Post peer review version.
Jennifer Smith and Mercedes Durham. (2012). Bidialectalism or dialect death? Explaining generational change in the Shetland Islands, Scotland. *American Speech* 87(1): 57-88. DOI: 10.1215/00031283-1599959

Bidialectalism or dialect death? Explaining generational change in the Shetland Islands, Scotland

Jennifer Smith & *Mercedes Durham*
University of Glasgow *University of Aberdeen*

ABSTRACT: This paper investigates the use of traditional dialect forms in a community in Shetland, northern Scotland. Specifically, we seek to establish whether the younger generations' patterns of language use signal rapid dialect obsolescence or bidialectalism. We compare recordings where audience design is manipulated - the addressee is either an insider or an outsider – across a range of lexical, phonological and morphosyntactic variables. Results show that only some of the younger speakers are bidialectal: the remaining speakers use virtually no dialect forms. We suggest these findings may signal dialect shift, and predict a further move from local to standard in the coming generations. We further explore the linguistic details of the bidialectal speakers language use through a qualitative and quantitative comparison of forms across the different recordings. We find that the use of the two varieties operates on a continuum, where rates of use differ, but constraints remain the same across the two speech styles. We discuss these findings against the backdrop of bidialectalism and the process of dialect obsolescence in the British Isles and elsewhere.

INTRODUCTION. A number of studies in recent years have demonstrated *dialect levelling* in the British Isles, "a process whereby differences between regional varieties are reduced, features which make varieties distinctive disappear, and new features emerge and are adopted by speakers over a wide geographical area" (Williams & Kerswill,

1999:149). In this scenario, supralocal features replace local features, which may finally lead to dialect obsolescence in traditional varieties of English. A case in point is the variety spoken in the Shetland Islands in Northern Scotland. The dialect spoken in the main town of Lerwick is said to be undergoing rapid dialect levelling, with loss of distinctive features in the younger speakers (e.g. van Leyden 2004, Tait 2001). Our previous research on change across three generations in this community (Smith & Durham 2011) suggested that dialect obsolescence may be well-advanced in this previously relic dialect community. An analysis of a number of vernacular features gleaned from sociolinguistic interviews revealed that all of the older speakers used similar rates and patterns of use of the local forms. With the younger speakers, in contrast, half used the local forms in line with the older generations while the other half used standard variants almost exclusively. We suggested that these results may reflect the pivotal generation in dialect obsolescence, often signalled by extreme linguistic heterogeneity across a group of historically homogeneous speakers (e.g. Dorian 1994). However, there may be an alternative explanation for the use versus non-use of the dialect in the younger speakers. Bidialectalism, where an indigenous variety operates alongside more widespread norms in a community of speakers, is said to have "increased so much that monolingual speakers of non-standard dialects have become the exception" (Cornips and Hulk 2006:355). In Shetland, "knappin", the use of Scottish Standard English in place of the local variety, is assumed to be increasingly prevalent, leading Melchers (2004a:37) to observe that it is "difficult to find truly monolingual speakers of the traditional dialect today", even with families who have lived there for generations. Instead, speakers "have access to a choice of two discrete, definable forms of speech: 'English' vs. 'Shetland'" (ibid:37). If this is the case, it has important implications for the interpretation of our findings: our results may not indicate rapid dialect obsolescence per se, but merely reflect differing code choice in the sociolinguistic interview setting.

In this paper, we explore this possibility by returning to the community in question to conduct further interviews with the younger speakers. In these recordings, the "dialect speakers" in the original recordings are interviewed by an "outsider" and the "standard speakers" recorded with a dialect-speaking peer in order to manipulate audience design (Bell 1984). We replicate our previous analysis of a number of lexical,

phonological and morphosyntactic variables in this additional dataset across a range of linguistic variables. This will allow us to test whether the inter-speaker variability we found in the younger speakers is the result of "command of two regional or social dialects of a language, one of which is commonly the standard language" (OED s.v. *bidialectal*) or indicative of dialect obsolescence. The paper also has a second aim. If we do find that these younger speakers switch codes in these different settings, does this mean that they are bidialectal? Hazen (2006) points out that "no sociolinguistic study has directly addressed this supposed ability", thus defining bidialectalism in the first place may be problematic if we do not know the linguistic details of this process. We contribute to this question through further analyses of the conditioning factors operating in the different speech contexts. In doing so, we hope to uncover some of the process involved in putative bidialectalism in the Shetland Isles, the British Isles and elsewhere.

We first provide information on the research site and our previous findings.

THE COMMUNITY. The Shetland Isles is situated in the North Sea, between Norway to the east and Scotland to the south (Figure 1).

Figure 1: The Shetland Islands, Scotland

For this study, we concentrate on the main town of Lerwick (Figure 2), the commercial and industrial centre of Shetland (see detail in Smith & Durham 2011). It has a population of approximately 7,500 and is the UK's northernmost town.

Figure 2: Lerwick, Shetland

The socio-historical context of this area has had a profound effect on the dialect spoken in Shetland. It was invaded by the Vikings in the 9th century, and with these invaders came the Scandinavian language of Norn. This language largely eradicated the indigenous languages of the time and was spoken in Shetland for over 800 years (e.g. Barnes 1998:2) until it started to be replaced by Scots from the 16th century. A situation of bilingualism is said to have existed in the following period (e.g. Smith 1996) and by the beginning of the 18th century Norn as a first language was rare and had largely died out by the end of that century (e.g. Barnes 1998:27, Knooihuizen 2005, 2010). The present day Shetland dialect is described as a variety of Scots, with elements from both Older Scots and the Norn substratum still in evidence (e.g. Melchers 1991, Tait 2001:10). This results in a number of traditional lexical, morphosyntactic and phonological forms, some of which are said to result from vestiges of Norn and others from Scots. van Leyden (2004:17) points out that "There is no Scottish Standard English speaking middle class and virtually all native speakers, from manual workers to university graduates, employ the local dialect in their everyday speech" (see also Johnston 1997:449). However, it is claimed that socio-economic, cultural and demographic changes arising from a highly developed infrastructure in recent decades have led to "an unprecedented levelling of the

local varieties in recent years" (van Leyden 2004:18), particularly in the main town of Lerwick. Our previous findings on change in Lerwick support this (Smith & Durham 2011), as we demonstrate below.

