



LIFESPANS & STYLES

Undergraduate Working Papers on Intraspeaker Variation

---

Volume 3, Issue 2

Article 4

---

2017

## Do People Tweet Like They Speak? A Study of Intraspeaker Variation in the Use of Scots

Naomi Crawford

naomicrawford@hotmail.co.uk

ISSN: 2057-1720

doi: 10.2218/lv3i2.2017.1865

This paper is available at: <http://journals.ed.ac.uk/lifespansstyles>

Hosted by The University of Edinburgh Journal Hosting Service: <http://journals.ed.ac.uk/>

# Do People Tweet Like They Speak? A Study of Intraspeaker Variation in the Use of Scots

Naomi Crawford

This study investigates young female speakers from Scotland to determine to what extent they use Scots dialect features in their written tweets and spoken language. It analyses the production of variation in phonology, morphosyntax, and lexis. The study finds that the speakers' dialect does appear in their written language, to varying degrees. The analysis presents possible explanations for the variation, including influence from extralinguistic factors such as audience and identity. The study shows a need for further research in this field to widen the scope to encompass different genders and geographical regions.

## 1 Introduction

With the rise of the Internet and mobile phones the way we communicate is changing: the traditionally separate oral and written traditions are merging (Holtgraves 2011). Twitter is a growing platform for networking and self-expression particularly among young people, with over 310 million monthly active users (TwitterCompanyFacts 2016). Oulasvirta et al. (2009) characterise micro-blogging platforms such as Twitter as being a space for the rapid disclosure of current events and experiences with the same instantaneous nature as text messaging. The field of the study of computer-mediated communication is still relatively new, and while previous research has shown that tweets contain highly non-standard orthography (Puniani et al. 2010), in part, to meet the demands of synchronous conversation (Eisenstein et al. 2014), there has been little research into intraspeaker variation between tweeted and spoken language. With this gap in research in mind, this study aims to investigate to what extent speakers' language on Twitter is a reflection of their spoken dialect. Through examination of the intraspeaker variation of five young Scottish females, this study takes a stylistic perspective on Scots, looking at a range of variables across the categories of phonology, morphosyntax, and lexis.

## 2 Literature Review

### 2.1 Standardisation and its Effect on Written Language

The Scottish education system promotes the use of Standard English in both written and spoken language. This can result in a linguistic incompatibility between home and school life, particularly so in the case of working-class and minority children (Greenfield 1972). Writing is a learned mechanical process, which, in contrast to the organic process of speech, is understandably different in its mode of production, transmission, and reception (Ong 1980). For a child brought up hearing a variation of the Scots language at home, it is understandable that they would struggle with the grammar and spelling of a code that is, as far as they are concerned, a completely different language. It is, therefore, interesting to look at the informal medium of Twitter, which is characterised by non-standard forms, to determine to what extent the participants' spoken dialect has an impact on their written language. The results from this study show that there is contrast between the spoken and tweeted use of Scots features for each participant, but that, despite the contrast, the proportion of Scots forms in each participant's tweets reflects the proportion found in their speech.

### 2.2 Language Prestige in Scotland

The linguistic situation in Scotland is a complex one. In the 2011 census, 93% of the population declared that they spoke only English at home, yet 38% reported that they were Scots speakers (Scotland's Census 2011). This highlights the ambiguity of the status of Scots. Scottish speakers tend to sit somewhere on a dialect continuum (Aitkin 1984), with Broad Scots at one end and Standard Scottish English (SSE) at the other. SSE is the more formal variety of Scottish English and has the most in common with Standard English. However, its spoken use is characterised by features such as the retention of the underlying post-vocalic /r/ and the Scottish Vowel Length Rule (SVLR), whereby in certain environments such as before fricatives, /r/, and morpheme boundaries, vowels are long (Aitkin 1984). Scots is considered either a separate language or a regional dialect of English, depending on your point of view (Stuart-Smith 2004). Chambers and Trudgill (1998:3) note that a dialect is typically described as a "sub-standard, low status, often rustic form of a language generally associated with the peasantry, the working class, or other groups lacking in prestige". Many Scottish people feel this way about the Scots language. In

Scotland, SSE is the prestige variety typically associated with educated, middle-class speakers (Robinson and Crawford 2001). In comparison, Scots is seen as the vernacular, synonymous with the working class, violence, drugs, and general social malaise (Lawson 2012).

However, this has not always been the common attitude towards Scots. Previously the language of the Scottish monarchy and government, it reached its peak in the 15<sup>th</sup> century (McClure 1988), with extensive literature and legal articles. Scots was an equal to English and the two languages were closely related, but they have diverged over time for political, social, and geographical reasons (McClure 1988). Due to a lack of standardisation (Meurman-Solin 1997) and the union of the crowns, Scots lost its social prestige to English, which gradually became the language of education, the Church, and the court. Görlach (1998:13) describes Scots as a “half-language”, never quite making it back to its independent status.

In contemporary Scotland, strongly negative attitudes are often held towards urban, or contemporary Scots. However, these coexist alongside a fierce national cultural pride, whereby every year around the Burns Night celebration in January, “rustic Scots” takes centre stage in schools, homes, and in the media in the form of Robert Burns’ poems being read and performed (Williamson 1982:387). This juxtaposition serves to highlight the hypocrisy of stereotypical middle-class Scots who will happily recall their heritage using the vocabulary and pronunciation of Burns, yet shudder at the thought of, for example, the language used by the author Irvine Welsh (Stuart-Smith et al. 2007).

