow, but she says she will move back without them once she is old enough.

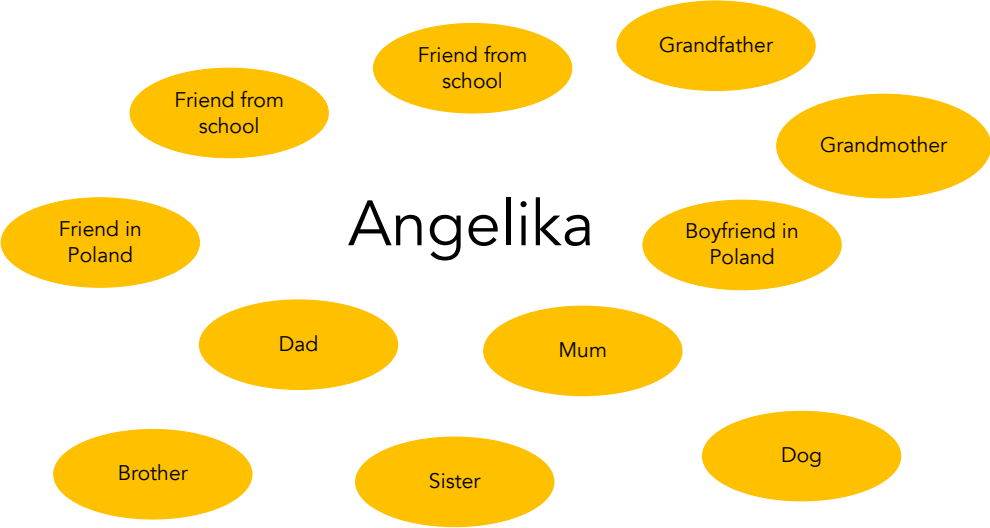


Figure 26: Angelika’s sociogram



The yellow circles on her sociogram indicate people who Angelika speaks mostly Polish with: she uses Polish with all of the most important people in her life. Note also that four of the 11 people listed still live in Poland.

Patricja and Marta are Angelika's best friends in Glasgow, and she says she'll miss them when she goes back to Poland; she'll be sad to leave Glasgow as well as happy to go home. She says that meeting them has been the best thing about moving to Glasgow. The three of them spend most of the day together in school, and don't mix much outside of their group. Angelika says that she does have some Scottish friends and that speaking to them has helped her learn English; however they aren't her best friends, and they aren't represented on her sociogram.

Some of her teachers think that Angelika's lack of non-Polish friends might be impeding her acquisition of English; they think that because she is part of an exclusively Polish friendship group, she isn't learning English as fast as those pupils who speak English with their friends. Despite the worries of her teachers, Angelika seems to be very comfortable conversing in English after spending only two years in Glasgow. When she discusses language, she always frames the discussion in terms of ability and academic success: she needs to speak English well to do well in school, and doing well at school seems to be her main reason for learning English. She sometimes expresses doubts about her own abilities in English, but she is doing very well academically, studying several subjects at Higher level (the top level available for her age group) in English, and keeping pace with many of her Glaswegian classmates. Angelika wants to go to university, but this might get in the way of her plans to move back to Poland. She says that because her education is happening in English, going to university in Poland would be very difficult for her. She plans to apply to the University of Glasgow to study psychology and, if she gets in, she might stay in Glasgow for another four years before returning to Poland.

The Scottish kids in school sometimes try to anglicise Angelika's name to 'Angie', but she corrects them every time, and gives them the Polish pronunciation: 'Angelika', she tells me firmly, is not her name.<sup>34</sup>

Angelika is placed within the low IM group.

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<sup>34</sup> 'Angelika' is a pseudonym, but her real name is shortened and anglicised in a comparable way.

#### 4.2.3.3. *Nikola*

Nikola has been in Glasgow since she was three and is now 13, but her identification with Poland is still remarkably strong. She moved over at the same time as Anna; they were in nursery together and have grown up together, but in their attitudes, their identities and their sense of where home is, they differ a great deal. For Nikola, Poland is still home. Like Dominik, she told me what part of Poland she lives in, using the present tense: she thinks of her grandparents' house in Poland, where she stays during the school holidays, as her home. Most of Nikola's extended family are still in Poland, and she speaks to them on Skype 'like, once a week'. She engages with Polish culture, watching Polish films because she likes them better than English-language films, and reading Polish magazines which her granny gets for her from Poland. She talks knowledgeably about the Polish school system, although she hasn't been to school in Poland herself.

Although Nikola was so small when she moved, she says that the move was very difficult for her.

It was hard to move. Like, I - I was pure crying in my family and - It was terrible when I moved. I didn't like it. It's just different, I - I didn't have my family here or anything.<sup>35</sup> And I just felt lonely.

When Evelyn asks her about learning English at nursery, she says:

I remember I was scared to talk to people. That's what I remem- I remember when I was in nursery, just tr- trying to learn it. I wasn't talking to anyone. Like, except Polish. I was - I was talking in Polish but not in English. I was scared to talk and that.

Nikola speaks Polish whenever possible, and chooses to hang out with the Polish people in school. She approaches new arrivals and befriends them, and is part of an

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<sup>35</sup> She is referring to her extended family; her parents and brother did move with her.

exclusively Polish friendship group: all of her friends are Polish, and she doesn't have any close friends who aren't Polish.

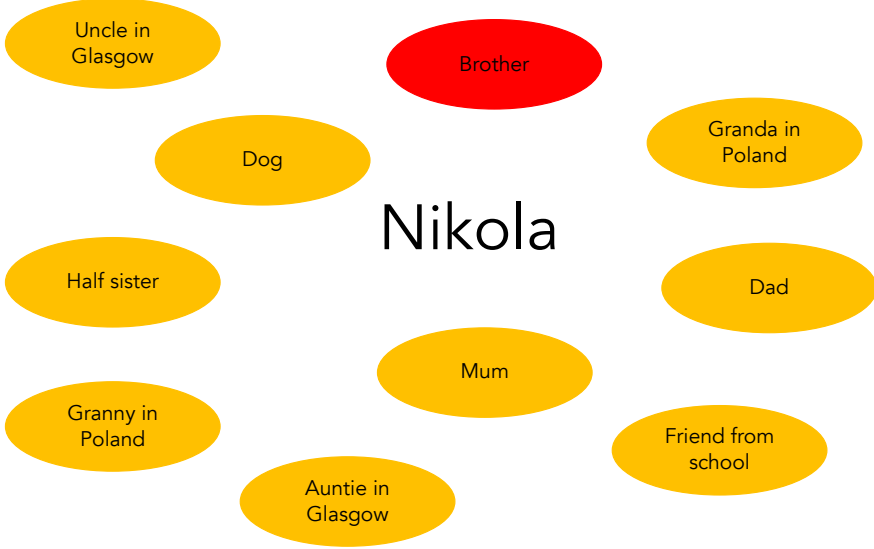


Figure 27: Nikola's sociogram

The yellow circles on Nikola's sociogram indicate people who she speaks mostly Polish with. The bright red circle indicates that she uses both Polish and English with her brother.

Nikola has a little sister who was born in Glasgow. Evelyn asks whether her sister will learn Polish or English.

Eh, sh- I think she'll l- learn both at a time. Because my mum said that - that we want her to learn first, eh, Polish, because she's Polish. And then Scottish, but I'm, like, I'm going to learn<sup>36</sup> her both in the same time. 'Cause I - I want her to be, like, n- normal Scottish and normal Polish as well. Even though sh- she was born here.

<sup>36</sup> Learn = teach

Nikola thinks that Polish and Scottish people are quite different, and she says that she thinks of herself as being Polish, not Scottish. Discussing a Scottish girl who's been learning Polish, she says 'I need to explain it to her a lot. But that's the bad thing, I hate explaining stuff to Scottish people.' In conversation she often sets up an 'us' and 'them' dichotomy, with Polish people on one side and non-Polish people on the other, and places herself on the Polish side. Occasionally this dichotomy becomes confused, as if she isn't sure which group she fits into.

But we don't celebrate Hallowe'en in my country. Well, it's starting to become, like, a tradition, but we didn't used to do it. They're starting to - to go, 'cause, like, they - they can see that people from different countries, like here we go and get sweets and everything and dress up. So they're starting to do it in Poland.

At the beginning of this extract, Polish people are 'we' and Poland is 'my country'. In the third sentence, Polish people become 'they', and 'people from different countries, like here' become 'we'. Nikola shifts her own group membership from Polish to non-Polish within the space of a few sentences.

Nikola describes experiencing a great deal of hostility as a Polish person in Glasgow. She describes being called a 'Polish bastard', being told to go back to her own country, and even having bricks thrown at her by older people when she was a small child. When I ask if Nikola would consider moving back to Poland she says 'yes' without hesitation. 'It's just because I miss my family. It's better here to live, because it's, like, a lot more money, and cheaper here.' Like most of the others, she mentions economic motivations for settling in the UK, but for her the social motivation to return to Poland overrides this.

Nikola is placed within the low IM group.

### 4.3. Sociograms and language dominance

Figure 28, below, is a reproduction of figure 1. It shows the participants arranged along the x-axis by length of time spent in Glasgow, and along the y-axis by age at the time of arrival. Those towards the left of the chart have spent less time in Glasgow and arrived at an older age. Those towards the right of the chart have spent more time in Glasgow and arrived at a younger age.

The colours of the participants' names give an indication of their dominant language, as suggested by their sociograms. I aggregate the colours of the sociograms to give an overall colour: speakers whose names appear in yellow have only yellow circles on their sociograms, indicating that they use mostly Polish with all of the most important people in their lives. The colours range towards red when speakers have orange and red circles on their sociograms, indicating that they use English with some of their friends and family. Red circles affect the shade more than orange circles, as they indicate that the participant is choosing to use English where both English and Polish are available (e.g. Piotr uses English with two of his cousins although they are able to speak Polish).

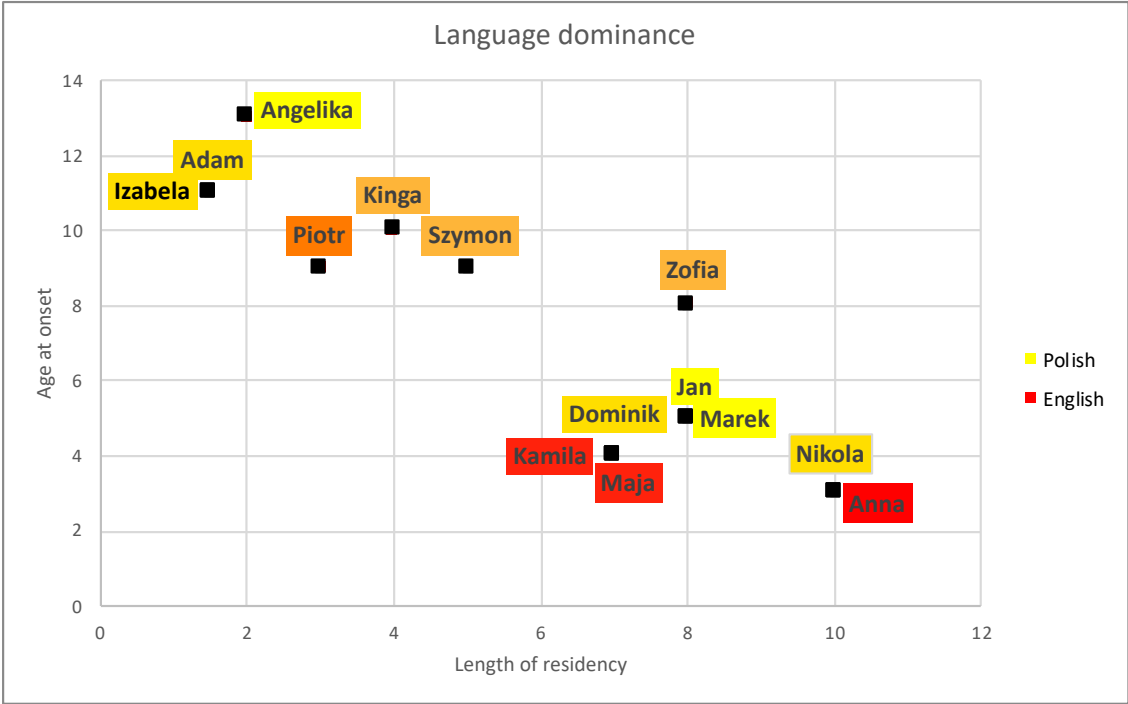


Figure 28: Details of the Polish participants: colours show language dominance

The sociogram data is unlikely to be as reliable as the data collected through participant observation. Being self-report data, it may reflect how the participants wanted to be seen by me in that particular interaction, rather than actual language dominance. There is also the possibility that the participants may have interpreted the questions differently. I asked them to represent the most important people in their lives: some represented only close family members, while Kamila represented a large social network across the school year-group and beyond (this difficulty of interpretation is also discussed by Howley 2015: 216). Another difficulty with taking this measure of language dominance at face value is that it takes into account only the number of circles of each colour: they are not weighted for importance. In fact some circles on a sociogram may be more important than others: for example, Adam's sociogram has only one circle indicating the use of English, but this circle represents his best friend, who he spends a large amount of his time with. For these reasons, this measure of language dominance informs the IM groupings to follow, but it is not taken as reliable evidence of IM in itself. The data gathered through participant observation and ethnographic interviewing forms the main basis for the IM groupings. Language dominance is not included as a factor by itself in the statistical analysis for the same reason.

Bearing these caveats in mind, it's interesting to note that this measure of language dominance does not appear to have a direct relationship with length of time spent in Glasgow. For example, Piotr is one of the newer arrivals, but favours English. Jan and Marek have spent a longer period of time in Glasgow but favour Polish. There may be a stronger relationship between language dominance and age at the time of arrival in Glasgow: the participants who now favour English most strongly all arrived in Glasgow at a young age.

It's worth noting, also, that in my conversation with them, many of the pupils (Izabela, Kinga, Maja, Dominik and Anna) describe some loss of L1 abilities; not just a change in language dominance, but an inability to fully express themselves in their L1. For these pupils, their L2 English acquisition may be a 'subtractive' process, where their L1 'is being replaced by a dominant L2' (Cummins 2001b: 56).

#### 4.4. Grouping the participants

The low IM group includes Angelika, Marek and Nikola. These three participants all have mostly Polish friends, and are very much a part of the Polish community at the school. They don't have many close ties with non-Polish people at the school. They also have strong connections back in Poland, and Angelika and Nikola both express a strong desire to go back to Poland. They prefer using Polish to English - even Nikola, who is entirely comfortable speaking English and has grown up with the language. They all strongly identify as being Polish, and most of the time they show little sign of identifying as Glaswegian at all.

The high IM group includes Piotr, Szymon, Kamila, Maja and Zofia. These participants have many strong connections with non-Polish people in Glasgow. All have best friends who aren't Polish, and Zofia has a boyfriend who is Glaswegian. They don't have many close ties back in Poland, or with the Polish community at St John's. Some (particularly Piotr and Zofia), have negative feelings towards the Polish community at St John's, and feel strongly that people shouldn't be forming exclusively Polish friendship groups at the school. Piotr and Zofia actively anglicise their names; the others allow their names to be anglicised by others. They no longer identify completely as migrants in Glasgow: they have settled in their new city, and have started to feel Glaswegian. None of them plan to move back to Poland in the future.

The medium IM group includes Adam, Izabela, Kinga, Dominik, Jan and Anna. This group are somewhere in between the other two groups. Izabela's feelings and orientations were in flux during the participant observation period. Her attitudes changed, as her friendship network did, during the course of the study. Adam, Jan and Dominik seem to be untroubled by questions of identity, and don't seem to have thought much about whether they consider themselves to be Polish or whether they consider themselves to be Glaswegian. Their choice of language - Polish or English - is largely practical, or follows the desires of others, and they are happy to use either language. Kinga and Anna seem to be strongly tied to Glasgow and also to their Polish identities. Kinga expresses different, sometimes apparently contradictory opinions at different times. She loves living in Glasgow and sometimes expresses negative attitudes

towards Poland, but she still strongly identifies as Polish. Anna sometimes pretends that she was born in Glasgow, but she also befriends new Polish arrivals at the school and takes an active part in the Polish community. Kinga loves using the Polish language, interpreting for people and teaching phrases to her friends, and of all of the participants she seems the proudest of being bilingual. Anna similarly enjoys interpreting and teaching Polish to her brother-in-law. They both have Polish and Glaswegian friends, actively engaging with the Polish community at the school but also forming important relationships and close ties outside of this community.

In figure 29, below, the participants are arranged along the x-axis by length of time spent in Glasgow and along the y-axis by age at the time of arrival. The colours indicate integrative motivation: blue shows low integrative motivation, orange shows high integrative motivation, and lilac shows medium integrative motivation.

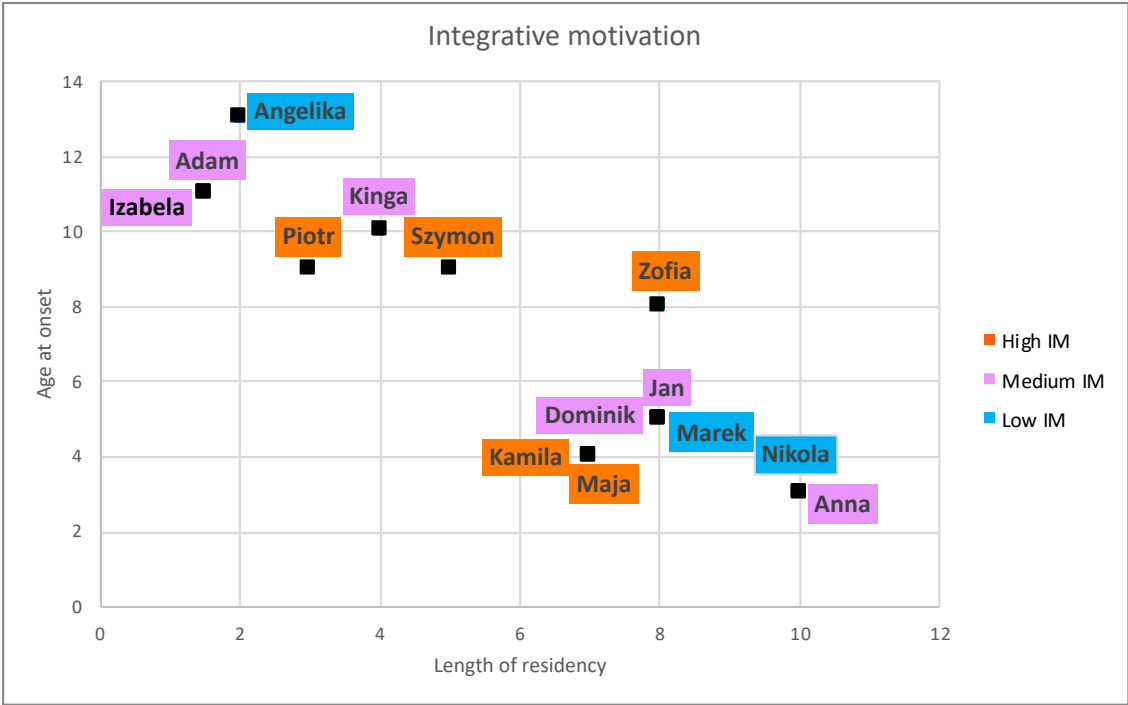


Figure 29: Details of the Polish participants: colours show IM



It is worth noting that there doesn't seem to be a strong relationship between the IM groupings and LoR or AaO. We might expect, intuitively, that those participants who arrived at a young age and have been in Glasgow for a long time will have stronger feelings of belonging in Glasgow, but this isn't always the case. The high IM group includes some participants who arrived at a very young age and have been in Glasgow a long time, as we might expect (Maja and Kamila), but also some participants who arrived at a much older age and more recently (Piotr and Szymon). The low IM group includes Angelika, who arrived at an older age and more recently, as we might expect, but also Nikola, who arrived at a very young age and has been in Glasgow for a long time.

In chapters 5 - 7, I apply this measure of IM within a quantitative analysis of several key linguistic variables. I ask whether we can use IM to explain individual differences in the Polish participants' acquisition of sociolinguistic variation in the L2.

## 5. *Aye*

In the following chapters, I examine four sociolinguistic variables using quantitative methods. I ask whether the learners have replicated the linguistic and social constraints found in native speech, and I also investigate the constraints on the acquisition of these variables (e.g. have learners who arrived at an earlier age acquired the variation to a greater extent?): I call these ‘predictors of acquisition’. In these chapters, I examine variables which differ from each other in a number of ways - they come from different levels of the grammar, and they are subject to differing levels of constraint complexity and differing levels of speaker awareness.

I begin by examining a lexical variable, *aye*. Trudgill (1986) states that ‘[l]exical differences are highly salient, and are readily apparent to all speakers of the varieties concerned without any linguistic training or analysis’ (25). If *aye* is high in speaker awareness, then its acquisition by L2 learners may be shaped by its social meaning (Labov 1993; Tarone 2007: 844; Howley 2015: 119). Previous research also shows that lexical variables tend to be low in constraint complexity (Smith et al 2013). If *aye* is low in constraint complexity, then it may be an ‘off-the-shelf’ variable, easy for learners to acquire without a high degree of contact with native speakers (Milroy 2007: 170).

## 5.1. Research context

The use of the lexical item *aye*, equivalent to Standard English *yes*, is iconic of Scots: Smith et al (2013) call it ‘one of the most defining characteristics of the Scots tongue’ (304). In the speech of the Glaswegian control group, the traditional Scots variant *aye* appears alongside the standard variant *yes* and two other supralocal variants, *yeah* and *uhuh*, as in examples (2a-d).

2. a. *Aye* I know, it went through his legs and all. - *Jake*
- b. *Yes*, I can show you a picture if you want? - *Candice*
- c. *Yeah* it’s an indie game. - *Jamie*
- d. *Uhuh* see if you look at my nose? - *Matt*

Aitken (1979) labels *aye* an ‘overt Scotticism’, and states that it is ‘almost by definition of a highly traditional Scottish character’. He includes it in a category which he calls ‘cultural Scotticisms’, and writes that these are part of ‘that special diction of Scottish-tagged locutions used self-consciously by many Scottish speakers as a kind of stylistic grace and as a way of claiming membership of the in-group of Scotsmen’ (107).

Dossena (2005) agrees that ‘ay(e) creates a [...] bond between the listener and the speaker by stressing the common cultural background’ (145), and calls it an ‘overt Scotticism’ (21).

While *aye* clearly carries some covert prestige as a marker of Scottish identity, there is also evidence that it is stigmatised in formal situations - and especially in the classroom. Romaine’s (1984) Edinburgh schoolchildren single out *aye* as a stigmatised form, and they discuss being chastised for using it (127). Matheson & Matheson (2000) write that ‘No longer are pupils hit with a leather belt for saying *aye* instead of *yes* but many are still told off for this’ (217). During my fieldwork period, I had the following conversation with Callum, one of the members of the Glaswegian control group. Callum brought up the subject of ‘slang’, the term the pupils at St John’s use to refer to non-standard variants.

Me: Do you use slang ever?

Callum: I try not to. But sometimes I say, like, “aye”, but I’m like, “oh god”. It’s just the way it comes out, I’m like, “aye - yes”.

Me: Do you always try not to speak slang?

Callum: No, sometimes I - I actually mean to speak slang, when I want to act Scottish. Sometimes I don’t.

Me: When’s that?

Callum: Er, when I’m around my friends, or that. Like, but when I’m around the house, my mum’s like, “Don’t use slang,” and I’m like, “what’s wrong with using slang around the house?” It’s just our tongue, the way it comes out.

Me: Is “aye” slang then?

Callum: Yeah. “Aye”, yes, that’s slang, for “yes”.

Callum understands *aye* as a form which carries stigma - his mum tells him not to use it, it is labelled as slang, and he says that he ‘tries not to’ use forms like this. However, he also understands that it carries covert prestige - he indicates that it is linked to group membership and identity (‘when I want to act Scottish’), and that sometimes there is social value in using it, particularly when he’s with his peer-group. Callum suggests that *aye* is constrained by speech context and interlocutor. He uses *aye* with his friends, and he thinks that it should be acceptable for him to use it at home, but he says that he tries to limit his use of it to these contexts. Callum’s ability to articulate the social meaning of *aye*, and his suggestion that he has some control over his use of it, implies that it is high in speaker awareness.

Although there is a great deal of qualitative comment in the literature, quantitative analysis of *aye* is sparse. Dossena (2005) provides quantitative analysis of *aye* variation, using data from the Miller-Brown Corpus of Scottish English, recorded in Edinburgh in the late 1970s. She finds that in these data, *aye* has a rate of 40.5% (145). Smith et al's (2013) study in the North East of Scotland finds that *aye* is used 99% of the time in adult speech (304). In the same community, Smith & Holmes-Elliott (in preparation) report that pre-adolescents aged 11-13 use *aye* at a rate of 90% when talking to an adult who is a community insider, and at a rate of 37% when talking to an adult who is a community outsider. Ryan (2014: 32), which examined the speech of a group of pre-adolescent Glaswegian girls (aged 10-13), found that in peer-group interaction they used *aye* at a rate of 10%, much lower than that reported for speakers in Edinburgh (Dossena 2005: 145) and the North East (Smith et al 2013: 304).

To my knowledge, no studies to date have examined the acquisition of *aye* in the L2 speech of migrants living in Scotland. For L1 speakers, the social meaning of the variation is clearly complex and nuanced, as exemplified by Callum's comments. How do L2 speakers negotiate this? In this chapter, I provide a quantitative analysis of the variation in the speech of my participants.

## 5.2. Methodology

In this chapter I ask two questions.

Research question 1: Are L2 learners able to replicate native speaker constraints on use? (section 5.3.)

Research question 2: What are the external factors predicting the acquisition of sociolinguistic variation by individual L2 learners? (section 5.4.)

I address each of these questions by building a separate statistical model. For research question 1, I model all of the speech data from both speaker groups together (Polish and Glaswegian), and then compare the two speaker groups to see how they differ from one another. For research question 2, I model only the Polish speech data, as I am examining constraints which are only relevant for the Polish speakers (e.g. length of residency and age at onset).

I began by extracting all occurrences of *aye*, *yes*, *yeah* and *uhuh* using AntConc (Anthony 2011). I then excluded tokens from the first 5 minutes of the interview and conversation data, and from the first 10 minutes of the peer-group data, to mitigate the effects of the Observer's Paradox (Labov 1972: 209).

Initial observation suggested that the three supralocal variants - *yes*, *yeah* and *uhuh* - pattern in similar ways, and have similar social meanings for these speakers. Although we might think of *yes* as being more formal, in fact many of these tokens are used in the context of celebrating a win during a game, as in example (3).

3.      Yesssssssss! Got it in! Right, ready? Three, two, one, go! - *Adam*

These celebratory *yes* tokens, often realised with an elongated /s/, are clearly not more formal than *yeah* or *uhuh*. In fact, for these speakers, *yeah* and *uhuh* are often used in a relatively formal way, alongside a few tokens of non-celebratory *yes*, to answer questions posed by adults. *Yeah* and *uhuh* seem to have lost the connotations of

casualness which they had for previous generations. Callum’s comments in section 5.1. suggest that the local form, *aye* has a social meaning which differs from the supralocal forms *yes*, *yeah* and *uhuh*. I therefore group together the three supralocal forms into a single category, and focus on the binary distinction between local *aye* and supralocal *yes / yeah / uhuh*. The overall distribution is shown in table 7, below.

	<i>Glaswegian speakers</i>		<i>Polish speakers</i>	
	N	Rate	N	Rate
<i>aye</i>	175	17.17%	349	10.69%
<i>yes / yeah / uhuh</i>	844	82.83%	2915	89.31%

*Table 7: Overall distribution of aye*

Table 7 shows that the Polish speakers use *aye* at only a slightly lower rate than their Glaswegian peers. They have begun to use the local variant, but is its use governed by the same constraints that can be observed in native speech?

### 5.3. The acquisition of native speaker constraints on *aye*

In order to investigate the acquisition of native speaker constraints, I created a mixed-effects logistic regression model using the lme4 package in R version 3.3.2. (R Core Team 2016). This model contained all of the data from both speaker groups - Polish and Glaswegian.

Within quantitative variationist sociolinguistics, many multivariate analyses compare speaker groups by modelling each group separately, presenting the significant constraints for each group, and making a qualitative comparison between the groups. In the present study, the main focus is on whether or not the groups differ from one another: whether the Polish speakers are matching the constraints shown by their Glaswegian peers. In order to answer this research question, I model both of the speaker groups together and make a statistical comparison between the two groups within this model.

When building my model, I included individual speaker in the model as a random intercept. This corrects for the unusual behaviours of particular speakers, meaning that these unusual behaviours are not allowed to have a disproportionate effect on the model. This means that the constraints which emerge as significant will not be the result of idiolectal differences. I fitted the model by beginning with this random intercept only, and adding potential constraints which tend to be associated with non-standard variants like *aye*: speech context (Labov 1972: 79; Bell 1984), gender (Fasold 1990: 92) and age (Tagliamonte 2011: 48). Age is included as two categories, with roughly equal numbers in each: the younger speakers (aged 11 and 12) and the older speakers (aged 13-16). Each time a new predictor is added, the fit of the model before and after its addition is compared using a log-likelihood ratio test. If the addition of the new predictor has significantly improved the fit of the model it remains, and if not it is removed again. The final model, therefore, contains only those constraints which are statistically significant.



### 5.3.1. Results

Table 8, below, gives a detailed summary of the model.

	Predictor	Estimate ( $\beta$ )	SE ( $\beta$ )	z-value	p
Row 1	Intercept	-3.788	0.428	-8.853	< .001
Row 2	Speech context = conversation	0.945	0.212	4.450	< .001
Row 3	Speech context = peer group	2.542	0.212	12.005	< .001

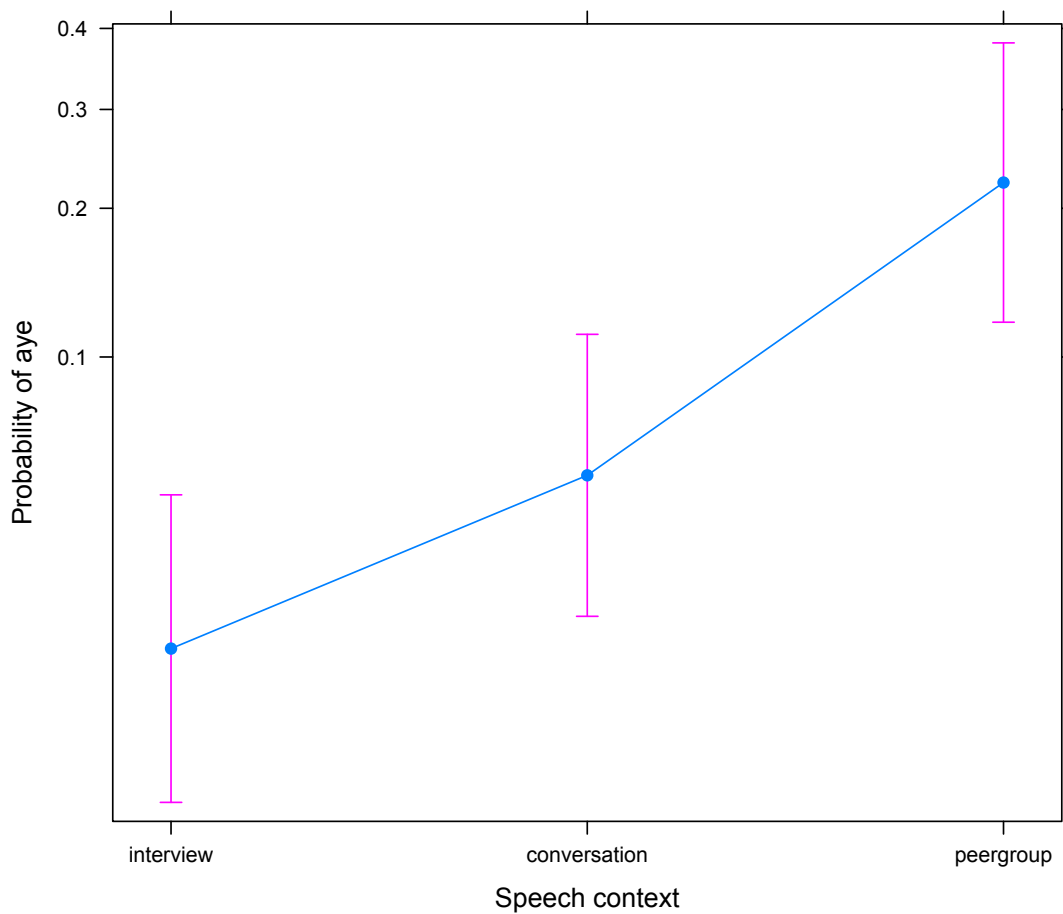
Table 8: Output of the logistic regression analysis showing the significant constraints for *aye* (both speaker groups modelled together)

The intercept category is the interview context. Row 1 shows that the log odds of *aye* are significantly negative for this category ( $p < .001$ ): a negative log odds value means less than a 50/50 chance of *aye*. Row 2 shows that in the conversation context, the log odds of *aye* are increased by 0.945 compared to the interview context: *aye* is more likely to occur in this category. This difference is statistically significant ( $p < .001$ ). Row 3 shows that in the peer-group context, the log odds of *aye* are increased by 2.542 compared to the interview context: *aye* is more likely to occur in this category. This difference is statistically significant ( $p < .001$ ).

Table 8 shows that the only constraint which emerges as significant is speech context: gender and age are not significant. Previous research has repeatedly found that stigmatised variants are used at higher rates by male speakers (Fasold 1990: 92), but this is not the case for *aye* amongst these speakers. Previous research has also repeatedly found that the use of stigmatised variants increases as speakers move into adolescence (Tagliamonte 2011: 48); however in the case of these speakers, those who are further into adolescence do not use *aye* at a higher rate than those who are just entering adolescence. While these potential constraints do not emerge as significant, speech context does.

Figure 30 shows a partial effects plot of the above model. A partial effects plot illustrates how the factor under consideration affects the outcome, after controlling for

individual variation and the effects of any other factors. Figure 30 shows how speech context affects the probability of *aye* occurring.



*Figure 30: Partial effects plot showing the probability of aye across speech contexts (both speaker groups modelled together)*

Overall, *aye* is least likely to occur in the interview context (the point furthest left on the x-axis); it is more likely to occur in the conversation context (the middle point), and it is most likely to occur in the peer-group context (the point further right on the x-axis). The participants are least likely to use *aye* in a formal, classroom-like environment and when conversing with a non-native speaker, and they are most likely to use *aye* with their friends in an informal environment. This aligns with Labov's (1972) suggestion that speakers use higher rates of non-standard variants in informal situations (79), and Bell's (1984) suggestion that speakers use higher rates of non-standard variants with community insiders.

We now know that speech context is a significant constraint for *aye* when both speaker groups are examined together. But is this constraint the same for both speaker groups? Do the Polish speakers match the linguistic behaviour of the Glaswegian control group for the speech context constraint, or do the groups differ from one another? To find out, I added speaker group to the model as an interaction term, which significantly improved the fit of the model ( $\chi^2(3) = 14.813, p < 0.01$ ). If speaker group did not significantly improve the fit of the model then we could infer that the two groups do not differ from each other statistically: the Polish speakers would be entirely matching the linguistic behaviour of their Glaswegian peers. As it is, we can infer that the two groups show statistically different linguistic behaviour for *aye*. Table 9 gives a detailed summary of the model with speaker group added as an interaction term.

	Predictor	Estimate ( $\beta$ )	SE ( $\beta$ )	z-value	p
Row 1	Intercept	-2.152	0.711	-3.028	< .01
Row 2	Speaker group = Polish	-2.311	0.711	-3.028	< .01
Row 3	Speech context = conversation	0.043	0.353	0.121	0.904
Row 4	Speech context = peer-group	1.239	0.378	3.276	< .01
Row 5	Speaker group = Polish: Speech context = conversation	1.194	0.444	2.690	< .01
Row 6	Speaker group = Polish: Speech context = peer-group	1.743	0.462	3.775	< .001

Table 9: Output of the logistic regression analysis showing significant constraints for *aye* with speaker group added as an interaction term

The intercept category is the interview context in the Glaswegian data. Row 1 shows that the log odds of *aye* are significantly negative for this category ( $p < .01$ ): a negative log odds value means less than a 50/50 chance of *aye*. Row 2 shows that in the interview context in the Polish data, the log odds of *aye* are reduced by 2.311 compared to the intercept category (the Glaswegian interview context): *aye* is less likely to occur in this context. This difference is statistically significant ( $p < .01$ ). Row 3 shows that in the conversation context in the Glaswegian data, the log odds of *aye* are increased by 0.043 compared to the intercept category (the interview context): this difference is not statistically significant ( $p = .904$ ). Row 4 shows that in the peer-group context in the Glaswegian data, the log odds of *aye* are increased by 1.239 compared to the intercept category (the interview context): *aye* is more likely to occur in this context. This difference is statistically significant ( $p < .01$ ). Row 5 shows that in the conversation context in the Polish data, the log odds of *aye* are increased by 1.194 compared to the intercept category with the row 2 ‘Polish’ adjustment and the row 3 ‘conversation’ adjustment included. This effect is statistically significant ( $p < .01$ ). Row 6 shows that in the peer-group context in the Polish data, the log odds of *aye* are increased by 1.743 compared to the intercept category with the row 2 ‘Polish’ adjustment and the row 4 ‘peer-group’ adjustment included. This effect is statistically significant ( $p < .001$ ).

Figure 31, below, is another partial effects plot showing exactly how the two groups differ from one another. It shows the probability of *aye* across each of the three speech contexts for each group.

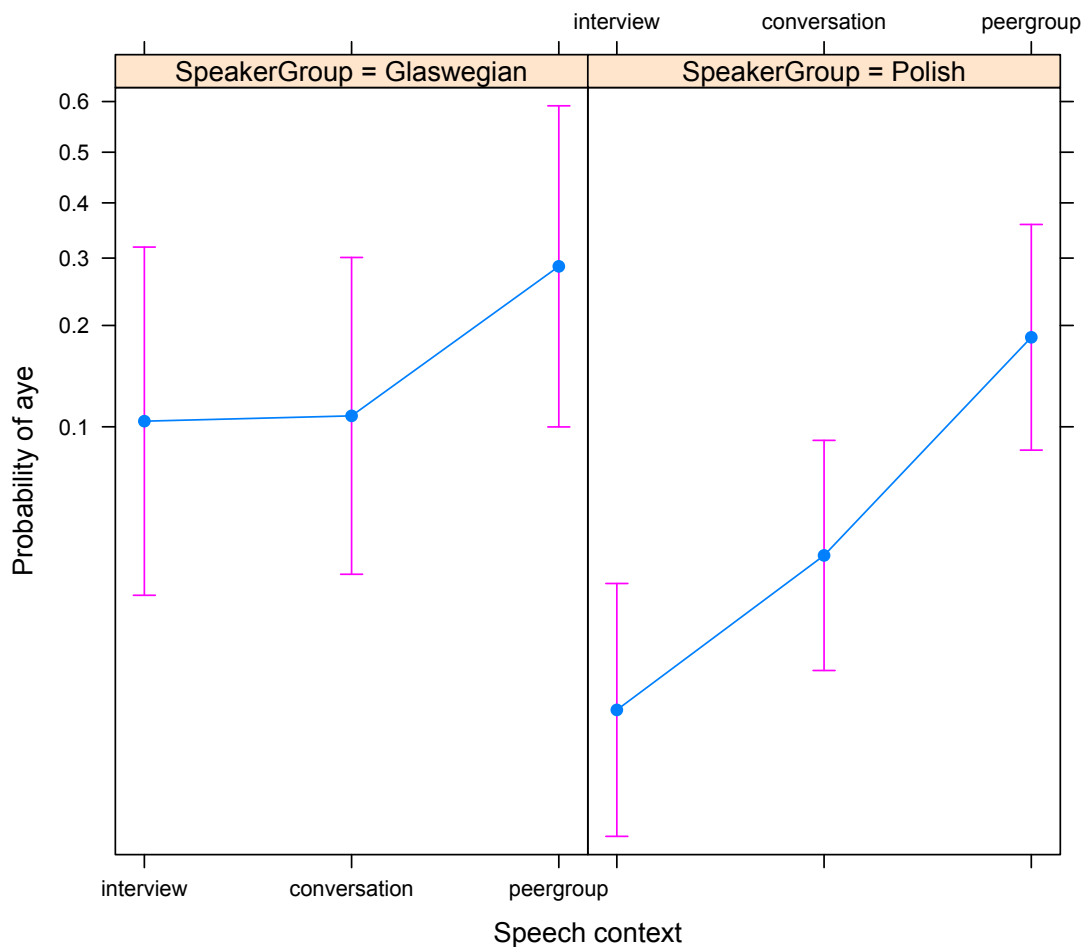


Figure 31: Partial effects plot showing the probability of *aye* across speech contexts for each speaker group

Figure 31 shows that for both speaker groups, *aye* is most likely to occur in the peer-group context. For the Glaswegian control group (shown in the panel on the left), the likelihood of *aye* occurring is roughly equal in the conversation and interview contexts: i.e. they do not reduce their rate of *aye* in the interview context, where they are conversing with a non-native speaker in a classroom-like environment. The Polish group (shown in the panel on the right) do reduce their rate of *aye* in the interview context. The Polish group alter their rate of *aye* more dramatically than the Glaswegian speakers across the three contexts, suggesting that they have over-acquired this constraint (see section 2.1.). Table 10, below, summarises this constraint acquisition pattern.