PREVIOUS FINDINGS. In our initial sociolinguistic study of change in the Lerwick dialect, 30 speakers stratified by age (17-21, 45-55, 70+) and sex were targeted in order to assess change in "apparent time" (e.g. Bailey 2002). Our original recordings (henceforth 1st recordings) were conducted by natives of Shetland in 2007 using classic sociolinguistic interview techniques (see detail in Smith & Durham 2011).

We analysed a number of linguistic variables gleaned from these interviews. Here we review four, taken from different areas of the grammar[1]: lexical (1), phonological (2) morphosyntactic (3) and phonetic (4). The variables are differentiated in terms of proposed Scots and/or Norn roots: two of the variables are found in mainland Scots varieties (1 and 2) and the other two are not (3 and 4) leading some scholars to conclude that these features are relics from the Norn substratum (see detail in Smith & Durham 2011). In each of these variables, there is variation between a local/traditional variant and a Standard (Scottish) English variant.

ken vs. *know*

Use of *ken* for *know* as in (1) is a stereotype of Scots. Although it has been around since the 1300s (OED s.v. *ken*), it is still used widely in vernacular Scots today (e.g. Miller 1993).

1. a. You'd sit in and you'd *ken* a' the tunes.
   b. And I was like brilliant, do you *know* what I mean (both Lisa)

hoose vs. *house*

The second variable is the alternation between the diphthong [ʌʉ] and the monophthong [u:] as in (2), herein referred to as the *hoose* variable.

[1] In our 2011 paper, the phonological variable analysed was Scots l-vocalisation. Lack of data in our 2nd interviews precluded further analysis here, thus we substitute the *hoose* variable.

2. a. And it was right enough, you heard it more [u:]tside the h[u:]se
   b. They tracked d[ʌʉ]n instruments (both Jake)

This lexically conditioned variable belongs to the OUT (au) class (Wells, 1982) in words that have the orthographical form <ow> or <ou> as in *now*, *house*, and *down* (e.g., Johnston, 1997:474) and involves the variable use of two phonemes in a restricted lexical set. The monophthongal variant is a relic, which is considered stereotypical of Scots or more northern varieties of English (e.g., Stuart-Smith, 2003)[2].

be perfect

In the Shetland dialect, *be* can appear in perfect contexts where Standard English appears with *have* (e.g. Pavlenko 1997, Robertson & Graham 1991:11, Melchers 2004b:39, Millar 2007:75), as in (3):

3. a. I*'m* no *been* in Imelda's in a start.
   b. By the time you*'ve come* home...
   c. But I *was stayed* with one of my friends
   d. Did you have to listen to what we*'d said* (all Joanne)

Be perfect is described as "perhaps the most striking structural feature" of the Shetland dialect (Millar 2007:75) and its use is more productive when compared to either the historical record (e.g. Kytö 1997) or present day varieties of English elsewhere (e.g. Wolfram 1996, Tagliamonte 2000). This has led to considerable debate surrounding its provenance - a reflex of a Norn substratum or remnant from the history of English (e.g. Pavlenko 1997, Melchers 1996:291, 2004a) - but whatever its roots, it is not found in mainland Scots.

[2] The analysis for *hoose* is auditory. The standard and local variants are said to be discrete, rather than forming a continuum of use from monophthong to diphthong (e.g. Macafee 1997: 521, Macaulay 1991). Our initial analysis confirmed this, thus coding decisions were largely unproblematic. However, to ensure consistency of coding across different transcribers, each transcript was spot-checked by the first author.

th- stopping

The next feature we analyse is the use of so called *th*- stopping (Wells 1982:565-6) where /ð/ and /θ/ are realized as stops rather than fricatives, as in (4).

4. Like /ð/at one there /d/at we did. (Mark)

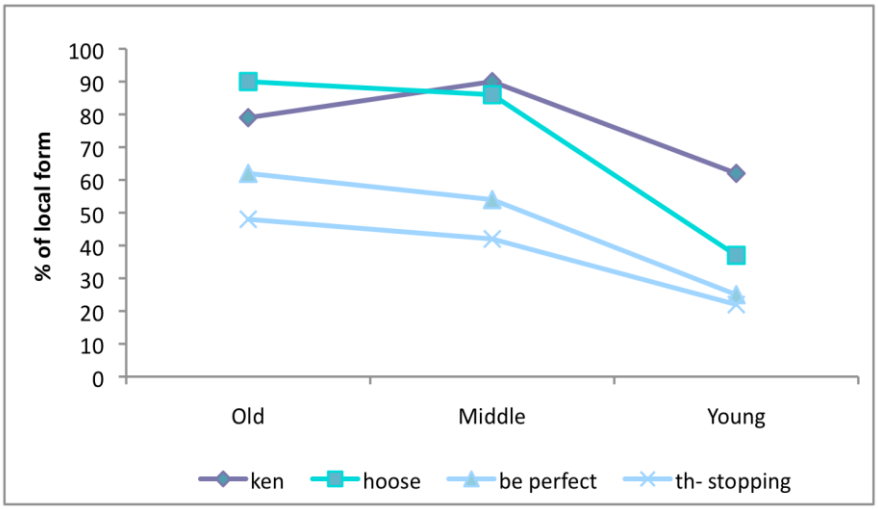
The use of [d] and [t] for /ð/ and /θ/ in word initial and medial positions "is a general feature of Shetland speech" (van Leyden 2004:20), especially amongst "traditional dialect speakers" (Millar 2007:62). Melchers (2004b:42) goes as far as to say that it is "…categorical in Shetland accents, unless adapted to outsiders". As with *be* perfect, there is debate regarding its etymology (see e.g. Barnes 1998, Melchers 2004a:42), but like *be* perfect, it is also not found in mainland Scots varieties. For this analysis, we concentrated on contexts of voiced dental fricatives only[3].