### 2.3 Style-shifting

Both linguistic and extralinguistic factors are known to contribute to language variation. The extralinguistic factors include a division between the social and stylistic dimension accounting for interspeaker and intraspeaker variation, respectively (Bell 1984), as well as other psychophysiological factors. Romaine (1980:228) notes that the two spheres are intrinsically related as “the socially diagnostic variables will exhibit parallel behaviour on a stylistic continuum”. Bell (1984:151) expands on this with respect to audience design: “variation on the style dimension within the speech of a single speaker derives from and echoes the variation which exists between speakers on the ‘social’ dimension”. He builds on this theory to describe how the audience affects a speaker’s style. In this framework, intraspeaker variation occurs as a result of accommodation, whereby the speaker’s speech style changes to converge towards the addressee, for example, in order to win approval (Giles and Powesland 1975). Speakers can either converge or diverge in their speech style in order to affiliate with or distance themselves from the interlocutor. Convergence is more common than divergence (Giles and Clair 1979). There have, however, been various studies which have found divergence to be a popular choice to win approval through conveying respect for the interlocutor’s autonomy (Thakerar et al. 1982). Speakers may also choose divergence to dissociate themselves from their interlocutor in order to show a distinct personal identity.

Another factor which affects a speaker’s style is topic, the effect of which Bell (1984) suggests comes from those addressee types that the speaker associates with a given topic. For instance, and relevant to the subject of the present study, previous work has shown that a shift in topic could trigger a switch from standard to local dialect (Auer 1984, Blom and Gumperz 1972, Douglas-Cowie 1978). Local forms may be injected to provide some humorous or anecdotal element (Görlach 1998); alternatively, standard forms may be used as a way of showing supposed intellectual superiority or authority in an otherwise dialectal conversation (Blom and Gumperz 1972). Topic changes trigger style-shift in speech, so it seems reasonable to suggest they may also be a factor in online discourse.

#### 2.3.1 Style-shifting in Scotland

The participants, like other Scottish speakers on the dialect continuum, are often considered to be unaware of the extent of their own style-shifting. However, this has been disputed (Schilling 2013, Kiesling 2009), with many sociolinguists agreeing that all speech is self-conscious to a certain degree, and when it comes to variation in the use of lexical items, speakers are more likely to be especially aware of their speech and may choose certain vocabulary for various stylistic or pragmatic purposes (Dossena 2005). Awareness of particular features implies that these features carry some kind of salience and are sociolinguistic markers that speakers are aware of, and they are therefore subject to stylistic variation (Llamas et al. 2009). With certain features, particularly grammatical ones, the “Scotticism” may be covert (Aitkin 1984), meaning that there are a number of expressions liable to be mistaken for English and used without the speaker’s awareness of the form being uniquely Scottish (McClure 1994). Some examples include *where do you stay?* ‘where do you live?’, *skelf* ‘splinter’, and *pinky* ‘smallest finger’. Many Scots use these phrases assuming that they are standard English. In contrast, more overt “Scotticisms” include *gies a shot then* ‘give me a turn now’ and *laddie* ‘boy’, where people are aware that these phrases are not used outside of Scotland. In their study of natural conversations in SSE, Brown and Miller (1980) found that participants did not “shift” in style but rather blended, as it was very difficult to separate the two sides of the continuum and identify what factors had triggered changes.

## 2.4 Language and Identity

Language is intrinsically linked to identity, a connection which is of relevance to this study as each participant has (at least) two facets to their identity that are explored—the persona they choose to cultivate and share on the online social media platform and their persona with friends in a casual setting. During their lifetime, people may move in and out of “communities of practice” (Eckert and McConnell-Ginet 1995), where they continually evolve their identities. For each different community there is a different linguistic style, and what style a speaker chooses expresses their affiliation with certain communities and their distance from others (Eckert and McConnell-Ginet 1995, Irvine 2001, Johnstone and Bean 1997). Language is a strong source of identity for minorities, such as the Scots within the United Kingdom, and the wider English-speaking world. Smith (1996:167) writes “choosing Scots or English is in one sense a statement of social solidarity”. People have strong positive or negative feelings about Scots because how they communicate is an integral part of their identity. In close-knit communities, the strong bonds between members resist the pressures for outside change. This is how such communities are able to maintain and sometimes enforce local social and linguistic norms (Milroy and Milroy 2010). These networks tend to be strongly localised and kin-based, and can provide a shelter for stigmatised urban varieties (Milroy and Milroy 2010).

Struggles over ethnic or regional identity are often linked to linguistic markers (Bourdieu and Thompson 1991), and there is a longstanding association between the ideologies of race and language (Bauman and Briggs 2000). In the 2011 census, 62% of the population reported that they identified as Scottish, with 18% reporting Scottish and British, and only 8% British only (Scotland’s Census 2011). The statistics show that the majority of Scottish people only identify as Scottish, despite their position as part of the United Kingdom. This clash of cultures may suggest why people have such mixed attitudes towards their national language, and why it is so important to some, as cultural factors play such an important role in the diffusion of, and resistance to, language change (Eisenstein et al. 2014).

## 3. Methodology

### 3.1 Participants

Five participants were chosen from a single social group of females aged 19–21. This social group was chosen because young people are often “outcome independent” users of Twitter (Soulo 2014), which means that, unlike celebrities or brands, they are not as focussed on amassing likes, retweets, or followers; they just tweet for fun. Young females have also been established as innovators of linguistic change (Labov 2001, Macafee 1994), so these young females should provide insight into the current linguistic situation.

#### 3.1.1 Participant Background

All of the participants were born in Falkirk Royal Infirmary and have grown up in the greater Falkirk area, going to local schools. They also all worked in the local McDonald’s during the same time period. These factors would suggest that their speech should be similar, since those who undertake the same social practices tend to have a group identity (Eckert and McConnell-Ginet 1995). As well as this, each of the participants follow one another on Twitter, meaning they are part of a multiplex network combining oral and written communication (Milroy and Milroy 2010).

Some details about the participants’ backgrounds, including factors which could influence linguistic variation are outlined in Table 1. The participant names are pseudonyms. Residence refers to their place of residence at the time of data collection (1 February 2016). Education refers to either completed or in-progress degrees.