Constraint	Comparison of the two speaker groups	Constraint acquisition pattern
speech context	constraint found in native speech; constraint stronger in non-native speech	constraint has been over-acquired

Table 10: Summary of constraint acquisition pattern for *aye*

### 5.3.2. Discussion

The Polish speakers have over-acquired the speech context constraint, shifting their speech more dramatically across the speech contexts than the Glaswegian speakers do. This over-acquisition shows that these learners are aware of the social meaning of the variation. They understand that *aye* is stigmatised in classroom-like contexts, but that its use has social value within the peer-group. They shift their use of the form accordingly, but overshoot the mark, shifting to a greater extent than their Glaswegian peers.

The heightened style-shifting behaviour shown by the Polish speakers may be interpreted as a form of hypercorrection. The term ‘hypercorrection’ was first used by Labov (1966: 152) to describe patterns observed in L1 sociolinguistic variation, e.g. the overuse of the prestige variant, rhotic /r/, by lower middle-class New York speakers in formal speech contexts. Eckman et al (2013) define hypercorrection as:

The rendition of a form by a speaker of a less prestigious variety as an attempt to have it match a more prestigious pattern, but which in the process overshoots the mark (258)

Eckman et al adopt the term to discuss patterns observed in L2 speech. The concept of hypercorrection may help to explain the over-acquisition of native-like variation patterns by the learners in the current study. As migrants and learners of English at St John’s, the Polish speakers occupy a more precarious position than their Glaswegian peers, both socially and linguistically (this is illustrated in section 3.3. and chapter 4).

If, as suggested by Wolfram (1991), '[t]he source of hypercorrection is linguistic insecurity' (155), and if we accept that in St John's high, non-native speech is 'less prestigious' than native Glaswegian speech, then the patterns of over-acquisition observed are not as surprising as they first appear.

#### **5.4. Predictors of the acquisition of *aye***

I now ask: have some individual learners acquired the variation to a greater extent than others? And if so, what are the external factors predicting the acquisition of variation by individual speakers?

Again, I created a mixed-effects logistic regression model, but this time the model contained only the speech data from the Polish group. I fitted the model using the methodology described in the previous section, beginning with only the random intercept (individual speaker), and adding in speech context, the only constraint found to be significant in the previous section. I then added each of the potential predictors of acquisition identified in chapter 2 - LoR (length of residency), AaO (age at onset), gender and IM (integrative motivation). The speakers are grouped into two LoR categories of roughly equal size: those with shorter LoRs (ranging between 1.5 and five years) and those with longer LoRs (ranging between seven and ten years). No speakers have an LoR of six years, meaning that there is a gap between the two categories. The speakers are also grouped into two equally sized AaO categories: the early starters (with AaOs between three and five) and the later starters (with AaOs between eight and 13). No speakers have an AaO of six or seven, so that, again, there is a gap between the two categories. As described in chapter 4, the speakers are grouped into three IM categories: high IM, medium IM and low IM.

##### **5.4.1. Results**

I tested whether each of the above factors significantly improved the fit of the model, and found that none of them did. They are not statistically significant predictors of an individual's rate of *aye*.

This lack of significance is not because individual differences in rates of *aye* do not exist. As shown by figure 32, below, individual differences are pronounced.



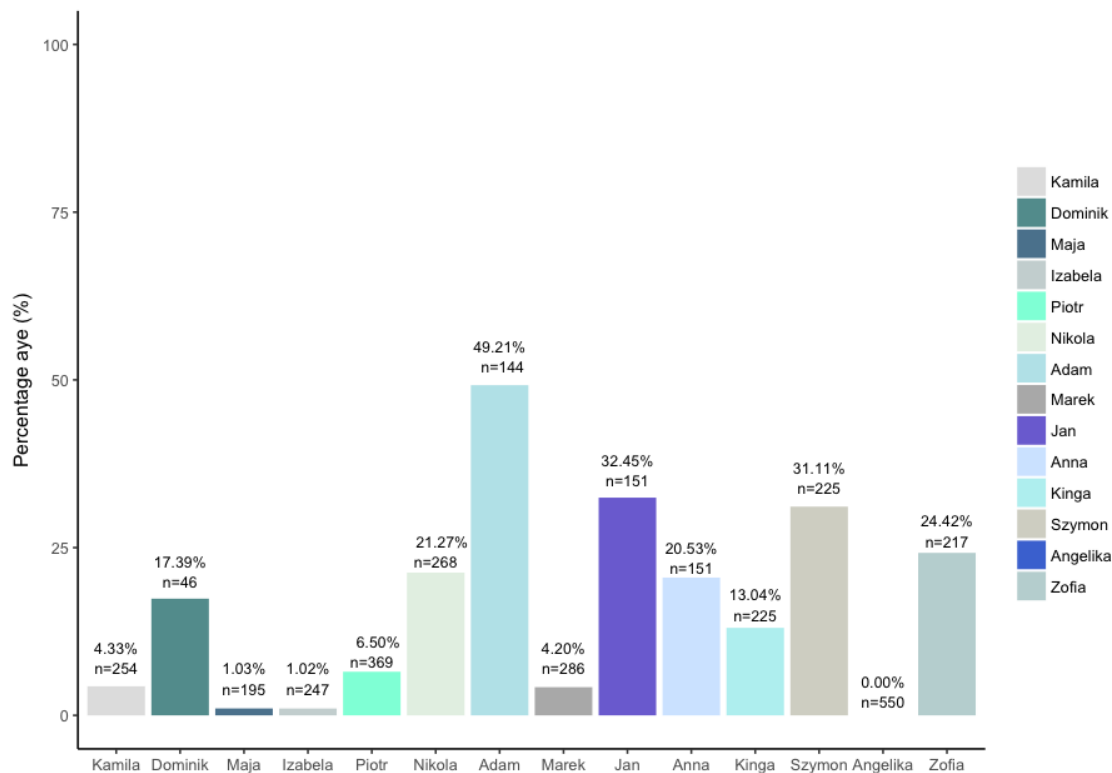


Figure 32: Comparison of *aye* across individual Polish speakers (speakers ordered youngest to oldest)

Figure 32 shows that individual speakers show quite divergent behaviour with regard to this variable. Adam uses a very high rate of *aye* (49.21%), while Maja and Izabela use very low rates (1.03% and 1.02% respectively) and Angelika avoids the use of *aye* altogether. This divergent speaker behaviour cannot be explained by LoR, AaO, gender and IM. The biggest user of *aye*, Adam, is also the newest arrival and has one of the highest AOs. Those speakers who identify more strongly with Glasgow and have more contact with native Glaswegians do not use *aye* at a significantly higher rate. If the factors tested cannot explain the divergent behaviour observed, what can?

#### 5.4.2. Discussion

All of the evidence presented on *aye* implies that it is very high in speaker awareness. This is implied by its status as a marker of Scottish identity (Aitken 1979: 107; Dossena 2005: 21; Smith et al 2013: 304), by its stigmatisation (Romaine 1984: 127; Matheson & Matheson 2000: 217), by Callum's overt comments on his use of it, and by its sensitivity to speech context in the current data. This also aligns with Trudgill's (1986: 25) prediction about lexical variables being high in speaker awareness.

I have suggested that the acquisition of high-awareness variables may be dependent on learners' social evaluation of them; they will be acquired if they are socially desirable to the learners, and rejected if they are not (Labov 1993; Tarone 2007: 844). If this is the case, then figure 32 suggests that *aye* is more socially desirable for some speakers than it is for others. Some of them have 'chosen' to acquire the local forms to a high degree, and some have 'chosen' to reject them. It is worth noting that the individual Glaswegian speakers also use *aye* at divergent rates, as shown in figure 33, below.

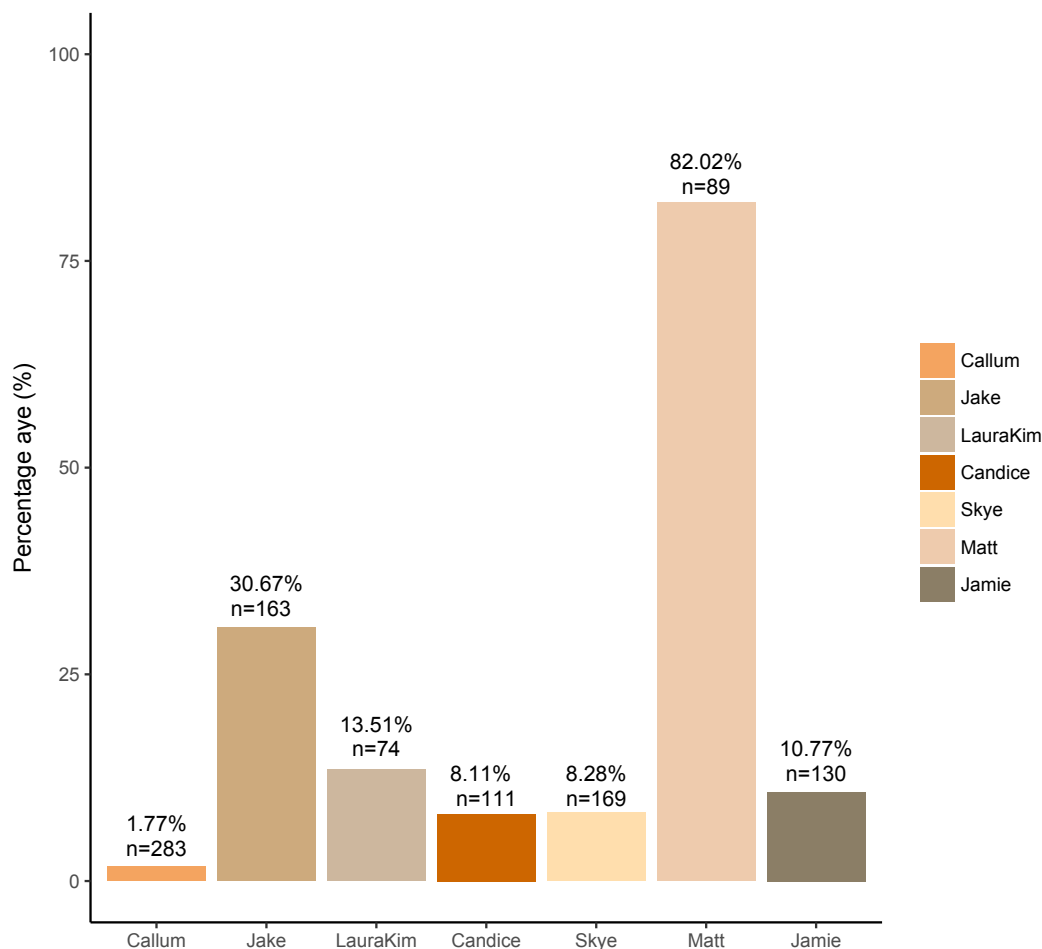


Figure 33: Comparison of *aye* across individual Glaswegian speakers (speakers ordered youngest to oldest)

The patterning across the two speaker groups suggests that *aye* may be used in individual acts of identity by both the Polish learners and their Glaswegian peers. Just as some of the Polish learners reject the local variants, so too do some of the Glaswegians. *Aye* is not an obligatory element of the Glaswegian adolescents' linguistic repertoires, suggesting that it may index some aspect of local identity other than simply 'Glaswegian-ness'.

Observing that *aye* tends to be avoided in the most formal and classroom-like social context, I suggest that the overall avoidance of the local form by certain individuals might be linked to 'pro-school' orientations. High rates of the local forms by other individuals may be linked to 'anti-school' orientations - rebelliousness and anti-establishment values (Willis 1977: 11; Eckert 2000: 67-68). Moore (2004) discusses the avoidance of institutionally stigmatised variants by adolescents who are

more engaged with school: '[i]n order to successfully engage with the institution, it is necessary to acknowledge the legitimacy of its authority - part of which includes authority over language' (390).

Adam (in the Polish group) and Matt (in the Glaswegian group) have the highest rates of *aye*. Both have a general anti-school orientation. Adam is interested in football, and he isn't particularly interested in school work: this was obvious in his interview with Evelyn, where she asked him classroom-style questions and he gave very minimal, disengaged answers. In the after-school club he took part in the activities but he didn't always follow the instructions of the workshop leaders, and he generally didn't have a problem with breaking the rules (for example, he would often sneak away to play Grand Theft Auto on the school computers, which Maja informed me was definitely not allowed). In our conversation, Matt told me that he is very disengaged with school; the teachers often misunderstand him and dislike him as a result. He believes that he isn't clever. He told me that his main skill is fighting, and when he leaves school he'll probably be a bouncer<sup>37</sup> or something similar. He gets into trouble a lot, both in and out of school. In the after-school club he didn't treat the workshop leaders as authority figures. He spoke to them as equals, and he was friendly with them but didn't always follow their instructions. Adam and Matt may be expressing their anti-school orientation in their language use, by using high rates of stigmatised forms such as *aye*, which are discouraged in the classroom.

Angelika, Maja and Izabela have the lowest rates of *aye* in the Polish group. Callum has the lowest rate of *aye* in the Glaswegian group. All of these pupils are highly engaged with education. They work hard in class and always do their homework. Angelika and Izabela told both me and Evelyn that they plan to go to the University of Glasgow. Callum told me that he wants to be an engineer when he grows up, and talks with pride about his brother, who is at university. Maja loves to read, plays the clarinet, and goes to the school debating club. All wear full school uniform, without the badges and piercings worn by some of the other participants to stretch the limits of the school uniform policy. At the after-school club, all of them followed the instructions of the workshop leaders and avoided causing any trouble. In the classroom-

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<sup>37</sup> *Bouncer* = nightclub security

style interviews with Evelyn, all were keen, engaged and eager to impress. Evelyn showed them a book and asked them how they would use it in class if they were teachers. Maja and Izabela took to this task with particular flair, and Izabela told Evelyn that she would like to be a teacher one day. In their clothing and social practice they tend to show a pro-school orientation; they may be expressing this orientation in their language use too, by avoiding stigmatised forms such as *aye*, which are discouraged in the classroom.

Maja has been in Glasgow since she was four, and to a casual observer she sounds like a native Glaswegian. But, crucially, she doesn't sound like *all* native Glaswegians, because not all native Glaswegians sound the same (as exemplified by figure 33). The use of *aye* by non-native speakers is not related to an identification with Glasgow, but with certain types or aspects of adolescent identity in Glasgow. The above descriptions of the pupils' orientations hint at how variables such as *aye* may be used to construct identities more nuanced than 'native-like' and 'non-native'.

Wolfram et al (2004) investigate whether Hispanic speakers settling in the American south are acquiring the local form of the vowel /ai/, a monophthong which contrasts with the diphthong /ai/ found in Standard American English. They find that, on the whole, there is 'gradient, incremental adjustment of the /ai/' (339) but that there are also 'exceptions, based on individual choice and cultural alignment' (355). To highlight the role of individual choice and cultural alignment, they describe the case of two siblings, a girl aged 11 and a boy aged 13. The girl produces very few instances of the local monophthong /ai/, instead favouring the diphthong /ai/ form found in Standard American English. The boy favours the local monophthong /ai/. The researchers align this with the girl's favouring of mainstream American institutional values, and the boy's favouring of 'the local non-Hispanic "jock" culture of adolescent boys' and 'a strong "macho" image' (354). They write that: 'Such cases demonstrate the symbolic individual choices that speakers may make, even within the same family, as they mold their identities in relation to those around them and for themselves' (355).

Nestor et al (2012) describe the acquisition of discourse *like* in the L2 English of six Polish migrants living in Dublin and County Mayo. They describe how in Ireland (and particularly in Dublin), two distinct uses of discourse *like* have very different

social meanings: clause-medial discourse *like* ‘indexes an upwardly-mobile, youthful, globalised identity’ (348), while clause-marginal discourse *like* is used by working-class speakers to distance themselves from this more middle-class identity. The speakers in this study construct differing identities through their preference for either clause-medial or clause-marginal discourse *like*: some favour clause-marginal *like* and in doing so orient more towards working-class Irish identity, while some favour clause-medial *like* and in doing so orient more towards middle-class Irish identity (350). Again, their degree of identification with the L2-speaking community as a whole is important, but where they place themselves within this L2-speaking community may be more important.

As discussed, in the current study, IM is designed to measure the degree to which a speaker has adopted Glaswegian identity. I suggest that it does not emerge as a significant predictor for *aye* because this variable does not necessarily index ‘Glaswegian-ness’ in a straightforward way. Lawson’s (2009) ethnography of Bannister Academy highlights the fact that there are many ways to be an adolescent working-class Glaswegian male, even within a single high school year group. ‘Glaswegian-ness’ is not a monolith which migrants can opt into by using local variants like *aye*. As the participants move away from migrant identities, they move into a complex landscape of local identity, with many possible ways to situate themselves.

As expected for a lexical variable, *aye* is also very low in constraint complexity (speech context is the only significant constraint to be identified). Meyerhoff & Schlee (2014: 122) suggest that variables which are low in constraint complexity may be easier for learners to acquire. Milroy (2007: 170) adds that low-constraint variables are likely to be ‘off-the-shelf’ variables: these are easily accessible, and can be acquired without a high degree of native speaker contact. I suggest that, as a low-constraint variable, *aye* is accessible to the learners in the current study whether or not they have had a high degree of native speaker contact.

This provides further explanations as to why IM, LoR and AaO do not emerge as predictors of acquisition. As well as being a measure of identity, IM is also a measure of a learner’s level of contact with native speakers: the learners with higher IM

identify more strongly with Glasgow, but they also have more friendships with native speakers. If *aye* was a highly-constrained variable, and this level of contact with native speakers was vital for its acquisition, then we might expect IM to emerge as a predictor for *aye*. As it is, this variable is accessible even to learners who have a low degree of contact with native speakers. This is also true of LoR and AaO: previous research has suggested that LoR and AaO may play a particularly important role in the acquisition of highly-constrained variables (Payne 1980: 175; Chambers 1992: 702; Kerswill 1996: 187); but *aye* is not highly-constrained, and LoR and AaO do not emerge as significant. I suggest that because *aye* is low in constraint complexity, it may be accessible even to those participants with relatively short LoRs, high AaOs and low IM. However, while it is accessible, its acquisition is not inevitable: it is dependent on the learners' 'individual choice and cultural alignment' (Wolfram et al 2004: 355).

## 5.5. Chapter summary

To summarise, I suggest that the acquisition of this high-awareness variable is shaped by its social meaning (Labov 1993; Tarone 2007: 844; Howley 2015: 119). Individual learners can adopt or reject the local form *aye*, and in doing so, they can express different individual orientations. *Aye* is involved in identity marking, but it doesn't mark 'Glaswegian' identity in any straightforward sense, and so its acquisition doesn't correlate with the learners' level of identification with Glasgow, as measured by IM.

*Aye* is also a low-constraint variable, and as such it may be available to learners without a high degree of contact with native speakers (Milroy 2007: 170). As a low-constraint variable, it may also be accessible without a long LoR or a low AaO (Payne 1980: 175; Chambers 1992: 702; Kerswill 1996: 188), so that these factors and IM, which is in part a measure of native speaker contact, do not emerge as significant for *aye*.

Finally, the native speaker constraint of speech context is over-acquired by the learners. I suggest that this is a form of hypercorrection resulting from linguistic insecurity (Wolfram 1991: 155).



## 6. Scots negation

Having examined the lexical variable *aye*, I now examine a morphophonological variable, Scots negation. Because this variable involves a phonological contrast, it is also expected to be relatively high in speaker awareness, although not as high as lexical variation (Trudgill 1986: 25). If Scots negation is high in speaker awareness, then its acquisition by L2 learners may be dependent on its social evaluation by these learners (Labov 1993; Tarone 2007: 844; Howley 2015: 119). Whether or not it is easy for learners to acquire, and what degree of native speaker contact is necessary for its acquisition, may also depend on its level of constraint complexity (Milroy 2007: 170).

## 6.1. Research context

Along with other Scottish varieties, Glaswegian allows speakers to vary between the standard negation form *-n̩t̩* /nt/ and the local negation form *-nae* /ne/ as in example (4). This is referred to as enclitic negation.

4. *Wouldn't* - I *wouldnae* have - I *wouldnae* say that - *Jake*

Speakers can also vary between the standard negation form *not* /nɒt/ and the local negation form *no'* /no/, as in example (5a-b). This is referred to as non-clitic negation.

5. a. I've *no'* opened it. - *Laura-Kim*  
b. I'm *not* talking to you! - *Candice*

Realisations vary regionally; in the North East, the local variants are *-na* [nʌ] in enclitic contexts and *nae* [ne] in non-clitic contexts

The local enclitic variants cannot occur in interrogatives and tags, so that examples (6a-b) are ungrammatical.

6. a. \* *Cannae* you do it tomorrow?  
b. \* I can do it tomorrow, *cannae* I?

Declarative sentences are the only fully variable contexts for this variation (Smith et al 2013: 298); therefore, I remove all other sentence types, leaving only declaratives, as in examples (7a-b).

7. a. I *can't* remember any names. - *Jamie*  
b. A wee first year *cannae* say I *cannae*. - *Matt*

For non-clitic variation, I examine all sentence types, as this constraint does not apply.

Because of the limited sentence types in which the variation can occur, I refer to Scots negation as a morphophonological variable. It is a phonological variable which is morphologically conditioned.

As with *aye*, Scots negation is a traditional marker of Scottish identity: Aitkin (1979) lists the form *dinna* as an ‘overt Scotticism’, as does Dossena (2005: 21). While Scots negation appears to carry some covert prestige, there is also evidence that, like *aye*, it is stigmatised in more formal situations. Sandred (1983) provides a survey of attitudes towards Scottish features, focusing on stigma and prestige; he asks which features are perceived as ‘good Scots’ and ‘bad Scots’. His participants often designate the examples *dinna* (83) and *I’ll no’ wait* (104) as ‘bad grammar’ and ‘lazy speech’. Romaine’s (1984) Edinburgh school children cite *dinnae* and *cannae* as stigmatised forms - forms which they have been chastised for using and which aren’t acceptable in ‘polite’ speech (127).

Quantitative studies tend to show high rates of Scots negation. In Ayr, Macaulay (1991) cites a rate of 60% for the local enclitic form, *-nae* (51), and a slightly higher rate of 67% for the local non-clitic form, *no’* (52), for his working-class speakers. Smith et al (2013: 299) report that in the North East, the local forms are used 99% of the time in adult vernacular speech. Ryan (2014: 43), reports that in enclitic contexts, a group of pre-adolescent Glaswegian girls use the local variant, *-nae*, 10% of the time, and in non-clitic contexts they use the local variant, *no’*, 27% of the time. Generally, the literature suggests that local forms appear more frequently in non-clitic contexts than in enclitic contexts.

When *-nae* occurs with *do*, the stem of the word changes to create the form *dinnae*. Previous research suggests that *-nae* is less likely to occur with auxiliary verb *do* than it is to occur with other auxiliary verbs. Smith et al (2013: 301) find that their speakers consistently have lower rates of *dinna* than other *-na* forms; however, rates of *dinna* are still fairly high, above 70% for some speakers. *Dinnae* appears to be more strongly disfavoured in the South West of Scotland. In Ayr, Macaulay (1991) finds no instances of *dinnae*, while for other auxiliary verbs *-nae* forms are very frequent (50). In Glasgow, Macafee examines *dinnae* separately from the other *-nae* forms (218)

because, although *dinnae* does occur in her data, it occurs very rarely (223). Also in Glasgow, Ryan (2014: 44) reports that *dinnae* is far less frequent than other enclitic forms (*amnae*, *didnae*, *canna* etc.).

To my knowledge, no studies to date have quantitatively examined Scots negation in an L2. In this chapter, I use quantitative analysis to ask whether the Polish participants are able to replicate the patterns of use found in native speech, and I attempt to identify the external factors predicting the acquisition of Scots negation by individual learners.

## 6.2. Methodology

My analysis of Scots negation follows the same pattern as my analysis of *aye*. I build two statistical models, the first comparing the two speaker groups (Glaswegian and Polish) in order to ask whether the Polish speakers have replicated the native speaker constraints, and the second examining constraints which are only relevant to the Polish group (e.g. length of residency and age at onset).

Using AntConc (Anthony 2011) I extracted all occurrences of enclitic and non-clitic negation within fully variable sentence types.<sup>38</sup> As with *aye*, I excluded tokens coming from the first 5 minutes of the interview and conversation data, and from the first 10 minutes of the peer-group data, to mitigate the effects of the Observer’s Paradox (Labov 1972: 209).

Initial observation suggested that, as found in other studies in the South West of the country (Macaulay 1991: 50; Macafee 1994: 223; Ryan 2014: 44), the form *dinnae* is extremely rare. When enclitic negation occurs with the auxiliary verb *do*, the standard form *don’t* is generally used. In table 11, below, I compare the effect of auxiliary verb *do* across the Polish and Glaswegian speaker groups. As this constraint applies to enclitic contexts only, I remove non-clitic contexts from this section of the analysis.

Auxiliary verb	<i>Glaswegian speakers</i>		<i>Polish speakers</i>	
	Total N	Rate of local forms	Total N	Rate of local forms
do	468	0.00%	1153	0.61%
other	403	40.45%	713	42.22%

Table 11: Comparison of auxiliary verb effect for enclitic negation contexts across speaker groups

<sup>38</sup> During the transcription phase, the transcription team were asked to differentiate between the standard form *no* as in example (8):  
 8. No offence to him, like. - *Maja*  
 And the non-standard for *no*’ used as a local equivalent to the standard form *not*, as in example (9):  
 9. I’m *no*’ sure. - *Dominik*  
 Example (9) is non-clitic Scots negation. It was transcribed as *no*’, so that it could be easily searched and extracted from the corpus for analysis alongside the enclitic *-nae* forms. See appendix 9.

The form *dinnae* is completely absent from the Glaswegian speech data, with *don't* occurring categorically. In the Polish speech data, *dinnae* occurs very rarely, only 7 times compared to 1146 occurrences of *don't*. The only speaker to use *dinnae* is Zofia. Recall that during the early stages of her L2 acquisition, Zofia attended a specialist language school. This school was located between Glasgow and Edinburgh, and served both cities. It is possible that Zofia picked up the form *dinnae*, which is used more commonly in Edinburgh (Romaine 1984: 101), during her time at this language school. Due to categoricity, I remove all tokens of *don't* and *dinnae* from the following analysis. Table 12, below, shows the overall distribution after the removal of these tokens.

	<i>Glaswegian speakers</i>		<i>Polish speakers</i>	
	N	Rate	N	Rate
local non-standard forms	300	36.90%	516	35.83%
supralocal standard forms	513	63.10%	924	64.17%

Table 12: Overall distribution of Scots negation after removal of *don't* and *dinnae*

Table 12 shows that the Polish speakers use Scots negation at a rate almost matching that of their Glaswegian peers; but have they also acquired the native speaker constraints on use?

### 6.3. The acquisition of native speaker constraints on Scots negation

To investigate the acquisition of native speaker constraints on Scots negation, I created a mixed-effects logistic regression model using the methodology described in section 5.3. This model contained data from both speaker groups - Polish and Glaswegian. Again, I included individual speaker in the model as a random intercept, meaning that the constraints which emerge as significant will not reflect idiolectal differences.

I fitted the model by beginning with this random intercept only, and adding potential constraints. The first constraint to be added I refer to as the ‘linguistic context’ constraint. Previous research has found that the non-clitic form *no*’ occurs more frequently than the enclitic form *-nae* (Macaulay 1991: 51-52; Ryan 2014: 43); I wanted to test whether this pattern emerged in my data. I also tested potential constraints which tend to be associated with stigmatised variation: speech context (Labov 1972: 79; Bell 1984), gender (Fasold 1990: 92) and age (Tagliamonte 2011: 48).

#### 6.3.1. Results

Table 13 gives a detailed summary of the model.

	Predictor	Estimate ( $\beta$ )	SE ( $\beta$ )	z-value	p
Row 1	Intercept	-2.419	0.467	-5.186	< .001
Row 2	Linguistic context = Non-clitic	-0.614	0.109	-5.659	< .001
Row 3	Speech context = conversation	0.865	0.178	4.870	< .001
Row 4	Speech context = peer group	1.481	0.171	8.644	< .001
Row 5	Gender = male	1.855	0.633	2.933	< .01

Table 13: Output of the logistic regression analysis showing the significant constraints for Scots negation (both speaker groups modelled together)

Three constraints emerge as significant: linguistic context, speech context and gender. As with *aye*, age is not significant. The final model contains only those constraints which emerged as significant.

Figure 34 shows how linguistic context affects the probability of Scots negation occurring.

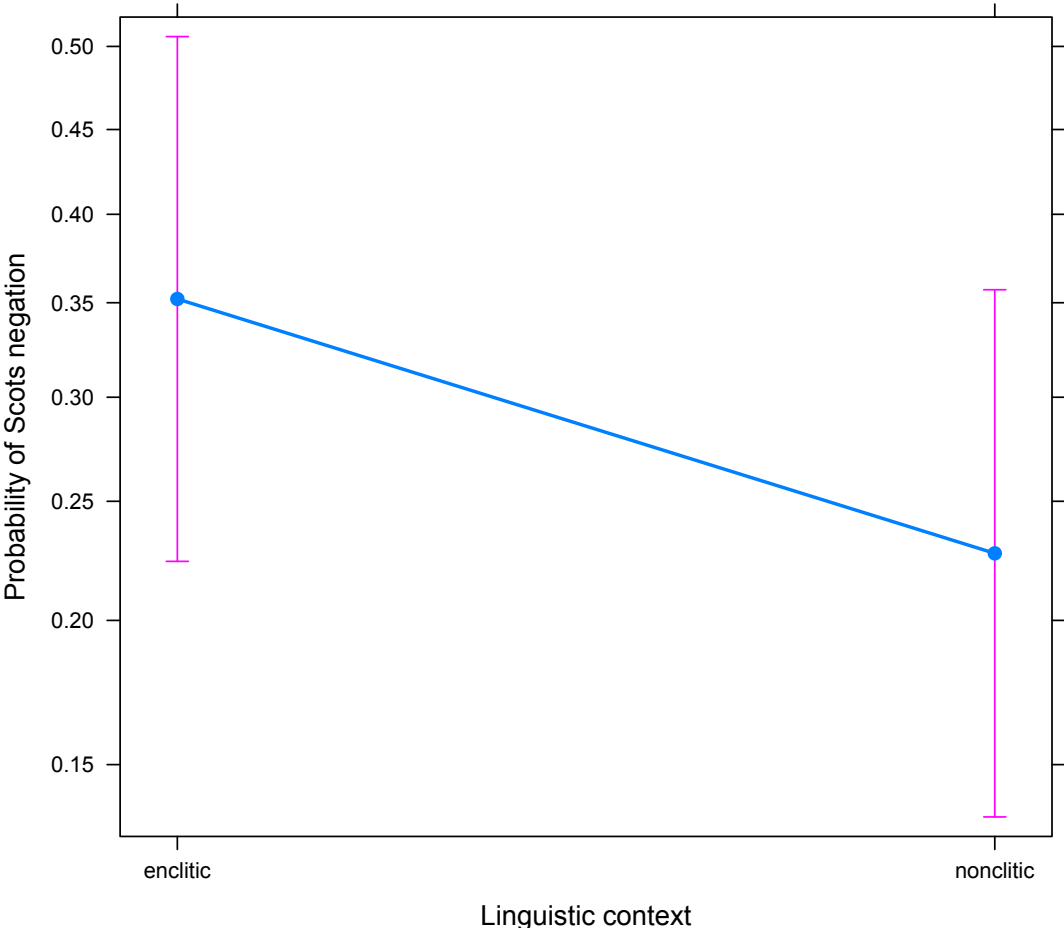


Figure 34: Partial effects plot showing the probability of Scots negation across linguistic contexts (both speaker groups modelled together)

Figure 34 shows that when both speaker groups are modelled together, the non-clitic form *no* occurs less frequently than the enclitic form *-nae*. This is the reverse of the pattern found by Macaulay (1991: 51-52) and Ryan (2014: 43).

Figure 35 shows the effect of speech context.



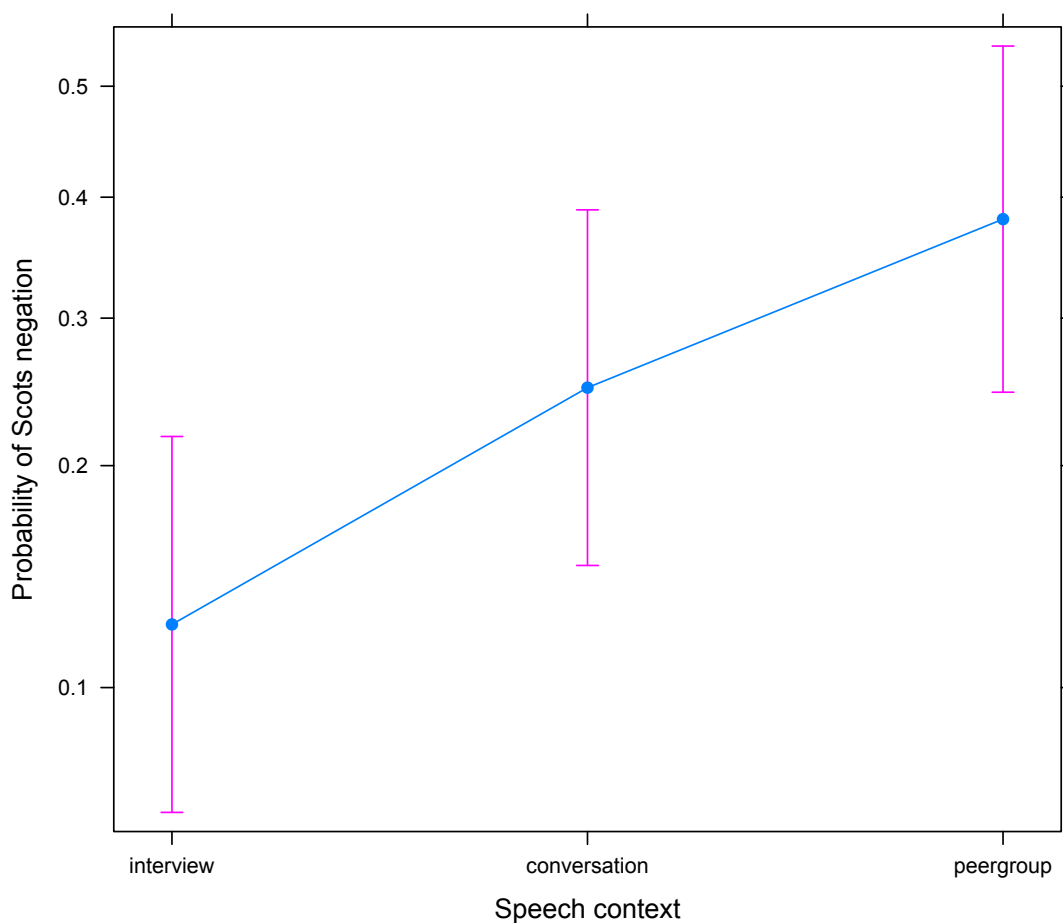
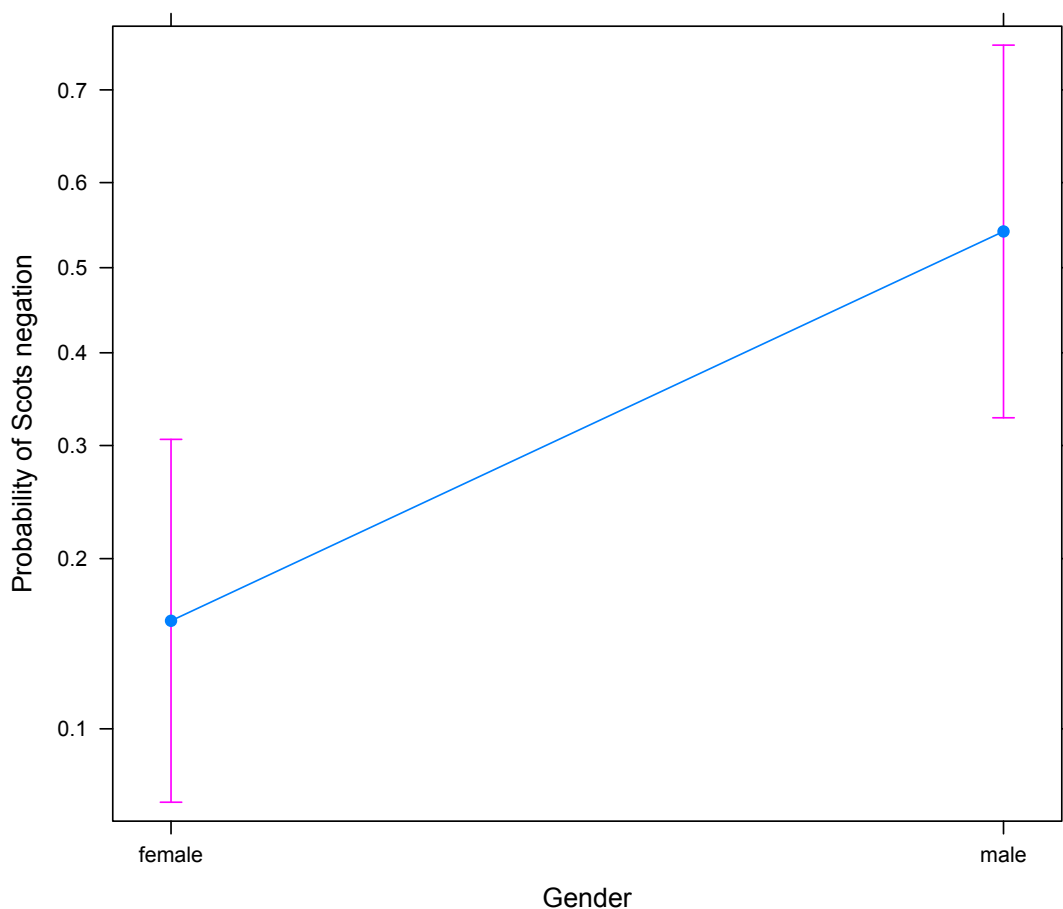


Figure 35: Partial effects plot showing the probability of Scots negation across speech contexts (both speaker groups modelled together)

Figure 35 shows that the participants are least likely to use Scots negation in a classroom-like environment and when conversing with a non-native speaker, and they are most likely to use Scots negation with their friends in an informal environment. The pattern is the same as the pattern observed for *aye*. Again, the speakers use the local non-standard variants at higher rates when they are in a more informal setting and interacting with their peers.

Figure 36 shows the effect of gender.



*Figure 36: Partial effects plot showing the probability of Scots negation across genders (both speaker groups modelled together)*

Figure 36 shows that the male speakers use Scots negation more than the female speakers. This aligns with Fasold's (1990: 92) suggestion that male speakers tend to use higher rates of stigmatised, non-standard variants than female speakers.

We now know that linguistic context, speech context and gender are significant when both speaker groups are modelled together. But are the Polish speakers replicating the constraints of their Glaswegian peers, or do the groups differ from one another? To find out, I added speaker group to the model as an interaction term, which significantly improved the fit of the model ( $\chi^2(5) = 16.262, p < .01$ ). This shows that the two groups have statistically different linguistic behaviour for Scots negation. Table 14 gives a detailed summary of the model with speaker group added as an interaction term.

	Predictor	Estimate ( $\beta$ )	SE ( $\beta$ )	z-value	p
Row 1	Intercept	-2.722	0.910	-2.992	< .01
Row 2	Speaker group = Polish	0.291	1.061	0.275	0.784
Row 2	Linguistic context = Non-clitic	-0.203	0.187	-1.089	0.276
Row 3	Speech context = conversation	1.459	0.389	3.755	< .001
Row 4	Speech context = peer group	2.369	0.404	5.859	< .001
Row 5	Gender = male	1.220	1.096	1.114	0.265
Row 6	Speaker group = Polish: Linguistic context = Non-clitic	-0.605	-0.230	-2.632	< .01
Row 7	Speaker group = Polish: Speech context = conversation	-0.682	0.442	-1.544	0.123
Row 8	Speaker group = Polish: Speech context = peer-group	-1.109	0.448	-2.476	< .05
Row 9	Speaker group = Polish: Gender = male	0.985	1.348	0.730	0.465

*Table 14: Output of the logistic regression analysis showing the significant constraints for Scots negation with speaker group added as an interaction term*

Figures 37 - 39 show exactly how the two groups differ from one another. Figure 37 compares the effect of linguistic context across the Glaswegian and Polish speaker groups.