When we analysed these variables across the three generations of speakers, perhaps not surprisingly, we found that there was a decrease in use of the traditional form in apparent time, as shown in

Figure 3:

[3] The analysis of th- stopping was auditory. However, in contrast to the *hoose* variable, we recognise a cline of variants exist with this variable. For the current analysis, we divide the data into two main categories - stops and fricatives but see Smith, Holmes & Durham (in progress) for a more detailed breakdown of variants.

Figure 3: Overall rates of 4 variables by age.



Closer analysis of individual use within each age cohort demonstrated that with the older and middle aged speakers, there was generally homogeneity of use: each individual demonstrated intra-speaker variation, and allowing for statistical fluctuation, had similar rates of the local forms. However, the younger speakers demonstrated a different pattern of use. Figure 4 shows the use of the four variables across the younger cohort, divided by individual speaker.

Figure 4: Rates of local forms across 4 variables in the younger speakers

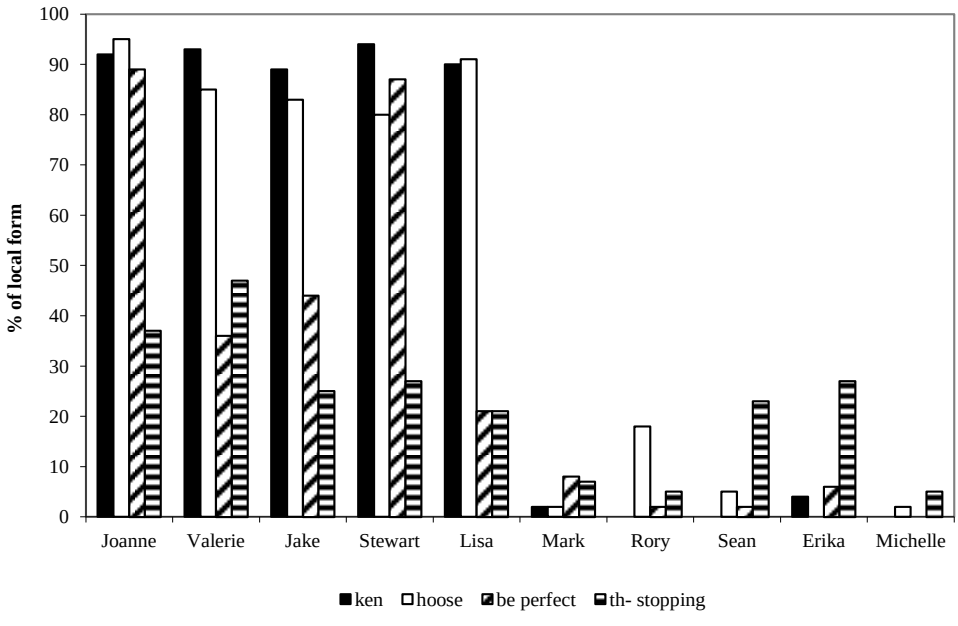


Figure 4 shows that, in sharp contrast to older generations, the younger speakers are characterised by heterogeneity and inter-speaker variability (the exception to this pattern is *th*- stoppping, which we return to below). We interpreted these results as indicative of rapid dialect obsolescence, with the replacement, at least with some speakers, of one variety by another in the space of one generation. However, we also suggested that "the results from this research may lend themselves to an entirely different – and apparently more upbeat - interpretation. Instead of dialect attrition, the younger speakers are bidialectal" (Smith & Durham 2011, footnote 9). In this scenario, the results we found do not point to obsolescence, but are merely a reflection of speaker choice of one code or another in the context of the sociolinguistic interview. In order to test this possibility, we returned to the community for further research.

THE PRESENT STUDY. For this follow-up research, we conducted further sociolinguistic interviews with the younger speakers (henceforth "2nd recordings"). In the case of potential bidialectalism, "code choice is usually made based on the presumed dialect…of the interlocutor" (Anderson 2011:222), thus with these recordings, the interviewers differed in order to manipulate insider vs. outsider effects on addressee speech (e.g. Douglas-Cowie 1978, Thelander 1982). The "dialect speakers" from the 1st recordings (Figure 4: Joanne, Valerie, Jake, Stewart, Lisa) were recorded by an "outsider" in a formal situation and the "standard speakers" (Figure 4: Mark, Rory, Sean, Michelle) were recorded with a high school friend in a more casual setting. One of our initial "dialect speakers", Lisa, conducted the interviews with the "standard speakers", either in their home or in a local pub. The "dialect speakers" were recorded by the second author, Mercedes, who is Swiss-American, in a hotel in Lerwick. Due to timing constraints, Lisa was recorded by the first author. We were unable to locate one of the original speakers, Erika, hence there are nine rather than the original ten speakers. The speakers are shown in Table 1:

Table 1: Speaker sample for 2nd recordings.