**Table 1:** Participant profiles

<i>Participant</i>	<i>Residence</i>	<i>Education</i>
Ivy	Glasgow	University of Strathclyde
Daisy	Falkirk	University of Strathclyde
Rose	Denny	Glasgow Caledonian University
Holly	Denny	Forth Valley College
Lily	Falkirk	Edinburgh College

### 3.2 Data Collection

Given that each of the participants uses Twitter in an informal manner—as a stream of consciousness, or casual chat with other users—the interview was designed with the goal of reflecting that informality in order to examine the relationship between their spoken and tweeted language. The participants were interviewed in pairs in an informal setting for 40–50 minutes. The interviews were conducted in the participants’ homes and each of the participants was known to their partner and the interviewer, avoiding any asymmetrical relationships which

may have harmed the informality of the interview (Labov 1970). The interview was recorded discreetly with a small recording device in an attempt to reduce the level of interviewee self-consciousness and approximate natural speech.

A web-based Twitter analytics tool, Twitonomy, which enables statistical analysis of each user's account, was used to download approximately 3000 tweets from each participant as an Excel spreadsheet. These initial 3000 tweets were then filtered to only include original content, so tweets which had originally been published by other users (retweets) were excluded. Variables were selected (see Sections 3.3), and then counted using filter and search tools for each participant's Twitter and speech data. This was contrasted with the other English options available to them and presented as a percentage showing the proportion of Scots forms over other forms for each context.

### 3.2.1 Participants' Twitter Statistics

Statistics regarding the participants' Twitter history, accessed via Twitonomy, have been included to see whether their online habits might be correlated with their patterns of language use.

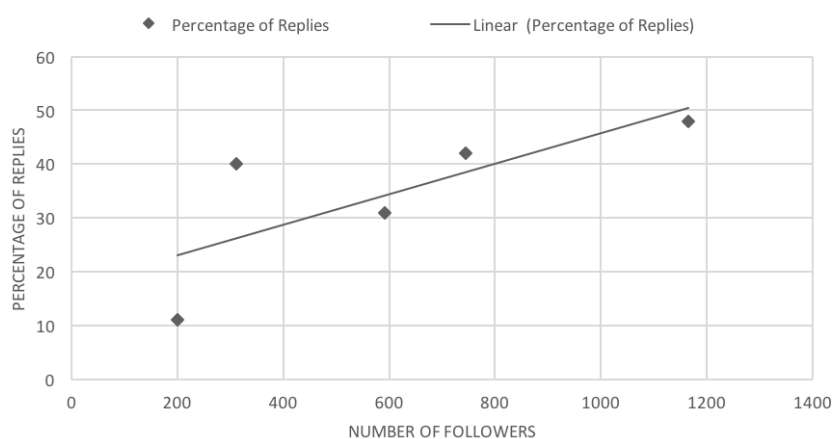
**Table 2:** Participants' Twitter history and usage as of 01/02/16

	<i>Active since</i>	<i>Total tweets</i>	<i>Sample tweets</i>	<i>Followers</i>	<i>RTs<sup>1</sup></i>	<i>Original tweets</i>	<i>Replies</i>
<i>Ivy</i>	2011	4287	3082	201	18%	2527	11%
<i>Daisy</i>	2013	7414	3147	311	28%	2266	40%
<i>Rose</i>	2010	11441	3091	591	51%	1515	31%
<i>Holly</i>	2011	20828	3185	1166	6%	2644	48%
<i>Lily</i>	2012	10693	3131	745	18%	2567	42%

Table 2 shows that the participants had all been active Twitter users for at least 3 years at the time of data collection. Ivy and Holly have both been users since 2011, yet Holly has over five times the number of Ivy's tweets. This suggests that she is a much more active user, who generates much more content. While Rose also has a large number of tweets, 51% of those are retweets, which means that she has a much lower proportion of original content. The table shows that of Rose's 3000+ sample tweets, only 1515 were able to be analysed, which is substantially less than the other participants.

Another factor to be considered is the number of followers each participant has, and how often they directly interact with the participant (replies). The larger the number of followers, the more your audience type changes (Bell 1984). When replying directly to a follower, you have an audience who is known, ratified, and addressed: an *addressee* in audience design theory. Users who do not have a high proportion of replies do not have as much direct contact with other users, and therefore their audience is nearly entirely *eavesdroppers* or *overhearers*.

It is to be expected that a user who has a high number of followers is more likely to interact with a larger number of users. Figure 1 reveals this to be the case, showing a positive correlation between number of followers and percentage of replies, meaning that participants with a large number of followers connect with other users on Twitter more frequently than those with few followers.



**Figure 1:** Correlation between number of followers and percentage of replies.

<sup>1</sup> Some users create very few posts of their own and simply republish, or "retweet", others' posts.

### 3.3 Features

The variables chosen are reflective of all areas of the urban Central Scots dialect, including phonology, morphosyntax, and lexis.

#### 3.3.1 Phonology

The features chosen were:

- (1) MOUTH lexical set
- (2) FOOT lexical set
- (3) /θ/ > /h/
- (4) L-vocalisation

Vowel pronunciations dating back to Old and Middle English are a common feature of Scots. Scots retained the long monophthong in words like *about* and *down* (both members of the MOUTH set), which have been diphthongised in many other varieties of British English (Dossena 2005). Th-debuccalisation from /θ/ > /h/ is an innovation driven by working-class youths and is prevalent in Glasgow and other areas of the Central Belt (Stuart-Smith et al. 2007). L-vocalisation is another persistent and vigorous feature of working-class speech, particularly among adolescents (Stuart-Smith et al. 2007). The lexical item *all* was shown to have a very high degree of Scots forms in a previous study, hence its inclusion here (Macafee 1988).