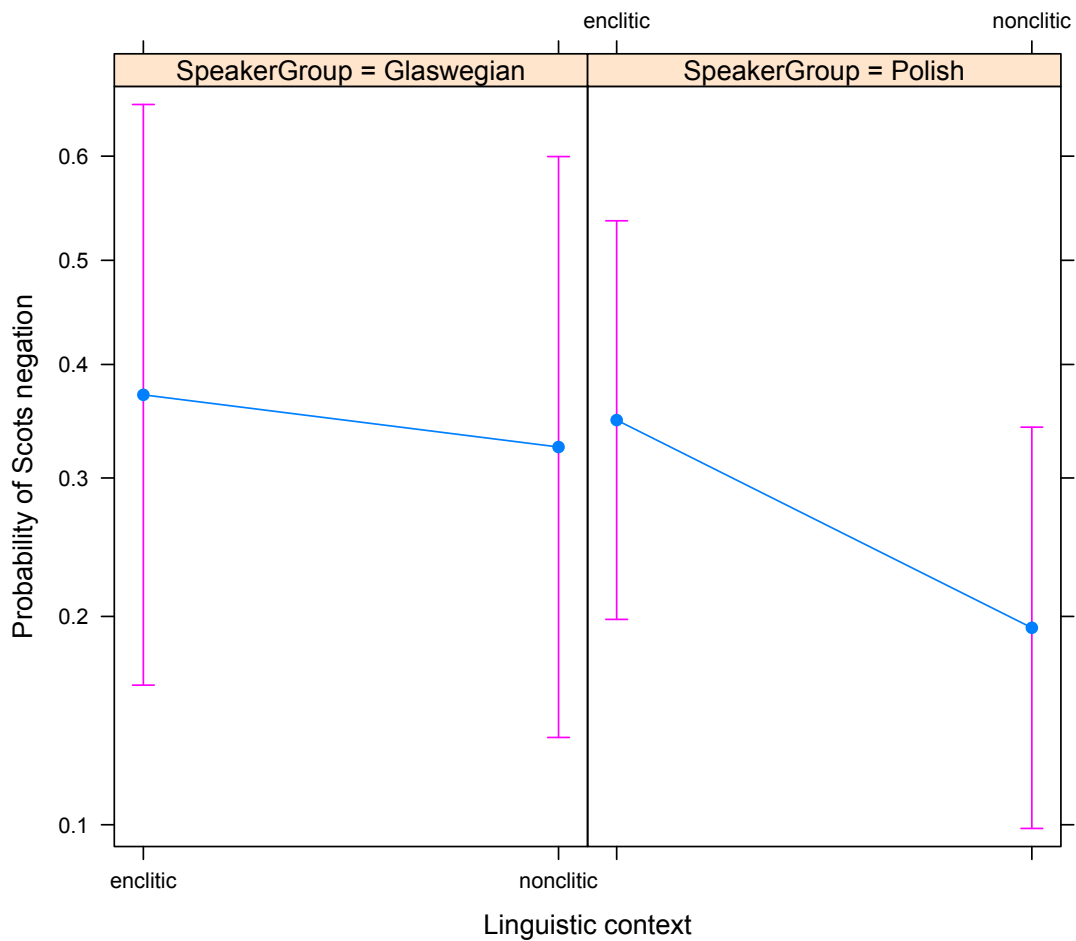


Figure 37: Partial effects plot showing the probability of Scots negation across linguistic contexts for each speaker group

Figure 37 shows that in the Glaswegian group the likelihood of the non-clitic form *no*’ and the enclitic form *-nae* are very similar: the effect of linguistic context is not statistically significant. However the Polish speakers disfavour the non-clitic form *no*’. The Polish group have innovated a linguistic context constraint which is not significant in their native speaker input.

Figure 38 shows the probability of Scots negation across speech contexts for each group.

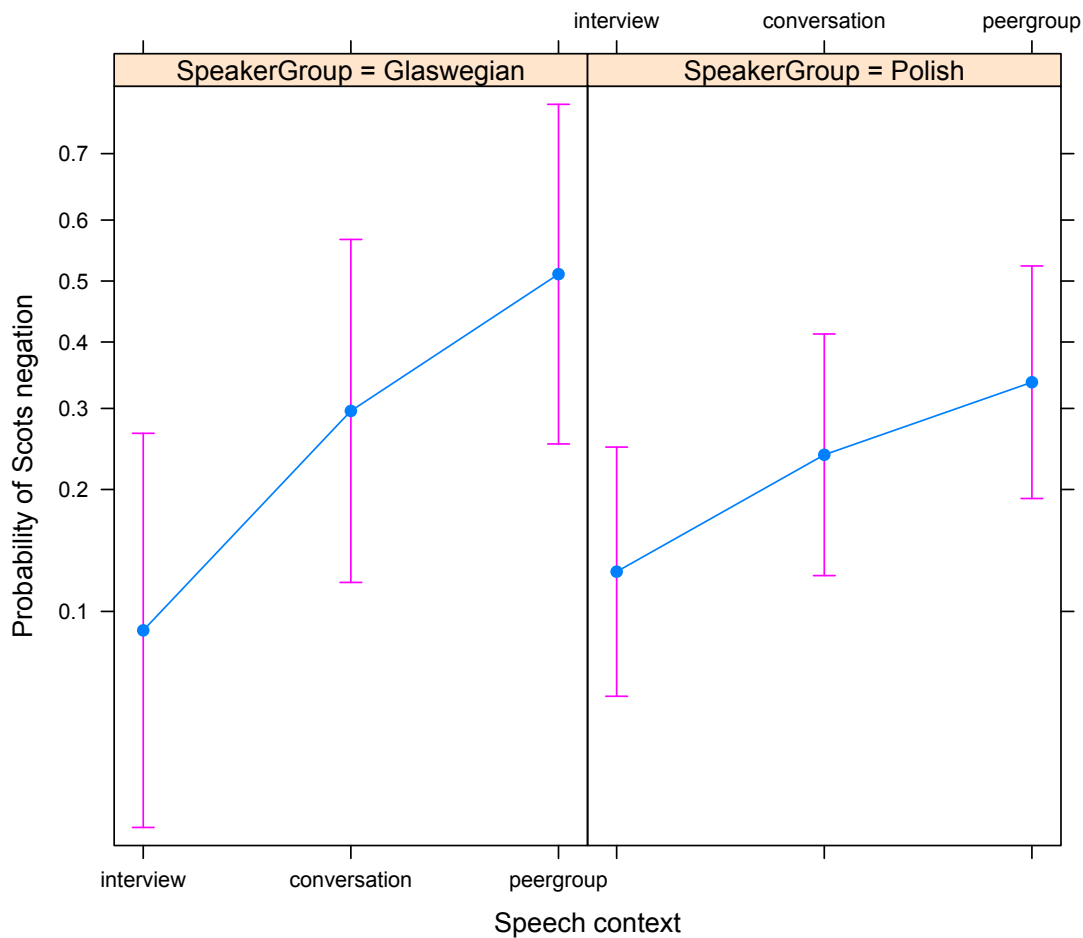
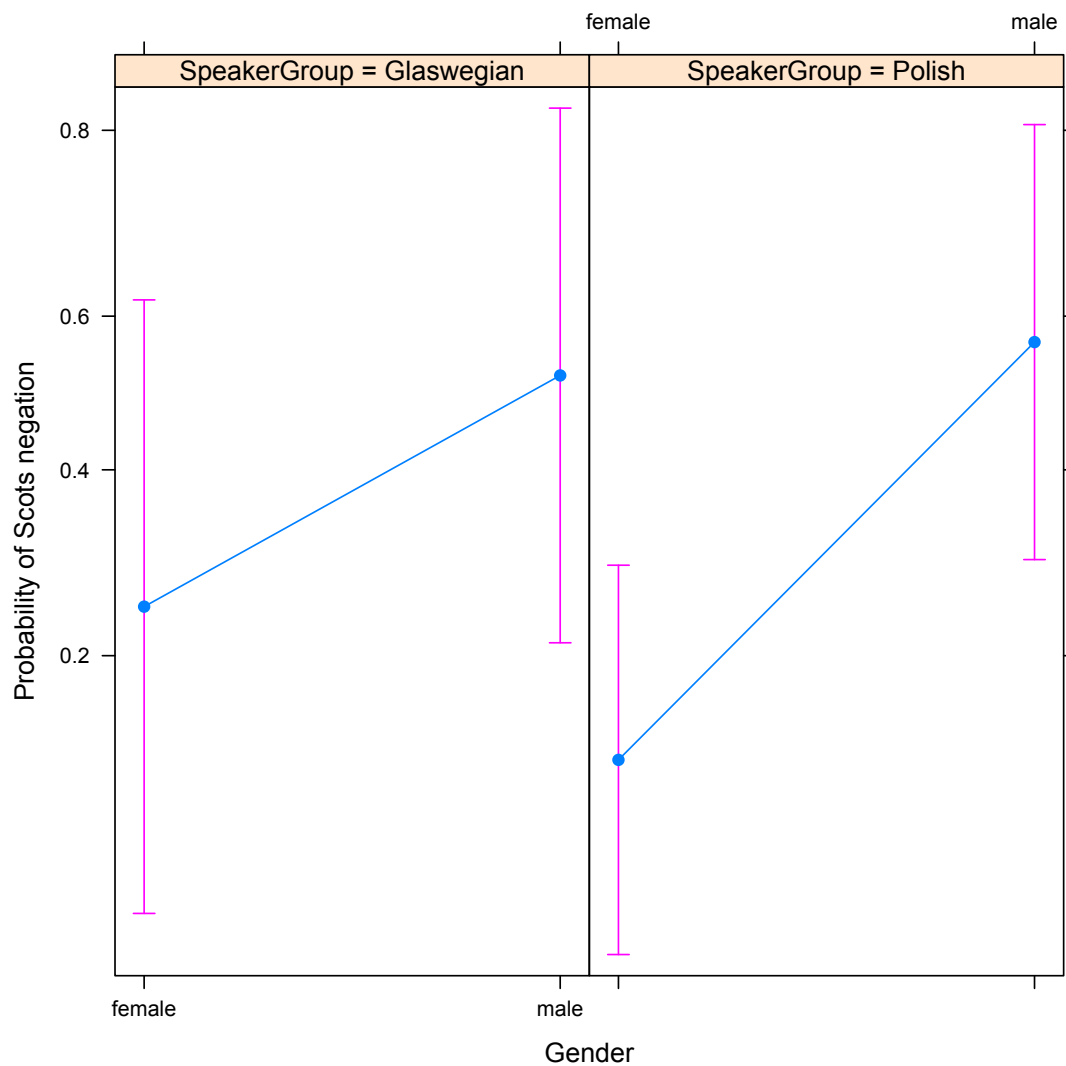


Figure 38: Partial effects plot showing the probability of Scots negation across speech contexts for each speaker group

Figure 38 shows that both speaker groups have the expected pattern across the speech contexts (Labov 1972: 79; Bell 1984): Scots negation is most likely in the peer-group context, then the conversation context, and it is least likely in the interview context. This pattern is significant for the Glaswegian group, and it remains significant for the Polish group when they are modelled separately (see section 6.4.), but it is significantly weaker for the Polish group, who shift their rates of use less dramatically than their Glaswegian peers. The Polish speakers have under-acquired the speech context constraint.

Figure 39 shows the effect of gender for each group.



*Figure 39: Partial effects plot showing the probability of Scots negation across genders for each speaker group*

Figure 39 shows that in both speaker groups, male speakers use more Scots negation than female speakers. Statistically, the Polish and Glaswegian groups show similar behaviour for gender. The Polish speakers have replicated the native speaker gender constraint for this variable.

Table 15 summarises the constraint acquisition pattern for Scots negation.

Constraint	Comparison of native and non-native speech	Constraint acquisition pattern
linguistic context	constraint absent from native speech; constraint found in non-native speech	constraint has been innovated
speech context	constraint found in native speech; constraint weaker in non-native speech	constraint has been under-acquired
gender	similar constraint found in native speech and non-native speech	constraint has been replicated

*Table 15: Summary of constraint acquisition patterns for Scots negation*

### **6.3.2. Discussion**

Three constraints on use emerge as significant for Scots negation: linguistic context, speech context and gender. One of these, linguistic context, is not significant for the native Glaswegians; the Polish learners have innovated this constraint (Schleef 2013b: 209; Meyerhoff & Schleef 2014: 105).

The native gender constraint has been successfully replicated by the Polish group. Major (2004) suggests that gender constraints are generally easy for learners to replicate, because ‘[b]esides playing an important role in the formation of self-concept, gender is also very salient in face-to-face interactions’ (179). My result lends support to Major’s assertion.

The Polish group have under-acquired the native speech context constraint for Scots negation, shifting their rate across the speech contexts to a lesser degree than their Glaswegian peers. It is possible that some of the individual speakers have replicated the speech context constraint and others have not; unfortunately, token counts are too low for this to be investigated further. It may simply be that, as a group, the learners have not yet gained a full understanding of this constraint. Recall that for

*aye* the learners had over-acquired the speech context constraint, shifting their speech to a heightened degree across the speech contexts. The findings across *aye* and Scots negation suggest that speech context constraints may not be inherently difficult or easy for learners to acquire; the difficulty or ease of acquisition may differ from variable to variable.

The Polish group have also innovated a linguistic context constraint: they disfavour the local non-clitic form *no*' compared to the local enclitic form *-nae*. This is particularly surprising as Polish uses only one word, *nie*, for the standardised English words *no* and *not*. We might therefore expect the Polish speakers to confuse these forms, so that *no* sometimes occurs in the place of *not* as a learner error. In an utterance such as (8), there is no way of knowing for sure whether Szymon's use of *no* represents a learner error or the local variant of *not*.

10. I'm *no*' (/ *no*) fighting over you poking into my business. - *Szymon*

If learner errors were occurring alongside uses of the local non-clitic form in the Polish data, we might expect to observe an increased rate of the local non-clitic *no*' in these data (compared to the local enclitic *-nae*, which will never represent a learner error). What we see is the opposite: the Polish speakers have a significantly *lower* rate of the local non-clitic *no*'. A possible explanation is that the Polish speakers are avoiding the use of the local non-clitic *no*' because when they use it there is a possibility of it being misinterpreted as a learner error. The local enclitic form *-nae* cannot be misinterpreted as a learner error, and so can be used 'safely'.

Janda & Auger (1992) discuss the overuse of word-initial /h/ by French learners of English. A common error for French learners of English is to drop word-initial /h/, producing /ɛd/ for *head*. In avoiding this error, and attempting to emulate native English speech, they find that learners produce realisations such as /hek/ for *ache*, in a pattern which they label as hypercorrection (199). This pattern is similar to that shown by the speakers in the current study. Janda & Auger's participants produce different non-native forms (e.g. /hek/ for *ache*) as a byproduct of their hypercorrection; my participants disfavour the local non-clitic *no*' as a byproduct of their hypercorrection.



Again, this hypercorrection may stem from linguistic insecurity (Wolfram 1991: 155). As described in section 3.3. and chapter 4, the Polish speakers at St John's occupy a precarious position. Many pupils respond to hostility based on their migrant identities by becoming as invisibly native-like as possible. Doing this often means avoiding the use of the L1 and anglicising their names. It may also mean avoiding marking their speech as non-native. Non-native sounding speech can be a target for bullying at the school, and as a result the learners may be avoiding non-native linguistic forms, and even local forms which sound the same as non-native forms.

## 6.4. Predictors of the acquisition of Scots negation

What are the external factors predicting the acquisition of Scots negation by individual L2 learners? Can we explain the extent to which the learners have acquired the local forms by looking at how long they have been in Glasgow (LoR), the age at which they arrived (AaO), gender or integrative motivation (IM)?

To find out, I created another mixed-effects logistic regression model, this time containing only the Polish speech data. Again, I began with the random intercept (individual speaker), and added in linguistic context, speech context and gender, the three constraints found to be significant in the previous section. I then added in three potential predictors of acquisition identified in chapter 2 - LoR, AaO and IM. Gender was also identified as a potential predictor of acquisition in chapter 2. However, for this variable gender has already been identified as a native speaker constraint which has been replicated by the Polish speakers. If we had seen gender emerge as significant only for the Polish group and not for the Glaswegian group (or if the effect of gender was significantly stronger for the Polish group) then this could be evidence that gender is a predictor of the acquisition of Scots negation. As it is, the two groups do not differ from each other with respect to gender, and so gender cannot be identified as a predictor.

### 6.4.1. Results

I tested whether LoR, AaO and IM significantly improved the fit of the model, and found that they did not. As was the case for *aye*, none of these external factors significantly predict an individual learner's acquisition of Scots negation.

As with *aye*, individual differences in rates of Scots negation are pronounced, as illustrated by figure 40.

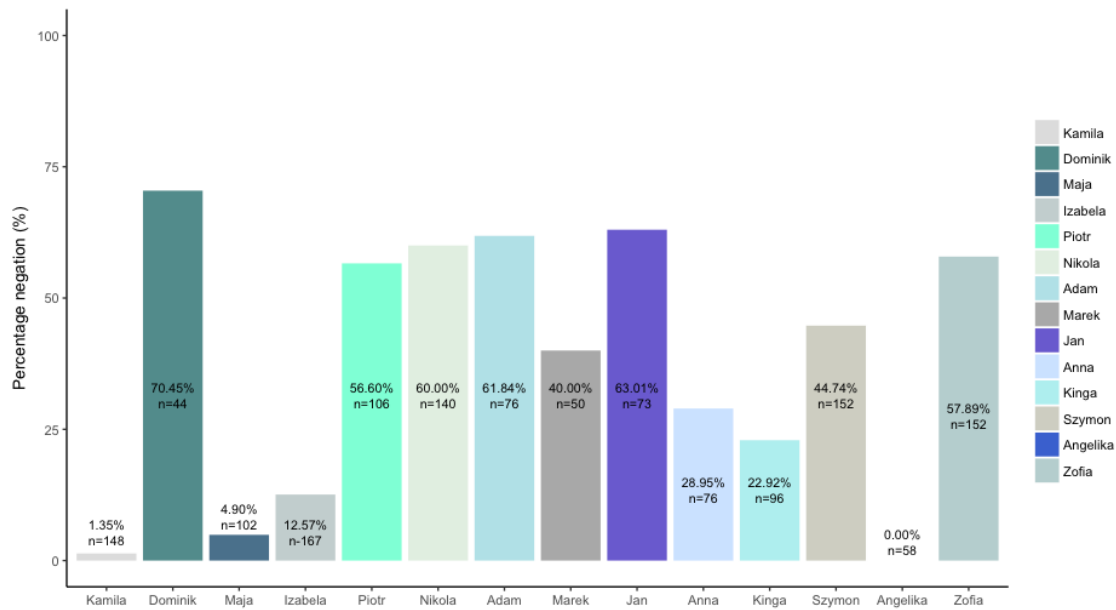


Figure 40: Comparison of Scots negation across individual Polish speakers (speakers ordered youngest to oldest)

Again, individual speakers show divergent behaviour. Some speakers, like Dominik, use a high rate of Scots negation (70.45%), while others, like Kamila, use a very low rate (1.35%), and Angelika avoids Scots negation altogether. Again, this behaviour cannot be explained by looking at LoR, AaO or IM. Adam and Piotr both have short LoRs (1.5 and three respectively) and relatively high AaOs (11 and nine respectively), but both use Scots negation at high rates. Nikola is in the low IM group and uses Scots negation at a high rate, while Kamila and Maja are in the high IM group and use Scots negation at low rates. If these factors cannot explain individual speaker behaviour for Scots negation, how can we explain it?

#### 6.4.2. Discussion

Scots negation appears to be relatively high in speaker awareness. Like *aye*, it is a marker of Scottish identity (Aitken 1979: 107; Dossena 2005: 21), it is subject to stigma (Sandred 1983: 83 and 104; Romaine 1984: 127), and it shows sensitivity to speech context in the current data. This also aligns with Trudgill's (1986: 25) prediction that variables which involve a phonological contrast are likely to be relatively high in speaker awareness. As with *aye*, not only the Polish speakers show divergent individual

speaker behaviour for Scots negation; the Glaswegian speakers do too. Figure 41 shows this.

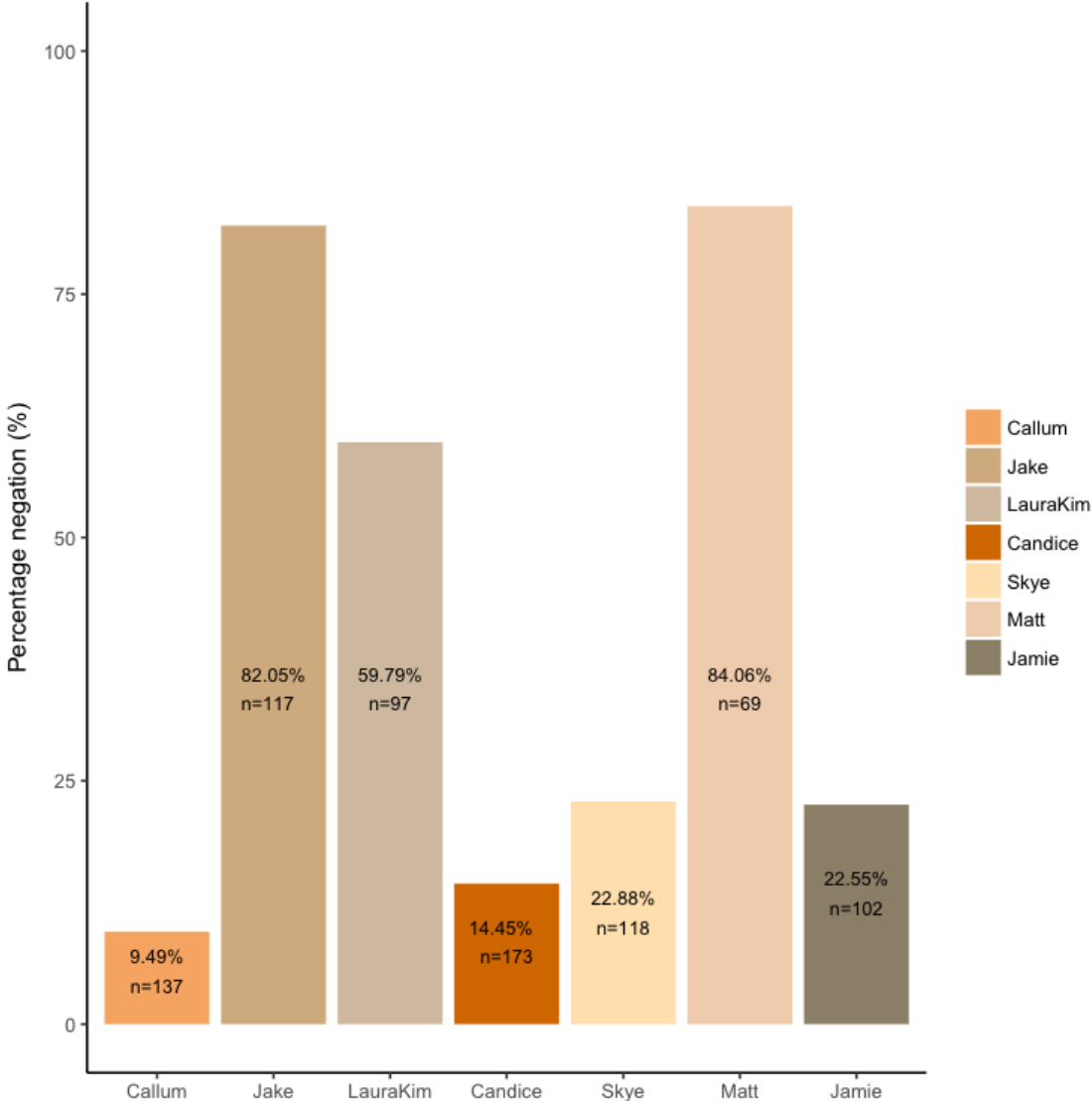


Figure 41: Comparison of Scots negation across individual Glaswegian speakers (speakers ordered youngest to oldest)

Like *aye*, it appears that Scots negation may be used in individual acts of identity by both the Polish and the Glaswegian speakers. Some of the Polish speakers reject Scots negation, and some of the native speakers do too. Again, the local variants may index some aspect of local identity beyond ‘Glaswegian-ness’.

I suggest that the social meaning of Scots negation may be similar to the social meaning of *aye* for these speakers - both may index rebelliousness and anti-

establishment values. Both tend to be avoided in classroom-like contexts. Both also tend to be avoided by the same speakers - note that Angelika, Maja, Izabela and Callum, who used low rates of *aye*, also use low rates of Scots negation (Kamila joins them in using a low rate of Scots negation). Adam and Matt, who used high rates of *aye*, also use high rates of Scots negation (Dominik, Jan, Nikola and Jake join them in using high rates of Scots negation).

Again, it appears that this variable may be used to construct identities beyond 'native' and 'non-native'. Native speakers use sociolinguistic variation to index differing orientations and identities, and the Polish learners follow suit. IM does not emerge as a predictor of acquisition for Scots negation because this variable does not index 'Glaswegian-ness' in a straightforward way. Individual speaker behaviour for Scots negation cannot be explained by looking at LoR, AaO or IM, but it might be explained by looking at learners' 'individual choice and cultural alignment' (Wolfram et al 2004: 355).

Scots negation is more highly-constrained than *aye*. The variable context is highly circumscribed. While *aye* can be used in any sentence type, enclitic negation (*-nae v - n't*) is fully variable in declarative sentences only (Smith et al 2013: 298), and only with auxiliary verbs other than *do* (i.e. *dinnae* is almost categorically absent from these data). When the variation is examined in fully variable contexts only, two constraints emerge as significant for the native speakers (speech context and gender), and a third is significant for the Polish speakers (linguistic context).

Milroy (2007: 170) suggests that the acquisition of more highly-constrained variables may require a higher degree of native speaker contact. As noted, IM is a measure of identity, but also a measure of native speaker contact, and we might therefore expect it to emerge as significant for more highly-constrained variables. Previous research has also suggested that LoR and AaO may play a particularly important role in the acquisition of highly-constrained variables (Payne 1980: 175; Chambers 1992: 702; Kerswill 1996: 187). Why, then, do LoR, AaO and IM fail to emerge as significant predictors for Scots negation, despite it being relatively highly-constrained?

It may be that Scots negation is not highly-constrained enough to present a problem to the learners in the current study. It may be that the identity-marking behaviour for Scots negation masks any potential effects of LoR, AaO and IM. Those who use Scots negation at low rates do not lack contact with native speakers and do not have shorter LoRs or higher AaOs. Kamila and Maja, in particular, use very little Scots negation, but they have both been in Glasgow for a relatively long time (seven years), they both arrived at a young age (four), and they both have many close friendships with native speakers and a high level of IM. Kamila and Maja's low rate of the local variants is best explained by their pro-school orientation, which may be linked to their avoidance of stigmatised forms which are discouraged in the classroom. Scots negation is most likely 'accessible' to them through their contact with native speakers, but they use the local forms only minimally. Angelika, on the other hand, has a short LoR (two years) and high AaO (13), and perhaps the lowest IM of any of the learners. She spends very little time with native speakers, and has no close friends in Glasgow who are not Polish. It is possible that Scots negation is not 'accessible' to her due to its constraint complexity and her lack of contact with native speakers, but we can't tell because her lack of Scots negation could just as easily be explained by her 'pro-school' orientation. Because of its strong social meaning and the divergent rates of use across individuals, we are unable to observe the effects of LoR, AO and IM.

## 6.5. Chapter summary

As with *aye*, I suggest that the acquisition of this high-awareness variable is dependent on ‘individual choice and cultural alignment’ (Wolfram et al 2004: 355). I note that the same learners who favoured *aye* tend to favour Scots negation, and the same learners who disfavoured *aye* tend to disfavour Scots negation. I suggest that these variables may have similar social meanings in this community. Again, Scots negation is involved in identity marking, but it doesn’t mark ‘Glaswegian’ identity in any straightforward sense, and so its acquisition doesn’t correlate with the learners’ identification with Glasgow, as measured by IM.

Scots negation is more highly-constrained than *aye*, so that it may be less accessible to learners who lack contact with native speakers (Milroy 2007: 170), and its acquisition may require a longer LoR and a younger AaO (Payne 1980: 175; Chambers 1992: 702; Kerswill 1996: 187) compared to *aye*. However, I suggest that its use in identity marking masks the potential role of LoR, AaO and IM. Where speakers use low rates of the local variants, this may be because the variation is not accessible to them, or it may be because they are rejecting the local variants in an individual act of identity. This may explain why LoR, AaO and IM do not emerge as significant predictors as we would expect them to for a more highly-constrained variable. It may also be that Scots negation is not highly-constrained enough to require a high degree of contact, a long LoR or an early AaO for its acquisition.

The learners have replicated the native gender constraint for this variable, and they have under-acquired the speech context constraint. They have innovated a linguistic context constraint, which is not significant for the Glaswegian speakers. I suggest that this innovation may be another example of learner hypercorrection. The learners disfavour the use of the local non-clitic variant *no*’, which could be misinterpreted as a non-native form. They may be hypercorrecting away from non-native forms, and in the process avoiding local native forms which an interlocutor could mistake for being non-native.

## 7. Glottal replacement

I have now examined a lexical variable, *aye*, and a morphophonological variable, Scots negation. I suggested that the acquisition of these high-awareness variables is dependent on the ‘individual choice and cultural alignment’ (Wolfram et al 2004: 355) of the learners, and that differences in individual speaker behaviour reflect individual acts of identity. In this chapter I turn to phonetic variation, and examine glottal replacement. Unlike *aye* and Scots negation, glottal replacement does not involve a phonological contrast, and because of this it is expected to be lower in speaker awareness than the other variables (Trudgull 1986: 25). If it is low in speaker awareness, glottal replacement may be ‘implicitly internalized’ (Tarone 2007: 844) by learners, entering their linguistic systems without their conscious awareness, its acquisition unrelated to its social meaning. Its level of constraint complexity may also be a factor in how ‘easy’ it is for learners to acquire (Meyerhoff & Schleeff 2014: 122), whether its acquisition requires a high degree of contact with native speakers (Milroy 2007: 170), whether its acquisition takes a long time, and whether it can only be acquired by very young learners (Payne 1980: 175; Chambers 1992: 702; Kerswill 1996: 187-188).



## 7.1. Research context

The replacement of [t] by [ʔ] as in examples (11a-c) - hereafter referred to as glottal replacement - has become extremely common across the UK in recent decades. It appears in London (Tollfree 1999), Derby, Newcastle (Milroy et al 1994), the Midlands (Mathisen 1999), Norwich (Trudgill 1999), Milton Keynes, Reading, Hull (Williams & Kerswill 1999), Cardiff (Mees & Collins 1999), Northern Ireland (McCafferty 1999) and in RP (Fabricius 2000). It also appears in the L2 English of migrants living in the UK (Schleef 2013b; Meyerhoff & Schleef 2014). It can occur even in the speech of recent arrivals (Drummond 2010: 79 and 139), but it does not always pattern as it does in native speech. Rampton (2013) provides a case study of a single speaker, Mandeep, a Punjabi migrant in London. Mandeep has not fully acquired native-like patterns of glottal replacement in his L2 English, but is able to use glottal replacement in acts of ‘stylization’ (361), as he does impressions of working-class London speech and re-enacts family conversations for comedic effect (373 and 375).

Glottal replacement is a common feature of Glaswegian speech, as shown in examples (11a-c).

11. a. And you had a thermome[ʔ]er and there was me[ʔ]al to hold i[ʔ] up. - *Laura-Kim*  
b. Some facial structures are the same and tha[ʔ]. Bu[t]... - *Matt*  
c. They don'[ʔ] even have good quali[ʔ]y blazers. When I fel[t] i[ʔ] I was like... - *Skye*

Following Schleef (2013a), I define glottal replacement as ‘the complete substitution of /t/ with something that has an acoustically robust glottal quality, whether this is a glottal stop or a period of creaky voice’ (201).

### 7.1.1. Social constraints

Macaulay & Trevelyan (1977) studied glottal replacement in Glasgow in the 1970s. At this time, they stated that it was ‘the most openly stigmatised feature of Glasgow speech’ (47). Their analysis showed that it generally followed the patterns expected of stigmatised

variation. They found that it was used at higher rates by male speakers (as predicted for stigmatised variants by Fasold 1990: 92), and that in their working-class group it was used at higher rates by adolescents than by children (as predicted by Tagliamonte 2011: 48). They also found that it was sensitive to speech context (as predicted by Labov 1972: 79).

In recent decades, studies from across the UK suggest a general trend of de-stigmatisation (Fabricius 2002). Although some recent studies have found glottal replacement to be sensitive to speech context (Schleef 2013b: 206; Meyerhoff & Schleef 2014: 113),<sup>39</sup> others have found it to be unconstrained, or only slightly constrained, by speech context. Stuart-Smith et al (2007: 242) record working-class Glaswegian adolescents in conversation with a friend and reading from a word list. When reading the word list, they lower their rate of glottal replacement only very slightly. In the North East of Scotland, Smith & Holmes-Elliott (2016: 16) find only a slight shift in rates of glottal replacement when speakers are interacting with a community insider and when they are interacting with a community outsider.

Stigma, sensitivity to speech context and sensitivity to interlocutor are characteristics we normally expect of variables which are relatively high in speaker awareness (Labov 1972 1993). For glottal replacement, findings on its level of stigma, sensitivity to speech context and sensitivity to interlocutor are mixed, and so predictions about its level of speaker awareness are mixed.

Previous findings on gender constraints for glottal replacement are also mixed. Some studies find that rates of glottal replacement are higher in male speakers (Macaulay & Trevelyan 1977: 45), some find that rates are higher in female speakers (Milroy et al 1994: 342), and some find no gender difference (Stuart-Smith 1999: 190). Smith & Holmes-Elliott (2016) suggest that the diversity of results relating to gender ‘can be explained by the stage of change, specifically the gender gap neutralizes as glottal replacement increases’ (8).

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<sup>39</sup> The speech contexts compared are conversational speech and reading. It is worth noting that the orthography reinforces the standard variant [t], which may contribute to this effect.

### 7.1.2. Linguistic constraints

Glottal replacement is the most productive of the variables examined so far. It is not generally found to occur in word-initial /t/ (e.g. *time*, *take*) (Tollfree 1999: 171), but it can occur in word-medial /t/ (12a) and word-final /t/ (12b) across most lexical items (with some restrictions, which I will return to in section 7.2.).

12. a. I think they might be able to follow i[ʔ]. - *Jamie*  
b. My mum was ge[ʔ]ing scared. - *Jake*

Word-medial and word-final glottal replacement often show very different variation patterns (Stuart-Smith 1999: 194). This finding has led most researchers to separate the two contexts in their analyses. Some examine only word-final /t/ (Fabricius 2000; Straw & Patrick 2007; Schleeff 2013b; Meyerhoff & Schleeff 2014), and some include both word-medial and word-final /t/ but categorise them separately and examine how the two contexts differ (Macaulay & Trevelyan 1977; Stuart-Smith 1999; Schleeff 2013a). I therefore review the linguistic constraints on word-medial and word-final glottal replacement separately.

#### 7.1.2.1. Word-final glottal replacement

Studies of word-final /t/ (e.g. *it*, *want*) tend to focus on the effect of the following phonological segment. Rates of glottal replacement are generally compared across three environments: before a consonant (#C) (13a), before a vowel (#V) (13b) and before a pause (#P) (13c).

13. a. (#C) He's go[ʔ] big feet and big legs for tha[ʔ] size of head. - *Jake*  
b. (#V) Wha[ʔ] about it? - *Matt*  
c. (#P) Can you hear tha[ʔ]? - *Laura-Kim*

A repeated pattern emerges across studies (as outlined by Straw & Patrick 2007: 391), where glottal replacement is most likely before a consonant, then before a pause, and it is least likely

before a vowel (#C > #P > #V).<sup>40</sup> Stuart-Smith (1999) comments that, in her Glasgow data, there is a disfavouring of glottal replacement in a specific set of constructions within the #V category. This set includes items where the /t/ is ‘the first in a sequence of two, in e.g. *put it*, *get it*’ (194). She also notes that in Scotland, the ‘prosodic tendency to make a final consonant begin the following syllable, if this begins in a vowel’ leads to a similar disfavouring of glottal replacement in sequences such as ‘*at all*’ (194). In other words, in Stuart-Smith’s data it would be unusual to find:

14.    \*a. pu[ʔ] it  
       \*b. shou[ʔ] at  
       \*c. a[ʔ] all

I hereafter refer to this special set of constructions which may disfavour glottal replacement as ‘*it* sequences’.<sup>41</sup>

Meyerhoff & Schlee (2014) examine the acquisition of native constraints on the variation by Polish adolescents in Edinburgh. They outline the constraints which emerge as significant for their native speaker control group, and then the constraints which emerge as significant for their Polish speakers. Their findings are summarised in table 16, below.

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<sup>40</sup> A different patterning of #P and #V glottal replacement is reported in Glasgow by Macaulay & Trevelyan (1977: 46) and in Tyneside by Milroy et al (1994: 345). These authors find glottal replacement to be more common before a vowel than before a pause, creating the pattern #C > #V > #P.

<sup>41</sup> Although the category includes word-final /t/ words followed by both *it* and *at*, and also the *at all* sequence, the majority of sequences in this category are word-final /t/ words followed by *it*.

Constraint	Findings for native speakers	Findings for Polish speakers	Constraint acquisition pattern
following phonological segment	significant, with the pattern: #C > #P > #V	not significant	constraint has been rejected
preceding phonological segment	significant, with the pattern: V# > #/r n l/ ([ʔ] more likely after a vowel than after a liquid or nasal)	significant (for some speakers), with the pattern: V# > #/r n l/	constraint has been replicated
grammatical category	significant: more glottal replacement in pronouns, then verbs, then conjunctions, then adverbs, then prepositions, then nouns, then adjectives	significant (for some speakers): more glottal replacement in pronouns, then adverbs, then prepositions, then adjectives, then nouns, then conjunctions, then verbs	constraint has been re-ordered
lexical frequency	not significant	significant (for some speakers): more glottal replacement in higher-frequency words	innovated
speech context	significant, with the pattern: conversation > reading	significant, with the pattern: conversation > reading	constraint has been replicated
age	not significant	significant (for some speakers): older speakers use more glottal replacement	constraint has been innovated

*Table 16: Summary of constraints on word-final glottal replacement for native speakers and Polish migrants in Edinburgh: Findings from Meyerhoff & Schlee (2014: 113 and 117)*<sup>42</sup>

<sup>42</sup> They divide their Polish speakers into groups based on self-report proficiency levels. Preceding segment is significant only for those who report themselves to be ‘high proficiency’ in English. Lexical frequency is significant only for those who report themselves to be ‘high proficiency’ in English and who have friendship networks containing native speakers. Grammatical category is significant only for those who report themselves to be ‘low proficiency’ in English.

### 7.1.2.2. Word-medial glottal replacement

Less research has been conducted on word-medial /t/ (e.g. *getting*, *better*), and to my knowledge the acquisition of word-medial glottal replacement by L2 learners has not been examined. Drummond (2010: 139) notes that he does not examine the acquisition of word-medial glottal replacement by the Polish learners in his study because the occurrence of word-medial glottal replacement in their speech is so low. This suggests that word-medial glottal replacement may be more difficult for learners to acquire than word-final glottal replacement (which Drummond's participants have acquired).

Most of the studies which include word-medial /t/ treat it as a single phonological environment, and do not examine the effect of following segment and preceding segment. Two exceptions are Schleeff (2013a: 207-208) and Smith & Holmes-Elliott (2016). Smith & Holmes-Elliott find that glottal replacement is more likely before a syllabic consonant (e.g. *button*) than before a vowel (e.g. *pretty*, *better*) in the North East of Scotland (13). In Schleeff's comparison of word-medial glottal replacement in native Edinburgh and London speech, he finds an effect of following segment for his London speakers: for these speakers, glottal replacement is more likely to occur before a consonant than before a vowel (#C > #V) (211). He also finds an effect of preceding segment in both locations: glottal replacement is more likely after a vowel than after a nasal or liquid (V# > #/r n l/) (211). In her Glasgow study, Stuart-Smith treats word-medial /t/ as a single phonological environment in her quantitative analysis, but comments qualitatively that in this environment 'Instances of [t] are mostly found in past participles in *-ed* to stems ending in /t/, e.g. *shouted*, or in what Reid (1978: 162) calls more "learned" words, e.g. *hospital*, *university*' (1999: 195). This comment could indicate an effect of following segment or an effect of grammatical category in the case of *-ed* words, and it could indicate an effect of lexical frequency in the case of words like *hospital* and *university* (i.e. "learned" words might be less frequent words).