Dialect speakers	*Standard speakers*
Joanne	Mark
Valerie	Rory
Jake	Sean
Stewart	Michelle
Lisa	

The interviews with Lisa were characterised by local gossip and "catching up" as demonstrated in Extract 1.

Extract 1: Lisa as interviewer

Lisa: It was just ridiculous how it all started in the first place.

Sean: Yeah I know.

Lisa: It was like one minute he was like-

Sean: It was just absolutely goody two shoes, never touched a drink until he was eighteen.

Rory: We used to go to Halls when we were like fifteen, sixteen, he wouldn't drink anything like.

Sean: Yeah, yeah. He wouldn't even touch it.

Lisa: Next thing you're like "whoa".

Sean: Yeah.

Rory: It was unbelievable like.

The data collected by Mercedes (Extract 2) was characterised by a slightly more formal style, given that she was an outsider with a North American accent.

Extract 2: Mercedes as interviewer

Joanne: And then they have Up Helly Aas in the country like peerier Up Helly Aas. And some of them are really good, I've been to a few. But the Lerwick one's really good.

Mercedes: So how do you think it's different, for the-, cos it's the men that are in the, squad- guizer.
Joanne: The men is, in the jarl squad and then the squads are- in Lerwick just men and then, all the women and that go to the halls. And I think it should stay like that because the country ones has men and women.
Mercedes: Yeah.
Joanne: Like I dinna think they're discriminating- nating against.
Mercedes: It's having- it's just how it's done.
Joanne: Yeah and I think- they shouldn't change it to women because, seeing they've got so many country ones that has men and women that the Lerwick one just wouldna be the same.
Mercedes: Um-hum.
Joanne: But some lasses probably disagree and think that they should have women. But I totally think that they should just stick with the men.

A portable Marantz PMD671 Digital Audio Recorder was used with lapel microphones. The data are fully digitised and transcribed using Transcriber, software which allows speech to text synchronization. The corpus from the 2nd recordings totals just over 75000 words.

TESTING BIDIALECTALISM. Research on bidialectalism has largely focussed on educational and speech pathology concerns (e.g. Baratz 1969, Papapavlou 2004, Yakioumetti 2006). However, as Hazen (2001) points out, "we do not know the qualitative and quantitative linguistic and sociolinguistic constraints for potentially bidialectal speakers". The term *bidialectal* is said to arise in analogy with bilingual (OED s.v. bidialectal) and occurs in situations where there are two dialects in contact, normally an indigenous variety in parallel with a more standardized form. Despite the implied link to bilingualism in the label, and the fact that the term has been in use since the 1950s[4], "no-one has seriously

[4] According to the OED, it first appears in the following quote from Weinreich (1954)**:** A 'diasystem' can be constructed by the linguistic analyst out of any two systems which have partial similarities (it is these similarities make it something different form the mere sum of two systems). But his does not mean that it is always a scientist's construction only: a 'diasystem' is experienced in a very real way by bilingual

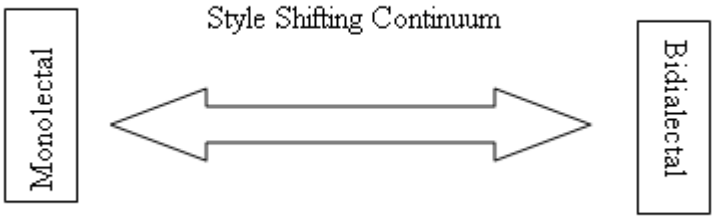
investigated whether humans are capable of maintaining two dialects in the same ways they can maintain two languages" (Hazen 2001:89). If bidialectalism is truly parallel to bilingualism, Hazen (2001) maintains that the speaker must not only produce the same qualitative and quantitative features as monodialectal speakers, but do so without overlap. Empirical analyses suggest that this is not the case. For example, Houston (1969:602) states that "control by Black speakers of both Black and White English…has never been observed by the present writer" even by children cited by teachers as "prototypic examples of bidialectal speakers". Instead she finds "the possession of two or more linguistic registers [which] belonged to the same linguistic genus". Labov (1998:140) also suggests that instead of two discrete systems, speakers of AAVE have "a continuum of styles and an intimate mixing of different values of the variants" (see also e.g. Cornips and Hulk 2006, Irvine 2008, Lippi-Green 1997, Sharma 2011). In contrast, a more recent study of "Rachel", a Pennsylvannia Dutchified English (PDE) and Standard English speaker (Anderson 2011), showed zero rates of PDE features in her speech when interacting with non-PDE speakers. This leads Anderson to conclude that "bidialectals are fully capable of maintaining and skillfully wielding two distinct systems of linguistic features" with no "bleeding" between systems (Anderson 2011:241)[5].

Although there is a dearth of research on bidialectalism, the majority of findings suggest that it may be rather different from bilingualism. So what is it? Both rates and constraints are implicated in disentangling this question. In an attempt to position bidialectalism within already established norms, Hazen (2001:93) suggests that it may appear at the "extreme ends of the style-shifting continuum" or "the opposite pole from monolectalism", as demonstrated in Figure 5 (adapted from Hazen 2001).

(including "bidialectal") speakers and corresponds to what students of language contact have called "merged system".

[5] There may also be a difference between receptive and productive bidialectalism. Weener's (1969:199) study of Detroit youths finds that "the child who is regularly exposed to two dialects…may develop bidialectal comprehension skills but speak only one of the two dialects". Hazen (2001) too finds a difference in reception vs. production: of the self-identified bidialectal speakers in his Morgantown, West Virginia study, most could identify and understand dialect features, but none demonstrated an ability to match both qualitatively and quantitatively in the *production* of these forms across the two dialects.