The specific tokens searched for included: *oot* ‘out’; *doon* ‘down’; *gid, guid* ‘good’; *hing* ‘thing’; *hink* ‘think’; *suhin* ‘something’; *nuhin* ‘nothing’; and *aw* ‘all’. Each of these was chosen due to their likelihood of appearing given the topics of discussion, and because they were easy to count in the data.

#### 3.3.2 Morphosyntax

The features chosen were:

- (1) *-nae* negation
- (2) *no* negation
- (3) *yous* 2<sup>nd</sup> person plural pronoun
- (4) *telt* -t past tense

In Scots, the verb is negated by either the independent word *no* or the English variant *not*, or by the dependent forms *-nae* and *-n’t*. *Nae* is the suffix added to all modal verbs and to DO (Miller 1993). The tokens searched for included *isnae, dinnae, and cannae* as well as forms such as *isny, dinni, canny, and canni* to allow for spelling variation. *No* is paired most frequently with BE and the next most frequently with ‘ll and the reduced forms of *have* and *has*. This feature is also prominent in tag questions (*That’s next week, is it no?*) (Miller 1993). *Yous* is considered a feature of Irish English, but over the years has become a feature of urban Scots when the referent is more than one person. Occasionally it is spelt as *use* or *youse*, so those variants were also searched for, with the variant *use* filtered out when used as a standard lexical item. The Scots inflectional system used the suffix *-it* for weak past tense construction (Miller 2004). A reduced form of this is in use today in certain lexical items such as *telt* and *selt*. *Selt* (or *sellt*) did not come up in the data and so was disregarded.

#### 3.3.3 Lexis

The features chosen were:

- (1) *lassie* ‘girl’
- (2) *crabbit* ‘annoyed’ ‘grumpy’
- (3) *feart* ‘scared’
- (4) *ken* ‘know’
- (5) *yin* ‘one’
- (6) *aye* ‘yes’

All of these words are overtly Scots and date from as far back as the 1300s (“OED Online” 2016). They were also words which I knew were used by the participants in casual conversation.

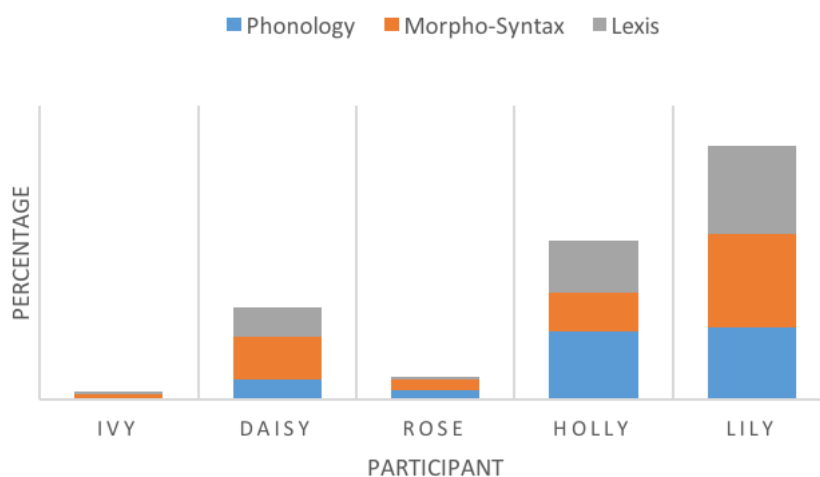
## 4. Results

The first main result is that contrasts exist between the spoken and tweeted language for each participant. Despite online messaging and texting being a form of written communication that allows for spelling variants communicating informality and brevity (Tagg 2009), the standardising influence of the education system means that there is still a noticeable difference in the percentage of Scots forms used in the tweets in comparison to the speech data. Table 3 shows the results for each category:

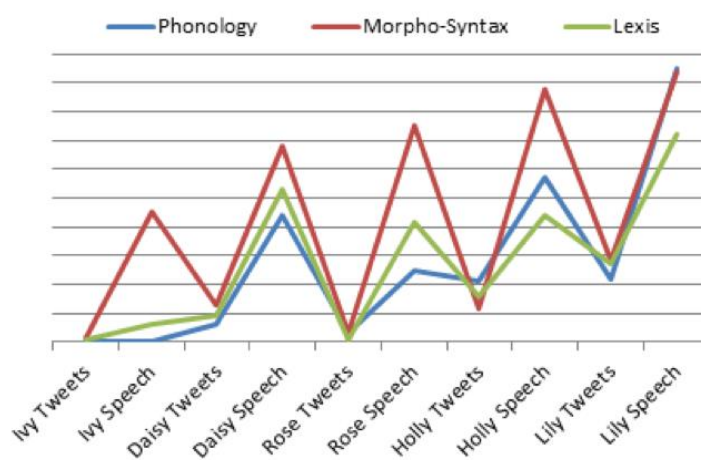
**Table 3:** Percentage of Scots forms (Twitter/speech)

<i>Participant</i>	<i>Pronunciation</i>	<i>Morphosyntax</i>	<i>Lexis</i>
Ivy	0/0	1.5/45	1/6
Daisy	6/44	13/68	9/53
Rose	3/25	3/75	1/41.5
Holly	21/57	11.5/88	16/44
Lily	22/95	28.5/94	27/72

Figure 2 shows the combined percentages of Scots forms used by each participant in their tweeted language. It is clear that some participants use substantially more Scots forms than their peers. The percentage of Scots forms shown in the graphs is drawn from the total number of instances recorded (number of Scots/number of Scots + number of non-Scots).