Schleeff (2013a) also finds several other constraints on word-medial glottal replacement. He finds that it is constrained by lexical frequency, with glottal replacement being more likely in more frequent words (211). He finds that it is constrained by grammatical category, with glottal replacement being most likely in function words, then past participles and progressive verbs, then verbs and proper nouns, then adjectives, and least likely in simple

nouns (211). He also finds that it is constrained by the number of syllables for his participants in Edinburgh, but not in London (the study examines glottal replacement in both locations). For the Edinburgh speakers, glottal replacement is more likely in words with more syllables (211).

### ***7.1.3. Predictors of the acquisition of word-final glottal replacement***

As well as Meyerhoff & Schleeef (2014), several other recent studies describe the acquisition of word-final glottal replacement by migrants living in the UK. Schleeef (2013b) compares acquisition by Polish migrants in Edinburgh and London and Drummond (2010) studies acquisition by Polish migrants in Manchester.

Several studies have identified external factors predicting the acquisition of word-final glottal replacement by individual L2 learners. Meyerhoff & Schleeef (2014: 117) and Schleeef (2013b: 207) find that friendship network is a predictor of acquisition for some of their participants.<sup>43</sup> Learners who have many friendships with native speakers have higher rates of glottal replacement than learners who have mostly Polish friends. Schleeef finds that learners who have spent longer learning English, and who have higher L2 attainment, use more glottal replacement. He also finds that learners who have a more positive attitude towards Scottish accents have higher rates of glottal replacement (2013b: 207). Similarly, Drummond (2010: 145) finds that learners with a more positive attitude to Manchester and its people use more word-final glottal replacement (although only in certain linguistic environments). Like Schleeef (2013b), he finds that learners with higher L2 attainment use more glottal replacement (218), and he also finds that learners who have spent more time in Manchester use more glottal replacement (216). Finally, he finds that gender is a predictor of the acquisition of glottal replacement, with higher rates amongst female learners (219). He suggests the female participants in his study have acquired glottal replacement to a greater extent because they have more contact with native speakers in their workplaces: many of them work in service industry jobs, whereas the male participants tend to work in jobs which require less interaction with native speakers (149).

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<sup>43</sup> For Meyerhoff & Schleeef (2014: 117), only those who report themselves to be ‘high proficiency’ in English. For Schleeef (2013b: 207), only those in Edinburgh, not those in London.

In the current study, I will be testing for the effects of length of residency (LoR), age at onset (AaO), gender and integrative motivation (IM) in the acquisition of both word-final and word-medial glottal replacement. The measure of IM used in this study takes into account attitudes and social networks, which have been found to be predictors of the acquisition of word-final glottal replacement by Drummond (2010: 145), Schlee (2013b: 207) and Meyerhoff & Schlee (2014: 117). Because the participants in the current study either began learning English on arrival in Glasgow, or had very minimal knowledge of English on arrival in Glasgow, the effect of time spent learning English will not be explored: I will examine LoR in Glasgow only. Because all of the participants in the current study have relatively high attainment in English, the role of L2 attainment will not be explored.



## 7.2. Methodology

### 7.2.1. Circumscribing the variable context

Not all /t/ contexts are included in the analysis. I exclude those contexts where glottal replacement cannot usually occur, and I exclude those contexts in which it is difficult to perceive glottal replacement.

Firstly, I include only word-final /t/ (e.g. *it*, *want*) and word-medial /t/ (e.g. *getting*, *better*); I exclude word-initial /t/ (e.g. *time*, *take*), because glottal replacement is not generally found to occur in this position (Tollfree 1999: 171). I also exclude all tokens which come directly before a consonant in syllable-onset position (#C, e.g. *that hates*, *football*). In doing so I follow Stuart-Smith, who states that she does this ‘both because of the difficulty of perceiving a clear glottal stop before a following consonant (particularly alveolar)’, and because Macaulay & Trevelyan’s (1977) study found this environment to be ‘the least informative in terms of social variation’ (1999: 188). Therefore, I include only /t/ tokens which come before a pause (#P, e.g. *what?*) or before a vowel (e.g. *but I think*, *pretty*, *bottle*). Following Stuart-Smith (1999: 188), Drummond (2010: 91) and Smith & Holmes-Elliott (2016: 8), I also exclude contexts which come directly after a non-sonorant consonant, (C#, e.g. *just*, *fact*). Therefore, I include only /t/ tokens which come after a vowel (#V, e.g. *cut*, *letters*) or after a liquid or nasal (#/r n l/, e.g. *heart*, *Celtic*, *wanting*).

For those linguistic environments which remain, the rules of where glottal replacement can and cannot occur are complex. Initial observation suggested that there are some contexts where glottal replacement is blocked for these speakers. Previous research has identified these contexts in Glasgow (Macaulay & Trevelyan 1977; Stuart-Smith 1999); however, glottal replacement is known to be a rapidly expanding variable (Smith & Holmes-Elliott 2016: 1), and with its rise and spread, the linguistic environments in which it can occur in particular varieties may be changing. For this reason, I follow Smith & Holmes-Elliott (2016: 8) and take a bottom-up approach. I remove all lexical items which never occur with glottal replacement in these data.

The contexts in which glottal replacement is blocked fall into two categories. The first includes almost all contexts where /t/ comes immediately before the main stress syllable of the word: e.g. *thirteen*, *fantastic*, *Italian*, *guitar*, *tatoo*. The only exception to this rule found in the data is the word *whatever*, in which glottal replacement occurs despite the /t/ being in a position which usually blocks it. The second context is the word *sometimes*, which occurs frequently (119 times), but never with glottal replacement,<sup>44</sup> although in terms of stress the /t/ is in a similar position to e.g. *auntie*, which does not block glottal replacement for these speakers. Glottal replacement does not occur in *sometimes*, despite the /t/ being in a position which does not normally block it. Because *sometimes* appears categorically with the variant [t], it is removed from the analysis. For a list of the words removed from the analysis because they do not occur with glottal replacement, see appendix 13.<sup>45</sup>

Initial observation suggested that in these data glottal replacement occurs at very high rates in discourse markers. Testing for this effect showed that, in fact, for all of the discourse markers which include a relevant /t/ token, [ʔ] occurs categorically.<sup>46</sup> Due to categoricity, I exclude all discourse markers from the analysis.

### 7.2.2. Coding the data

Both Docherty & Foulkes (1999: 71) and Straw & Patrick (2007: 401) advocate the use of instrumental techniques for the analysis of glottal replacement. However, my study is primarily concerned with the sociolinguistic patterning of glottal replacement rather than its acoustic details, and I follow the majority of studies on glottal replacement in conducting auditory analysis on my data (Stuart-Smith 1999: 188; Fabricius 2000; Drummond 2010: 91; Smith & Holmes-Elliott 2016: 7).

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<sup>44</sup> Although *sometimes* blocks glottal replacement in my data, it does occur with glottal replacement in other regions: Smith & Holmes-Elliott (2016: 8) report on this in the North East of Scotland.

<sup>45</sup> The unexpected behaviour of the words *whatever* and *sometimes* could be due to the fact that they are both compound words. *Whatever* contains the word *what*, which does allow glottal replacement when it is uncompounded. *Sometimes* contains the word *times*, which does not allow glottal replacement when it is uncompounded. The glottal replacement ‘rules’ for these uncompounded words may be carried over into their compound forms.

<sup>46</sup> Only a small number of lexical items fall into this category: *right*, *alright* and *that* (as used in the general extender *and that*).

Using LaBB-CAT (Fromont & Hay 2012), I extracted all relevant /t/ tokens. As with the other variables examined, I excluded tokens coming from the first 5 minutes of the interview and conversation data, and from the first 10 minutes of the peer-group interaction data. I also excluded those tokens where it was impossible to determine the variant auditorily, (e.g. because of background noise on the recording), and very occasional tokens where the /t/ is elided completely in connected speech. In Praat 6.0.19. (Boersma & Weenink 2016), I annotated approximately 200 tokens per speaker, split as evenly as possible across the three speech contexts. High-frequency words (e.g. *that*, *it*) were capped at 30 per speaker (10 in each speech context), to compensate for possible word-specific effects (Wolfram 1993: 214).

### 7.3. Overall distribution

A range of variants occur in the data, as shown in (15a-d).

15. a. I don't like reading i[ʔ] out loud bu[ʔ]. - *Adam*  
 b. You said you work in the Universi[t]y of Glasgow? - *Izabela*  
 c. Try ge[r] it, like, up. - *Anna*  
 d. And I like to play games on compu[d]er. - *Marek*

(15a) is glottal replacement. (15b) is a released [t]. (15c) is [r], a tap which is noted to occur intervocally in native Glaswegian speech, in environments such as *let it* (Macafee 1983: 34). (15d) is the alveolar [d], which occurs occasionally in native Glaswegian (Stuart-Smith 1999: 189), but which Meyerhoff & Schleeff (2014: 111) also note as a possible non-native form in the L2 English of Polish speakers. Table 17 shows the overall distribution of these variants in the data.

	<i>Glaswegian speakers</i>		<i>Polish speakers</i>	
	N	Rate	N	Rate
[ʔ]	1236	89.37%	2296	79.89%
[t]	134	9.69%	522	17.98%
[r]	12	0.87%	48	1.65%
[d]	1	0.0007%	41	1.41%

Table 17: Overall distribution of all variants of /t/

The above table shows that the majority of the data - 99.06% of the Glaswegian data and 96.94% of the Polish data - are either [ʔ] or [t]. The remaining variants, [r] and [d], occur rarely. I therefore exclude these minority variants to focus on the distinction between [ʔ] and [t] (following Drummond 2010: 92; Smith & Holmes-Elliott 2016: 9).<sup>47</sup>

<sup>47</sup> Although it will not be the object of this analysis, it is worth noting that the minority variants [r] and [d] occur at slightly higher rates in the Polish data than in the Glaswegian data. This could provide some support for Meyerhoff & Schleeff's (2014: 111) suggestion that the [d] variant occurs as a non-native form.

Because word-final /t/ (e.g. *it*, *want*) and word-medial /t/ (e.g. *getting*, *better*) frequently exhibit different variation patterns (Macaulay & Trevelyan 1977: 48; Stuart-Smith 1999: 194; Meyerhoff & Schlee 2014: 106), I follow most research into glottal replacement and separate these two contexts in my analysis. I first conduct an analysis of word-final glottal replacement, and then I examine word-medial glottal replacement.

#### 7.4. Word-final glottal replacement

Table 18 shows the overall distribution of [ʔ] and [t] for word-final /t/.

	<i>Glaswegian speakers</i>		<i>Polish speakers</i>	
	N	Rate	N	Rate
[ʔ]	857	95.12%	1556	90.05%
[t]	44	4.88%	172	9.95%

Table 18: Overall distribution of [ʔ] and [t] for word-final /t/

Looking at this overall distribution tells us that, as a group, the Polish speakers are using word-final glottal replacement at a rate only slightly lower than that of their Glaswegian peers. However, it doesn't tell us whether they have replicated the native speaker constraints on use, and it doesn't tell us about the linguistic behaviour of individual speakers. In order to address these questions, I again build two statistical models: the first asks whether the Polish speaker group have replicated native-like constraints on use, and the second examines potential predictors of acquisition for the Polish speaker group (e.g. LoR and AaO).

##### ***7.4.1. The acquisition of native speaker constraints on word-final glottal replacement***

As with *aye* and Scots negation, I examined the acquisition of native speaker constraints by creating a mixed-effects logistic regression model, containing data from both speaker groups - Polish and Glaswegian - and including individual speaker as a random intercept. For glottal replacement I also included the lexical item as a random intercept: this corrects for word-specific effects, meaning that if particular words behave unusually, this is not allowed to have a disproportionate effect on the model. I began with the random intercepts only, and added potential constraints. Each time I added a potential constraint I tested whether it improved the fit of the model using a log-likelihood ratio test. If it did not improve the fit it was removed again.

Based on the findings of previous studies (Stuart-Smith 1999: 196; Straw & Patrick 2007: 400), I tested for the effect of following segment by creating these categories:

- /t/ comes before a pause (#P), e.g. *what?*
- /t/ comes before a vowel (#V), e.g. *but I think*
- /t/ comes before a vowel and is part of an ‘it sequence’, e.g. *put it, shout at, at all* (Stuart-Smith 1999: 194)

I tested for the effect of preceding segment (Meyerhoff & Schleeff 2014: 113) by creating these categories:

- /t/ comes after a vowel (V#), e.g. *boat*
- /t/ comes after a nasal or liquid (/r n l/#), e.g. *heart, want, built*

In order to investigate lexical frequency effects in these data (Meyerhoff & Schleeff 2014: 117), I extracted frequency counts from my own corpus. Some researchers take frequency counts from larger corpora e.g. the Brown Corpus (Dinkin 2008; Abramowicz 2007), or from a list of frequency counts such as the CELEX lexical database (Hay 2001). In taking frequency counts from my own corpus I follow Clark & Trousdale (2009), who note that there are local, nonstandard lexical items which are frequent in their data but which ‘are much less frequent in [...] the BNC or even a more local corpus of Scottish English such as the SCOTS corpus’ (37). They note that ‘had the frequency counts for these nonstandard lexical items come from a large database [...] the frequency value assigned to these items would not have been an accurate representation of the frequency with which they are used by these speakers’ (38). This is also the case with my data.

Lexical frequency is included in the model as a continuous numerical predictor. It is log transformed to account for the fact that frequency differences at the lower end of the scale are more important than frequency differences higher up the scale: the difference between a frequency of 1 and 100 is more important than the difference between a frequency of 1001 and 1100. It is also centred around its mean

so that the baseline value is a word of average lexical frequency, rather than a word with lexical frequency of 0.

In investigating the effect of grammatical category, I was unable to follow Meyerhoff & Schlee (2014: 113 and 117) and code for adverbs, pronouns, adjectives, conjunctions, prepositions, nouns and verbs. This is because several grammatical categories have low token counts in my data, and some contain only a small number of lexical items (meaning that the results could reflect specific lexical effects rather than grammatical category effects). Instead, I created the following categories and tested whether the type of word constrains the variation:

- Function words (e.g. *but*, *about*, *at*)
- Content words (e.g. *write*, *cat*)

Recall that discourse markers were removed due to categoricity (section 7.2.1.).

I also tested for the effect of number of syllables. Although to my knowledge this has not been reported as a constraint on word-final glottal replacement, this may simply indicate a lack of evidence, as it has rarely been investigated: it has been reported to constrain word-medial glottal replacement (Schlee 2013a: 211). Like lexical frequency, number of syllables is included as a continuous numerical predictor. It is also centred around its mean so that the baseline value is a word with an average number of syllables, rather than a word with 0 syllables.

Because stress pattern can block glottal replacement (section 7.2.1.), I also investigate stress pattern as a potential constraint. For those contexts where glottal replacement is not blocked, I explore whether the position of /t/ in relation to stress constrains the variation. I compare two categories:

- /t/ comes directly after a main stress syllable
- /t/ does not come directly after a main stress syllable

I also tested potential social constraints on the variation: speech context (Macaulay & Trevelyan 1977: 53; Meyerhoff & Schlee 2014: 113 and 117), gender (Macaulay &



Trevelyan 1977: 45; Milroy et al 1994: 342) and age (Macaulay & Trevelyan 1977: 46; Meyerhoff & Schlee 2014: 117).

7.4.1.1. Results

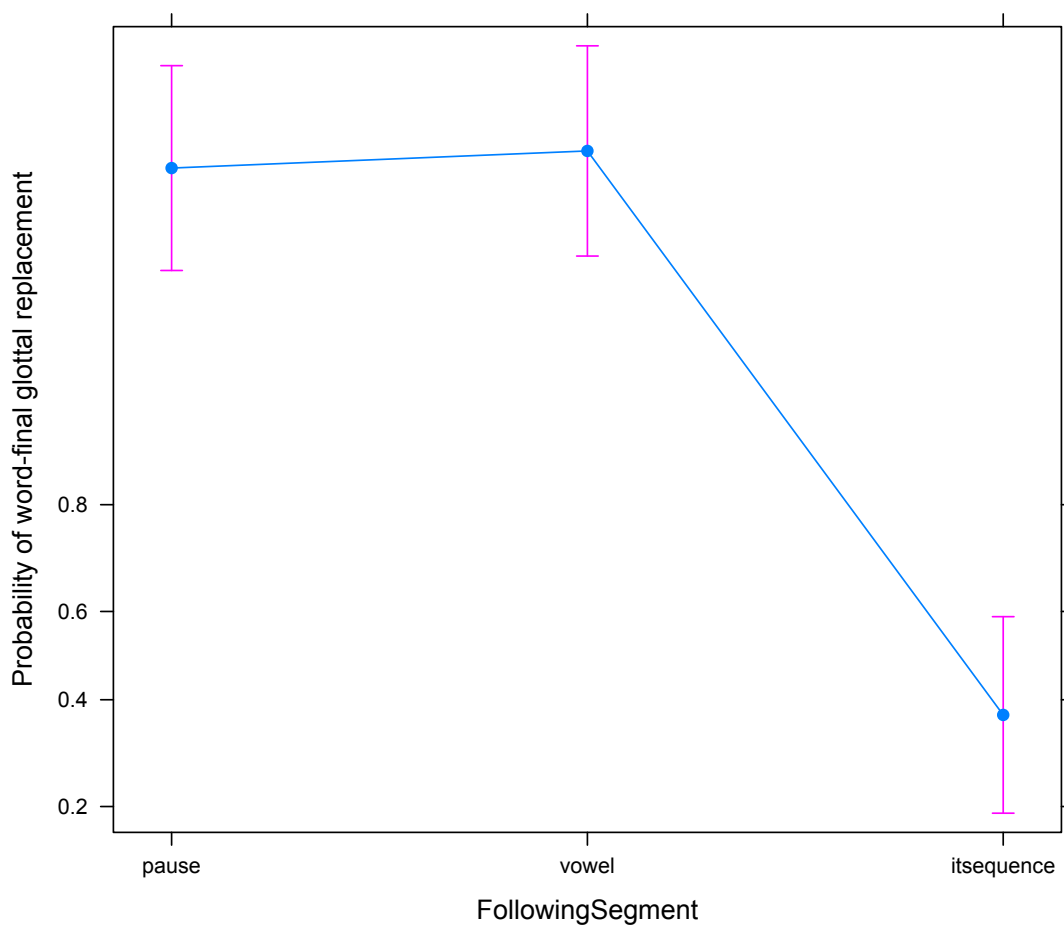
Table 19 shows a detailed summary of the model.

Predictor	Estimate ( $\beta$ )	SE ( $\beta$ )	z-value	p
Intercept	4.478	0.480	9.331	< .001
Following segment = vowel	0.157	0.291	0.540	0.589
Following segment = special construction	-5.023	0.291	-13.224	< .001
Lexical frequency	0.363	0.082	4.416	< .001

Table 19: Output of the logistic regression analysis showing the significant constraints for word-final glottal replacement (both speaker groups modelled together)

Two of the above constraints emerged as significant: following segment and lexical frequency. The other potential constraints did not emerge as significant: preceding segment, type of word, number of syllables, stress position, speech context, gender and age do not constrain the variation. The absence of any social constraints on the variation is notable: this suggests that word-final glottal replacement may be low in awareness for these speakers. Note also that word-final glottal replacement is not very highly-constrained: it has fewer constraints on use than Scots negation.

Figure 42 shows the effect of following segment.



*Figure 42: Partial effects plot showing the probability of word-final glottal replacement across following-segment categories (both speaker groups modelled together)*

Figure 42 shows that the probability of glottal replacement occurring is dramatically lower in the ‘it sequence’ category, identified by Stuart-Smith (1999: 194) - i.e. when the /t/ comes before *it* or *at* (e.g. *put it*, *shout at*), or in the sequence *at all*.

Figure 43 shows the effect of lexical frequency on the probability of word-final glottal replacement.

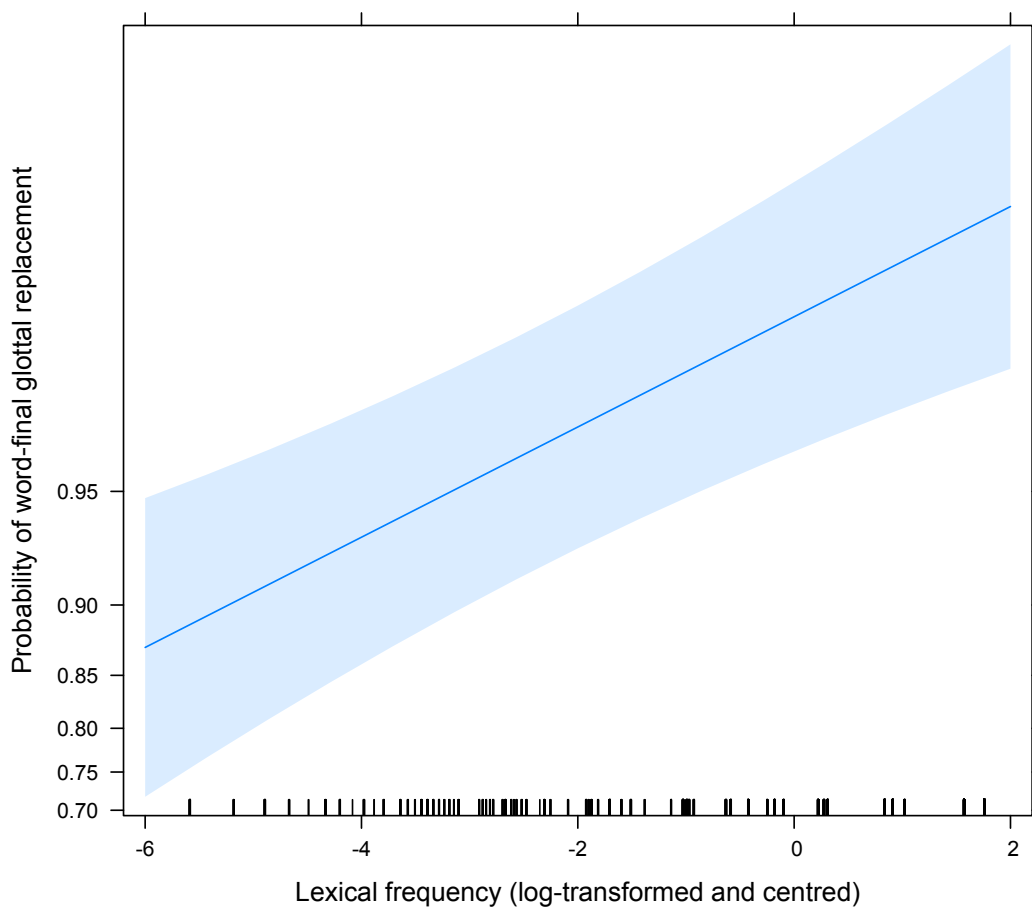


Figure 43: Partial effects plot showing the effect of lexical frequency on the probability of word-final glottal replacement (both speaker groups modelled together)

Word-final glottal replacement is more likely to occur in higher frequency words (e.g. *it*) than it is to occur in lower frequency words (e.g. *retreat*).

Figures 42 and 43 show that when the two speaker groups are modelled together, following segment and lexical frequency emerge as significant constraints. I now ask whether the Polish group are replicating the constraints found in the native speaker control group, or whether the two groups differ from one another. Adding speaker group to the model as an interaction term significantly improves the fit of the model ( $\chi^2(4) = 10.763, p < 0.05$ ). This means that the two groups have statistically different linguistic behaviour for word-final glottal replacement. Table 20 gives a detailed summary of the model with speaker group added as an interaction term.

Predictor	Estimate ( $\beta$ )	SE ( $\beta$ )	z-value	p
Intercept	4.661	0.775	6.016	< .001
Speaker group = Polish	-0.401	0.884	-0.454	0.650
Following segment = vowel	1.015	0.864	1.176	0.240
Following segment = special construction	-4.820	0.611	-7.893	< .001
Lexical frequency	0.093	0.134	0.696	0.487
Speaker group = Polish: Following segment = vowel	-0.989	0.912	-1.085	0.278
Speaker group = Polish: Following segment = special construction	-0.277	0.712	-0.389	0.698
Speaker group = Polish: Lexical frequency	0.365	0.140	2.604	< .001

*Table 20: Output of the logistic regression analysis showing significant constraints for word-final glottal replacement with speaker group added as an interaction term*

Figures 44 and 45 show how the two groups differ from one another.

Figure 44 shows the effect of following segment across the Glaswegian and Polish speaker groups.

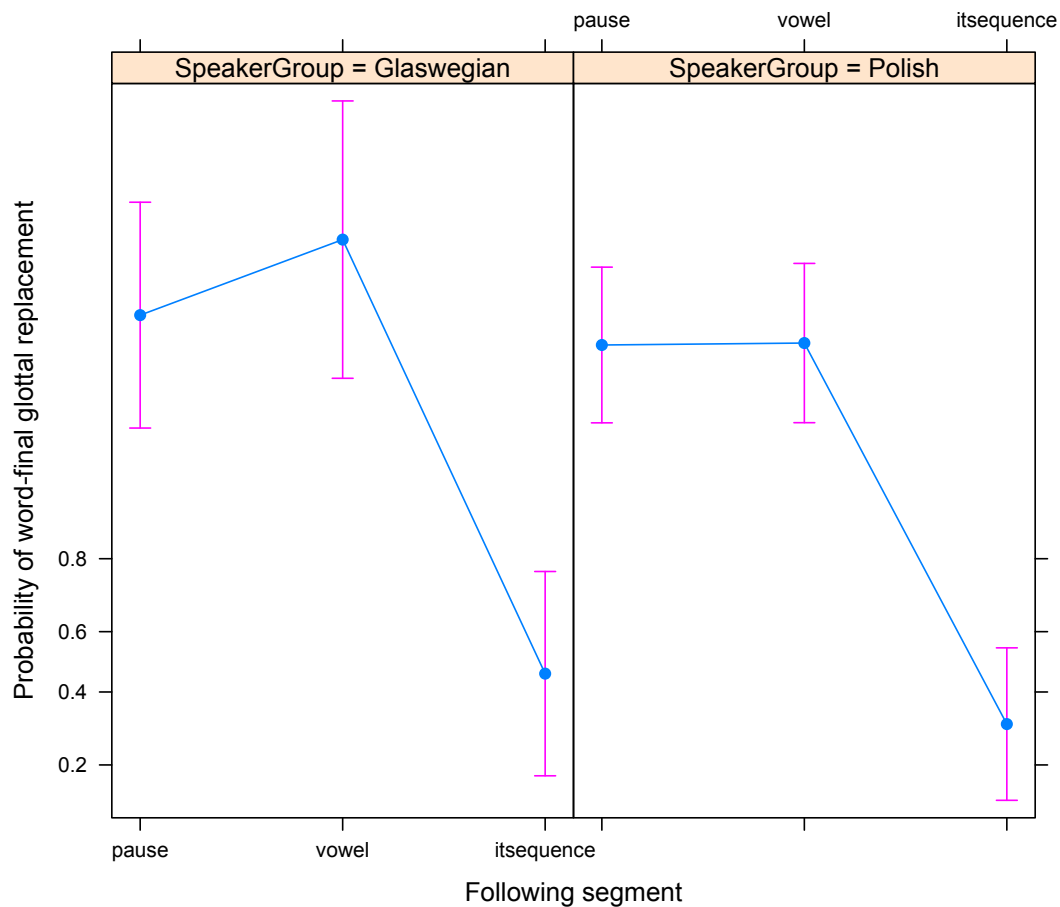
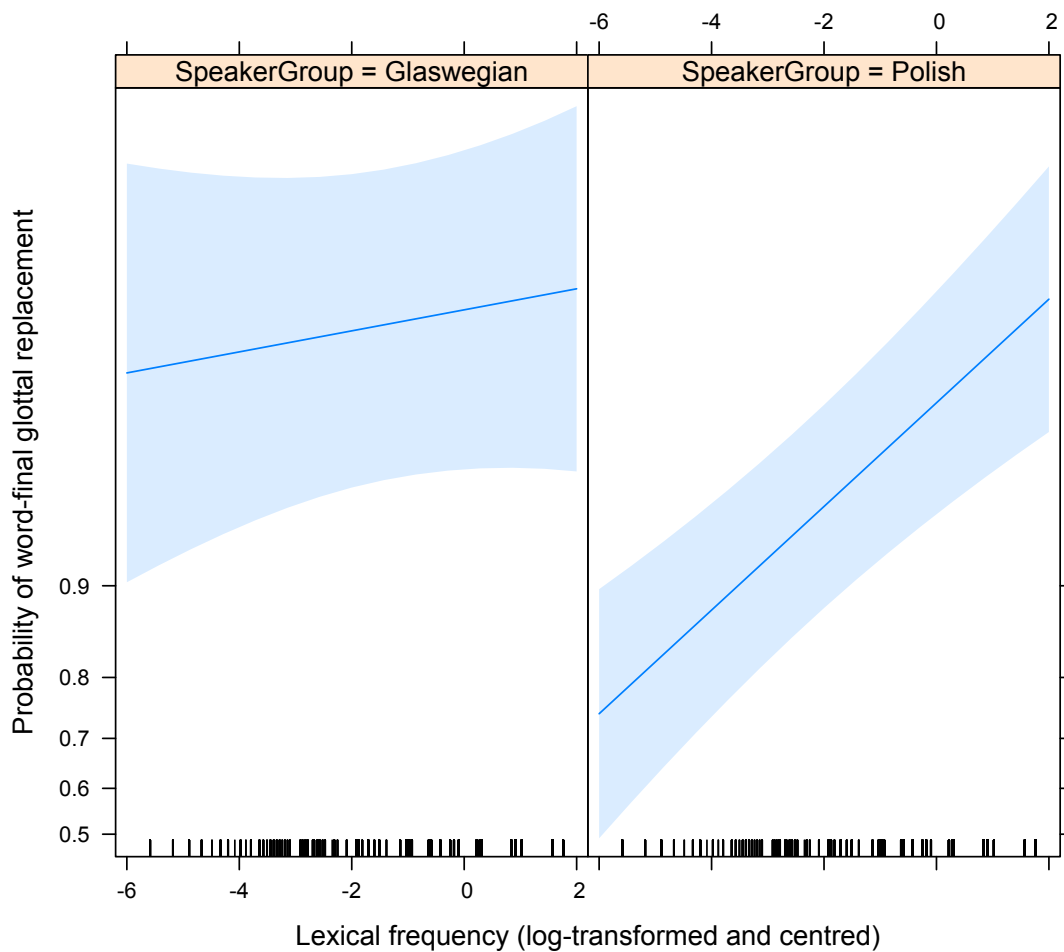


Figure 44: Partial effects plot showing the probability of word-final glottal replacement across following-segment categories for each speaker group

Figure 44 shows that for both groups, the ‘it sequence’ category elicits a dramatic reduction in word-final glottal replacement. The Polish group have ‘learnt’ that while word-final glottal replacement occurs at a very high rate in native Glaswegian speech, it occurs at a much lower rate in a specific set of constructions, including *put it*, *shout at* and *at all*. The Polish group have replicated this native speaker constraints.

Figure 45 shows the effect of lexical frequency for each group.



*Figure 45: Partial effects plot showing the effect of lexical frequency on the probability of word-final glottal replacement for each speaker group*

Figure 45 shows that for the Polish group, word-final glottal replacement is more likely to occur in higher frequency words. The effect is not significant for their Glaswegian peers. The learners have innovated a lexical frequency constraint.

Table 21 summarises the constraint acquisition pattern for word-final glottal replacement.

Constraint	Comparison of native and non-native speech	Constraint acquisition pattern
following phonological segment	similar constraint found in native speech and non-native speech	constraint has been replicated
lexical frequency	constraint absent from native speech; constraint found in non-native speech	constraint has been innovated

*Table 21: Summary of constraint acquisition patterns for word-final glottal replacement*

#### *7.4.1.2. Discussion*

The learners have successfully replicated the native speaker constraint of following segment, and they have innovated a lexical frequency constraint. The innovation of the lexical frequency constraint may tell us something about the process by which sociolinguistic variation is acquired in a new language. Previous research has noted that in the process of acquiring sociolinguistic variation, learners often acquire features in a small number of specific words first, before they spread to the rest of their speech. Wolfram et al (2004) suggest that ‘lexical diffusion may be an active process in the acquisition of local dialects of English’ (345). Chambers (1992) gives the example: ‘the acquisition of R-lessness will be initiated by the use of [a] [...] pronunciation such as [bɜ:d] for [...] [bɘ:d] “bird”’ (694). The acquisition of word-final glottal replacement by the Polish speakers appears to be initiated in the high-frequency lexical items they are exposed to most in their input.

#### ***7.4.2. Predictors of the acquisition of word-final glottal replacement***

Chapters 5 and 6 showed that length of residency (LoR), age at onset (AaO), gender and integrative motivation (IM) do not predict the learners' acquisition of *aye* or Scots negation: e.g. learners who have been in Glasgow longer do not use *aye* at a higher rate than new arrivals; learners who identify strongly with Glasgow do not use more Scots negation than those who still think of Poland as home. Do these external factors predict a learners' acquisition of word-final glottal replacement?

To investigate this, I created a second mixed-effects logistic regression model for word-final glottal replacement, this time containing only the Polish speech data. I again began with the random intercepts (individual speaker and word), and I added in the two constraints which emerged as significant in the previous section, following segment and lexical frequency. I then added in LoR, AaO, gender and IM, and I tested whether the addition of these factors significantly improved the fit of the model

##### *7.4.2.1. Results*

I found that the addition of LoR, AaO, gender and IM did not significantly improve the fit of the model. As was the case for *aye* and Scots negation, none of these external factors significantly predict an individual learner's acquisition of word-final glottal replacement.

For *aye* and Scots negation, I showed that although LoR, AaO, gender and IM were not able to explain individual differences in the learners' acquisition of the variables, these individual differences were pronounced. Some of the learners had very high rates of the local variants, and some had very low rates. I suggested that these individual differences might be explained by looking at the speakers' differing orientations towards school. I suggested that these high-awareness variables were being used in individual acts of identity by the Polish learners and also by their Glaswegian classmates.

For word-final glottal replacement, the picture for individual speaker behaviour is quite different from the other variables examined, as shown in figure 46.



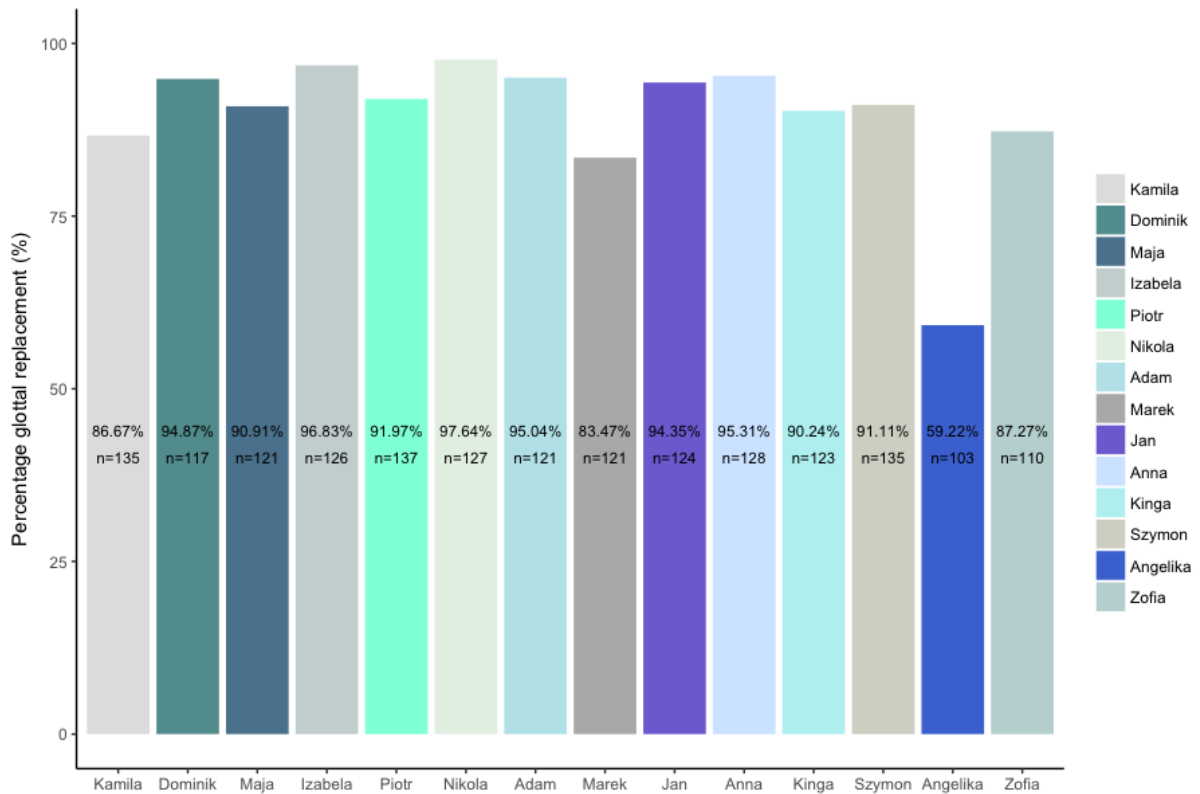


Figure 46: Comparison of individual Polish speakers for word-final glottal replacement (speakers ordered youngest to oldest)

Unlike *aye* and Scots negation, for word-final glottal replacement most of the learners show very similar rates of use. Only Angelika lags behind in her acquisition of this variable. For this variable, LoR, AaO, gender and IM have very little individual difference to explain.

Figure 47 shows that in the Glaswegian group, too, speakers have very similar rates of use.

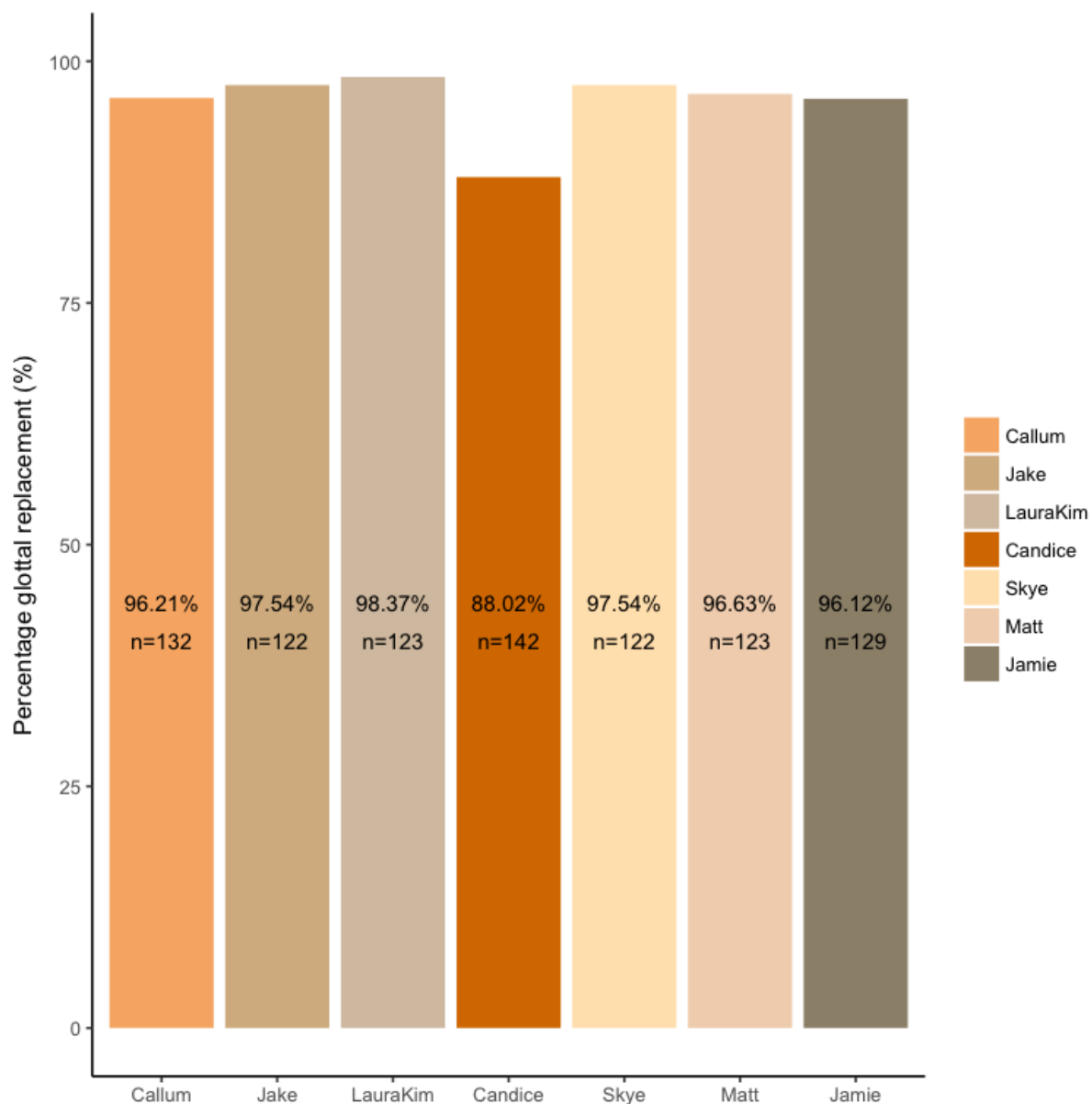


Figure 47: Comparison of individual Glaswegian speakers for word-final glottal replacement (speakers ordered youngest to oldest)

#### 7.4.2.2. Discussion

Word-final glottal replacement appears to be fairly low in speaker awareness, as Trudgill (1986: 25) predicts for variables which do not involve a phonological contrast. It is the first of the variables examined which is not sensitive to speech context: while the speakers shift their rates of use across the speech contexts for *aye* and Scots negation, they don't for word-final glottal replacement. If word-final glottal replacement is a low awareness variable, it may not be available for identity marking as the other, higher-awareness variables are. Its acquisition,

therefore, may not be shaped by its social meaning as the acquisition of *aye* and Scots negation is. Instead of its acquisition being dependent on its social evaluation by the learners (Howley 2015: 119), it appears that word-final glottal replacement may be ‘implicitly internalized’ (Tarone 2007: 844) through contact with native speakers. This would partly explain why IM does not emerge as significant: learners may not have enough awareness or control of word-final glottal replacement for it to index local identity.