Figure 5: Hazen's "potential theoretical space for bidialectalism"



The positioning of bidialectalism on this continuum has important implications for determining linguistic outcomes. Sociolinguistic research has demonstrated that all speakers have a variety of styles at their disposal in their everyday repertoire, with these employed according to setting, topic, interlocutor and frame (e.g. Bell 1984, Labov 1966, Schilling-Estes 1998). If placed at this extreme end of styleshifting, bidialectal speakers would be expected to switch between very high and very low rates of the vernacular form, as opposed to the more compressed adjustments shown for attention to speech models (e.g. Trudgill 1972) or even those much larger shifts demonstrated in audience design models (e.g. Bell 1984). Sharma's (2011:481) research on British-born Asians in London demonstrate that some speakers have "sharp differentiation" across different speech styles, while others show "mixed traits". In other words, significant individual differences exist. Further, the vast body of research on styleshifting has shown that it generally involves purely quantitative adjustments in the rates of use of a particular variable (e.g. Labov 1966). Within a single grammar, constraint weights remain constant. However, Lim & Guy (2005) argue that ranking differences in different social contexts of use may provide evidence for establishing a difference between style shifting and bidialectalism. In a study of Singarporean English speakers, they find different constraint rankings on (t, d) deletion across formal and informal styles, leading them to suggest that the speakers use "contrasting grammars" across the two styles, rather than simply being "mono-dialectal style shifters" (ibid:166). They conclude that such speakers' behaviour "cannot be modeled by a single grammar" and that "contrasting constraint rankings can serve as a diagnostic for…bi-dialectalism" (ibid:170). In these data, the variables are different to (t, d) deletion as they involve a qualitative difference in variants from

standard to vernacular. However, we hypothesise that if there is some use of the vernacular forms in the 2nd recordings, and these maintain constraint rankings found in the 1st recordings, then we conclude that the same grammar is in operation.

Taking as a starting point some of the findings above, we now investigate in detail our current dataset. In the following analyses, we consider both rates and constraints on use across the four linguistic variables in both recordings in order to test putative bidialectalism.

RESULTS FROM PRESENT STUDY

Rates

If bidialectalism is situated at the far end of the stylistic continuum (Hazen 2001), we might expect to find significantly different rates of use across the two interviews with our younger speakers. Figure 6 shows a stylised graph which predicts language use across the two recordings in the present study.

Figure 6: Stylised graph showing bidialectal speech

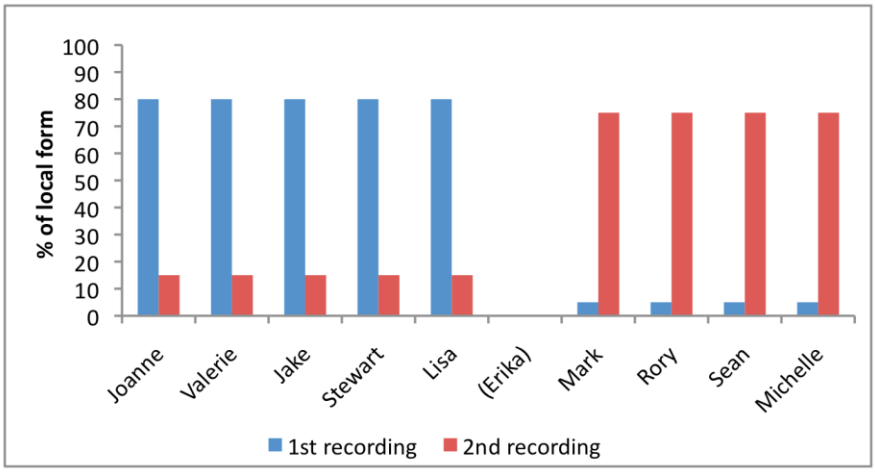


Figure 6 shows that for the 1st recording there are high rates of the local form with the dialect speakers and low rates with the standard speakers. This was the actual case in our initial research, as demonstrated in Figure 4. In the 2nd recording, however, we see the

hypothetical reverse: lower rates of the local form with the dialect speakers as they move to a more standard code in conversation with an outsider in a rather formal context, and higher rates of the dialect variants in the standard speakers as they converse with a school friend in a relaxed context. If the speakers have access to two discrete codes, we may find no use of the vernacular variants at all with the dialect speakers and vice versa with the standard speakers.

We first analyse use of *ken* for *know* in Figure 7.