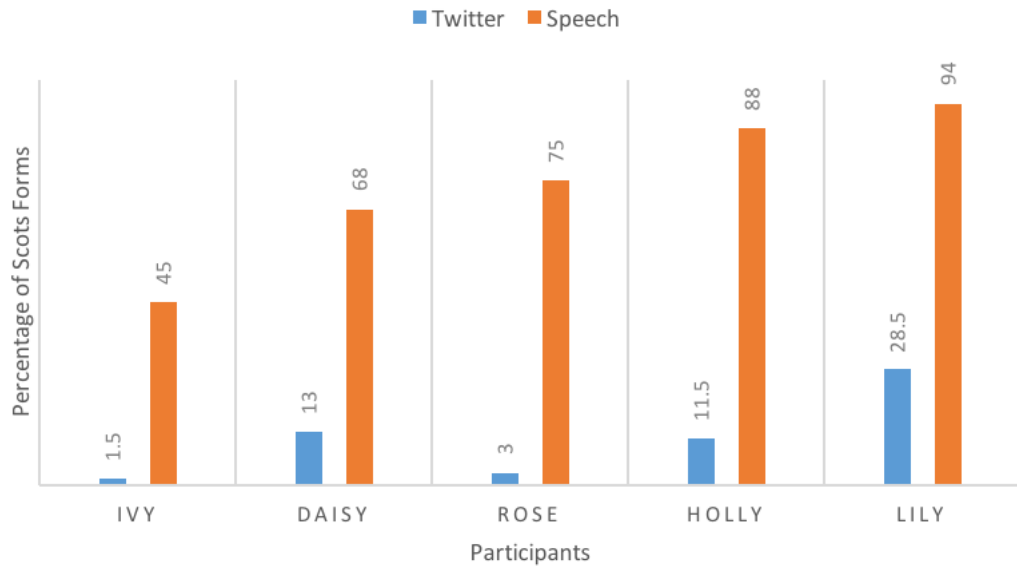
**Figure 2:** Combined percentage of Scots forms in Twitter data.



**Figure 3:** Comparison of Scots forms in Twitter and speech data.

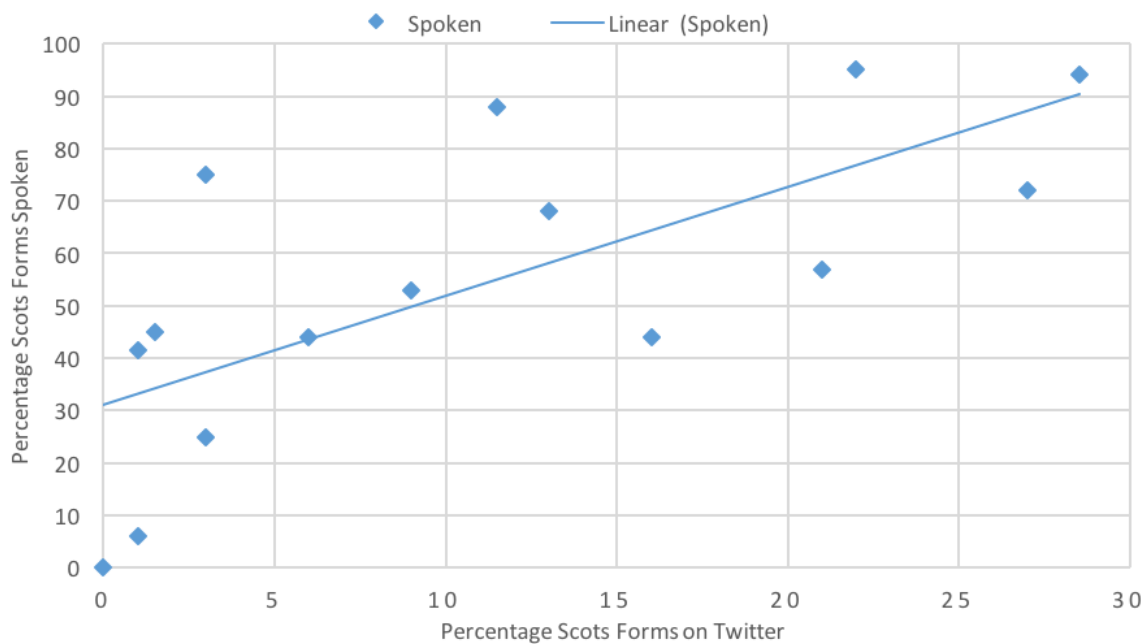
Figure 3 shows a consistent finding, which confirms that there is a marked difference between the proportions of Scots forms found in the Twitter data compared to the speech data. Not only is there a difference, but there are also consistently more forms found in the speech data. It is also interesting to note the sharp distinctions between the three categories, with Scots morphosyntactic forms being common in speech yet substantially less frequently observed in tweets.

From Figure 3 we can see that Ivy uses no Scots forms in either her pronunciation or in her tweets. In contrast, Lily, who consistently uses Scots forms in her speech, has the same percentage of Scots in her tweets as Holly, who only uses Scots forms in her tweets 57% of the time. The comparison with the morphosyntactic data reveals that the participants have a high frequency of these forms in their spoken language, overall.



**Figure 4:** Percentage of Scots forms in morphosyntax.

Figure 4 shows a much higher proportion of Scots forms in the spoken data across all participants, including Ivy, who, as we have already seen, had no Scots forms in either spoken or tweeted language for the category of phonology. The higher speech proportions overall are therefore likely due to the morphosyntactic variables. While Daisy, Holly, and Lily show comparable patterns, Rose displays a much larger difference between her use of Scots in tweets and her use of Scots in speech, with a difference of 72 percentage points.



**Figure 5:** Correlation in Scots usage in pronunciation, morphosyntax, and lexis.



Figure 5 shows these data in another way by plotting the correlation between the percentages of Scots forms in the Twitter data compared with the corresponding percentages from the speech data. We see a strong positive correlation. However, there are a few outliers in the graph, which reflect the inconsistencies found in the data: for example, Rose's results for morphosyntax, which showed a very high percentage of Scots forms in her speech, yet this was not proportionally represented in her tweets.