As noted, LoR and AaO might be more likely to emerge as predictors of the acquisition of more highly-constrained variables (Payne 1980: 175; Chambers 1992: 702; Kerswill 1996: 187); we might also expect IM to emerge as a predictor for highly-constrained variables, because their acquisition may require a higher degree of native speaker contact (Milroy 2007: 170). Conversely, we might expect LoR, AaO and IM to play a less important role in the acquisition of less highly-constrained variables. Word-final glottal replacement is not very highly constrained, and this may explain why LoR and AaO do not emerge as predictors, and why native speaker contact does not emerge as a predictor via IM. Even speakers with short LoRs and high AaOs (e.g. Adam and Izabela), have high rates of word-final glottal replacement; it appears that word-final glottal replacement is not highly-constrained enough to present a problem for these learners. Only one of the Polish speakers, Angelika, is behind in her acquisition of word-final glottal replacement. Angelika has probably had the least native speaker contact out of all of the participants. She has a short LoR (two years), a high AaO (13), and no close friends who are not Polish. I suggest that her very low level of native speaker contact may explain her low acquisition of word-final glottal replacement. Its acquisition does not require a high degree of exposure to native speech, and even with very little exposure, Angelika has begun to use the local variant. However, with very little exposure she has not acquired it as fully as the other learners have.

### ***7.4.3. Summary for word-final glottal replacement***

Unlike *aye* and Scots negation, I suggest that word-final glottal replacement is relatively low in speaker awareness. The acquisition of this low-awareness variable is not dependent on individual choice and cultural alignment' (Wolfram et al 2004: 355): it is 'implicitly internalized' (Tarone 2007: 844) through contact with native speech, without the learner's awareness. It is not involved with individual acts of identity, and so is used at very similar rates across most of the speakers, and its acquisition doesn't correlate with the learners' feeling of identification with Glasgow, as measured by IM. Word-final glottal replacement is not very highly-constrained, and therefore I suggest that its acquisition does not require a great deal of native speaker contact (Milroy 2007: 170), a long LoR, or an early AaO (Payne 1980: 175; Chambers 1992: 702; Kerswill 1996: 187-188), which may explain why none of these factors emerge as significant in the analysis.

The learners have replicated the native following-segment constraint, and they have innovated a lexical frequency constraint. I suggest that this may represent a lexical diffusion effect, where the local variant is initially tied to specific lexical items. It is first acquired in the high-frequency lexical items they are exposed to the most in their input, before spreading to the rest of the lexicon (Chambers 1992: 694; Wolfram et al 2004: 345).

## 7.5. Word-medial glottal replacement

Table 22 shows the overall distribution of [ʔ] v [t] for word-medial /t/.

	<i>Glaswegian speakers</i>		<i>Polish speakers</i>	
	N	Rate	N	Rate
[ʔ]	379	80.81%	740	67.89%
[t]	90	19.19%	350	32.11%

Table 22: Overall distribution of [ʔ] v [t] for word-medial /t/

For word-final /t/, the Polish speakers came close to matching the overall rate of glottal replacement shown by their Glaswegian peers. Their acquisition of word-medial glottal replacement lags further behind.

Table 22 shows that the Polish speakers have begun to use the local variant; but do they have the same patterns of use as the native speakers? Have some individuals acquired word-medial glottal replacement to a greater extent than others, and if so, why? Again, I address these questions by building two statistical models. In the first I test whether the Polish speakers have replicated the native speaker constraints on use, and in the second I test whether we can explain individual acquisition by looking at LoR, AaO, gender and IM.

### ***7.5.1. The acquisition of native speaker constraints on word-medial glottal replacement***

I created a mixed-effects logistic regression model, containing the data from the Polish and Glaswegian speaker groups. I began with the random intercepts only (individual speaker and lexical item), and then added potential constraints. Each time I added a potential constraint I tested whether it improved the fit of the model using a log-likelihood ratio test, and if it did not it was removed again. The final model, therefore, contains only significant constraints.

Based on the findings of previous studies (Schleef 2013a: 211; Smith & Holmes-Elliott 2016: 13), I tested for the effect of following segment. Stuart-Smith (1999: 195) comments qualitatively that *-ed* words appear to disfavour glottal replacement; this

could indicate an effect of following phonological segment (i.e. following /d/ segments disfavour glottal replacement), or it could relate to the grammatical nature of the word (i.e. preterite forms disfavour glottal replacement). Initial observation of the current data supported Stuart-Smith's observation about *-ed* words disfavouring glottal replacement. It also became apparent that other phonologically similar words also disfavour glottal replacement for these speakers: words in which the /t/ is followed by /d/ (e.g. *started*) disfavour glottal replacement, but so do words in which the /t/ is followed by any other plosive (e.g. *romantic*, *Celtic*, *competitive*, *debatable*). This suggests that it may be the phonological segment which follows the /t/ that is important, rather than the grammatical nature of the word. It appears that when /t/ is followed by a syllable containing a vowel and another plosive sound, the likelihood of glottal replacement may be reduced. In order to examine this possibility, I construct these categories in the data:

- /t/ comes before a segment containing a vowel and a plosive (#/d k t b/), e.g. *started*, *enchanted*, *romantic*, *Celtic*, *competitive*, *debatable*
- /t/ comes before a segment which doesn't contain a plosive

I tested for the effect of preceding segment (Schleef 2013a: 211), by creating these categories:

- /t/ comes after a vowel (V#), e.g. *fighting*
- /t/ comes after a nasal or liquid (/r n l/#), e.g. *thirty*, *wanting*, *Celtic*

As with word-final glottal replacement, to investigate lexical frequency effects (Schleef 2013a: 211) I extracted frequency counts from my own corpus (following Clark & Trousdale 2009: 37-38). Again, lexical frequency is included in the model as a continuous numerical predictor. It is log transformed and centred around its mean.

As with word-final glottal replacement, I was unable to code for a wide range of grammatical categories (Schleef 2013a: 208) due to the low token counts in several categories. I instead coded all lexical items as either content words or function words. However, in these data the only function words containing a word-medial /t/ are *whatever* and

*into* - all other word-medial items are content words. For this reason, I do not examine the constraint of grammatical category for word-medial glottal replacement.

I also tested for the effect of number of syllables (Schleef 2013a: 211). Number of syllables is again included as a continuous numerical predictor, and centred around its mean.

I again investigate stress pattern as a potential constraint on the variation. For those contexts where glottal replacement is not blocked, I explore whether the position of /t/ in relation to stress constrains the variation. I compare two categories:

- /t/ comes directly after a main stress syllable
- /t/ does not come directly after a main stress syllable

I also tested potential social constraints on the variation: speech context (Macaulay & Trevelyan 1977: 53), gender (45) and age (46).

#### 7.5.1.1. Results

Table 23 gives a detailed summary of the model.

Predictor	Estimate ( $\beta$ )	SE ( $\beta$ )	z-value	p
Intercept	0.036	0.505	0.071	0.944
Following segment = plosive	-4.512	0.477	-9.467	< .001
Preceding segment = vowel	1.824	0.294	6.197	< .001
Lexical frequency	0.204	0.104	1.962	< .05
Number of syllables	-0.642	0.173	-3.718	< .001
Speech context = conversation	0.726	0.262	2.769	< .01
Speech context = peer-group	0.530	0.276	1.924	0.054

Table 23: Output of the logistic regression analysis showing the significant constraints for word-medial glottal replacement (both speaker groups modelled together)

Five of the above constraints emerged as significant: following segment, preceding segment, lexical frequency, number of syllables and speech context. The other potential constraints did not emerge as significant: stress position, gender and age.

Figure 48 shows the effect of following segment on the probability of word-medial glottal replacement occurring.

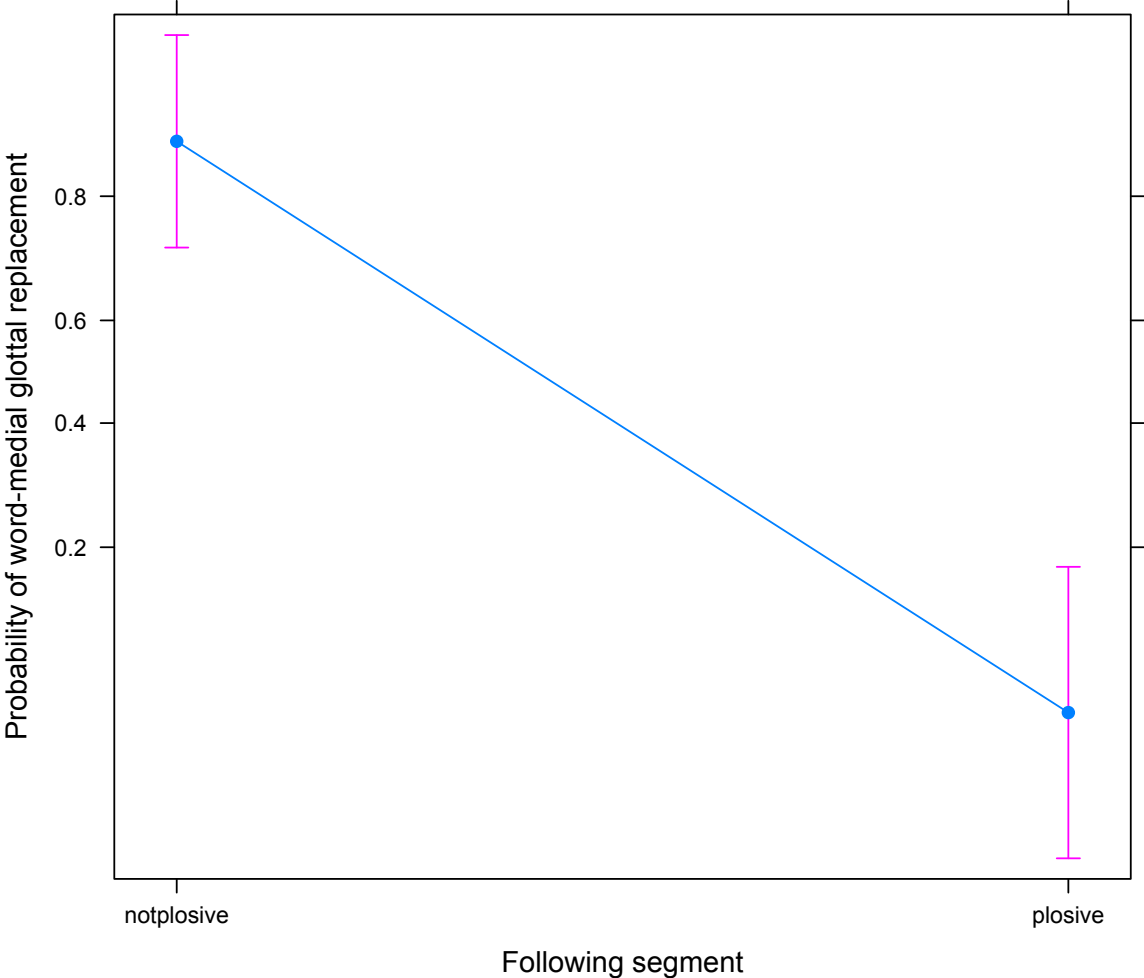


Figure 48: Partial effects plot showing the probability of word-medial glottal replacement across following-segment categories (both speaker groups modelled together)

Figure 48 shows that the probability of word-medial glottal replacement occurring is dramatically lower when /t/ comes before a segment containing a plosive (#/d k t b/), e.g. *started*, *enchanted*, *romantic*, *Celtic*, *competitive*, *debatable*. This builds on Stuart-Smith’s



observation that *-ed* words appear to disfavour glottal replacement in Glasgow (1999: 195). I find that this is also true of other words where /t/ is followed closely by another plosive.

Recall that word-final [ʔ] was much less likely to occur when the /t/ was part of an ‘it sequence’, in e.g. *put it*, *shout at*, *at all*. With the exception of *at all*, the other constructions in this category are phonologically very similar to the ‘following segment = plosive’ category which disfavors word-medial [ʔ]. When /t/ is followed by a segment containing a plosive, this reduces the likelihood of both word-medial and word-final glottal replacement.<sup>48</sup>

Figure 49 shows the effect of preceding segment.

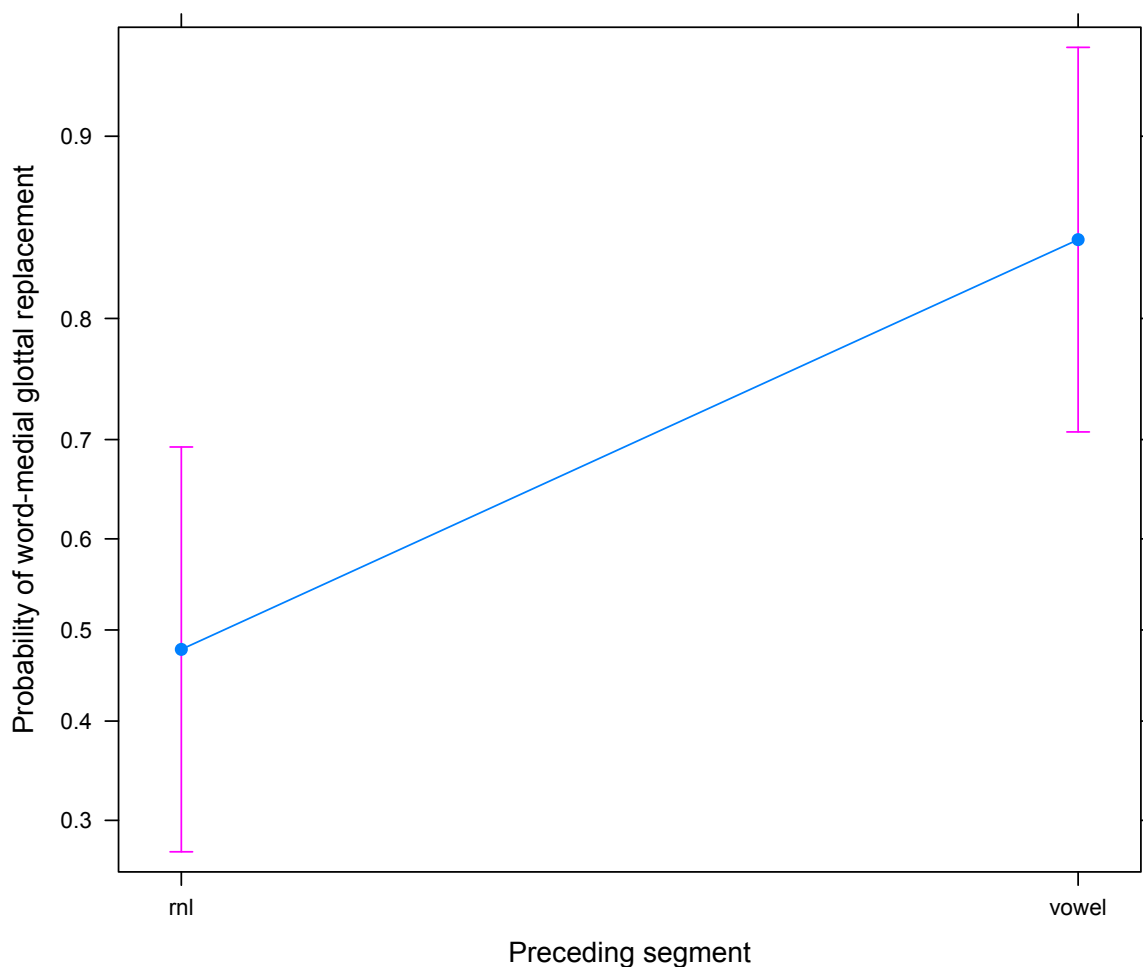


Figure 49: Partial effects plot showing the probability of word-medial glottal replacement across preceding-segment categories (both speaker groups modelled together)

<sup>48</sup> The disfavouring of word-final [ʔ] in *at all* has a different explanation: the ‘prosodic tendency to make a final consonant begin the following syllable, if this begins in a vowel’ in Scottish speech (Stuart-Smith 1999: 194).

Figure 49 shows that the probability of word-medial glottal replacement is lower when /t/ comes after a nasal or liquid (/r n l/#), e.g. *thirty*, *wanting*, *Celtic*, and higher when /t/ comes after a vowel (V#), e.g. *fighting*.

Figure 50 shows the effect of lexical frequency.

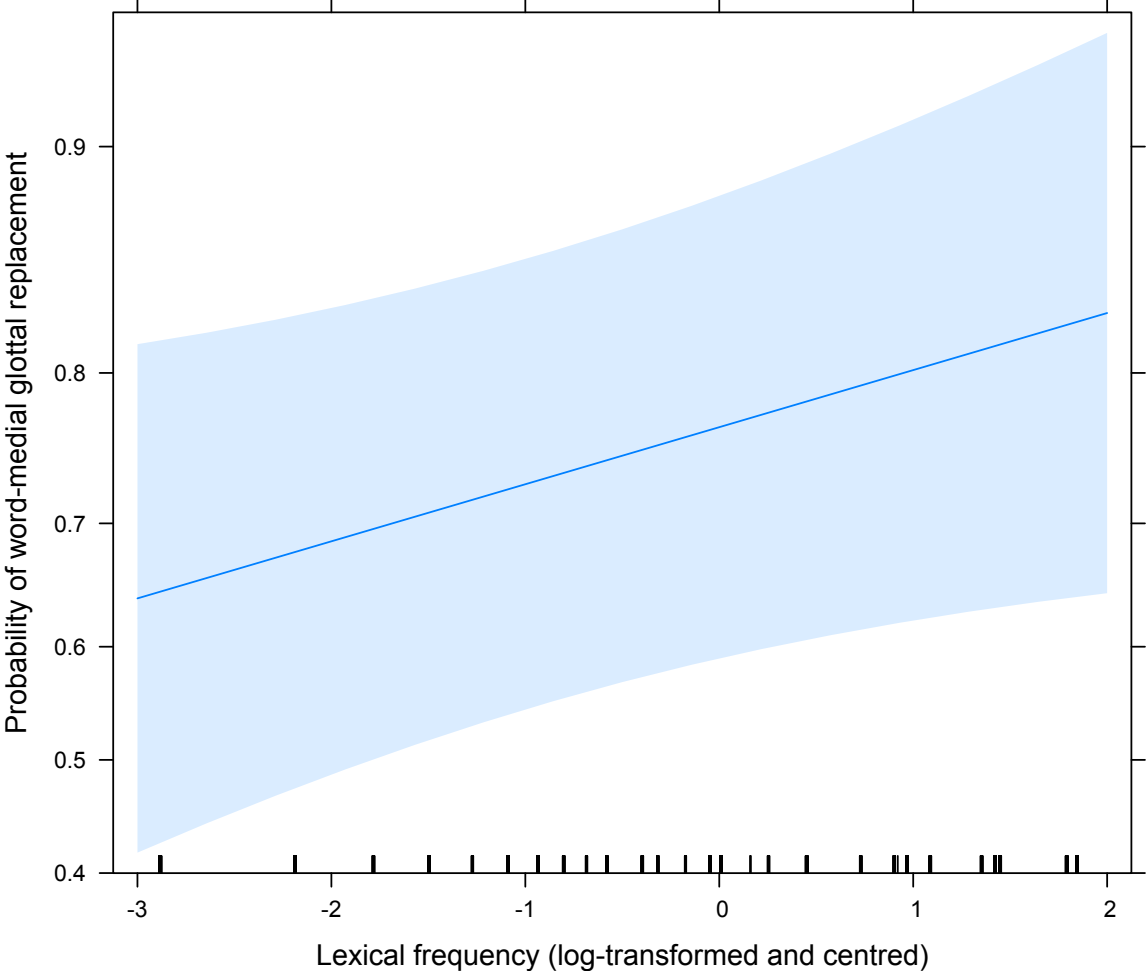
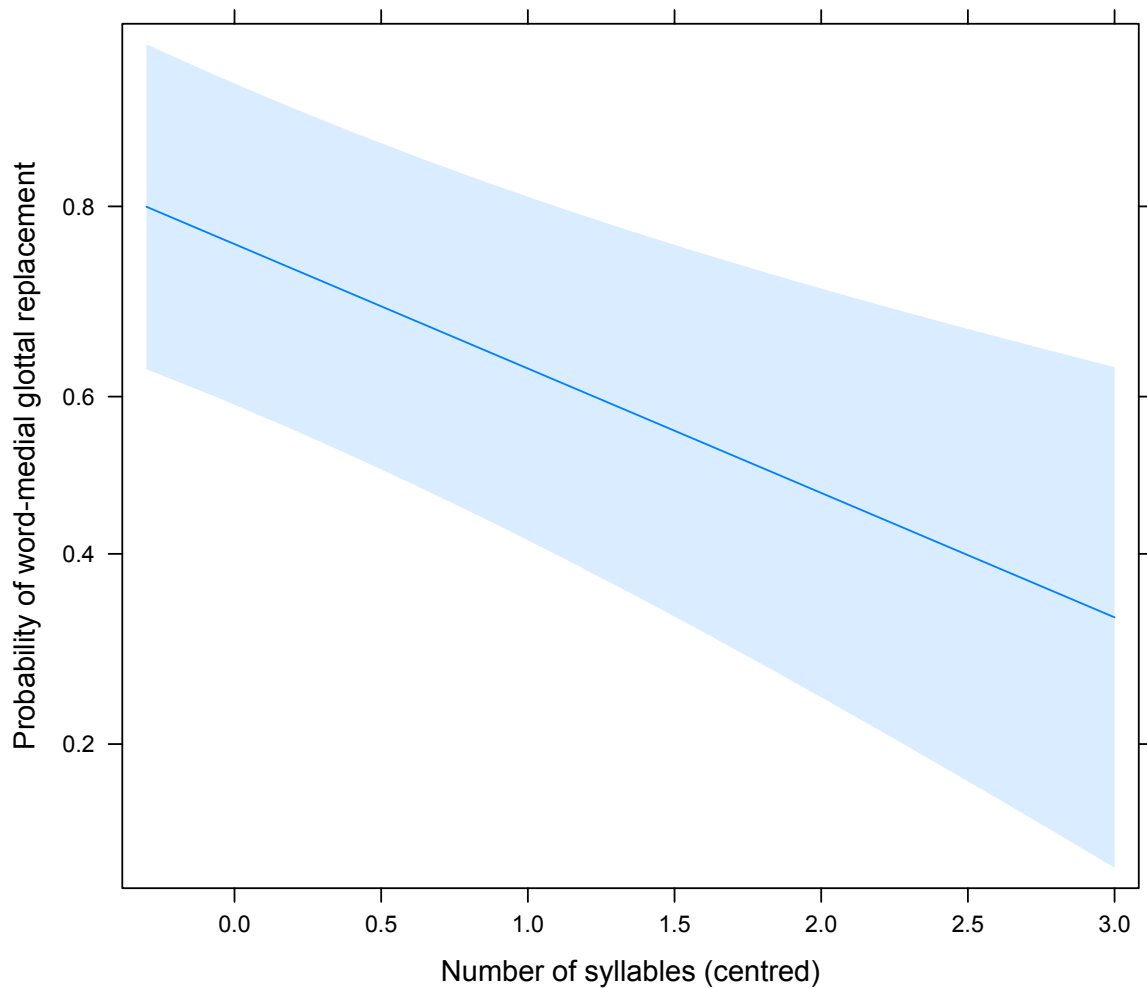


Figure 50: Partial effects plot showing the effect of lexical frequency on the probability of word-medial glottal replacement (both speaker groups modelled together)

Figure 50 shows that, overall, word-medial glottal replacement is more likely to occur in higher frequency words. Recall that this was also the case for word-final glottal replacement.

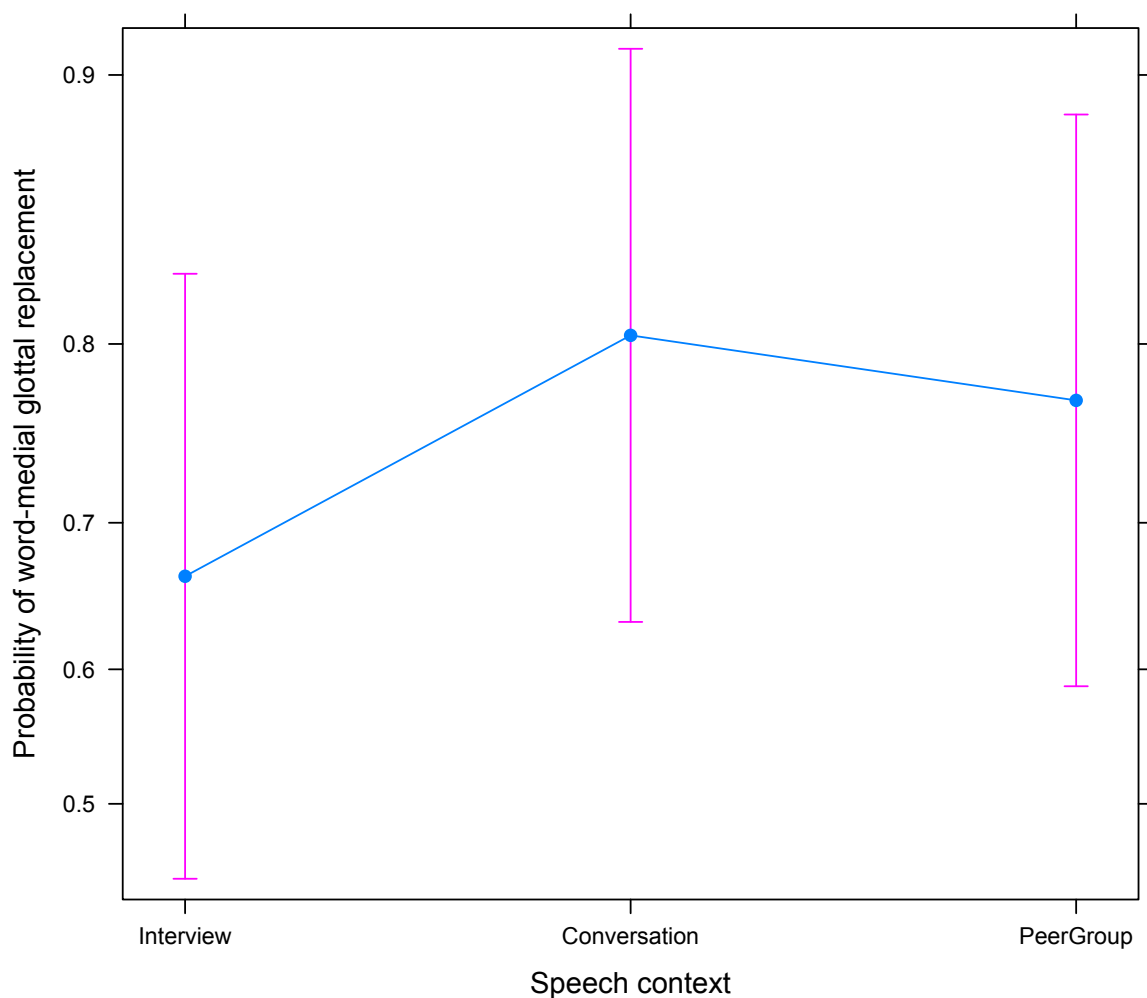
Figure 51 shows the effect of number of syllables.



*Figure 51: Partial effects plot showing the effect of number of syllables on the probability of word-medial glottal replacement (both speaker groups modelled together)*

Figure 51 shows that, overall, word-medial glottal replacement is less likely to occur in words with more syllables.

Figure 52 shows the effect of speech context.



*Figure 52: Partial effects plot showing the probability of word-medial glottal replacement across speech contexts (both speaker groups modelled together)*

Figure 52 shows that word-medial glottal replacement is much less likely to occur in the interview context, where the participants are engaged in classroom-like activities with a stranger who is a non-native English speaker. The likelihood of word-medial glottal replacement occurring is statistically similar across the conversation context and the peer-group context.

Figures 48 - 52 show the patterns which emerge when both the Polish and Glaswegian speakers are modelled together. I now ask whether or not the two groups differ in their patterns of use. Are the Polish learners replicating the constraints in their native speaker input?

To test this, I add speaker group to the model as an interaction term. This significantly improves the fit of the model ( $\chi^2(4) = 38.43$ ,  $p < 0.001$ ). This means that, as with the other variables examined, the two speaker groups show statistically different linguistic behaviour for word-medial glottal replacement. Table 24 gives a detailed summary of the model with speaker group added as an interaction term.

Predictor	Estimate ( $\beta$ )	SE ( $\beta$ )	z-value	p
Intercept	3.505	1.037	3.381	< .001
Speaker group = Polish	-4.482	1.151	-3.894	< .001
Following segment = plosive	-7.675	0.955	-8.038	< .001
Preceding segment = vowel	0.977	0.534	1.830	0.067
Lexical frequency	-0.356	0.209	-1.702	0.089
Number of syllables	-0.804	0.380	-2.113	< .05
Speech context = conversation	-1.012	0.739	-1.371	0.170
Speech context = peer-group	-0.806	0.784	-1.028	0.304
Speaker group = Polish: Following segment = plosive	4.182	0.963	4.343	< .001
Speaker group = Polish: Preceding segment = vowel	1.134	0.534	2.124	< .05
Speaker group = Polish: Lexical frequency	0.660	0.206	3.209	< .01
Speaker group = Polish: Number of syllables	0.055	0.418	0.132	0.895
Speaker group = Polish: Speech context = conversation	2.051	0.801	2.561	< .05
Speaker group = Polish: Speech context = peer-group	1.581	0.842	1.878	0.060

Table 24: Output of the logistic regression analysis showing significant constraints for word-medial glottal replacement with speaker group added as an interaction term

Figures 53 - 57 show the details of how the two groups differ for each constraint. Figure 53 shows the effect of following segment across the Glaswegian and Polish speaker groups.

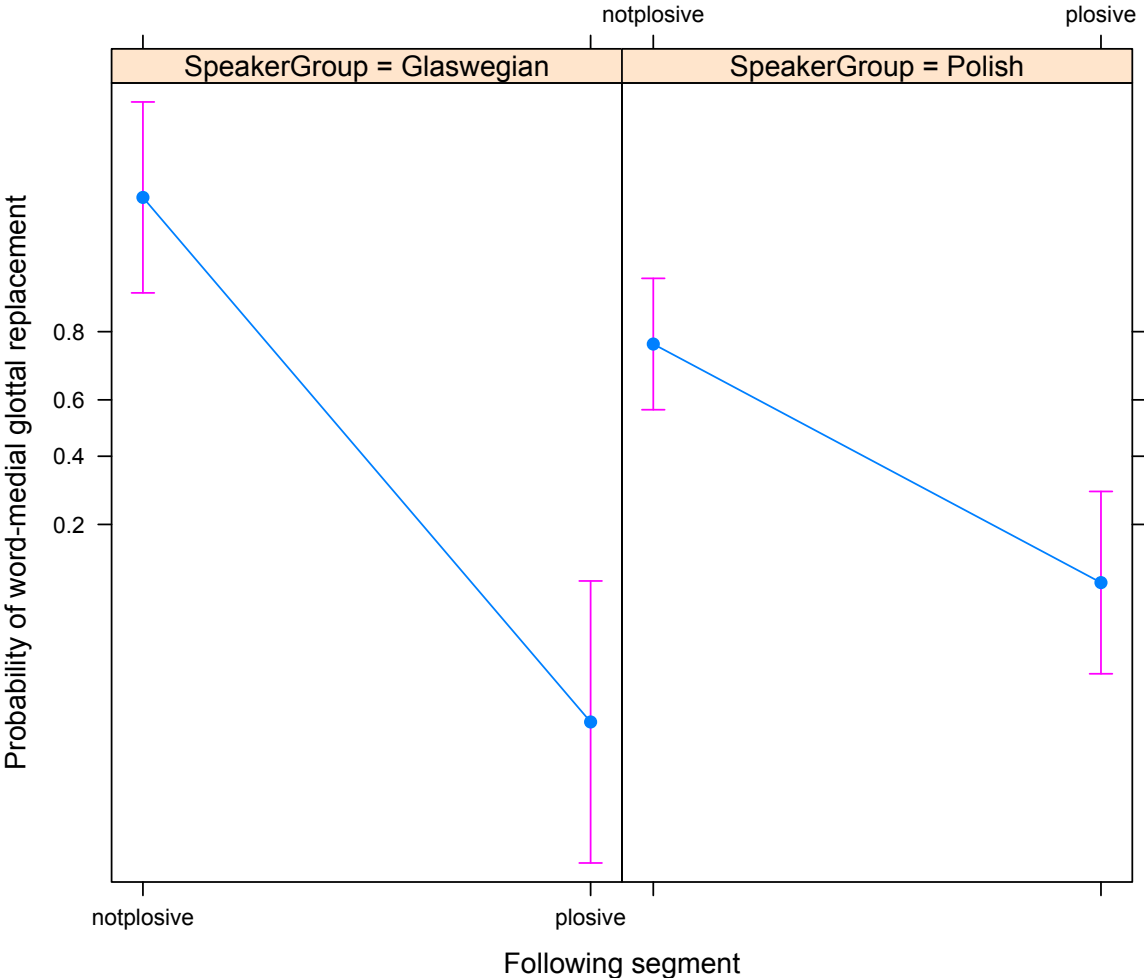


Figure 53: Partial effects plot showing the probability of word-medial glottal replacement across following-segment categories for each speaker group

Figure 53 shows that for both groups, the probability of word-medial glottal replacement occurring is lower when /t/ comes before a segment containing a plosive (#/d k t b/), e.g. *started*, *romantic*, *debatable*. This pattern is significant for the Glaswegian group, and it remains significant for the Polish group when they are modelled separately (see section 7.5.2.), but it is significantly weaker for the Polish group, who shift their rates of use less dramatically than their Glaswegian peers. The Polish speakers have under-acquired this constraint.

Figure 54 shows the effect of preceding segment across the speaker groups.

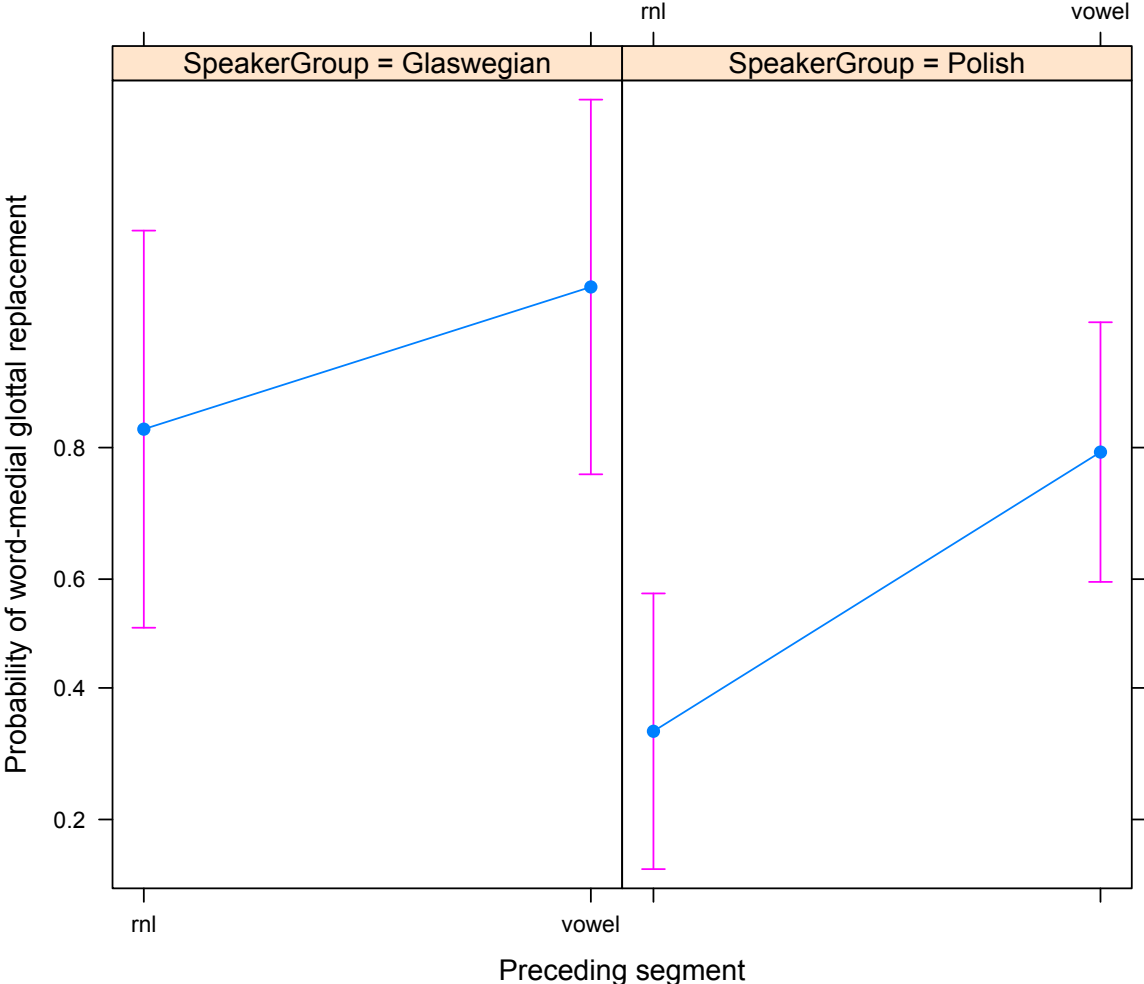


Figure 54: Partial effects plot showing the probability of word-medial glottal replacement across preceding-segment categories for each speaker group



Figure 53 shows that for the Polish group, the probability of word-medial glottal replacement is lower when /t/ comes after a nasal or liquid (/r n l/#), e.g. *thirty*, *wanting*, *Celtic*, and higher when /t/ comes after a vowel (V#), e.g. *fighting*. This constraint is not significant for the Glaswegian speakers. The Polish speakers have innovated this constraint.

Figure 55 shows the effect of lexical frequency across the speaker groups.