Figure 7: Use of *ken* across younger speakers in 1st and 2nd recordings

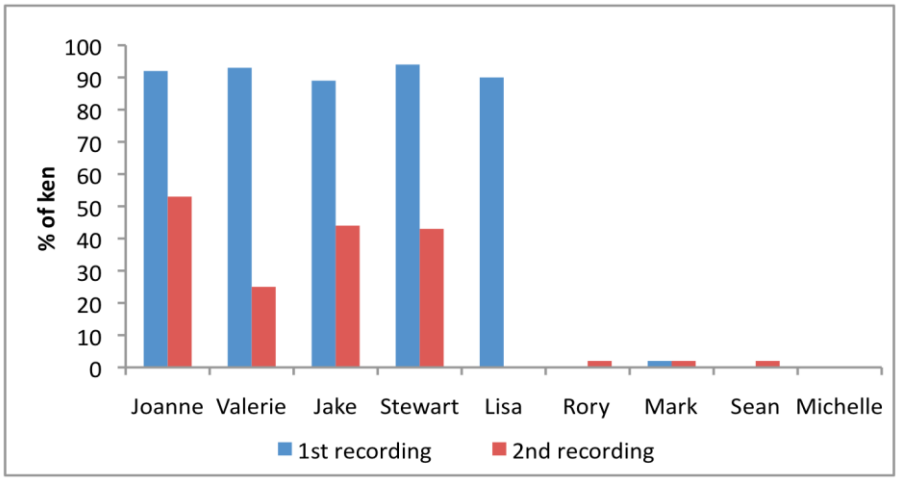


Figure 7 shows two main points: the dialect speakers drop their rates of the non-standard form as predicted[6]. The standard speakers on the other hand, do not use higher rates of the local form, despite speaking to a highly dialectal peer. We conclude that with this variable only Joanne, Valerie, Jake, Stewart and Lisa have access to, and use, two codes. The remaining speakers use one code only: the standardised variety. Note however, that with the exception of Lisa, there are no "discrete…forms of speech, but

[6] A chi square test comparing the rates of the dialect speakers' first recordings with their second recordings is statistically significant at $p < 0.001$ ($df = 1$, $\chi^2 = 129$). The low rate of the dialectal variant makes it impossible to test for statistical significance for the standard speakers in this and subsequent variables. Chi square tests were chosen in this paper because the number of speakers made t-tests inappropriate.

rather something of a continuum" (Melchers 2004a:37), with a "mixing of styles" (Labov 1994:180) in the different contexts of use.

Figure 8 shows the results for *hoose* vs. *house*.

Figure 8: Use of *hoose* across younger speakers in 1st and 2nd recordings

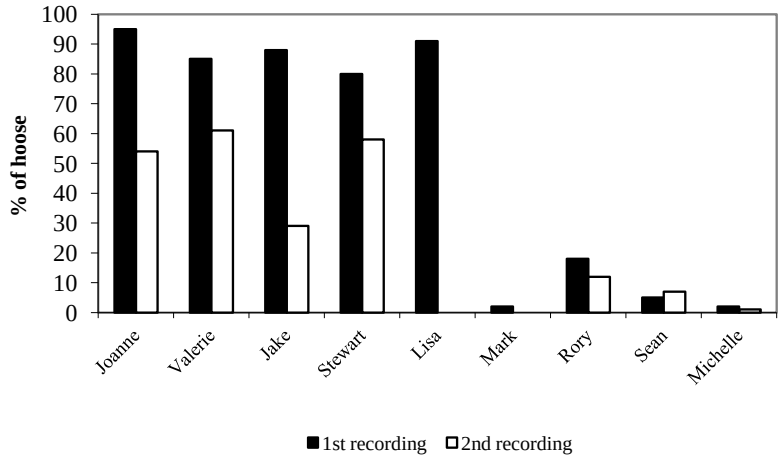


Figure 8 mirrors the results for *ken*, with the first five speakers using higher rates of the standard variants when compared to their 1st recording, but the remaining five speakers using the standard form near-categorically in the 2nd recording also[7].

We now turn to the morphosyntactic variable where *be* is used for *have* in perfect contexts.

Figure **9** shows the results.

Figure 9: Use of *be* perfect across younger speakers in 1st and 2nd recordings

[7] A chi square test comparing the rates of the dialect speakers' first recordings with their second recordings is statistically significant at $p < 0.001$ ($df = 1$, $\chi^2 = 132$).

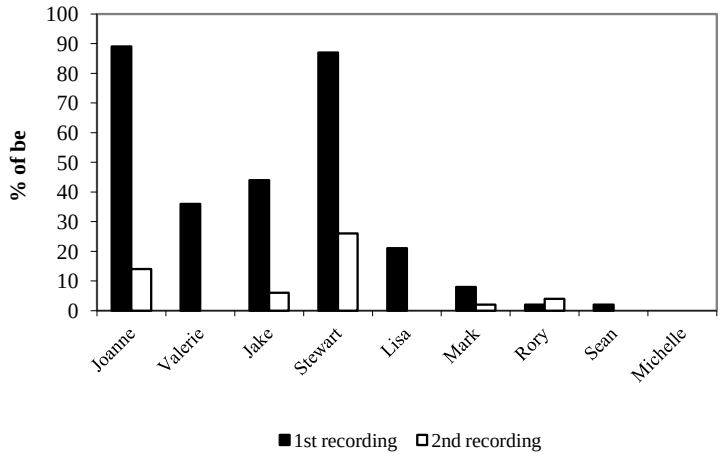


Figure **9** shows that Joanne, Valerie, Jake, Stewart and Lisa significantly decrease their rates of the local forms in conversation with Mercedes. In fact, Lisa and Valerie have zero rates of the local form in the 2nd recording. For the standard speakers - with Mark, Sean, Rory and Michelle - there remains virtually no use of the vernacular form at all[8].

Lastly, Figure 10 shows use of *th*- stopping across the two recordings.

Figure 10: Use of *th*- stopping across younger speakers in the 1st and 2nd recordings.

[8] A chi square test comparing the rates of the dialect speakers' first recordings with their second recordings is statistically significant at $p < 0.001$ ($df = 1$, $\chi^2 = 43$).