## 5. Discussion

The results show a clear indication that there is a relationship between the use of Scots in online writing and the use of Scots in spoken interaction. Speakers who used more Scots in their speech were generally more likely to use Scots in their tweets. However, one speaker, Rose, was an exception to the overall trend in that her percentage of Scots in tweets was not in proportion to the percentage spoken. One explanation for this is Rose's online identity and personality. In this study, some of the variables were biased towards negativity, namely, two of the morphosyntactic variables and two of the lexical items, *feart* and *crabbit*. Rose can be described as generally avoiding negativity. Overall, she is more likely to use affirmative as opposed to negative phrasing.

- (1) Example tweet from Rose's data:  
 (i) so so exciteeed for the weeknd

- (2) Example tweet from Holly's data:  
 (i) canny wait for friday now

The meaning of (1i) and (2i) is almost the same; however, each participant has chosen to phrase it differently. If Rose's structure tends to be more positive, then it can be argued that her tweets will contain fewer instances of the negatively biased tokens *-nae* and *no*. In addition to this, if another aspect of her identity is taken into consideration, namely, her positive outlook, then it can be further argued that less negative lexis would be used by her. An analysis of the content of Rose's tweets shows that she often tweets about humorous events in her daily life or expresses excitement about upcoming events:

- (3) Further example tweets from Rose's data:  
 (i) Av actual just got a text from Nicks mum askin if a know where he is, he's actual gon to Newcastle for the weekend and not told his mum wtf  
 (ii) A month today and al be in London seein JB eeeee

When screened for negativity, by searching for both the Scots and non-Scots variants of the negatively biased morphosyntactic features in the sample tweets, Rose had a far lower percentage (5.6%) than Ivy (10.1%), Daisy (11.3%), Holly (15.2%), and Lily (11.6%). This pattern was also reflected in the spoken data, although not as strongly, with Rose once again lower (12.2%) than Ivy (17.9%), Daisy (16.3%), Holly (19.6%), and Lily (18.9%). The conversation opener was "How has your day been?", which in every case was followed by the participant discussing their studies. As it was mid-semester, final exams and assessments were looming, causing a somewhat negative tone. Gosling et al. (2002:381) noted that people are known to unintentionally leave "personality-related behavioural residue" in both their physical and virtual environments. This provides an explanation for the difference in styles between the participants, as well as the relationship between the spoken and tweeted data. Their online personas are an extension of their identities, and Twitter is an environment which actively encourages people to record thoughts and feelings (Oulasvirta et al. 2009). So, Rose's naturally upbeat personality is reflected in her online presence.

Lily's Twitter data also show the importance of topic or key:

- (4) Examples of tweets from Lily's data:  
 (i) Pure hate how when ur mwi u hink everythings acceptable when its absolutely no  
 (ii) sportsters wis actual deed last night, kerry still managed to get chucked out tho  
 (iii) I will honestly be so sad if Scotland votes no

These two tweets convey very different tones. In (4i) the use of the Scots forms arguably lends a comedic element to the content. Similarly, Coupland (2001) has shown that radio DJs in Cardiff use different variants from the local dialect to act out certain joking keys. This is juxtaposed with the more sombre appeal to reason in (4iii). The injection of Standard English suggests a different element of her identity—someone who wants to be taken seriously. In shifting to this style, she diverges from the persona constructed in (4i). (4iii) refers to the Scottish Independence Referendum (indyref) in 2014, and it has been shown that users are less likely to use

Scots features in referendum-related tweets (Shoemark et al. 2017). This ties into her audience. Lily has a public account, meaning that anyone can access her tweets, and it can be argued that she is making an appeal to a wider audience with regards to indyref, rather than just the Scots-speaking community that she usually engages with via her retweets and replies. These two examples further show that in Scotland there are two competing prestige varieties: the overt prestige, SSE, which gives the audience the impression of an educated, respectable individual, and Scots, which might be described as carrying covert prestige, and allows speakers to feel included in a community. The comparison highlights the adaptability of these speakers, as they are able to adapt their persona as required based on the local dynamics, or whichever identity they wish to display (Eckert and McConnell-Ginet 2003). For some speakers, it seems that the two ends of the continuum are almost in complementary distribution. In their spoken language, Scots is for family and friends, whereas SSE is the language of work and education. In their tweeted language this separation also exists and is reflected in the mood and topic of their posts. The switch to SSE when tweeting on the topic of the indyref could be acknowledged as a conscious effort to go against the generalisation that all “Yes” voters are unaware of the facts and biased by emotional patriotism, while the Better Together campaign paints a rational and reasoned argument for the “No” voters. Changing to the standard variety could lend a greater sense of credibility to supporters of independence.

Ivy uses the least amount of Scotticisms in her speech, which is reflected in the lack of Scotticisms in her tweets. This reveals something about the identities she has created for herself. Unlike the other participants, she lives in multi-cultural Glasgow, surrounded by students and professionals. In her surroundings, it is important for her to make herself understood, so she is aware of her audience. Ivy showed consistency in her results—she did not have many Scots forms in her speech and this was reflected in her tweets. However, she did show a surprisingly high amount of Scots morphosyntactic forms. The reason for the lack of these forms in her tweets could be due to a lack of user interaction on Twitter in comparison to the other participants. With only 11% of her tweets being replies to other users, Ivy had a much lower reply rate than the others, which means that her tweets have less of a conversational element. This has perhaps prompted a more formal tone.