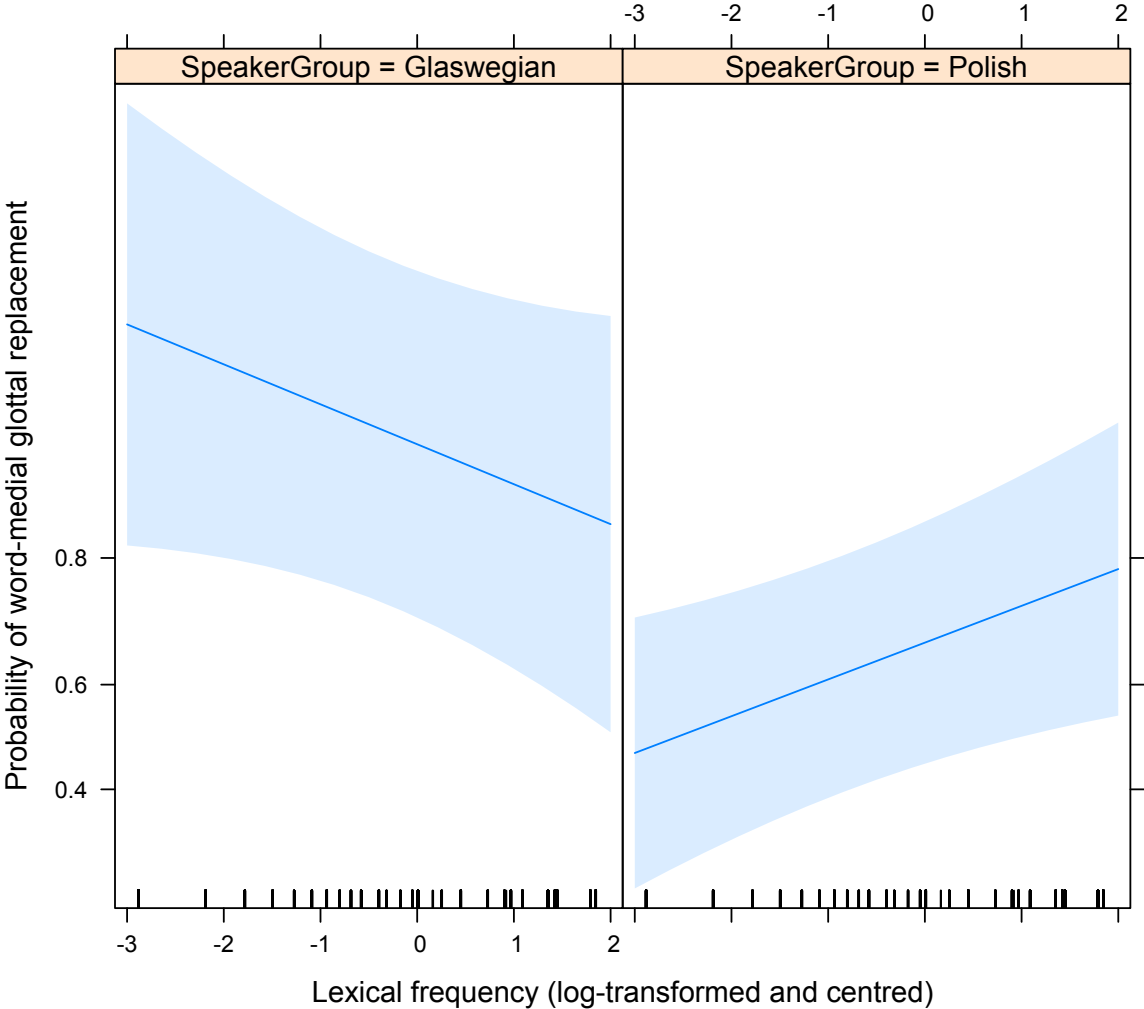
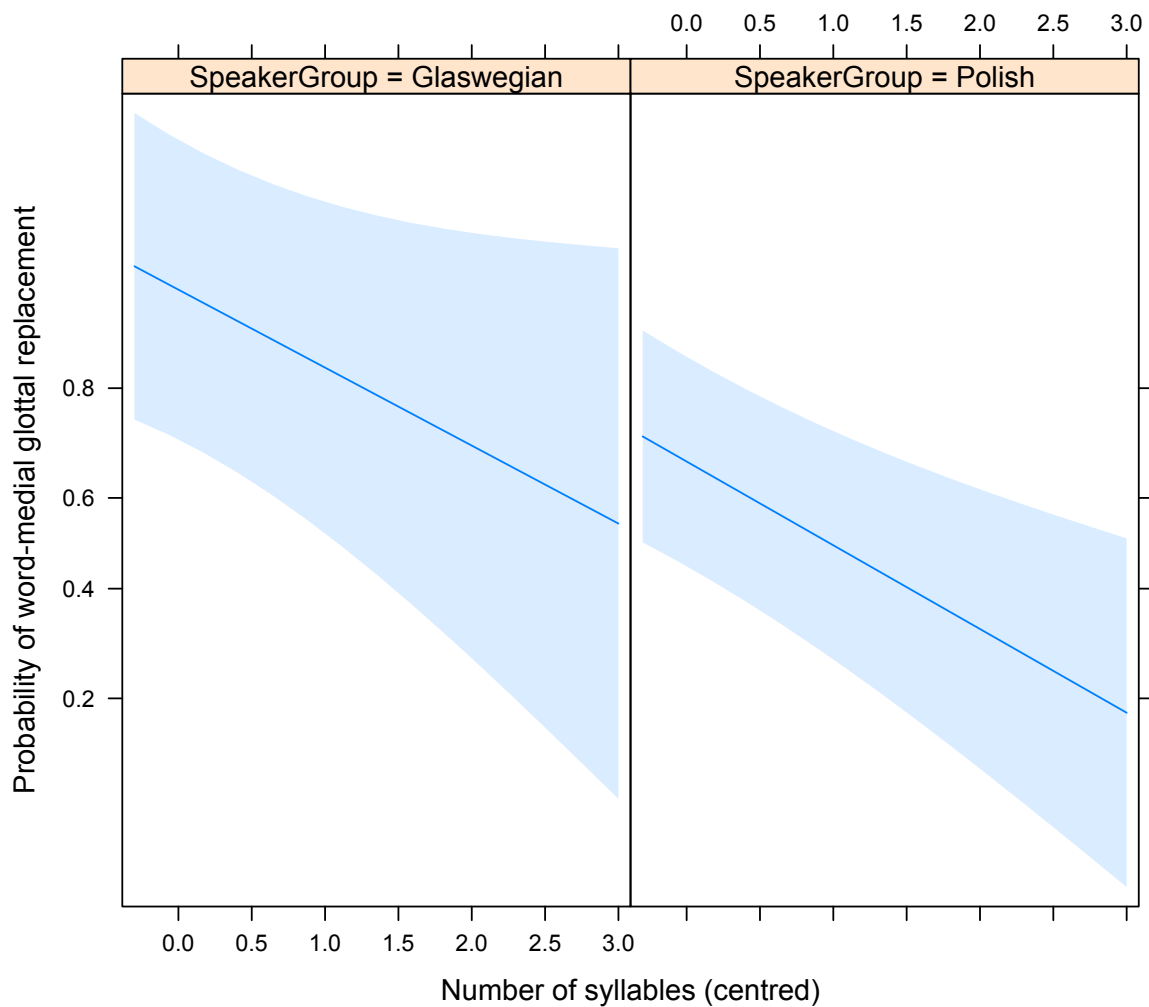


Figure 55: Partial effects plot showing the effect of lexical frequency on the probability of word-medial glottal replacement for each speaker group

As with word-final glottal replacement, for the Polish speakers word-medial glottal replacement is more likely to occur in higher-frequency words. Again, this constraint is not significant for the Glaswegian group. The Polish speakers have innovated a lexical frequency constraint.

Figure 56 shows the effect of number of syllables across the speaker groups.



*Figure 56: Partial effects plot showing the effect of number of syllables on the probability of word-medial glottal replacement for each speaker group*

Figure 56 shows that, for both speaker groups, word-medial glottal replacement is less likely to occur in words with more syllables. The Polish learners have replicated this constraint.

Finally, figure 57 shows the speech context constraint across the speaker groups.

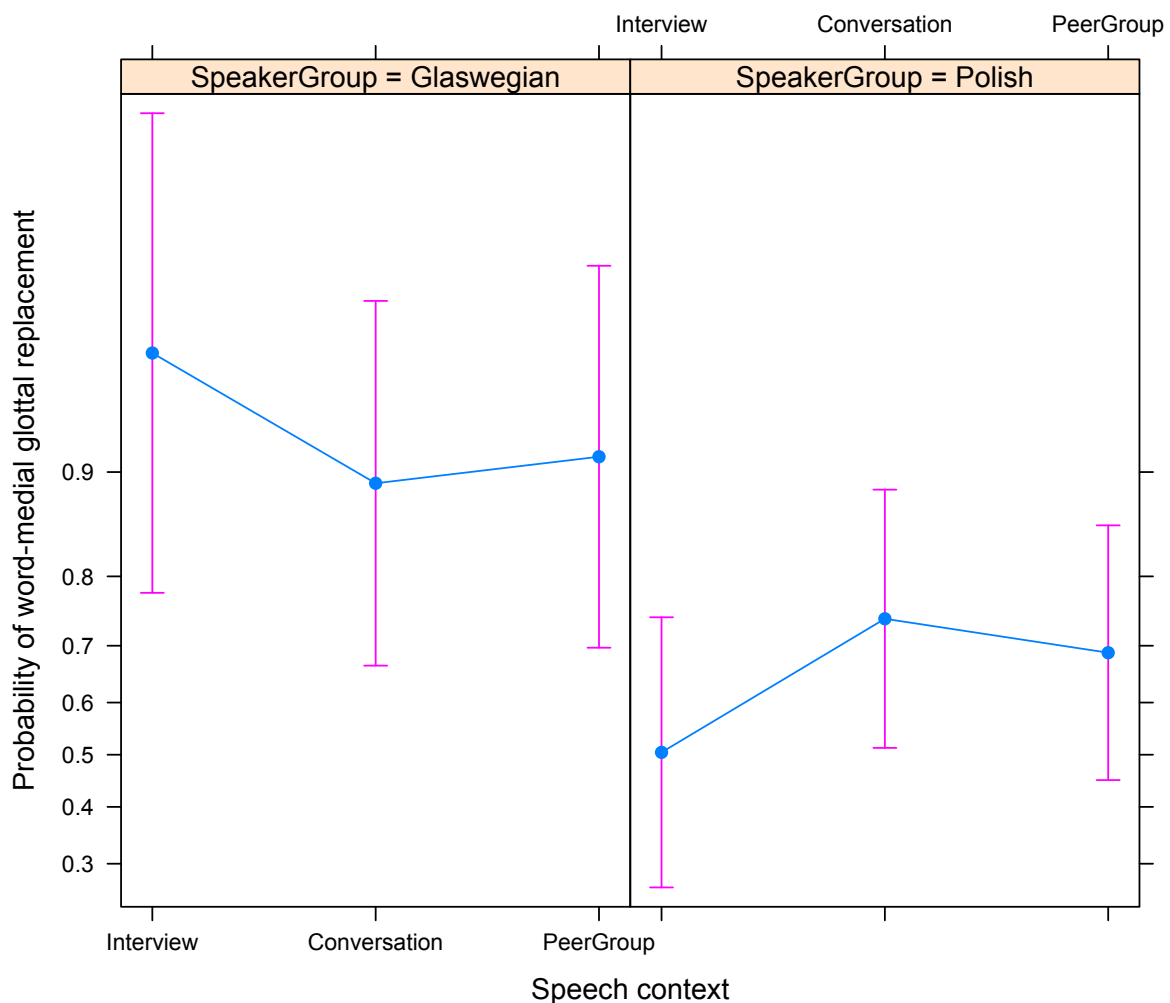


Figure 57: Partial effects plot showing the probability of word-medial glottal replacement across speech contexts for each speaker group

For the Glaswegian control group, the effect of speech context is not statistically significant. For the Polish group, word-medial glottal replacement is less likely to occur in the interview context. The Polish group have innovated a speech context constraint for this variable.

Although the Polish group drop their rate of word-medial glottal replacement in the interview context, their rates are not significantly different in the conversation context and in the peer-group context. A possible interpretation of this is that the learners are more likely to use word-medial glottal replacement when the interlocutor uses word-medial glottal replacement, regardless of whether the interlocutor is a friend (in the peer-group context), or a researcher (in the conversation context). Qualitative observation of the conversation data shows that I use a great deal of word-medial glottal replacement when talking to the

participants; observation of the interview context shows that Evelyn does not. They may be responding to her lack of word-medial glottal replacement by lowering their own rates of use.

Table 25 summarises the constraint acquisition pattern for word-medial glottal replacement.

Constraint	Comparison of native and non-native speech	Constraint acquisition pattern
following phonological segment	constraint found in native speech; constraint weaker in non-native speech	constraint has been under-acquired
preceding phonological segment	constraint absent from native speech; constraint found in non-native speech	constraint has been innovated
lexical frequency	constraint absent from native speech; constraint found in non-native speech	constraint has been innovated
number of syllables	similar constraint found in native speech and non-native speech	constraint has been replicated
speech context	constraint absent from native speech; constraint found in non-native speech	constraint has been innovated

*Table 25: Summary of constraint acquisition patterns for word-medial glottal replacement*

### 7.5.1.2. Discussion

For word-medial glottal replacement, the learners have successfully replicated the number of syllables constraint. They have under-acquired the following segment constraint. It may be that some of the learners have replicated this constraint and others have not: token counts are too low to investigate this possibility. The learners have innovated a preceding segment constraint, a lexical frequency constraint and a speech context constraint. The innovation of the lexical frequency constraint provides further evidence of lexical diffusion in the acquisition of sociolinguistic variation (Chambers 1992: 694; Wolfram et al 2004: 345). Recall that for word-final glottal replacement, the learners had also innovated a lexical frequency constraint. I suggested that the acquisition of word-final glottal replacement is initiated in the high-frequency words which they have the most exposure to. The results for word-medial glottal replacement constitute further evidence to support this claim. The innovation of a speech context constraint may be further evidence of hypercorrection, as noted for *aye* and Scots negation.

### 7.5.2. Predictors of the acquisition of word-medial glottal replacement

I have shown that LoR, AaO, gender and IM do not predict the learners' acquisition of *aye*, Scots negation or word-final glottal replacement. I suggest that for the high-awareness variables *aye* and Scots negation, acquisition is related to individual acts of identity. A speaker's level of identification with Glasgow (IM) does not emerge as a significant predictor for these variables because they do not index 'Glaswegian-ness' in any straightforward way: they are not tied to Glaswegian identity, but rather they are tied to particular types or aspects of adolescent Glaswegian identity. I suggest that for the low-awareness variable word-final glottal replacement, acquisition is not dependent on the social meaning of the variation; instead it is 'implicitly internalized' (Tarone 2007: 844) through native speaker contact, without the speakers' conscious awareness. Because the variable is low in constraint complexity, this exposure does not need to be extensive (Milroy 2007: 170), and it does not need to occur over a long period of time or at a very young age (Payne 1980: 175; Chambers 1992: 702; Kerswill 1996: 187). All of the learners in the current study have had sufficient exposure to allow them to acquire word-final glottal replacement to some extent. All apart

from Angelika have had sufficient exposure to allow them to fully acquire the variable, using it at rates comparable to their Glaswegian peers.

I now turn to word-medial glottal replacement. Do LoR, AaO, gender and IM predict the acquisition of this variable? To find out, I created a second mixed-effects logistic regression model for word-medial glottal replacement. This time I included only speech data from the Polish group. I began with the random intercepts (individual speaker and word), and I then added in all of the constraints which emerged as significant in the previous section: following segment, preceding segment, lexical frequency, number of syllables and speech context. Next, I added LoR, AaO, gender and IM to see whether they significantly improved the fit of the model.

#### *7.5.2.1. Results*

Adding LoR, AaO and gender did not significantly improve the fit of the model. However, adding IM did ( $\chi^2(2) = 8.35, p < 0.05$ ). IM is a significant predictor of the learners' acquisition of word-medial glottal replacement. Table 26 gives a detailed summary of the model.

Predictor	Estimate ( $\beta$ )	SE ( $\beta$ )	z-value	p
Intercept	-0.187	0.787	-0.240	0.811
Following segment = plosive	-3.909	0.576	-6.792	< .001
Preceding segment = vowel	2.121	0.344	6.161	< .001
Lexical frequency	0.334	0.121	2.754	< .01
Number of syllables	-0.474	0.234	-2.026	< .05
Speech context = conversation	1.064	0.315	3.379	< .001
Speech context = peer-group	0.773	0.322	2.402	< .05
IM = low	-3.358	1.208	-2.781	< .01
IM = medium	0.204	0.962	0.212	0.832

*Table 26: Output of the logistic regression analysis showing the significant constraints for word-medial glottal replacement when only the Polish speaker group is included, and IM is added as a predictor of the acquisition of glottal replacement*

Figure 58 shows the effect of IM on the probability of word-medial glottal replacement occurring.

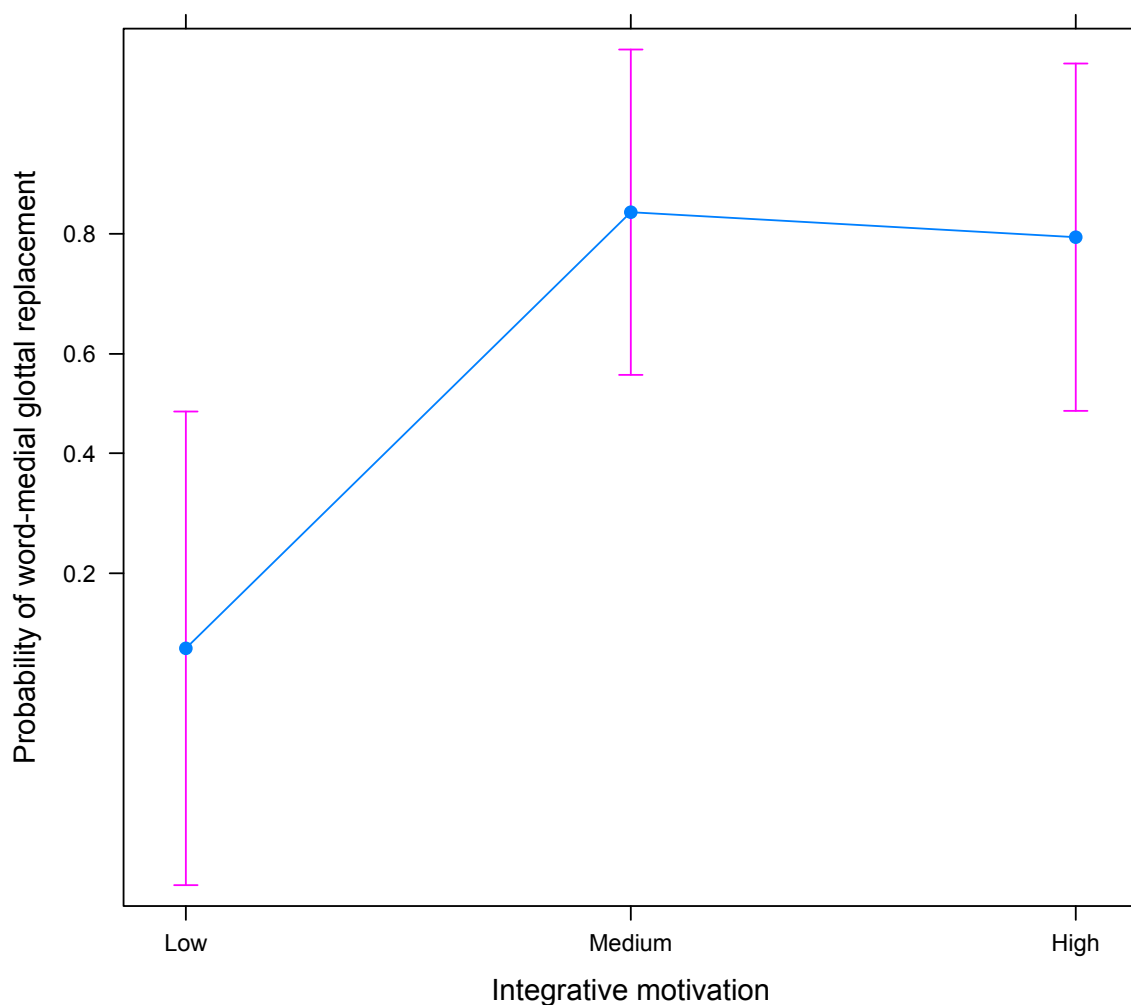


Figure 58: Partial effects plot showing the effect of IM on the probability of word-medial glottal replacement (Polish speakers only)

When we control for all of the effects identified in the previous section, and after correcting for individual speaker behaviour and lexical effects, the speakers in the low IM group are significantly less likely to use word-medial glottal replacement than the speakers in the other two IM groups.

#### 7.5.2.2. Discussion

Higher rates of word-medial glottal replacement correlate with medium and high IM. There are two ways of interpreting this result. The first is that word-medial glottal replacement is used by the learners as a marker of Glaswegian identity. To be available for such identity



marking, word-medial glottal replacement would need to be fairly high in speaker awareness. Trudgill’s (1986: 25) predictions about speaker awareness suggest that word-medial glottal replacement (along with word-final glottal replacement) will be fairly low in speaker awareness, because they do not involve a phonological contrast. Previous findings on the level of speaker awareness associated with glottal replacement are mixed, with some studies suggesting that it may be falling in speaker awareness (Smith & Holmes-Elliott 2016: 16). However in these data word-medial glottal replacement is constrained by speech context for the Polish speakers, a characteristic we usually expect from variables which are relatively high in speaker awareness (Labov 1993).

Unlike *aye* and Scots negation, word-medial glottal replacement is used at roughly the same rate by all of the Glaswegian speakers: none of them reject the local variant. This is shown in figure 59, below.

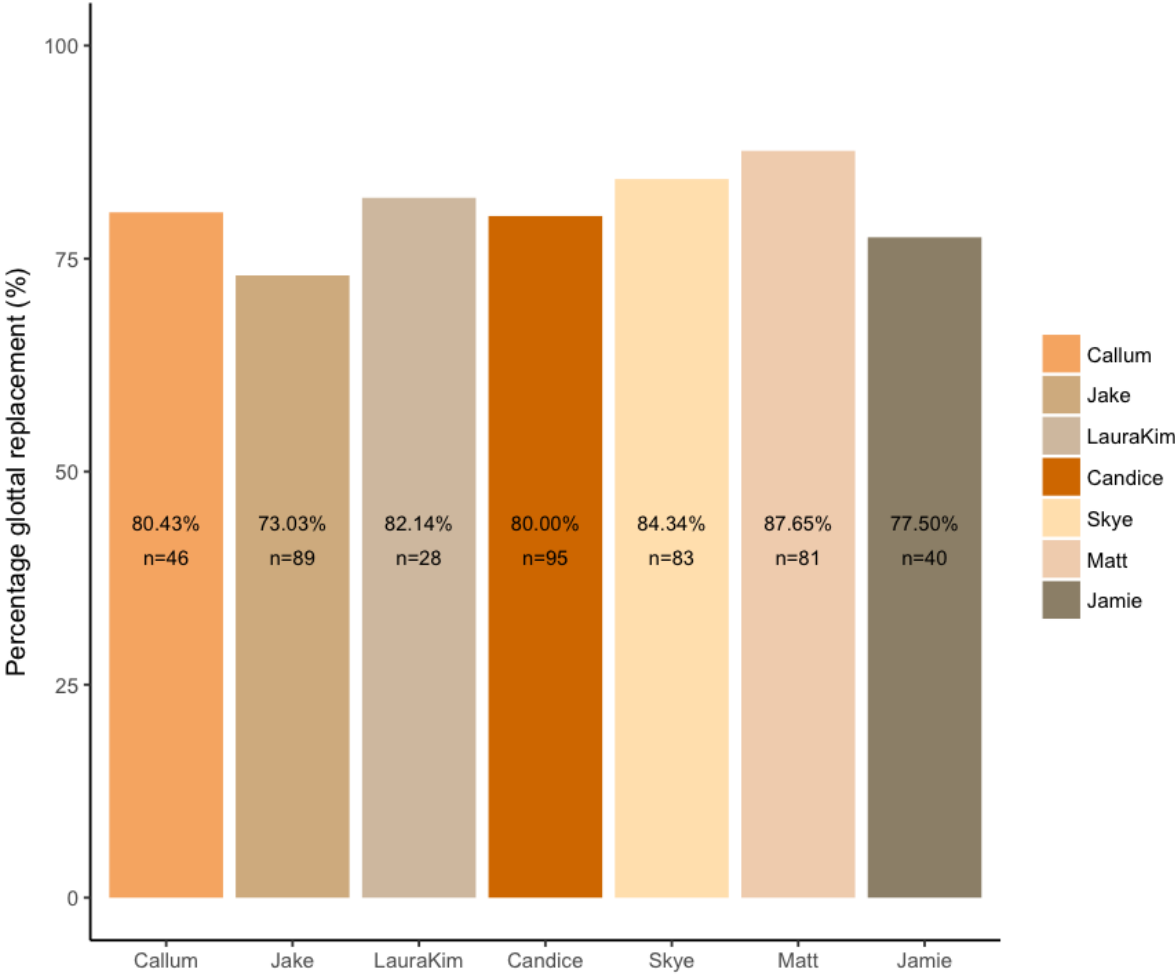


Figure 59: Comparison of individual Glaswegian speakers for word-medial glottal replacement (speakers ordered youngest to oldest)

Figure 60 shows the individual rates of the Polish learners.

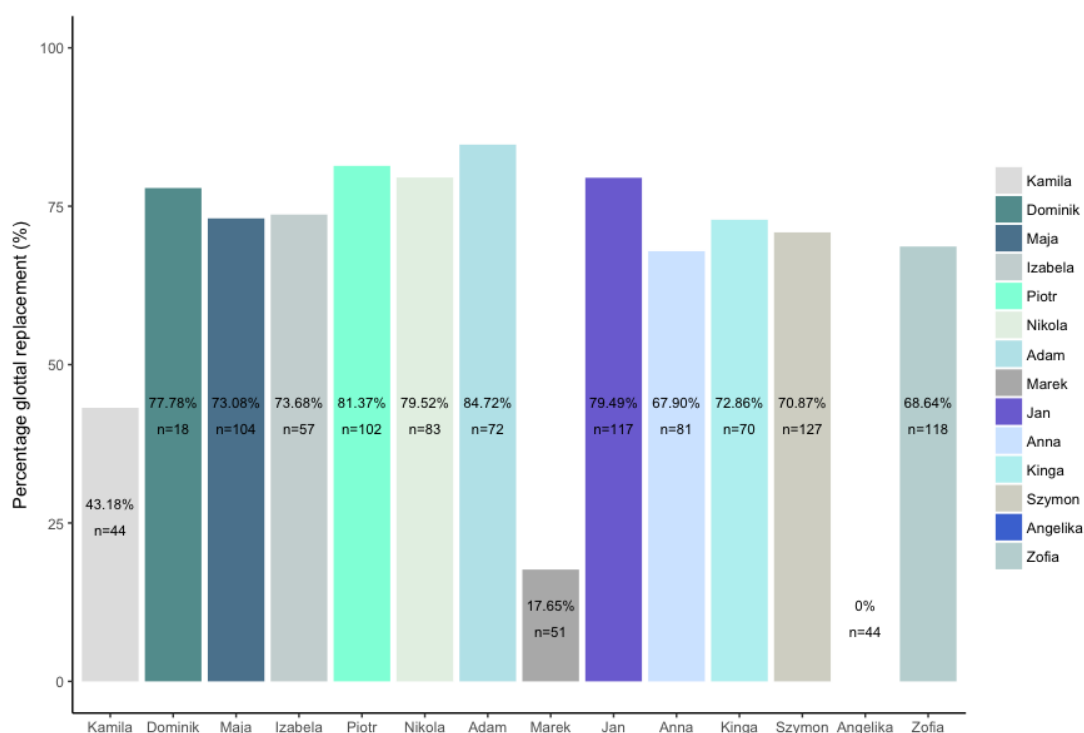


Figure 60: Comparison of individual Polish speakers for word-medial glottal replacement (speakers ordered youngest to oldest)

Only three of the Polish speakers lag far behind in their acquisition of word-medial glottal replacement: Angelika, Marek and Kamila. Two of these, Angelika and Marek, have low IM. They do not identify strongly with Glasgow, and it may be that their low rates of word-medial glottal replacement reflect this. Kamila is in the high IM group but uses a relatively low rate of word-medial glottal replacement; however, this low rate could be linked to her unusual habit of mimicking an American accent when she is interacting with her peers. This often leads to her producing word-medial /t/ as [d]. Utterances produced in an American accent are removed from the analysis, but their removal leaves behind an unusually low rate of [ʔ] in Kamila’s speech. It appears that in instances where the other speakers use [ʔ], she often uses [d] instead.

While I have suggested that *aye* and Scots negation do not index ‘Glaswegian-ness’ but more nuanced identity categories, it may be that word-medial glottal replacement is a more straightforward marker of local identity, used by all of the speakers who feel themselves to be Glaswegian, regardless of e.g. their pro-

school or anti-school orientations. This might explain why e.g. Maja and Izabela, who have a very pro-school stance and avoid using Scots negation and *aye*, have high rates of word-medial glottal replacement.

The emergence of IM as a predictor for word-medial glottal replacement can also be interpreted in relation to the variable's constraint complexity. For the Polish group, word-medial glottal replacement is the most highly-constrained of the variables examined (for the Glaswegian group it is roughly equal to Scots negation in its constraint complexity). Milroy (2007: 170) suggests that highly-constrained variables are likely to be 'under-the-counter' variables, and that 'under-the-counter' variables can only be acquired with a high degree of contact. As well as being a measure of a learner's feeling of 'Glaswegian-ness', IM is also a measure of a learner's contact with native speakers. Those speakers in the low IM group have few Glaswegian friends, and spend little time with Glaswegian people (in Angelika's case, hardly any). It may be that it is contact with native speakers which truly predicts acquisition of word-medial glottal replacement. This might explain why IM emerges as significant for word-medial glottal replacement and not for any of the other variables examined: as it is highly-constrained, its acquisition may require a heightened degree of contact with native speakers. If this is the case, then Marek's acquisition lags behind because he has had insufficient contact with native speakers to fully acquire this highly-constrained variable. Angelika has had very little contact with native speakers, and she hasn't acquired the variation at all. Recall that in the case of the other relatively highly-constrained variable, Scots negation, its use in identity marking may have been masking the role of native speaker contact. For this variable, it was impossible to tell whether Angelika uses a low rate of Scots negation because she lacks the necessary native speaker contact to acquire it, or whether her rejection of the local forms is related to her pro-school orientation.

If we accept this interpretation, then word-medial glottal replacement may be lower in speaker awareness than *aye* and Scots negation. Its sensitivity to speech context for the Polish group suggests that, for this group at least, it is higher in awareness than word-final glottal replacement (which was not sensitive to speech context), but its relatively similar rates across most speakers (apart from those who

have had insufficient contact with native speakers and Kamila, whose linguistic behaviour for this variable is unusual) could indicate that it is not involved in identity marking. It may be that this variable is low in speaker awareness and so is ‘implicitly internalized’ by the learners through contact with native speakers (Tarone 2007: 844).

This interpretation might help explain why Nikola, who has low IM, uses word-medial glottal replacement at a rate comparable to the native speakers. If word-medial glottal replacement indexed Glaswegian identity, then it would be surprising to see Nikola using it at such a high rate: for the most part she identifies vocally as Polish, not Glaswegian. However, her withdrawal from native speakers appears to be a relatively recent development, and she alludes to periods in the past where most of her friends were Glaswegian. In her 10 years in Glasgow, she has had a sufficient degree of contact with native speakers to acquire this variable, if it is ‘implicitly internalized’ (Tarone 2007: 844) without the speaker’s awareness. If its use was related to identity marking, we might expect to see her reject the local variant. If the variable was low in speaker awareness and its use was not related to identity marking, her high rate of use could be more easily explained.

Whether word-medial glottal replacement is a high-awareness variable involved in marking Glaswegian identity, or a low-awareness variable which is uninvolved in identity marking, the failure of LoR and AaO to emerge as significant predictors might be explained by the compensatory role of IM. Even some speakers who have short LoRs and high AaOs have acquired word-medial glottal replacement to native-liked levels: Adam, Izabela, Piotr, Kinga and Szymon. These speakers have medium or high levels of IM. They all have a fairly strong identification with Glasgow, and they all have a fairly high degree of contact with native speakers. If we view word-medial glottal replacement as a high-awareness variable which marks Glaswegian identity, then higher levels of identification with Glasgow may compensate for short LoRs and high AaOs, as individuals ‘choose’ to mark their speech as Glaswegian with native-like rates of use. If we view word-medial glottal replacement as a low-awareness variable which is ‘implicitly internalized’ by the learners through contact with native speakers (Tarone 2007: 844), higher levels of IM may compensate for short LoRs and high AaOs because they correlate with higher levels of native speaker contact. If a speaker identifies strongly as Glaswegian, or spends a lot of time interacting with native speakers, then they can acquire even this highly-constrained variable very quickly. If they do not have a strong sense of belonging in Glasgow, or if they have had insufficient contact with native Glaswegians, then their acquisition of this variable will lag behind.

### ***7.5.3. Summary for word-medial glottal replacement***

There are two ways to interpret the results for word-medial glottal replacement. The first is that it is fairly high in speaker awareness, but that unlike *aye* and Scots negation, it marks local ‘Glaswegian’ identity in a fairly straightforward way. This would explain why its acquisition correlates with the learners’ feeling of belonging in Glasgow, as measured by IM, and why it is used at high rates by all members of the Glaswegian control group. The second is that, like word-final glottal replacement, it is fairly low in speaker awareness, and is not involved in identity marking. If so, the emergence of IM as significant could be because IM measures the learners’ level of contact with native speakers. It may be this contact which is important for the acquisition of this variable.

Word-medial glottal replacement is highly-constrained, and so we might expect its acquisition to correlate with high levels of native speaker contact (Milroy 2007: 170). The failure of LoR and AaO to emerge as significant might be explained by the compensatory role of IM. Even learners with short LoRs and high AaOs may have had intensive contact with native speakers through close friendships. IM may be a very important predictor for the acquisition of highly-constrained variables through native speaker contact - so much so that it masks the potential predictive power of LoR and AaO.

The learners have replicated the native number of syllables constraint, and they have under-acquired the native following segment constraint. They have also innovated three constraints which are not significant for the native speakers: preceding segment, lexical frequency and speech context. I suggest that the innovation of a lexical frequency constraint constitutes further evidence of lexical diffusion in the acquisition of sociolinguistic variation, and I suggest that the innovation of a speech context constraint may be further evidence of hypercorrection, as in the over-acquisition of the speech context constraint for *aye*.

## 8. Morphosyntactic and discourse-pragmatic variation

Chapters 5 - 7 show that the acquisition of the high-awareness variables *aye* and Scots negation differs from the acquisition of the low-awareness variable word-final glottal replacement. The findings on word-medial glottal replacement can be interpreted in two different ways: one interpretation places it with the high-awareness variables, and one places it with the low-awareness variables. I suggested that the acquisition of high-awareness variables in the L2 is shaped by the social meaning of the variables and identity marking, and the acquisition of low-awareness variables is not (Labov 1993; Tarone 2007: 844; Howley 2015: 119).

Trudgill (1986: 25) predicts that lexical variables will be the highest in speaker awareness, and that variables which involve a phonological contrast will be higher in speaker awareness than variables which don't. Predictions about the level of speaker awareness associated with morphosyntactic and discourse-pragmatic variation are mixed. Kerswill & Williams (2002) write that '[f]or morphological and discourse features, the a priori predictors of salience (phonological and phonetic distinctiveness) combine with sociodemographic and social psychological factors to produce varying levels of salience' (104). In Cutler's (1999) study of a white teenager, Mike, using AAVE (African American vernacular English) speech, she finds that he 'demonstrates the use of many AAVE phonological and lexical features but lacks the tense and aspect system' (428). It is possible that Mike does not have control over his use of certain morphosyntactic features: they are low in his awareness and therefore not available for identity marking. In Moore's (2004) study of adolescents in the North of England, however, she finds that morphosyntactic variation is used in socially meaningful acts of identity and argues that 'all areas of the grammar can be socially salient elements of style' (385).

In this chapter I investigate the acquisition of morphosyntactic and discourse-pragmatic variation by the Polish speakers. Do these variables pattern like the high-awareness variables, *aye* and Scots negation. Do they pattern like the low-awareness variable word-final glottal replacement? Or, like word-medial glottal replacement, do they pattern in more complex ways?

The data contains a number of local morphosyntactic and discourse-pragmatic variables, but in each case low token counts preclude a full quantitative analysis. Instead of using multivariate modelling to examine constraints, as in previous chapters, I describe the variation and, where possible, provide overall rates of use for the Glaswegian and Polish speaker groups.

The variables described are:

1. a. Verb formation type 1  
b. Verb formation type 2
2. Agreement patterns in plural existentials
3. Plural demonstratives
4. Second person plural pronoun *youse*
5. Intensifiers

## 8.1. Verb formation

In dialects of English across the world, verb formation is variable. Two main types of variation occur. The first is when past participle forms are used in past tense contexts. This is hereby referred to as type 1 variation. (16a) shows the standardised pattern, and (16b) shows the non-standard pattern.

16. a. I don't remember what *he did*. - *Callum*  
b. No, *I done* that yesterday. - *Candice*

In the second type of variation, past tense forms are used in past participle contexts. This is hereby referred to as type 2 variation. (17a) shows the standardised pattern, and (17b) shows the non-standard pattern.

17. a. *I've done* it detailed like the comics. - *Jake*  
b. There's so many *we've did* I just can't remember them all. - *Laura-Kim*

The examples above use the verb *to do*, but type 2 variation is not limited to this verb: it occurs across a range of irregular verbs which have separate past tense and past participle forms.

Constructions such as *I done* and *I've did* are found in contemporary usage all over the English-speaking world: the variation is not a localised idiosyncrasy, but a global tendency. Sociolinguistic research has described the variation in three continents: it has been studied in Australia (Eisikovits 1991) and in diverse regions of North America (Labov 1977 in inner city New York; Feagin 1979 in Alabama; Christian et al 1988 in the Appalachian and Ozark mountains), and in the UK. In the UK, Hughes et al (1987) report its use in London, Liverpool, Newcastle, Belfast, and Pontypridd in rural South Wales. Miller (1993: 75) and Bergs (2001: 25) also describes it as a feature which is used in Scotland.



Reported rates of use in Scotland tend to be relatively high. In the North East, Smith (in preparation) reports that adults in their 20s and 30s use non-standard type 1 constructions (e.g. *I done*) at a rate of 53%. Older speakers use lower rates, but non-standard constructions still appear regularly in their speech. In Ayr, Macaulay (1991: 108) reports that working-class adults use non-standard type 1 constructions at a rate of 42%. Macaulay & Trevelyan's (1977: 55) and Macafee's (1983: 49) studies of Glasgow speech comment qualitatively on the presence of variation types 1 and 2. Ryan (2014: 63) reports that adolescent Glaswegian girls use non-standard type 1 constructions at a rate of 80%.

The variation (both type 1 and type 2) is often described as being heavily stigmatised (Sandred 1983: 39; Romaine 1984: 127; Macafee 1994: 224). Macafee (1994) writes that using the non-standard constructions can often 'attract specific comment as slovenly. [...] Such usages are untraditional in Scots and enter into the stereotype of "rough" speech' (224). She quotes Clifford Hanley's (1984) memoir, where he writes:

My mother left school at twelve, but I never heard her make a grammatical mistake, and anybody who did was decidedly down-market, and probably scruff even if they couldn't help it...We did use a lot of Scots vocabulary, preferred oxters to armpits...But the cases and tenses were always correct, and we never seen things or done them (166).

A recurring theme across attitudes surveys such as Sandred (1983) is that morphosyntactic variation is often subject to a heightened degree of stigma compared to variation at other levels of the grammar. Although lexical variation is high in speaker awareness (Trudgill 1986: 25), some lexical variants are considered to be acceptable 'Scots vocabulary'; morphosyntactic variation, on the other hand, is often treated as 'bad grammar' (Sandred 1983: 39) or simply incorrect (Hanley 1984: 166).

Because non-standard morphosyntactic variants are often treated as mistakes, language learners are likely to be explicitly discouraged from using them. On a Stack Exchange forum for language learners (<https://ell.stackexchange.com/questions/9532/>

done-vs-have-done?answertab=oldest#tab-top; accessed 5 September 2017), a learner asks whether saying ‘I done something’ is different from saying ‘I have done something’. The first reply tells them that ‘ “I done something” is not correct. You should say “I did something” ’. A reply further down the page adds:

Using the past participle instead of the preterit form, as in “I done something”, is something that *some* natives do and that you should not imitate. It is associated with several popular or vulgar variants of English. In some circumstances, it could make you perceived as uneducated or uncouth, or worse, be interpreted as a mockery. That’s very dependent on the context, of course: if you say it with a recognizable foreign accent, it’ll just be interpreted as a foreigner’s mistake.

[italics in original]

This response acknowledges that ‘I done something’ is not always a ‘foreigner’s mistake’: it might be interpreted as such, or it might be interpreted as the stigmatised, non-standard native variant. In the current study, only two verbs participate in type 1 variation, as in examples (18 - 19).

18. ’Cause that’s what *I done* with my dog. - *Jake*

19. Last time *I seen* one of these I broke it. - *Jamie*

There are 206 type 1 constructions in total. Figure 61 shows how the standard and non-standard constructions are distributed across the speaker groups.