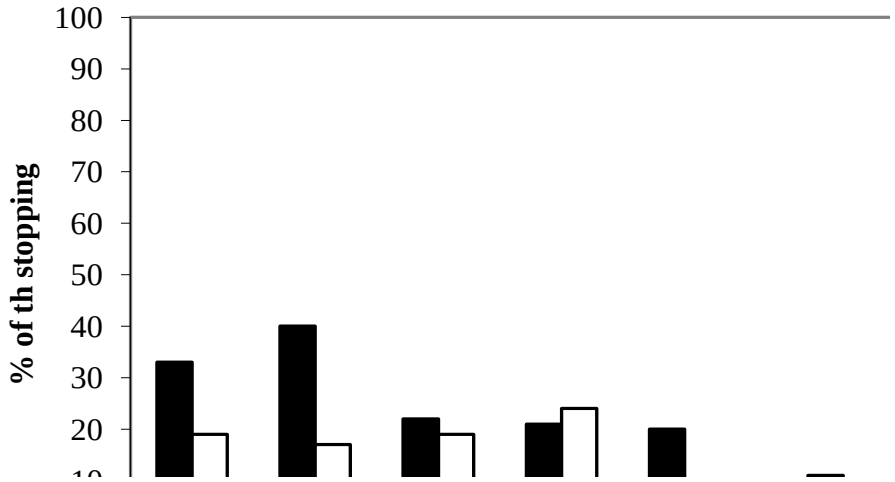


Figure 10 reveals that *th*- stopping is differentiated in two ways from the preceding variables. First, *all* speakers have at least some use of the local variant, hence the variable exhibits intra- rather than inter-speaker variation. Second, there is no clear cut more to less hierarchy across the two recordings as with the other variables. In the dialect speakers group, Joanne, Valerie and Lisa have statistically significant style shifting, but Jake and Stewart do not[9]. The same is true in the standard speakers: Sean shows a statistically significant difference between the two recordings but Mark, Rory and Michelle do not.[10]

These initial results comparing 1st and 2nd recordings reveal a number of findings:

1. Only half the speakers switch styles according to the different interlocutor: if a speaker uses the dialect in these younger generations in Lerwick, they also have at their disposal a more standardised variety when talking to outsiders. With the remaining speakers, they only have a standardised variety in their repertoire, even when talking to a peer.

[9] A chi square test comparing the rates of Joanne's first and second recordings is statistically significant ($p < 0.05$ df = 1, $\chi^2 = 7.8$), as is Valerie's ($p < 0.001$ df = 1, $\chi^2 = 13.1$) and Lisa's ($p < 0.05$ df = 1, $\chi^2 = 10.4$). The test for Jake is not statistically significant ($p > 0.05$, df = 1, $\chi^2 = 0.34$) and neither is Stewart's ($p > 0.05$, df=1, $\chi^2 = 0.22$).

[10] A chi square test comparing the rates of Sean's first and second recordings is statistically significant at $p < 0.05$ (df = 1, $\chi^2 = 5.7$). The test for Mark ($p > 0.05$, df =1, $\chi^2 = 1.9$) and Rory ($p > 0.05$, df =1, $\chi^2 = 0.2$) is not statistically significant. Although Michelle's rates of th- stopping and her overall number of tokens make it impossible to test for statistical significance, the rates between the first and second recording are within one percent of each other which suggests no difference.

2. The overall rates for the dialect speakers demonstrate a mixed system in the 2nd recordings. With the exception of Lisa, there is a *decrease* in use of the traditional variants, rather than a 100% switch to standard forms. However, the decrease is substantial.
3. There are vestiges of dialect forms in the very standardised speakers, but these are focussed solely on the phonetic variable *th*- stopping. The remaining lexical, phonological and morphosyntactic features are all but absent in their speech.
4. Related to (3), across all dialect speakers, there is a decrease in use of the traditional variants across the lexical, phonological and morphosyntactic variables, but with *th*- stopping, there is no simple split between dialect and standard speakers. Individual use differs within these groups.

While these initial overall rates of use may be indicative, the constraints on use may be even more insightful in pinpointing possible bidialectalism. Specifically, in the switch from vernacular to standard, do the linguistic constraints of one system perdure in the other as with styleshifting more generally? Or do ranking differences exist which may suggest a more fundamental difference between styleshifting and bidialectalism (cf. Lim & Guy 2005)? We now turn to a more detailed analysis of the bidialectal speakers' use of forms across the two contexts of use in order to contribute to these questions.

CONSTRAINTS.

Ken vs *know*

In our previous analysis, we found a difference between use of *ken* vs. *know* as a main lexical verb (5) or discourse marker (6): discourse markers had 100% vernacular use across the variable speakers while the verbal use of *ken* had lower rates.[11]

5. You'd sit in and you'd *ken* a' the tunes. (Lisa)
6. Like Americanisms and kind of *ken* peerie sentences (Lisa)

[11] A chi square test between the two contexts shows a statistically significant difference at $p < 0.001$ ($df = 1$, $\chi^2 = 16.2$).

Figure 11 plots these results from the 1st recording with the new dataset. Lisa is removed from the analysis as she had no use of the non-standard form in this 2nd recording.

Figure 11: Use of *ken* as a discourse marker or verb in the 1st and 2nd recordings.

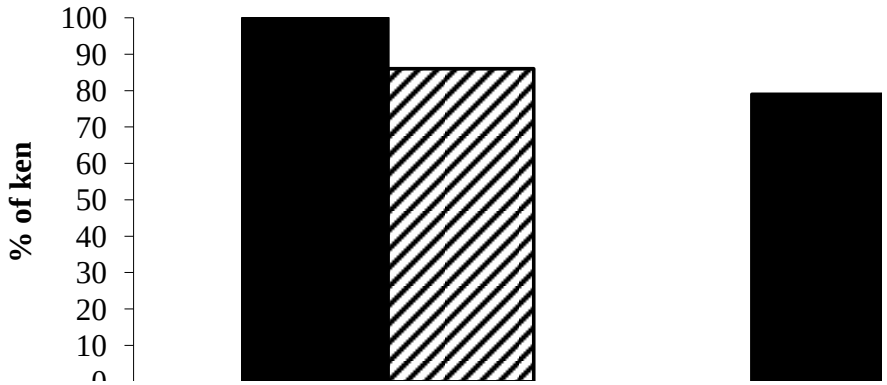


Figure 11 shows that the more to less hierarchy is maintained in the 2nd recording, with a decrease in use across both linguistic contexts[12].