Despite having public profiles, I do not believe that the participants gave much thought to the eavesdroppers and overhearers of their tweets, at least certainly not on a global scale. Social media facilitates instant communication across the globe, yet the adoption of particular written forms is often marked out by geography and demographics (Eisenstein et al. 2014). Certain language features spread in online communication such as Twitter. It provides an intriguing insight into certain communities which seem to evolve together. The modern example of this type of tight-knit community can be found on social media platforms such as Twitter, either in the way that these young people communicate directly with each other, or also in the retweets. Retweeted content was excluded from this study, as it was designed to focus on intraspeaker variation. However, it is relevant as tweets can become viral from retweeting and being shared among the community. This provides exposure to certain linguistic forms, which, in turn, are likely to influence the participants. Between replying to friends and this exposure to a certain community it is possible that this would influence the particular language style the participant would use. Tweets (3i) and (4ii) help to show this idea of community. Rose describes an amusing event concerning Nick, which presumes that her audience knows this person. Likewise, Lily recalls her friend Kerry being removed from a club. Although their profiles are public, they are part of a community in which other users are aware of the people described, and not only read the tweets but also interact with them. However, a change in topic can alter the perception of community, as seen in regards to the indyref.

## 6. Conclusion

The analysis of the use of Scots forms by five young Scottish women has shown that while a contrast does exist between spoken and tweeted language, there is a positive correlation between the proportion of Scots dialectal forms found in the tweets and in speech. There were, however, many fewer occurrences of Scots tokens in the Twitter data than I had expected. I suspect this is due to the widespread standardisation of written English and the subsequent lack of prestige given to Scots in education.

Unfortunately, the sample size was small and limited to only young females from the Central Belt. This research question would benefit from further research on a larger scale. It would be interesting to compare the results across both genders, but more importantly to test other regions in order to identify whether or not the use of regional varieties in tweets is limited to Scotland, or if it is a more widespread phenomenon. It would be particularly interesting to compare regions such as Yorkshire or Cornwall, which also have strong regional identities and dialects but without the historical independence that Scotland has.

## References

- Aitkin, Adam J. 1984. Scottish accents and dialects. In *Language in the British Isles*, ed. P. Trudgill, 94–114. Cambridge: Cambridge University Press.
- Auer, Peter. 1984. *Bilingual Conversation*. Philadelphia: John Benjamins Publishing Company.
- Bauman, Richard, and Charles L. Briggs. 2000. Language philosophy as language ideology: John Locke and Johann Gottfried Herder. In *Regimes of Language: Ideologies, Politics, and Identities*, ed. P. V. Kroskrity, 139–204. Santa Fe, N.M.: School of American Research Press.
- Bell, Allan. 1984. Language style as audience design. *Language in Society* 13(2):145–204. <https://doi.org/10.1017/s004740450001037x>
- Blom, Jan-Petter, and John J. Gumperz. 1972. Social meaning in linguistic structure: Code switching in Norway. In *Directions in Sociolinguistics*, ed. J. J. Gumperz and D. Hymes, 407–434. New York: Holt, Rinehart & Winston.
- Bourdieu, Pierre, and John B. Thompson. 1991. *Language and Symbolic Power*. Cambridge: Polity/Basil Blackwell.
- Brown, Edward K., and Jim Miller. 1980. Scottish English. *End of Grant Report to Social Science Research Council*.
- Chambers, Jack K., and Peter Trudgill. 1998. *Dialectology*. Cambridge: Cambridge University Press.
- Coupland, Nikolas. 2001. Dialect stylization in radio talk. *Language in Society* 30(3):345–375.
- Dossena, Marina. 2005. *Scotticisms in Grammar and Vocabulary: 'Like Runes upon a Standin' Stane'?* Edinburgh: Edinburgh: J. Donald.
- Douglas-Cowie, Ellen. 1978. Linguistic code switching in a Northern Irish village: Social interaction and social ambition. In *Sociolinguistic Patterns in British English*, ed. P. Trudgill, 37–51. London: Edward Arnold.
- Eckert, Penelope, and Sally McConnell-Ginet. 1995. Constructing meaning, constructing selves: Snapshots of language, gender and class from Belten High. In *Gender Articulated: Arrangements of Language and the Socially Constructed Self*, ed. K. Hall and M. Bucholtz, 469–507. New York: Routledge.
- Eckert, Penelope, and Sally McConnell-Ginet. 2003. *Language and Gender*. Cambridge: Cambridge University Press.
- Eisenstein, Jacob, Brendan O'Connor, Noah A. Smith, and Eric P. Xing. 2014. Diffusions of lexical change in social media. *PLoS ONE* 9(11): e113114. <https://doi.org/10.1371/journal.pone.0113114>
- Giles, Howard, and Robert N. St. Clair. 1979. *Language and Social Psychology*. Oxford: B. Blackwell.
- Giles, Howard, and Peter F. Powesland. 1975. *Speech Style and Social Evaluation*. London: Academic Press.
- Görlach, Manfred. 1998. *Even More Englishes: Studies 1996–7*. Amsterdam: John Benjamins.
- Gosling, Samuel D., Sei Jin Ko, Thomas Mannarelli, and Margaret E. Morris. 2002. A room with a cue: Personality judgments based on offices and bedrooms. *Journal of Personality and Social Psychology* 82(3):379–398. <https://doi.org/10.1037//0022-3514.82.3.379>
- Greenfield, Patricia M. 1972. Oral or written language: The consequences for cognitive development in Africa, the United States, and England. *Language and Speech* 15(2): 169–178.
- Holtgraves, Thomas. 2011. Text messaging, personality, and the social context. *Journal of Research in Personality* 45(1): 92–99. <http://dx.doi.org/10.1016/j.jrp.2010.11.015>
- Irvine, Judith. 2001. “Style” as distinctiveness: The culture and ideology of linguistic differentiation. In *Stylistic Variation in Language*, ed. P. Eckert and J. Rickford, 21–43. Cambridge: Cambridge University Press.
- Johnstone, Barbara, and Judith M. Bean. 1997. Self-expression and linguistic variation. *Language in Society* 26(2):221–246. <https://doi.org/10.1017/s0047404500020911>
- Kiesling, Scott F. 2009. Style as stance: Stance as an explanation for patterns of sociolinguistic variation. In *Stance: Sociolinguistic Perspectives*, ed. A. Jaffe, 171–194. Oxford: Oxford University Press.
- Labov, William. 1970. The logic of non-standard English. In *Georgetown Monograph Series on Languages and Linguistics* (Vol. 22), ed. J. E. Alati, 1–44. Washington DC: Georgetown University Press.
- Labov, William. 2001. *Principles of Linguistic Change: Social Factors* (Vol. 2). Oxford: Blackwell.
- Lawson, Robert. 2012. Patterns of linguistic variation among Glaswegian adolescent males. *Journal of Sociolinguistics* 15(2):226–255. <https://doi.org/10.1111/j.1467-9841.2011.00477.x>
- Llamas, Carmen, Dominic Watt, and Daniel E. Johnson. 2009. Linguistic accommodation and the salience of national identity markers in a border town. *Journal of Language and Social Psychology* 28(4):381–407. <https://doi.org/10.1177/0261927x09341962>
- Macafee, Caroline. 1988. Some studies in the Glasgow vernacular. Doctoral dissertation, University of Glasgow.
- Macafee, Caroline. 1994. *Traditional Dialect in the Modern World: A Glasgow Case Study*. Frankfurt: Peter Lang.
- McClure, J. Derrick. 1988. *Why Scots Matters*. Tillicoultry: W. M. Bett Ltd.
- McClure, J. Derrick. 1994. English in Scotland. In *Cambridge History of the English Language, Vol. 5: English in Britain and Overseas*, ed. R. W. Burchfield, 21–93. Cambridge: Cambridge University Press. <https://doi.org/10.1017/chol9780521264785.003>
- Meurman-Solin, Anneli. 1997. Differentiation and standardisation in Early Scots. In *The Edinburgh History of the Scots Language*, ed. C. Jones, 3–23. Edinburgh: Edinburgh University Press.
- Miller, Jim. 1993. The grammar of Scottish English. In *Real English: The Grammar of English Dialects in the British Isles*, ed. J. Milroy and L. Milroy, 99–138. London: Longman.
- Miller, Jim. 2004. Scottish English: Morphology and syntax. In *A Handbook of Varieties of English*, ed. B. Kortmann and E. W. Schneider, 299–326. New York: Mouton de Gruyter.
- Milroy, Lesley, and Milroy, James. 2010. Social network and social class: Toward an integrated sociolinguistic model. In *The Routledge Sociolinguistics Reader*, ed. M. Meyerhoff and E. Schlee, 392–408. Abingdon: Routledge.
- “OED Online”. 2016. [Online dictionary]. Accessed 1 March 2016, <http://www.oed.com/>