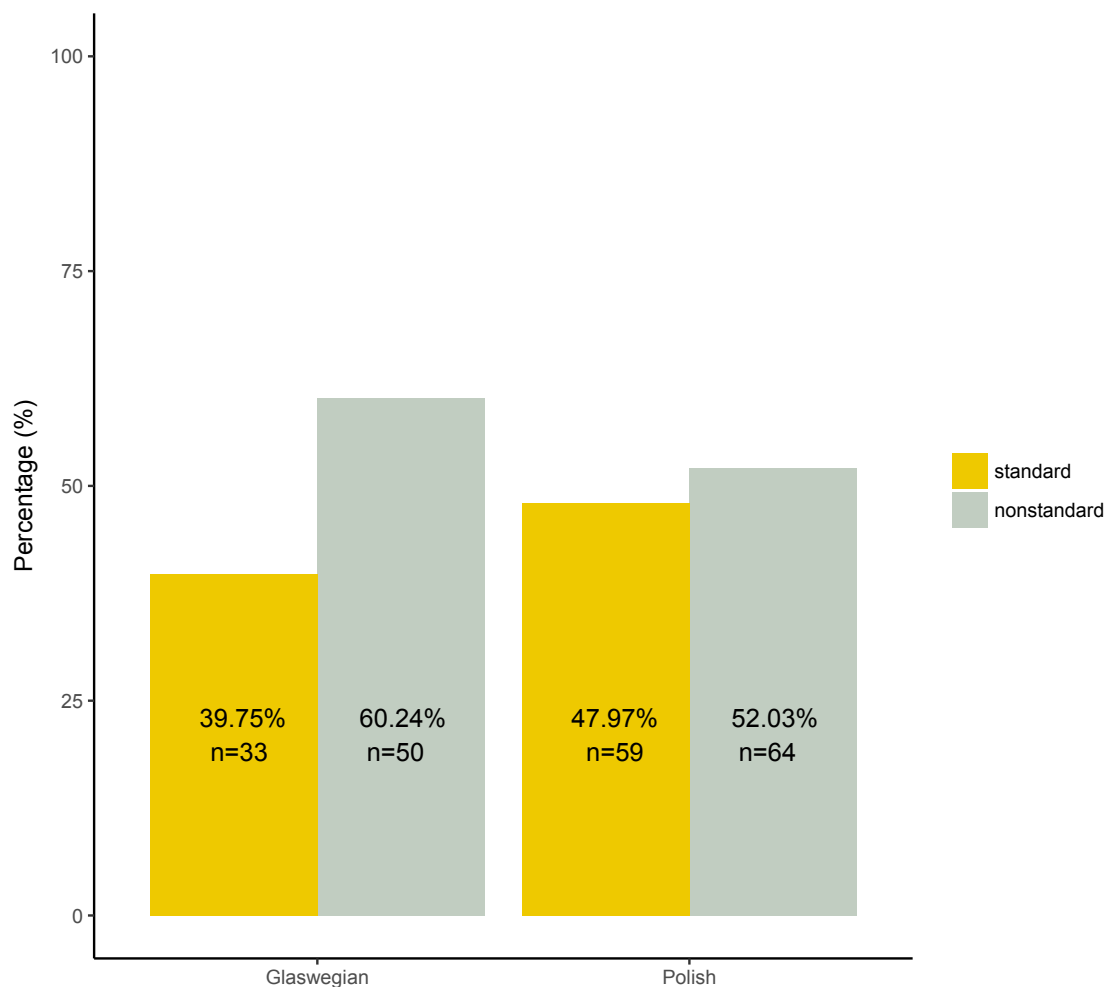


Figure 61: Comparison of type 1 verb formation for each speaker group

Figure 61 shows that the Polish learners use non-standard type 1 constructions at a slightly lower rate than their Glaswegian peers.

A range of irregular verbs participate in type 2 variation, as in examples (20 - 23).

20. *He's broke* the shuttle. - Candice
21. *I've fell* more doing Parkour. - Jamie
22. *I've wrote*, like, two each. - Skye
23. *This year's flew* in. - Laura-Kim

There are 137 type 2 constructions. Figure 62 shows the distribution of standard and non-standard constructions for the Glaswegian group and the Polish group.

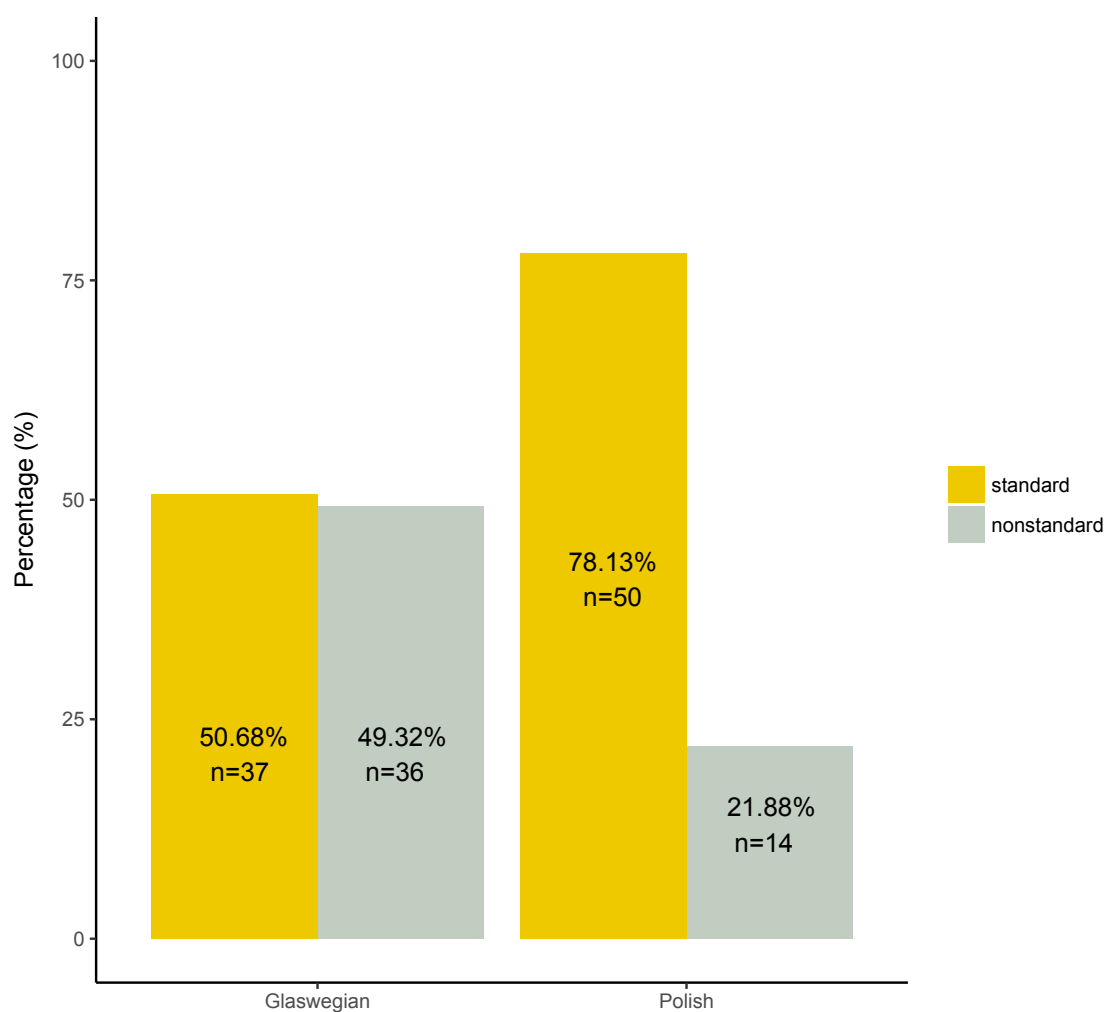


Figure 62: Comparison of type 2 verb formation for each speaker group

Figure 62 shows that the learners use non-standard type 2 constructions at a much lower rate than their Glaswegian peers. The learners' low rate of non-standard type 2 constructions compared to non-standard type 1 constructions might be explained by referring back to the lexical frequency effects observed for glottal replacement. In chapter 7 I suggested that the learners initially acquire glottal replacement in the frequent lexical items which they are exposed to the most in their input, and then later in less frequent lexical items. Only two verbs participate in type 1 variation (*do* and *see*), while a wide range of verbs participate in type 2 variation. This means that while type 2 variation occurs fairly frequently as a *rule* in the native speaker input, the type 1 constructions *I done* and *I seen* occur far more frequently as lexicalised units than e.g.

*I've fell* and *I've wrote*. As with glottal replacement, the learners may acquire the variation tied to specific lexical items before they are able to apply the rules across the rest of their lexicon. If so, type 1 verb formation offers them input of higher lexical frequency than type 2 verb formation.

## 8.2. Agreement patterns in plural existentials

Like variation in verb formation, variation of agreement in plural existentials is not a localised idiosyncrasy, but a global tendency in varieties of English across the world (Kortmann & Lunkenheimer 2012). In many varieties, plural existentials can be realised with non-standard agreement: instead of the standard agreement patterns *there are + plural NP* or *there were + plural NP*, we often see the non-standard agreement patterns *there's / there is + plural NP* or *there was + plural NP*. Examples from the current data are shown below. (24a) and (25a) show the standardised patterns, and (24b) and (25b) show the non-standard patterns.

24. a. *There are* quite a lot of *jobs* out there. - *Jan*  
b. 'Cause if *there's words* they might not understand them. - *Candice*
25. a. Yeah *there were people* in Primary. - *Izabela*  
b. I woke up and *there was* just all the *neighbours*. - *Skye*

The variation has been reported in Australia (Eisikovits 1991), New Zealand and the Falkland Islands (Britain & Sudbury 2002), Pacific Islander communities in New Zealand (Starks & Thompson 2009), America (Schilling-Estes & Wolfram 1994), and the UK (Tagliamonte 1998; Cheshire 1999; Britain 2002). In the UK, rates of use tend to be high. In York, Tagliamonte (1998: 162) reports a rate of 66% non-standard agreement in past tense affirmative contexts (*there was + plural NP*) and 17% in past tense negative contexts (*there wasn't + plural NP*). In Milton Keynes, Cheshire (1999: 70) reports a rate of above 89% non-standard agreement for adolescents. In the Fens, Britain (2002: 27) reports a rate of 81% non-standard agreement in the past tense. The variation is also reported in Scotland (Macaulay 1991: 59; Miller 1993: 76-77; Bergs 2001: 23). Amongst working-class speakers in Ayr, Macaulay (1991: 59) reports a rate of 38% non-standard agreement in existential constructions.

The variation does not appear to be as heavily stigmatised as irregular verb formation: Squires (2013) writes that non-standard agreement patterns have 'broad social acceptance' (208). However, when non-standard agreement does elicit comment,

it is generally treated as ‘bad grammar’ (Bergs 2001: 23) rather than being recognised as a legitimised feature of Scots. Because it is not generally recognised as being a feature of Scots, non-standard agreement, like irregular verb formation, might be misinterpreted as a learner error when it appears in non-native speech.

There are 208 plural existentials in the data. Figure 63 shows how they pattern across the speaker groups.

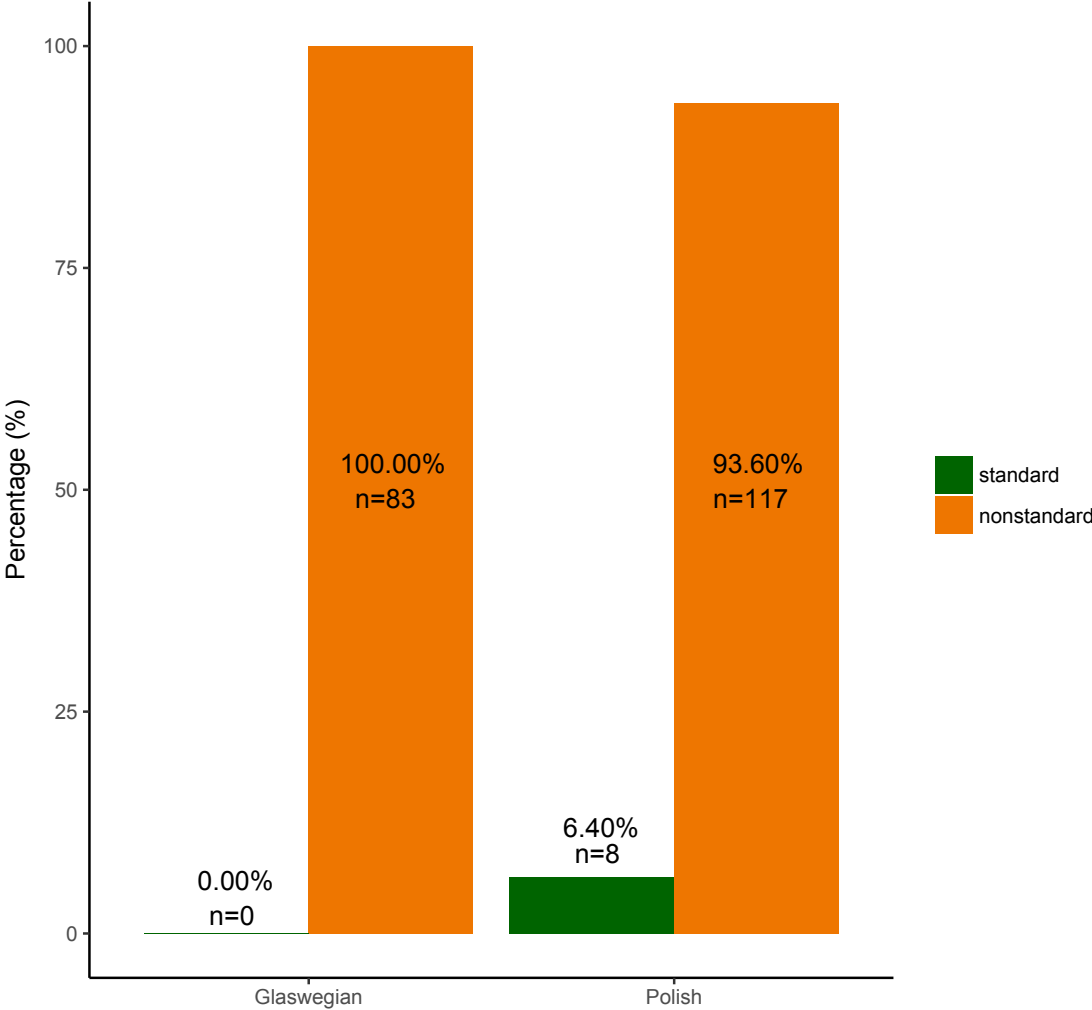


Figure 63: Comparison of plural existentials for each speaker group

Figure 63 shows that for the native Glaswegians, the non-standard constructions *there's / there was + plural NP* occur categorically: these speakers never use the

standard constructions *there are / there were* + *plural NP*. Despite this, the Polish learners do occasionally use the standard constructions



### 8.3. Plural demonstratives

Alongside the standard distal plural demonstrative *those*, varieties of English across the world also allow the non-standard distal plural demonstrative *them*. Examples from the Glaswegian control group are shown in (26a-b).

26. a. I would like to, like, go to one of *those*, em, game cons. - *Jamie*  
b. Who would trust an eight-year-old with *them* things? - *Candice*

The use of the distal plural demonstrative *them* is noted in African American vernacular English (Wolfram 2004), Midland and Southern American (Schneider 2003), the Appalachian mountains (Hazen et al 2011), the Caribbean (Patrick 2004; Schneider 2003), East Anglia (Trudgill 2004), Northern England (Beal 2004), and Wales (Lewis 1990). Macafee (1983: 51) also notes its use in her description of Glaswegian speech in the 1980s, suggesting that its use may have spread to the city from England.

Descriptions of Scots morphosyntax often cite the form *they* or *thae* (both spellings are used) as the traditional Scots distal plural demonstrative. The Scottish demonstrative system, therefore, includes the possibility of the distal plural demonstratives *those* and *them*, but also *thae*, as in (26c).

26. c. And then we tie *thae* two together. - *Laura-Kim*

Bergs (2001) writes that *thae* is used only in the North of Scotland (18), but its use is observed in the South West by Macafee (1983: 51) and Macaulay (1991: 72). Macaulay (1991: 72) and Miller (1993: 76) both suggest that *them* may be in the process of replacing *thae* in Scotland.

There are 59 plural demonstratives in the data. Figure 64 shows how they pattern across the speaker groups.

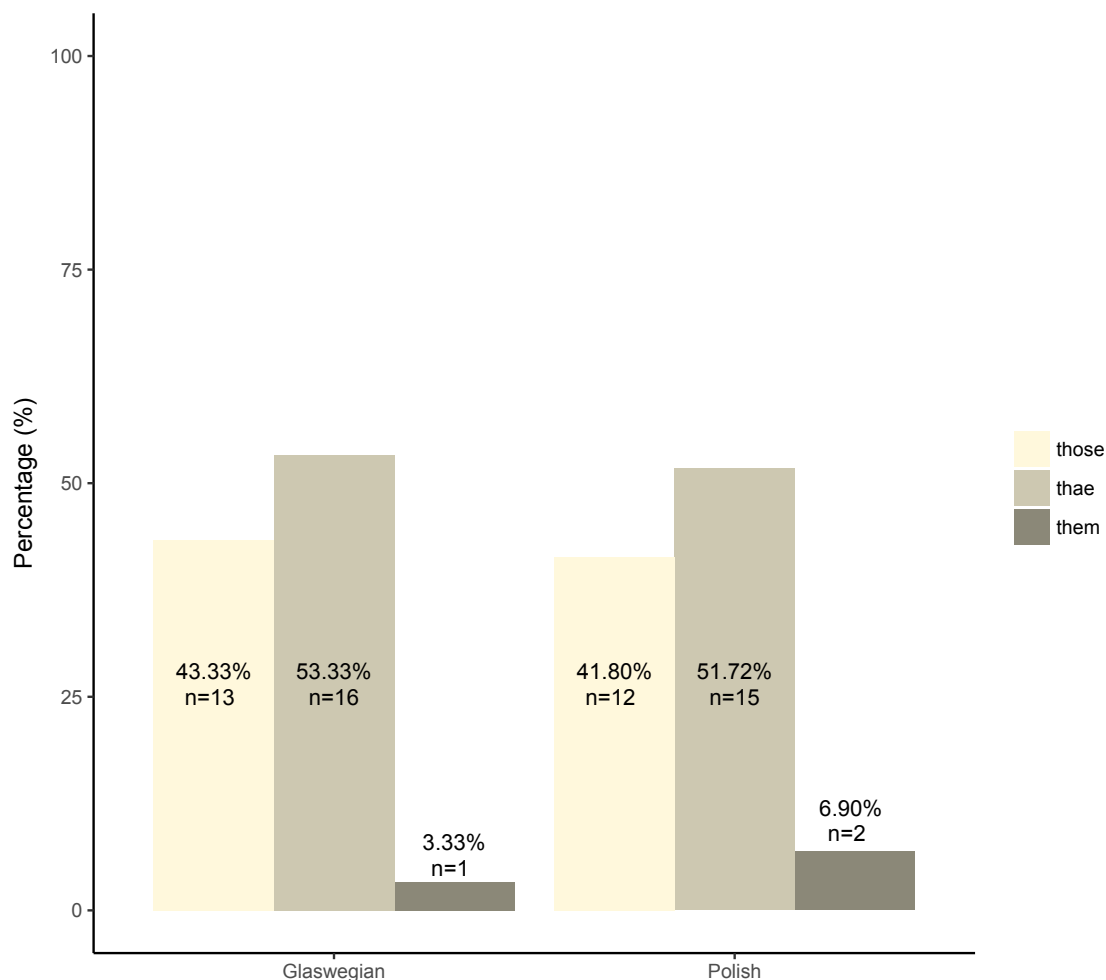


Figure 64: Comparison of plural demonstratives for each speaker group

As figure 64 shows, the plural demonstratives have a very similar pattern across the two speaker groups. Both groups favour the local form *thae*, and use it at a rate slightly higher than the standard form *those*. Both groups occasionally use the supralocal form *them*.

#### 8.4. Plural second person pronoun *youse*

In standard English, the second person pronoun is *you* for both singular and plural addressees. In some areas of the UK, including Glasgow, the second person plural pronoun *youse* can be used to distinguish plural from singular contexts, as in examples (27a-c).

27. a. I need to design them for *youse* all. - *Matt*  
b. Do *youse*? You arenae allowed to eat meat? - *Laura-Kim*  
c. *Youse* have got, like - when you see a book, obviously. - *Jamie*

In Macaulay & Trevelyan's (1977: 90) attitudes survey, one of the participants brings up *youse* as a Glaswegian form which they particularly dislike. Macafee's (1983) description of Glaswegian speech mentions the use of *youse*, treating it as an innovative form which has been imported from Irish English (51). Macaulay's (1991) study of speech in Ayr mentions *youse* as a feature which 'occurs sporadically in the lower-class interviews' (73): it occurs 14 times in his speech data. He notes that his older speakers don't use the form, and suggests that it 'is probably a comparatively recent import from Northern Ireland via Glasgow' (73).

In the current data, the form *youse* appears 48 times. It is not clear how many times the speakers produce the standard *you* form with a plural addressee, because in the after-school club data it is not always possible to tell whether *you* is being used to address a single person or a group. For example, in (28), Adam is shouting across the room. He could be using *you* as a singular second person pronoun, or as a plural second person pronoun equivalent to *youse*.

28. Hey! What are *you* doing? What are *you* doing? - *Adam*

Table 27 shows the rate of *youse* per 1,000 words for each speaker group.

	<i>Glaswegian speakers</i>	<i>Polish speakers</i>
Tokens of <i>youse</i>	14	34
Rate of <i>youse</i> per 1,000 words	0.20	0.28

*Table 27: Comparison of youse across speaker groups*

Table 27 shows that the Polish speakers produce *youse* slightly more frequently than the Glaswegian speakers.

## 8.5. Intensifiers

Adolescents tend to use a system of intensifiers distinct from those used by adults. These intensifiers change rapidly, vary from place to place and often exist as local stereotypes. Macaulay (2006) discusses the system used by Glaswegian working-class adolescents, his main focus being the intensifier *pure*, which he suggests is a relatively recent innovation of this group (280). He finds that *pure* occurs very frequently in the peer-group interaction he analyses, with a rate of 6.7 times per 1,000 words (269). He also notes the use of other local intensifiers: *dead* (270), *heavy*, *healthy* and *mad* (280). Of these, *dead* may be the most established form: its use by children and adolescents in Glasgow is also mentioned by Macaulay & Trevelyan (1977: 55). The position of *pure* as a local stereotype is attested by its use in advertising: the slogan for Prestwick Airport in Ayrshire is ‘pure dead brilliant’. This slogan ironically plays on the speech of local working-class adolescents.

The intensifier *pure* has a complex range of uses, more varied than other common intensifiers, e.g. *really*. In the current data, it can be used to modify an adjective, as in (29a).

29. a. I was getting *pure* excited. - *Jake*

It can also be used to modify a noun, as in (29b).

29. b. You had to sneak out for a *pure* buzz. - *Matt*

It can be used to modify verbs, as in (29c), where it intensifies the meaning of the verb.

29. c. I *pure* want it. - *Anna*

And it can also be used to modify verbs as in (29d), where it adds negative evaluation to a verb.

29. d. I'm *pure* talking about this. - *Laura-Kim*<sup>49</sup>

In the current study, there are 119 occurrences of *pure* as an intensifier. As well as *pure*, the other local intensifiers which occur are *dead*, *heavy* and *mad*. These are used alongside the standard intensifiers *very*, *really* and *so*. The other local intensifier cited by Macaulay, *healthy*, does not appear. Table 28 shows the rates of these intensifiers across the two speaker groups. Because each of the intensifiers differs slightly in the contexts in which it can be used (e.g. *pure* can modify a noun but *really* cannot), rates are given per 1,000 words.

	<i>Glaswegian speakers</i>	<i>Polish speakers</i>
Tokens of <i>pure</i>	30	89
Rate of <i>pure</i> per 1,000 words	0.42	0.74
Tokens of <i>dead</i>	29	4
Rate of <i>dead</i> per 1,000 words	0.40	0.03
Tokens of <i>heavy</i>	4	8
Rate of <i>heavy</i> per 1,000 words	0.06	0.07
Tokens of <i>mad</i>	10	18
Rate of <i>mad</i> per 1,000 words	0.14	0.15
Tokens of <i>very</i>	23	32
Rate of <i>very</i> per 1,000 words	0.32	0.27
Tokens of <i>really</i>	68	102
Rate of <i>really</i> per 1,000 words	0.95	0.85
Tokens of <i>so</i>	25	155
Rate of <i>so</i> per 1,000 words	0.35	1.29

Table 28: Comparison of intensifiers across speaker groups

<sup>49</sup> Looking at this utterance in context, by adding *pure* she is implying that she shouldn't be talking about this - it's something that should be a secret. Therefore the addition of *pure* intensifies but also adds negative evaluation.

Table 28 shows that the Polish learners are using the local intensifier *pure* at a higher rate than their Glaswegian peers. They are using *dead* at a lower rate than the Glaswegians, and they are using *so* at a much higher rate. The apparently erratic pattern across the Glaswegian and Polish speaker groups can be explained by examining individual speaker behaviour (this examination is qualitative rather than quantitative due to low token counts). As with *aye* and Scots negation, both the Polish learners and their Glaswegian peers show individual preferences, suggesting that intensifiers may also be used for the purposes of identity marking. Tables 29 and 30 show these individual preferences.

Speaker	Favours	Doesn't use
Callum	really, very (doesn't use many intensifiers)	pure, dead, heavy, mad, so
Candice	so, very, really, mad	pure, dead, heavy
Jake	dead, pure	NA
Jamie	pure, really, so (doesn't use many intensifiers)	dead, heavy, mad, very
Laura-Kim	really	NA
Matt	pure	heavy
Skye	really	dead, mad, heavy

Table 29: Intensifier preferences across individual Glaswegian speakers

Speaker	Favours	Doesn't use
Adam	mad, pure	dead, very
Angelika	really	dead, mad, heavy, pure
Anna	pure, so	dead, mad, really, very
Dominik	doesn't use any intensifiers	doesn't use any intensifiers
Izabela	really, so, very	dead, mad, heavy
Jan	mad (doesn't use many intensifiers)	dead, heavy, pure
Kamila	so	dead, mad, heavy, very
Kinga	so	really
Maja	really, so, very	dead, heavy, pure
Marek	very (doesn't use many intensifiers)	dead, mad, heavy, pure, very, so
Nikola	pure, so	dead, mad, heavy, really
Piotr	so	dead
Szymon	really	mad, heavy
Zofia	so, pure, really	heavy

Table 30: Intensifier preferences across individual Polish speakers



## 8.6. Discussion

Verb formation and agreement patterns are both areas of the L2 where learners are likely to be explicitly taught the rules of the standardised variety. These learners are likely to have been taught that in English we say *I did* and *I have done*, and that *is* becomes *are* when it occurs with a plural NP. However, with exposure to native speech comes exposure to the fact that this is not always the case: their Glaswegian peers often say *I done* and *I've did*, and they categorically use non-standard agreement patterns with plural existentials.

The influence of the Polish group's formal language education can be seen in the fact that they do not use non-standard verb formation as much as native speakers, and in the fact that they use some standard agreement patterns with plural existentials, while the native speakers do not. However, the learners have acquired the native non-standard forms used by the Glaswegian speakers and use them at relatively high rates. It is notable that all of the speakers in the Polish group use some non-standard verb formation and some non-standard agreement patterns with plural existentials, even Angelika, who generally avoids non-standard variants unless they are low in speaker awareness (e.g. word-final glottal replacement). I suggest that in this community, these variables are not strongly tied to identity. Although previous research has suggested that non-standard verb formation, in particular, is stigmatised, in the current data it shows no strong evidence of stigma. Its use is not differentiated across individual speakers or across the three speech contexts.<sup>50</sup> These variables generally pattern like word-final glottal replacement, not like *aye* and Scots negation.

The plural demonstratives *thae* and *them*, the plural second person pronoun *youse*, and the local intensifiers *pure*, *mad* and *heavy* all pattern more like *aye* and Scots negation. Although token counts are too low to examine individual speaker behaviour in detail, we can see that *thae* and *them* are generally avoided by the speakers who avoided *aye* and Scots negation, e.g. Angelika, Maja, Izabela and Callum. This is also true of *youse* and the local intensifiers. These variants are also generally favoured by the speakers who favoured *aye* and Scots negation, e.g. Adam and Matt. I suggest that

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<sup>50</sup> Observations in this section are qualitative, not quantitative, due to low token counts.

these variants are tied to identity in this community; they may have similar social meanings to *aye* and Scots negation, indexing rebelliousness and anti-establishment values. In support of this, I note that *thae*, *youse* and *pure* occur more often in the peer-group context than in the other speech contexts, and they are particularly avoided in the more formal interview context.

I note that using *thae*, *youse* and *pure* involves variation between distinct alternative lexical forms, whereas variation in verb formation and agreement patterns involves variation in the relationships between words. For this reason, they may be higher in speaker awareness, and this may explain why these variables pattern more like *aye* and Scots negation. As well as this, *thae*, *youse* and *pure* are all variables which are unlikely to be misinterpreted as learner errors. They may be stigmatised, but they are not generally considered to be grammatical ‘mistakes’, as non-standard verb formation and non-standard agreement patterns often are. This might explain why the Polish learners do not appear to be fully matching the patterns of their Glaswegian peers for non-standard verb formation and non-standard agreement patterns: we may be observing the influence of their formal language instruction, perhaps compounded by linguistic insecurity.

## 9. Discussion

I have shown that the learners in the current study are acquiring sociolinguistic variation in the L2, as shown in examples (30 - 33).

30. *Aye, a wee bit. How?*<sup>51</sup> - *Nikola*
31. *I'm no', like, good at it but.* - *Dominik*
32. *And you're just si[?]ing there like "wha[?]?"* - *Zofia*
33. *She's pure funny but. She's my pal!* - *Adam*

They are acquiring local variants even when these variants are stigmatised and they are likely to be discouraged from using them in the classroom. The SSE (Scottish standard English) of the classroom is not their only language learning target. They are modelling their L2 speech primarily on the speech of their native Glaswegian peer-group, not on the standardised models presented to them by teachers and textbooks.

Across a range of variables examined in chapters 5 - 8, the learners come close to matching the overall rates of use shown by their Glaswegian peers. However, their speech doesn't always show the same patterns of use observed in native speech, and the acquisition of different variables differs in character. In the following sections, I summarise the details of how the variation is being acquired.

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<sup>51</sup> Local form: *how* = *why*

## **9.1. The acquisition of native speaker constraints on use**

Howley (2015) suggests that if we can observe the replication of native speaker constraints in L2 speech, then this can be taken as evidence of an L2 speaker's sociolinguistic competence: it is the replication of the linguistic and social constraints on the variation that indicates mastery of the new language (71). We have observed that the learners are using local variants, but does their use follow the same social and linguistic patterning as that of their Glaswegian peers?

Previous research (Regan 1995: 258; Schleeff 2013b: 209; Meyerhoff & Schleeff 2014: 105) has found that when we look for evidence of native speaker constraints being reproduced in L2 speech, a variety of constraint acquisition patterns can be observed. These are summarised in table 31, below, which is a reproduction of table 1 from chapter 2.

Comparison of native and non-native speech	Constraint acquisition pattern
similar constraint found in native speech and non-native speech	constraint has been replicated
constraint found in native speech; constraint weaker in non-native speech	constraint has been under-acquired
constraint found in native speech; constraint absent from non-native speech	constraint has been rejected
constraint found in native speech; constraint stronger in non-native speech	constraint has been over-acquired
constraint absent from native speech; constraint found in non-native speech	constraint has been innovated
constraint found in native speech and non-native speech, but with different constraint rankings	constraint has been re-ordered

*Table 31: Summary of possible constraint acquisition patterns (Table 1 repeated)*

In my data, a variety of constraint acquisition patterns are observed. Across the four variables for which constraints are examined, I find that some constraints are replicated, some are under-acquired, some are over-acquired, and several new constraints are innovated. Table 32, below, summarises which constraints are acquired in which way.

Comparison of native and non-native speech	Constraint acquisition pattern	Constraints which follow this pattern in the data
similar constraint found in native speech and non-native speech	constraint has been replicated	<ul style="list-style-type: none"> <li>• gender constraint for Scots negation</li> <li>• following-segment constraint for word-final glottal replacement</li> <li>• number of syllables constraint for word-medial glottal replacement</li> </ul>
constraint found in native speech; constraint weaker in non-native speech	constraint has been under-acquired	<ul style="list-style-type: none"> <li>• speech context constraint for Scots negation</li> <li>• following-segment constraint for word-medial glottal replacement</li> </ul>
constraint found in native speech; constraint stronger in non-native speech	constraint has been over-acquired	<ul style="list-style-type: none"> <li>• speech context constraint for <i>aye</i></li> </ul>
constraint absent from native speech; constraint found in non-native speech	constraint has been innovated	<ul style="list-style-type: none"> <li>• linguistic context constraint for Scots negation</li> <li>• lexical frequency constraint for word-final glottal replacement</li> <li>• lexical frequency constraint for word-medial glottal replacement</li> <li>• preceding-segment constraint for word-medial glottal replacement</li> <li>• speech context for word-medial glottal replacement</li> </ul>

Table 32: Summary of constraint acquisition patterns across all variables

I first ask whether some constraints are easier for learners to replicate than others. In Major's (2004) analysis of the acquisition of constraints, he suggests that gender constraints are generally easy for learners to acquire, because '[b]esides playing an important role in the formation of self-concept, gender is also very salient in face-to-face interactions' (179). In my data, gender is replicated by the learners, lending support to Major's assertion. However, in the case of other constraints it is not clear that they are inherently easy or difficult to acquire. The speech context constraint, for example, is over-acquired in the case of *aye* and under-acquired in the case of Scots negation, and a constraint is innovated in the case of word-medial glottal replacement. Therefore we can't conclude that the speech context constraint is in itself particularly challenging or particularly easy for learners to acquire. The relative ease or difficulty may be different from variable to variable.

Across the variables I have examined, three constraints have been replicated by the learners. According to Howley (2015: 71), this can be taken as evidence of the learners' sociolinguistic competence in the L2. A further two constraints have been under-acquired, so that they are weaker for the Polish group. In these cases, it is possible that some of the individual speakers have replicated these constraints and others have not. Token counts are not high enough for constraints to be examined across individual speakers, but this may be evidence that some of the learners have gained a higher level of sociolinguistic competence than others. Of the remaining constraints, one has been over-acquired, and five have been innovated. Meyerhoff & Schlee suggest that patterns of reinterpretation and innovation of constraints are evidence that learners are not 'simply copying or replicating what they hear', but 'approaching the task of systematising the variation more actively' (2014: 121). They suggest that the reinterpretation and innovation of constraints may be an inherent step in the acquisition of variation in an L2. While it may be evidence that learners have not yet fully gained sociolinguistic competence in the L2 (Howley 2015: 71), it is also evidence that the acquisition process is systematic (Dickerson 1975; Bayley 1996). They have not replicated all of the patterns of use shown by native speakers, but they have their own non-native patterns of use, and these patterns may tell us something about the nature of

learner language, and the process by which sociolinguistic variation is acquired in the L2.

Across both word-final and word-medial glottal replacement, a lexical frequency effect emerges in the speech of the learners, where the local variants are more likely to occur in higher-frequency words. Chambers (1992: 694) and Wolfram et al (2004: 345) both describe lexical diffusion effects in the acquisition of new variants, where the acquisition of new variants is initially tied to specific lexical items, those which occur most frequently in the input. Learners will later apply these rules across the rest of the lexicon. For the learners in the current study, they initially acquire glottal replacement in frequent words such as *it* and *that*, and their use later spreads to less frequent words. The acquisition of verb formation, in chapter 8, may provide further evidence to support this. The learners haven't had much difficulty acquiring non-standard type 1 constructions, which can occur with only two verbs, in the constructions *I done* and *I seen*. If the acquisition is initially tied to specific lexical items, then these constructions are well-represented in the input. The learners have had more difficulty acquiring non-standard type 2 constructions, which can occur with a range of verbs. If the acquisition is initially tied to specific lexical items, then constructions such as *he could've went* are not so well-represented in the input. This lexical diffusion effect may be a systematic rule in the acquisition of L2 sociolinguistic variation.

The over-acquisition of the speech context constraint for *aye* may be interpreted as a form of hypercorrection. The learners 'understand' that in native speech, *aye* is more likely to be used in informal situations with friends, and less likely to be used in more formal, classroom-like situations. They 'over-react' to this influence, and shift their rates of use across speech contexts more dramatically than their native peers do; in essence, they are more 'careful' with their use of *aye* than the Glaswegian speakers. The Polish speakers occupy a more precarious position than their Glaswegian peers, both socially and linguistically, and this may lead to linguistic insecurity, which Wolfram (1991) refers to as '[t]he source of hypercorrection' (155). Because they have undergone formal language instruction in the L2, their speech is likely to have come under heightened scrutiny, and this might also have led to heightened style-shifting behaviour. The innovation of a speech context constraint for word-medial glottal



replacement can be interpreted as part of the same pattern of hypercorrection. The heightened scrutiny on their language use might even mean that the learners are more aware of word-medial glottal replacement than their Glaswegian peers, which could explain why it is sensitive to speech context for the learners and not for the Glaswegians.

The innovation of the linguistic context constraint for Scots negation may be considered another form of hypercorrection. I suggest that the Polish speakers disfavour the use of the local non-clitic *no* ' because when they use it there is a possibility of it being misinterpreted as a learner error. As described in chapter 6, in an utterance such as (34), there is no way of telling whether Dominik's use of *no* represents a learner error or the local variant of *not*.

34. I'm going, 'cause I'm *no* '(/*no*) sitting in class. - *Dominik*

I suggest that the learners are hypercorrecting away from non-native forms, and in the process disfavours local forms which might potentially be misinterpreted as non-native. Again, I suggest that this pattern of hypercorrection stems from linguistic insecurity. The Polish pupils risk being victimised for having speech which sounds non-native (as described in section 3.3. and chapter 4), and hypercorrecting away from non-native forms may be a form of self-protection.

The replication of native speaker constraints can be taken as evidence of learners' acquisition of sociolinguistic competence in the L2, but other constraint acquisition patterns, particularly over-acquisition and innovation, can offer insights into the nature of learner language, the process by which sociolinguistic variation is acquired in the L2, and learners' social positioning and experiences. Patterns of hypercorrection may emerge from linguistic insecurity, as learners who occupy precarious social positions struggle to acquire socially advantageous L2 patterns of use.

## 9.2. Predictors of the acquisition of sociolinguistic variation

In chapters 5 - 7, I tested whether the acquisition of L2 sociolinguistic variation is predicted by the length of time a learner has been in Glasgow (LoR), the age at which they arrived in Glasgow (AaO), their gender, or their integrative motivation (IM). IM is primarily a measure of their feeling of ‘Glaswegian-ness’, but it also measures their level of contact with native speakers.

### 9.2.1. Length of residency (LoR)

The analysis produced several negative findings. The first is that in these models, the acquisition of sociolinguistic variation is not predicted by LoR. In other words, the speakers who have been in Glasgow longer have not acquired the variables to a greater extent than the newer arrivals. It may simply be that the sample sizes are not large enough to detect the effects of LoR. However, in the following sections I will discuss other possible explanations for the absence of this effect, if we assume that the effect is truly absent.

One potential explanation is that many of the speakers have relatively long LoRs: perhaps the effect of LoR is important in the early stages of acquisition, and becomes less important in the later stages? However, looking at the newest arrivals in the speaker sample appears to refute this suggestion. The very newest arrival is Adam, who has been in Glasgow for 1.5 years. He shows very high rates of the local forms across all of the variables examined: he is the biggest user of *aye* and word-medial glottal replacement, and one of the biggest users of Scots negation and word-final glottal replacement.

The absence of a LoR effect does not align with the results of Regan (1995: 261) and Drummond (2010: 216), who find LoR to be a significant predictor of the acquisition of sociolinguistic variation in their data. However, it does align with the results of Howley, who also finds that LoR is not a significant predictor in her data (2015: 135, 151 and 180).

### 9.2.2 Age at onset (AaO)

A second negative finding is that the acquisition of sociolinguistic variation is not predicted by AaO for these speakers. The speakers who arrived in Glasgow as young children have not acquired the variables to a greater extent than those who arrived at an older age. Again, it may simply be that the sample sizes are not large enough to detect the effects of AaO. However, there are other possible explanations for the absence of this effect, which will be discussed in the following sections.