- Ong, Walter J. 1980. Literacy and orality in our times. *Journal of Communication* 30(1):197–204. <https://doi.org/10.1111/j.1460-2466.1980.tb01787.x>
- Oulasvirta, Antti, Esko Lehtonen, Esko Kurvinen, and Mika Raento. 2009. Making the ordinary visible in microblogs. *Personal and Ubiquitous Computing* 14(3):237–249. <https://doi.org/10.1007/s00779-009-0259-y>
- Robinson, Chris, and Carol Ann Crawford. 2001. *Scot Speak*. Glasgow: Bell and Bain Ltd.
- Romaine, Suzanne. 1980. Stylistic variation and evaluative reactions to speech: Problems in the investigation of linguistic attitudes in Scotland. *Language and Speech* 23(3):213–232.
- Schilling, Natalie. 2013. Investigating stylistic variation. In *The Handbook of Language Variation and Change*, ed. J. K. Chambers and N. Schilling. Oxford: John Wiley & Sons, Inc.
- Scotland's Census. 2011. [Online census resource by National Records of Scotland]. Accessed 27 February 2016, <http://www.scotlandscensus.gov.uk/>
- Shoemark, Philippa, Debnil Sur, Luke Shrimpton, Iain Murray, and Sharon Goldwater. 2017. Aye or naw, whit dae ye hink? Scottish independence and linguistic identity on social media. In *Proceedings of the 15th Conference of the European Chapter of the Association for Computational Linguistics, Vol. 1*, 1239–1248. <http://www.aclweb.org/anthology/E/E17/E17-1116.pdf>
- Smith, Jeremy J. 1996. *An Historical Study of English—Form, Function and Change*. London: Routledge.
- Soulo, Tim. 2014. What do people tweet about & the surprising truth about what drives them [Blog post for *BloggerJet*]. Accessed 20 June 2016, <http://bloggerjet.com/what-do-people-tweet-about/>
- Stuart-Smith, Jane. 2004. Scottish English: Phonology. In *A Handbook of Varieties of English*, ed. B. Kortmann and E. W. Schneider, 47–67. New York: Mouton de Gruyter.
- Stuart-Smith, Jane, Claire Timmins, and Fiona Tweedie. 2007. Talkin Jockney? Variation and change in Glaswegian accent. *Journal of Sociolinguistics* 11(2):221–260.
- Tagg, Caroline. 2009. *A Corpus Linguistics Study of Text Messaging*. Doctoral dissertation, University of Birmingham.
- Thakerar, Jitendra N., Howard Giles, and Jenny Cheshire. 1982. Psychological and linguistic parameters of speech accommodation theory. In *Advances in the Social Psychology of Language*, ed. C. Fraser and K. R. Scherer, 205–255. Cambridge: Cambridge University Press.
- TwitterCompanyFacts. 2016. [Twitter webpage]. Accessed 1 March 2016, <https://about.twitter.com/company>
- Williamson, Keith. 1982. Lowland Scots in education: An historical survey part II. *Scottish Language* 2:52–87.