The absence of an AaO effect is surprising in relation to the findings of the field of SLA, where AaO is repeatedly found to predict various aspects of L2 attainment, e.g. the absence of a detectable foreign accent (Oyama 1976), grammatical judgement (Johnson & Newport 1989), and intelligibility of L2 vowel production (Flege et al 1999). However, in this body of research L2 attainment tends to relate to invariant use of a standardised variety, and the acquisition of sociolinguistic variation tends not to be considered (Nestor et al 2012: 328). Not many studies have examined the role played by AaO in the acquisition of sociolinguistic variation, but when it is examined, it does not tend to emerge as a significant predictor (Baker 2008: 194; Howley 2015: 135, 151 and 180).

This suggests that the acquisition of sociolinguistic variation may differ from the acquisition of other aspects of L2 attainment (those tested for in SLA research). It seems that the advantage young children have in the development of e.g. grammatical judgement in the L2 may not transfer to the acquisition of sociolinguistic variation in the L2. Why not?

A potential explanation relates to the effect of adolescence with regard to sociolinguistic variation. The SLA literature suggests that as children grow towards adolescence they become less linguistically pliable, and therefore the acquisition of an L2 becomes more difficult (Hyltenstam & Abrahamsson 2003: 572). However, evidence from L1 variationist sociolinguistics shows that in the L1, children retain the ability to alter their linguistic system as they enter adolescence, with increased rates of non-standard variants and the incorporation of new non-standard variants. Not only do they retain the ability to alter their linguistic system, but they show a strong drive to do

so (Sankoff 2004: 4; Chambers 2009: 184; Tagliamonte 2011: 48). There is not yet sufficient empirical evidence to confirm whether adolescents also retain the ability to acquire new sociolinguistic variation in the L2, but if they do, this might explain why AaO does not emerge as a significant predictor of the acquisition of sociolinguistic variation for my participants.

### **9.2.3. Gender**

A third negative finding is that gender is not a significant predictor of the acquisition of sociolinguistic variation for these speakers. In previous research, gender often emerges as a predictor. However, Drummond (2010) and Howley (2015), who both find that female speakers are more likely to acquire local forms than male speakers, suggest that this may be because of the different social positions occupied by female and male speakers in the particular communities they study. They suggest that female speakers may have a heightened level of exposure to local forms, due to the type of employment they have (Drummond 2010: 149) or the type of friendship groups they form (Howley 2015: 213-215). They suggest that gender may not itself be a predictor, but that it may simply correlate with favourable circumstances for the acquisition of sociolinguistic variation, i.e. a high level of contact with native speakers. It may be that in the community examined in the current study, gender does not correlate with favourable circumstances for the acquisition of sociolinguistic variation, and this is why it does not emerge as a predictor. If the effect of gender is specific to the community under observation, then we can expect to see different results across different communities.

### **9.2.4. Integrative motivation (IM)**

In the analysis of word-medial glottal replacement, IM emerges as a significant predictor: in other words, speakers who identify strongly with Glasgow use more word-medial glottal replacement, speakers who do not identify strongly with Glasgow use less. In chapter 7 I noted that this finding can be interpreted in two ways. The first is that IM is significant because word-medial glottal replacement is a marker of

Glaswegian identity. Those learners in the medium and high IM groups have a stronger feeling of belonging in Glasgow and a stronger sense of Glaswegian identity, and they use word-medial glottal replacement to mark this identity. The second is that IM is significant because it also measures learners' level of contact with native speakers. Those learners in the medium and high IM groups have a stronger feeling of belonging in Glasgow, but they also have a higher level of contact with native speakers. It may be this aspect of IM which is important for the acquisition of word-medial glottal replacement.

Given the strong body of evidence that IM is a predictor of the acquisition of L2 sociolinguistic variation (Goldstein 1987: 426; Baker 2008: 194; Diskin 2012: 86; Drummond 2010: 220-221; Meyerhoff & Schleef 2014: 117; Howley 2015: 216), it is surprising that it does not emerge as significant for the other variables examined. One possibility is that my grouping of the participants by IM was imperfect. IM is complex and difficult to access, and it may be that despite my best efforts, I was unable to get a true sense of how strongly the participants identify with their new community. However, I suggest that there may be another explanation. In the following section, I outline this potential explanation by comparing the four variables, paying particular attention to their differing levels of speaker awareness and their differing constraint complexity.

### 9.3. Comparing the acquisition of different variables

I now turn to research question 3: Do L2 learners acquire different sociolinguistic variables in different ways?

#### 9.3.1. *Speaker awareness*

The acquisition of high-awareness variables differs in character from the acquisition of low-awareness variables (Labov 1993; Tarone 2007: 844; Howley 2015: 119). The acquisition of high-awareness variables is shaped by their social meaning and by identity marking, with learners acquiring those variants which are socially desirable to them and rejecting those which are not. Low-awareness variables are acquired more automatically through contact; their acquisition is unrelated to social meaning and identity.

I have suggested that *aye* and Scots negation pattern like high-awareness variables. Both are used at high rates by some learners, and almost completely rejected by others. Across the native Glaswegian group, too, some speakers use high rates of the local variants and some do not. I suggest that these high-awareness variables are being used in individual acts of identity marking, and that their acquisition is related to the learners' 'individual choice and cultural alignment' (Wolfram et al 2004: 355). Observing the divergent patterns across the Glaswegian group, and the fact that IM (as a measure of the learners' feelings of 'Glaswegian-ness') does not emerge as a predictor of acquisition for the Polish group, I suggest that *aye* and Scots negation index some aspect of local identity other than simply 'Glaswegian-ness'. Observing which of the individual speakers use *aye* and Scots negation and which largely reject these forms, I suggest that they may index rebelliousness and anti-establishment values. Those speakers with a generally 'pro-school' orientation avoid the use of the local forms, and those with a generally 'anti-school' orientation use them at high rates. This is true of the Polish learners and also of their native peers.

High rates of *aye* and Scots negation are consistent with other markers of rebelliousness and anti-authoritarian orientations across the learners and their Glaswegian peers. Those pupils who use high rates of *aye* and Scots negation are

consistently those who express rebellious attitudes in other ways, e.g. by making an effort to stretch the limits of the school uniform policy. Those who use low rates of *aye* and Scots negation are consistently those who express enthusiasm for school. There are no learners in the Polish group who appear to be getting this ‘wrong’ - expressing an anti-school orientation but using low rates of *aye* and Scots negation, or expressing a pro-school orientation but using high rates of *aye* and Scots negation. Moore (2004) writes that ‘speakers choose the manner in which to manipulate the resources to which they have access, and carve out particular representations of self by exploiting the meanings assigned and assignable to recognisable styles’ (380). I suggest that the learners in the current study are able to do exactly this with those variables to which they have access - *aye* and Scots negation - and that in doing so they are able to occupy the same identity space occupied by their Glaswegian classmates.

I have suggested that word-final glottal replacement patterns like a low-awareness variable. It is used at high rates across all of the Glaswegian speakers and most of the Polish speakers, suggesting that the speakers do not use this variable to differentiate themselves from one another. I suggest that its acquisition is unrelated to social evaluation, and it is acquired automatically through contact with native speakers. Only one learner, Angelika, has not acquired word-final glottal replacement to a native-like level. I suggest that her very low degree of native speaker contact - rather than an active rejection of the variable - explains why she has not yet fully acquired word-final glottal replacement.

Of the variables examined in chapter 8, I suggest that non-standard verb formation and non-standard agreement with plural existentials pattern more like low-awareness variables, and that plural demonstratives, *youse* and the local intensifiers pattern more like high-awareness variables. I note that using *thae*, *youse* and *pure* involves variation between distinct alternative lexical forms, whereas variation in verb formation and agreement patterns involves variation in the relationships between words. This distinction may explain their differing patterns, and their apparently differing levels of speaker awareness.

### 9.3.2. *Constraint complexity*

Payne (1980: 175), Chambers (1992: 702) and Kerswill (1996: 187) suggest that variables which are more highly-constrained may take longer for learners to acquire, and they suggest that some variables which are very highly-constrained can only be acquired in very early childhood. We might therefore expect LoR and AaO to emerge as predictors of the acquisition of more highly-constrained variables, and not of less highly-constrained variables. Given the above, the difficult task is explaining why LoR and AaO do not emerge as predictors of the acquisition of any of the variables examined in the current study. Milroy (2007: 170) also suggests that highly-constrained variables may require a high degree of contact with native speakers, and dense social network ties, if they are to be incorporated into a speaker's system. We might therefore expect IM to emerge as a predictor of the acquisition of more highly-constrained variables, because as well as acting as a measure of identity, it also acts as a measure of native speaker contact.

*Aye* is low in constraint complexity, and because of this it is accessible even to learners who have had little contact with native speakers. Its acquisition does not require a long residency in Glasgow, and it does not need to be acquired in early childhood. However, this does not mean that its acquisition is inevitable; as a high-awareness variable which is involved in identity marking, it is acquired only when it is socially desirable to the learners, and it is rejected when it is not. It is accessible, but it is not obligatory.

Scots negation is higher in constraint complexity, and so its acquisition might present more of a difficulty to learners like Angelika, who lack contact with native speakers. However, because it is also a high-awareness variable which is involved in identity marking, I suggest that this identity marking masks any potential effects of LoR, AaO and IM, which do not emerge as significant. Speakers who have a high LoR, a low AaO, and high IM, probably do have access to this variable, but they do not necessarily use it: as with *aye*, it is acquired only when it is socially desirable to the learners, and it is rejected when it is not. Angelika, who has the lowest level of contact with native speakers, does not use Scots negation, but we can't tell whether this is



because the variation is not accessible to her, or because it is not socially desirable to her. This masking effect may explain why LoR, AaO and IM do not emerge as significant for this variable.

Word-final glottal replacement is not very highly-constrained. Because of its low constraint complexity, it is accessible even to speakers with a relatively low LoR and high AaO, so that almost all of the learners have acquired it to native-like levels, and LoR, AaO and IM do not emerge as significant predictors. Because it is not involved in individual identity marking, its acquisition to native-like levels is inevitable given sufficient contact with native speakers. Only Angelika lacks sufficient contact, and as a result has not fully acquired this variable.

Word-medial glottal replacement's high level of constraint complexity may explain why IM predicts the acquisition of this variable and not any of the others. Contact with native speakers may be particularly important for the acquisition of highly-constrained variables (Milroy 2007: 170). Therefore the emergence of IM as a significant predictor may indicate that a high degree of native-speaker contact is necessary for the acquisition of this highly-constrained variable. The failure of LoR and AaO to emerge as significant for word-medial glottal replacement might be explained by the compensatory role of IM. Even some speakers who have short LoRs and high AaOs have acquired word-medial glottal replacement to native-liked levels: Adam, Izabela, Piotr, Kinga and Szymon. These learners, who all spend a great deal of time with native speakers, have acquired word-medial glottal replacement even over a relatively short period of time spent in the city, through intensive exposure to the speech of their Glaswegian peers.

## 10. Conclusion

The learners in the current study are acquiring local non-standard variants, even when these variants are stigmatised and they are likely to be discouraged from using them in the classroom. Traditionally, research on second language acquisition (SLA) has ‘tended to assume that standardised varieties are the target of learning’ (Nestor et al 2012: 328), but this is not the case for learners like those in the current study. They are modelling their L2 speech on the speech of their native Glaswegian peer-group, not on the standardised models presented to them by teachers and textbooks. This is unsurprising given what we know about the importance of peer-group influence during adolescence (Chambers 2009: 184; Sankoff 2004: 4). ‘Fitting in’ linguistically is important during all life stages, as exemplified by the importance of social networks in the spread of linguistic change (Milroy 1980: 154), but it is particularly important during adolescence.

Although the learners are modelling their speech on that of their Glaswegian peer-group, their patterns of use do not always match those of their peers. Some native speaker constraints have been replicated, and the replication of these constraints may be taken as evidence of the learners’ sociolinguistic competence in the L2 (Howley 2015: 71). Other constraints have been over-acquired, and new constraints have been innovated by the learners, suggesting that they are ‘approaching the task of systematising the variation [...] actively’ (Meyerhoff & Schlee 2014: 121). The learners have not replicated all of the native speaker patterns, but in observing their speech, we can see that they have their own non-native patterns of use. These non-native patterns may tell us something about the nature of learner language, and the process by which sociolinguistic variation is acquired in the L2. The importance of lexical frequency in the speech of the Polish learners, for example, may represent a lexical diffusion effect, where the local variant is initially tied to specific lexical items before spreading to the rest of the lexicon (Chambers 1992: 694; Wolfram et al 2004: 345). Patterns of hypercorrection may stem from linguistic insecurity due to the precarious positioning of migrant learners in their community; as a result, the learners

may be more ‘careful’ than native speakers with their use of certain local variants, avoiding the use of certain stigmatised variants in more formal situations, and avoiding the use of local variants which may be misinterpreted as non-native forms. The fact that the Polish learners have heightened patterns of styleshifting compared to their Glaswegian classmates may also contribute to current conversations about the potential advantages of multilingualism. Previous research has suggested that multilingualism ‘can positively influence aspects of cognitive functioning’ (Cummins 2001a: 32) and that multilingual speakers may have heightened metalinguistic awareness. My finding suggests that this heightened awareness may extend to the social dimension of language use. The learners, most of whom regularly move between Polish and English dependent on social context, may have an enhanced awareness of the connections between language and social context which extends into their use of sociolinguistic variation within the L2.

I also find that not all variables are acquired in the same way. The role of native speaker contact may be particularly important for the acquisition of highly-constrained variables (Milroy 2007: 170), and this may explain why integrative motivation, or IM, (which is a measure both of identity and of native speaker contact) emerges as a predictor of acquisition only for the highly-constrained variable word-medial glottal replacement. Identity plays an important role in the acquisition of high-awareness variables, which speakers can adopt or reject in order to express orientations and alignments within their new cultural landscape. This is not as simple as using local variants to mark their speech as ‘Glaswegian’, and this is why IM does not emerge as significant for the highest-awareness variables, *aye* and Scots negation. Adolescent Glaswegian identity is not a monolith; it is multi-faceted. Young migrants are able to negotiate its complexities and use certain (high-awareness) local variants to position themselves within the same identity space as their Glaswegian peers. It seems that the learners ‘understand’ the social meaning of the variables, that their understanding matches that of their Glaswegian peers, and that they are able to deploy the variables in individual acts of identity alongside their Glaswegian classmates.

This finding has implications for how we think about ‘integration’. The measure of integrative motivation (IM) used in this study was an ethnographically-informed

grouping, which placed the learners into categories based on their feelings of belonging in Glasgow, their level of contact with native speakers, their attitudes towards Glasgow, their desire to stay in Glasgow and become a part of the local community, and where they thought of as home. This measure emerged as significant for only one of the variables tested, word-medial glottal replacement, and I suggested that the importance of IM for the acquisition of this highly-constrained variable may lie in its measure of native speaker contact (Milroy 2007: 170), rather than its measure of identity and feeling of belonging. In terms of identity, this measure of IM may tell only a small part of the story. Studies of IM often discuss how learners differ in the degree of their desire to become native-like (Drummond 2010: 220-221; Diskin 2012: 84-86; Howley 2015: 216), both socially and linguistically, and this was the starting point for the current study. However, the results for the high-awareness variables *aye* and Scots negation call into question what it means to be ‘native-like’. The Glaswegian control group do not all show the same linguistic behaviour for these variables, just as they do not all show the same social behaviour. In becoming ‘Glaswegian’, the learners are moving into a complex landscape of local identity, with many possible ways to situate themselves. This finding aligns with the qualitative observations of Wolfram et al (2004: 355) and Nestor et al (2012: 350) about the complexities of local identity encountered by migrant language learners.

This thesis makes several important contributions to the study of the acquisition of sociolinguistic variation in the L2. One of these is in the methodology used to investigate the acquisition of styleshifting. Previous studies have tested for the acquisition of styleshifting by comparing conversational speech with read speech (e.g. Meyerhoff & Schlee 2014: 113 and 117), by comparing different types of read speech (e.g. Major 2004: 173-174) or by comparing different speech styles within a single conversational context (e.g. Adamson & Regan 1991: 9; Regan 1995: 252). This study tests for the acquisition of styleshifting across a range of social contexts and with a range of different interlocutors. The data collected, therefore, builds a picture of styleshifting which is likely to be relatively reflective of that produced in day-to-day

life by the participants. Using this methodology, the heightened styleshifting patterns described above emerge for the first time in the field.

Another important contribution is the clarification and formalisation of a framework for examining constraint acquisition, as outlined in table 1 (repeated as table 31). This table summarises a range of possible constraint acquisition patterns, and the evidence for each. Several of these patterns have been observed in previous studies, but these observations have been scattered across studies, using varying terminology. In this thesis I bring together the observations of previous studies and create a framework with consistent terminology, which can be used within a quantitative analysis to test for the full range of possible constraint acquisition patterns.

A further contribution is the use of ethnographic methods alongside quantitative methods to interrogate the concept of integrative motivation (IM). The concept of IM has been present in the field for several decades, but studies which explore the concept using a mixed methodology (as called for by Spolsky 2000: 162) are rare. Having investigated IM in depth, I suggest that at St John's High, the concept of IM does not hold a great deal of power for explaining the acquisition of sociolinguistic variation in the L2. This is an important negative finding which will inform future research by myself and others.

The fact that IM does not (clearly) emerge as an explanatory factor across the variables examined using quantitative methods may be due to limitations in the research design. The use of IM within a logistic regression analysis required the concept to be simplified to three categories: low, medium and high. The ethnographic analysis in chapter 4 shows that IM is far more complex than this, and it may be that this necessary simplification reduced the explanatory power of the concept. It may be that IM, while remaining a useful concept within ethnographic analysis, is too complex to be operationalised within a mixed methodology.

However, it may also be that explaining the identity work being done by the participants via the use of sociolinguistic variation requires an analysis which goes beyond the concept of IM. This is indicated by my suggestion that the use of *aye* and Scots negation may index rebelliousness and anti-establishment values, and may be linked to 'anti-school' stances. A limitation of this thesis is that I was unable to conduct

a more thorough investigation of this possibility. This investigation was precluded by time constraints, but offers a potential avenue for future study. This type of third-wave variationist approach has been taken in the study of L1 speech by e.g. Moore (2003), Kiesling (2004) and Podesva (2007), and in the study of L2 speech by e.g. Mendoza-Denton (2008), but it has not yet been used to examine the construction and negotiation of identity between L1 and L2 groups within a community. The findings of this thesis suggest that this approach may be a fruitful direction for future study.

Understanding the complexities of social integration, and its relationship with language use, is important for the fields of sociolinguistics and applied linguistics, and it is also important for classroom teachers. Language use and identity are inextricably bound, and linguistic identity is particularly important during adolescence, as young people construct independent identities outside of the home, in relation to their peers (Eckert 2000; Moore 2003; Lawson 2009). An important part of this is the use of sociolinguistic variation, including those non-standard variants which are stigmatised, referred to as ‘slang’, and often discouraged by authority figures. This thesis shows how adolescent migrants are able to use sociolinguistic variation to position themselves in relation to their peers, and within the complex landscape of local identity they are entering into.

An understanding of the social role played by variation is potentially useful to all those who support young people, both migrants and non-migrants, and it is also potentially useful to the young people in question. I suggest that opening classroom discussions about language use and identity could be an excellent starting point. Cummins (2001d) emphasises the importance of linguistic empowerment in education. In discussing how schools can provide for pupils who have an L1 which is not the dominant language of the classroom, he stresses that schools should make space for the pupils’ home languages, and value the pupils’ cultural identities (180). This notion of linguistic empowerment could be extended to include both young people who are multilingual and those who use any variety which is not the official language of the classroom (and also those who, like the Polish participants in this study, fall into both categories). At schools like St John’s, a focus on linguistic empowerment might involve opening discussions about sociolinguistic variation, multilingualism, the linguistic

resources we have at our disposal, and how these relate to who we are and where we call home.



Figure 65: A doodle by Jan

## Appendices

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**Appendix 1: Ethical approval from the University of Glasgow College of Arts  
Research Ethics Committee**

31 Mar 2014

Dear Sadie

**Ethics Application 100130077: Ethics Approval**

Ethical approval is given for your research. Please note that an end of project report is required by the Ethics Committee. A brief report should be provided within one month of the completion of the research, giving details of any ethical issues which have arisen (a copy of the report to the funder, or a paragraph or two will usually be sufficient). This is a condition of approval and in line with the committee's need to monitor research. Further, it is your responsibility to inform, as appropriate, your supervisor, advisor or funding body of the outcome of your Ethics application. You should also indicate successful receipt of ethics clearance on the acknowledgements page of the approved project.

In addition, any unforeseen events which might affect the ethical conduct of the research, or which might provide grounds for discontinuing the study, must be reported immediately in writing to the Ethics Committee. The Committee will examine the circumstances and advise you of its decision, which may include referral of the matter to the central University Ethics Committee or a requirement that the research be terminated.

Information on the College of Arts Ethics policy and procedures is at <http://www.gla.ac.uk/colleges/arts/research/ethics>.

## **Appendix 2: Ethical approval from Glasgow City Council Education Authority**

Dear Sadie,

### **Proposed Research Project –Language, Identity, Integration and Education: A Sociolinguistic study of “New Arrivals” in Glasgow.**

Thank you for your recent research application form in respect of the above. I now write to advise you that this department has no objection to you seeking assistance with your project from schools in Glasgow.

I would confirm however, that it is very much up to the Heads of Establishments to decide whether or not they wish to participate and assist you in your research.

We would ask that you provide a copy of your Disclosure Scotland/PVG scheme approval. This must also be shown to all establishments participating in the project. Anyone else assisting in the research must also provide their PVG approval.

A copy of this letter should be sent to the Head of Establishment when contacting the schools. We would ask that you link with Maria Walker, Head of Service, English as an Additional Language Service, who will assist you to identify relevant schools that may be able to take part in this research.

I hope that this is helpful and that you have success with your project. We would be interested to see the findings from your research once it is completed.

## Appendix 3: PVG scheme membership certificate

**STRICTLY PRIVATE AND CONFIDENTIAL**


**Disclosure**  
SCOTLAND

**PVG SCHEME RECORD**  
Scheme record disclosure issued under section 52 of the Protection of Vulnerable Groups (Scotland) Act 2007

**APPLICANT COPY**

Disclosure Number: 20000000999413  
Date of Issue: 02/07/2012  
Page 1 of 1

MS SADIE DURKACZ RYAN  
23 SOUTHFIELD FARM GROVE  
EDINBURGH  
MIDLOTHIAN  
EH15 1SR  
SCOTLAND



**Applicant Personal Details**

Surname: RYAN  
Forename(s): SADIE DURKACZ  
Date of Birth: 06/08/1989  
PVG Membership No. 1207 0292 7805 0333

A copy of this disclosure record has also been sent to the registered body which countersigned the application and any authorised regulatory body.

**Statement of Scheme Membership**

**Membership Status**  
The applicant is a PVG Scheme Member in respect of regulated work with children and, therefore, not barred from that type of regulated work.

**Consideration Status**  
The applicant is not under consideration for listing by the Scottish Ministers for the workforce(s) to which this disclosure relates.

**Vetting Information**

**Convictions**  
The applicant has no convictions for disclosure.

**Cautions**  
The applicant has no cautions for disclosure.

**Prescribed Court Orders & Sex Offenders Notification Requirements**  
The applicant has no prescribed court orders or sex offender notification requirements for disclosure.

**Other Relevant Information**  
The applicant has no Other Relevant Information for disclosure.

**END OF DISCLOSURE**

\*004520305081\*

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## Appendix 4: Scan of confidentiality agreement signed by one of the transcription team



### Confidentiality agreement for transcribers on the PhD project 'Language, Identity and Migration at School: a sociolinguistic study with Polish adolescents in Glasgow'

You, **Ashley Gordon**, will be transcribing and anonymising recorded material from the above project during 2015 and 2016.

This material should be treated as confidential; all names, identifying information (including the name of the school and other local landmarks) and particularly sensitive subject matter should be removed from the transcripts, and file names should use participants' pseudonyms only.

You are asked to uphold participants' anonymity by not discussing the material or using names or identifying information outside of the transcription and researcher team.

You will have access to the above material only during transcription shifts, and only on Sadie Ryan's university computer. You are unable to access the material outside of your transcription shifts or on any other computer.

Print name:

Ashley Gordon

Signed by the transcriber:

[Signature]

Date:

29/10/15

**Researcher's name and email contact:**

Sadie Durkacz Ryan: [s.ryan.2@research.gla.ac.uk](mailto:s.ryan.2@research.gla.ac.uk)

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G128HQ

## **Appendix 5: Information sheet for participants (English language)**

### *Project Information for Participants*

‘Language, identity, integration and education: a sociolinguistic study of “new arrivals” in Glasgow’ is a project which aims to find out more about the language use of Polish people who live in Glasgow. In particular, I am interested in whether young people are picking up the local dialect.

If you choose to take part in the study you will be asked to come to an after-school club once a week. The club will involve activities like film-making, art, music and computer games, and will be free of charge.

During these after-school club sessions I will make speech recordings. Sometimes I will ask you to wear a small microphone during activities, and once or twice I will ask to interview you. This will really be more like a chat, and is just to get a sense of how you use local language.

The after-school club will be running for a few months, and may continue for longer if possible. I would like to see (by making more speech recordings later) how the language use of you and your friends develops over a few years. You will have to option to drop out of the study at any point if you aren’t enjoying it any more.

The study will be 100% anonymous (I won’t use your real name), it is optional, and I won’t be doing any research unless you really want to take part. If you have any questions, you are very welcome to get in touch with me using the contact details on the letter. You can also speak to your EAL teachers, Mrs. Higgins and Mr. Stevenson, who will be involved in the project.

## Appendix 6: Questionnaire for parents (English language)

### Questionnaire for Parents

Your name:

Your contact details (preferred method of contact):

Your son / daughter's name:

Your son / daughter's date of birth:

Does your son / daughter have any medical conditions?

Does your son / daughter have any allergies?

Does your son / daughter take any regular medication?

Do you have any other children of school age?

If yes, would you be happy for them to also take part in the study?

If yes, what are their names and how old are they?

Do they attend a school other than St. John's?

If yes, which school?

Please tick each of the following statements which applies to your son / daughter:

Born in Poland.

Moved to Glasgow within the past 5 years.

If yes, how many years ago?

Has lived in countries other than Poland and Scotland.

If yes, which countries, and for how many years?

Has lived in UK cities / areas other than Glasgow.

Which cities / areas, and for how many years?

Speaks Polish as a first language.

Started learning English before coming to the UK.

If yes, at what age?

Speaks languages other than Polish and English.

If yes, which languages?

Which of the following times would be suitable for your son / daughter to attend an after-school club?

Monday after school.

Tuesday after school.

Wednesday after school.

Thursday after school.

Friday after school.

## Appendix 7: Consent form for participants (English language)



University  
of Glasgow

### CONSENT TO THE USE OF DATA

University of Glasgow, College of Arts Research Ethics Committee

I understand that Sadie Durkacz Ryan is collecting data in the form of digital speech recordings for use in an academic research project at the University of Glasgow.

#### **I give my consent to the use of data for this purpose on the understanding that:**

- All names and other material likely to identify individuals will be anonymised.
- The material will be treated as confidential and kept in secure storage at all times.
- The material may be used in future research, but future researchers will only have access to anonymised data with sensitive material removed, and will be required to sign a confidentiality agreement.
- The material may be used in future publications, both print and online.
- Any interview material deemed to be of a sensitive nature will be excluded from the study.

This data is being collected as part of a research project concerned with the language use of new migrants in Glasgow, by the Department of English Language of the University of Glasgow, funded by the Lord Kelvin Adam Smith Scholarship. The information that you supply and that may be collected as part of this research project will be entered into a filing system and will only be accessed by authorised persons of the University of Glasgow or its agents or its collaborators in this research project. The information will be retained by the University and will only be used for the purpose of (a) research, and (b) for statistical and audit purposes. By supplying such information you consent to the University storing the information for the stated purposes. The information is processed by the University in accordance with the provisions of the Data Protection Act 1998.

Signed by the contributor

---

Date:

---



## Appendix 8: Consent form for parents (Polish language)



### ZGODA NA WYKORZYSTANIE DANYCH

Uniwersytet w Glasgow, Komitet Etyki Badań Naukowych Wydziału Humanistycznego (College of Arts)

Rozumiem, że Sadie Durkacz Ryan gromadzi dane w formie cyfrowych nagrań głosowych do użycia w akademickim badaniu naukowym na Uniwersytecie w Glasgow.

**Wyrażam zgodę na wykorzystywanie danych w wyżej wymienionym celu rozumiejąc, że:**

- Wszelkie dane osobowe umożliwiające identyfikację konkretnych osób będą zatajane i przedstawiane w sposób gwarantujący anonimowość.
- Zebrany materiał będzie poufny i przechowywany w bezpiecznym miejscu.
- Zgromadzone dane mogą zostać użyte w przyszłych badaniach, ale inni badacze nie będą mieli dostępu do danych osobowych i informacji poufnych oraz będą musieli podpisać umowę o zachowaniu poufności.
- Dane mogą zostać wykorzystane w przyszłych publikacjach, zarówno drukowanych, jak i internetowych.
- Zebrany podczas wywiadów materiał delikatnej natury zostanie wykluczony z badania.

Dane zbierane są jako część badania naukowego na temat używania języka przez nowo przybyłych imigrantów w Glasgow, prowadzonego przez Wydział Filologii Angielskiej na Uniwersytecie w Glasgow, ufundowanego ze Stypendium Lord Kelvin Adam Smith. Informacje dostarczane przez Państwa oraz zebrane podczas badania będą skatalogowane i dostępne tylko dla uprawnionych osób, przedstawicieli Uniwersytetu w Glasgow i współpracowników badania naukowego. Informacje zostaną zachowane przez Uniwersytet i używane wyłącznie do a) celów badania naukowego, i b) celów statystycznych i audytowych. Dostarczając danych zgadzają się Państwo, aby Uniwersytet przechowywał te informacje dla wyżej wymienionych celów. Dane są przetwarzane przez Uniwersytet zgodnie z postanowieniami Aktu o Ochronie Danych z 1998 (Data Protection Act 1998).

Podpis rodzica lub opiekuna (w przypadku uczestników młodszych niż 18 lat)

\_\_\_\_\_

Data:

\_\_\_\_\_

## Appendix 9: Transcription protocol

### 1. Orthography

The initial transcription is orthographic. Lexical, morphological, syntactic and discourse-pragmatic variation are included in the transcript at this stage, but not phonetic and phonological variation. The non-standard forms which are given their own representations are those which cannot easily be represented using standard orthography. This includes local forms, non-dictionary items (including proper nouns which do not need to be anonymised, e.g. names of celebrities), malapropisms and idiosyncratic word forms. These should be noted down and submitted with your completed transcripts. A list will be compiled to ensure representations are consistent across the transcripts.

The transcription should use standard UK English orthography wherever possible. There are no diacritics in the software, so words which usually include diacritics are transcribed without them and this is noted down. Whenever there are multiple spelling options available (including choosing between separate, hyphenated or compound representations), a decision should be taken, noted down and submitted with your completed transcripts.

Variation in vowels should not be represented, e.g.:

‘dae’ is represented with *do*

‘mair’ is represented with *more*

Non-standard negation should be represented, e.g.:

*arenae, cannae, willnae* etc. as so

*no* is used to represent ‘no’ when it is used as equivalent to standard *not*

However, *no* is used to represent all non-standard variants equivalent to standard *no* (e.g. ‘nup’, ‘nuh’, ‘nah’, ‘nae’ etc.).

Transcribe *youse* (Scots second person plural) as so.

Transcribe *mine’s* (the thing belonging to me) as so.

Look out for Scots past tense forms like *et* for ‘ate’, *writ* for ‘wrote’ and *bet* for ‘beat’. These should be transcribed as so.

Common items where multiple spelling options / hyphenation options are available:

*'cause*

*'til*

*okay*

*thankyou*

## 2. Segmentation

Only the speech of the person wearing the microphone is transcribed. Other speech will be audible in the background, but should be ignored. Sections where the main speaker is not saying anything should be given their own segment in the transcript and marked with {NS} (for 'no speaker'). Speech should be segmented into manageable sections for the ease of the transcriber and the reader. Segmentation does not need to follow breath groups.

## 3. Numbers

All numbers are written out as complete words. Hyphenation is used for numbers between twenty-one and ninety-nine only, e.g.:

*twenty-two, nineteen ninety-five, seven thousand two hundred seventy-five, nineteen oh nine*

## 4. Acronyms and spoken letters

Acronyms and spoken letters should be written in all capitals, with each individual letter surrounded by spaces, e.g.:

*G T A - that's a game where you do certain missions.*

These acronyms and spoken letters can be pluralised, e.g.:

*Polish has three different Zs.*

Some items come up that come from acronyms but are now used as linguistic units - e.g. *Nab* comes from 'National Assessment Bank', the acronym is N A B, but now it is used as a lexical item and spoken as such - the participants don't spell out the individual letters. In cases like this, the item should be noted down and submitted with your completed transcripts.

## 5. Punctuation

Standard punctuation is used for ease of reading comprehension.

Quotation marks are used to indicate reported speech or thoughts within a narrative, or words held outside of the main narrative, e.g.:

*Yeah and I'm asking my mum like, "mum, how do you say that in Polish?"*

*Type up "download".*

*Definition of "you".*

Quotation marks should be used to mark each line, not over line breaks.

Sung words are marked with asterisks in place of quotation marks.

When the word *like* is used as a discourse marker (which is a lot!), surround it with commas, e.g.:

*maybe, like, work in twos.*

This is just to make the transcripts a bit easier to follow.

## 6. Disfluent or unclear speech

### 6.1. Partial words

When a speaker breaks off in the middle of a word, the transcript should include as much of the word as can be made out. A single dash without preceding space is used to indicate the point at which the word was broken off.

*Yeah we were at the same class but she moved like three months bef- before.*

### 6.2. Restarts

When a speaker breaks off after a full word, this restart is indicated with a dash surrounded by spaces, e.g.:

*Yeah. I - there's not a - like, there's not an answer.*

### 6.3. Inaudible speech

Sometimes a section of speech is difficult to understand. In these cases, the transcription uses double parentheses (( )) to mark the region of difficulty.

If it is possible to make a guess about the speaker's words, the transcription includes a guess at the uncertain section within the double parentheses, e.g.:

*I think ((so)). ((Szczecin)). Eh - um - em - ((It's - )) Uh-huh.*

If a guess is not possible, empty double parentheses should be used to surround the untranscribed region, e.g.:

*No, no, that was just to see Grandma (( )). Yeah.*

Loud and prominent vocalisations which are not linguistic items (e.g. screams and other noises) are also marked as (( )).

## 7. Additional markup

Polish utterances are marked as {Polish}, or ({Polish}) when it is difficult to tell whether the utterance is in Polish or English. Utterances in languages other than Polish and English are marked as (( )).

When a single Polish word is used in an English utterance (e.g. the name of a food or a town, e.g. *pierogi, Krakow*) and it can be transcribed easily, then it should be transcribed and noted down and submitted with your completed transcripts.

{MIC NOT ON SPEAKER} is used for periods where mic is left on without being worn by anyone.

[R] is used to mark read speech.

[FV] is used to mark utterances where a speaker is using a 'funny voice' (mimetic reenactment).

In the peer-group context, utterances which are not peer-group interaction are marked with [ADULT].

## Appendix 10: Extract from transcription word list

This list is compiled from the transcription notes, and includes spelling and hyphenation decisions, dialect forms, non-dictionary items, malapropisms, idiosyncratic forms, proper nouns which do not need to be anonymised (e.g. names of celebrities) and words from languages other than English.

Abstergo  
achoo (not an actual sneeze, a spoken form used to represent a sneeze)  
action-packed  
afterworld  
after-school club  
alley-oop (basketball term)  
alpacs (malapropism of alpacas)  
Altair  
Anakin Skywalker  
Arnold Schwarzenegger  
Arian (malapropism) / Ariana Grande  
Arno  
Arsenal  
Asus Zen  
Atari  
Angie Montana (made-up name)  
Augustus  
Autodesk  
Avicii  
axe-murderer  
Ayr  
back flip  
back-heel  
backie  
backstabbers  
bae  
Barbie  
Barca (short for Barcelona, football team)  
Barry Hutchison  
Barszcz  
Bart Baker  
bawbag  
Bayern Munich  
Benatia  
Benzema  
bestest  
bet (Scots past tense of beat)  
Beyonce (transcribed without diacritics)  
bi (bisexual)

Appendix 11: Screenshot of Transcriber file

The screenshot displays a transcription software interface. At the top right, a red tab is labeled "report". Below it, a grey header bar contains the name "Adam". The main area is a list of transcription items, each with a green circular icon on the left:

- {NS}
- Hello.
- {NS}
- Uh-huh.
- (( ))
- (( ))
- (( ))
- {NS}
- (( ))
- {NS}
- Nah.
- {NS}
- ((Uh-huh)).
- {NS}
- I think, either eleven or twelve.
- {NS}
- Two and a half, I think it was.
- {NS}

Below the transcript is a control bar with icons for back, previous, play/pause, next, forward, and a settings icon. Underneath is a yellow background with a black audio waveform. At the bottom, a red bar is labeled "report" and a blue bar is labeled "Adam". Below these are two green bars representing segments: the first contains "{NS}" and the second contains "Hello . {NS}". A timeline at the very bottom has markers at 5 and 10.

## Appendix 12: Screenshot from my NVivo database

The screenshot displays the NVivo software interface. At the top, the title bar reads '10.03.16. NVivo Database'. The main window is divided into several sections:

- Top Panel:** Contains various toolbars including 'Format' (with options like Bold, Italic, Underline, Text), 'Clipboard' (with Cut, Copy, Merge, Paste), 'Query' (with Times New Roman font and size 12), 'Explore', 'Layout', and 'View'.
- Left Panel:** A tree view showing the project structure: SOURCES (Internals, Fieldwork), Nodes (Clips, Fieldwork Notes, Notes on Individuals, Literature Review), External, and Memos. Below this are sections for NODES, CLASSIFICATIONS, COLLECTIONS, and QUERIES.
- Table:** A table listing nodes with columns for Name, Nodes, Referenc..., Created On, Modified On, and Modified By. The data is as follows:
 

Name	Nodes	Referenc...	Created On	Modified On	Modified By
Adam	0	0	25 Nov 2015 18:04	Today, 19:04	SR
Agnieszka (not for analysis)	0	0	26 Nov 2015 11:30	30 Nov 2015 17:24	SR
Angelika	0	0	25 Nov 2015 18:27	16 Feb 2016 11:15	SR
Anna	0	0	25 Nov 2015 18:13	23 Jan 2016 18:25	SR
Dominik	0	0	25 Nov 2015 18:09	20 Feb 2016 17:40	SR
Ewa (not for analysis)	0	0	26 Nov 2015 11:29	30 Nov 2015 17:25	SR
Izabela	0	0	25 Nov 2015 18:10	26 Nov 2015 14:32	SR
Jan	0	0	25 Nov 2015 18:21	Yesterday, 11:49	SR
Kamila	0	0	25 Nov 2015 18:02	26 Nov 2015 14:48	SR
Kinna	0	0	25 Nov 2015 18:25	14 Dec 2015 14:33	SR
Adam	0	0			SR
- Text Editor:** A large text area containing several bullet points:
  - Started learning English when he was 7, but didn't know much when he arrived. 'I only knew, like, you know, like "hi", "my name is (( )", stuff like that.'
  - Went into Primary 6 when he arrived, even though he was Primary 7 age, to give him some time to learn English in Primary school. Therefore he's old for his year group.
  - When I ask if it was scary starting school in Glasgow, he says 'On first three days. On first - first three days in the school only.'
  - 24.02.15. Adam Interview, 4:33-4:40
  - He says that he still speaks to his friends in Poland on Skype and Facebook, and he misses them, and he speaks to them quite a lot. He says that he has more Scottish friends than Polish friends in Glasgow. He does have some Polish friends, like Marek.
  - He says that the way the teachers teach you in Poland is 'well harder'. He likes school is
- Bottom Panel:** Shows 'OPEN ITEMS' with a list including 'Fieldwork Diary', 'Activities', 'Angelika', and 'Adam'.



**Appendix 13: Words removed from glottal replacement analysis because they never occur with glottal replacement**

*Words with stress pattern which appears to block glottal replacement:*

thirteen and thirteenth
fourteen
seventeen
eighteen
nineteen
fantastic
creativity and creativities (first /t/ only, glottal replacement is possible for second /t/)
until
continue
Italian
tattoo, tattoos and tattooed
mutate (first /t/ only, glottal replacement is possible for second /t/)
mutation
potato (first /t/ only, glottal replacement is possible for second /t/)
meditation
guitar
interpret (first /t/ only, glottal replacement is possible for second /t/)
interpretation (first and second /t/)
return
hotel
hesitated (first /t/ only, glottal replacement is possible for second /t/)
architect

*Words without stress pattern which appears to block glottal replacement:*

sometimes

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