Hoose vs. *house*

Our analysis of the 1st recordings showed that lexical item had an effect on the use of the monophthong vs. diphthong.

Figure 12 compares the results for this constraint across the two recordings. We separate lexical items that appeared more than 30 times across the recordings. With the exception of *how* (N=175), the lexical items appear between 31-46 times each (overall mean = 54). The remaining lexical items are grouped as 'other'. As with *ken*, Lisa is excluded as she used the standard form categorically in the 2nd recording.

[12] A chi square test between the two contexts shows a statistically significant difference at $p < 0.001$ ($df = 1$, $\chi^2 = 21.8$).

Figure 12: Use of *hoose* across individual lexical items in the 1st and 2nd recordings

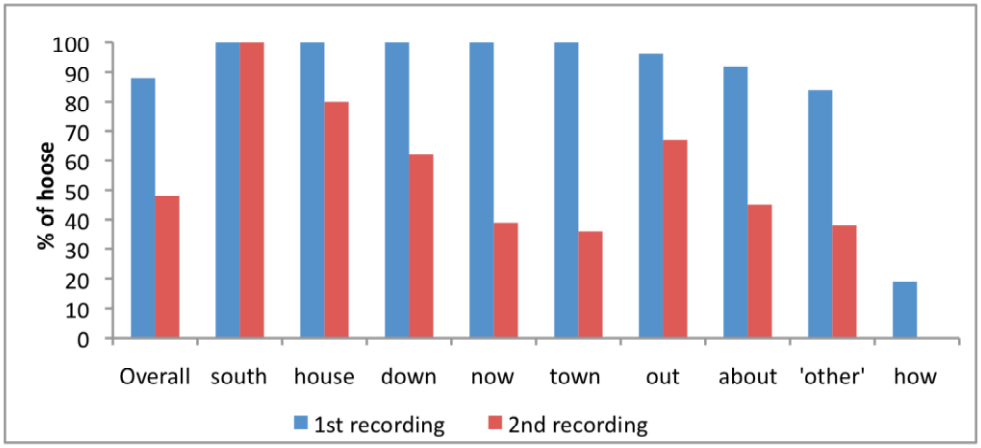


Figure 12 shows that with the exception of *south*, which categorically retains the monophothongal variant, the shift from vernacular to standard is fairly orderly, with a decrease in use of the monophthong across all lexical types[13].

We now move to the morphosyntactic variable, *be* perfect. In our previous analysis, we found that the strongest linguistic constraint on use was tense: present tense was highly favoured and past tense disfavoured. Figure 13 shows the results across the two recordings. Both Lisa and Valerie use only the standard form in the 2nd recording and thus are excluded.

Figure 13: Use of *be* perfect across past and present tense in 1st and 2nd recordings.

[13] A one-tailed paired t-test comparing the percentages of the various lexical items across the two recordings is statistically significant at $p < 0.001$.

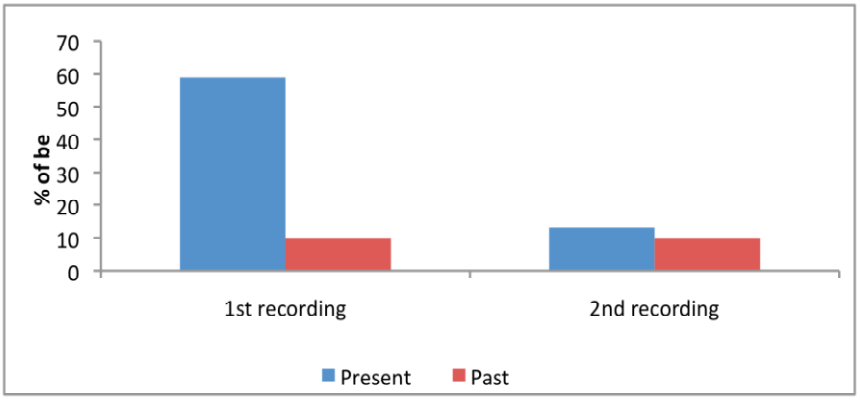


Figure 13 shows that this constraint is much attenuated in the 2nd recording. However, closer analysis shows that only Joanne uses *be* in past tense contexts: Stewart and Jake show no use at all (although we note very small Ns in this context: Joanne 4, Stewart 5, Jake 11). This suggests that even with extremely low rates of use, constraints may continue to operate, although small Ns preclude further statistical analysis.

Th- stopping

We noted in Figure 4 that *th*- stopping looked somewhat different from the other three variables in terms of rates: there was intra- rather than inter-speaker variability and no dramatic decrease in use of the vernacular variants across the bidialectal speakers. We now test for constraints. As noted earlier, we concentrate on voiced contexts only. Our previous analysis revealed that there were higher rates of the standard variant with content words (7) compared to function words (8).

7. She went the o/ð/er day
8. So I think /ð/ey just let him have /d/e drum shop. (both Michelle).

Figure 14 compares this constraint in the 1st and 2nd recordings. For these results, we include all 9 younger speakers as they were all shown to retain the use of the non-standard variants. However, we separate the groups into the now familiar dialect vs. and standard speakers to assess further their similarities and differences.

Figure 14: Use of *th*- stopping across content vs. function words in the 1st and 2nd recordings

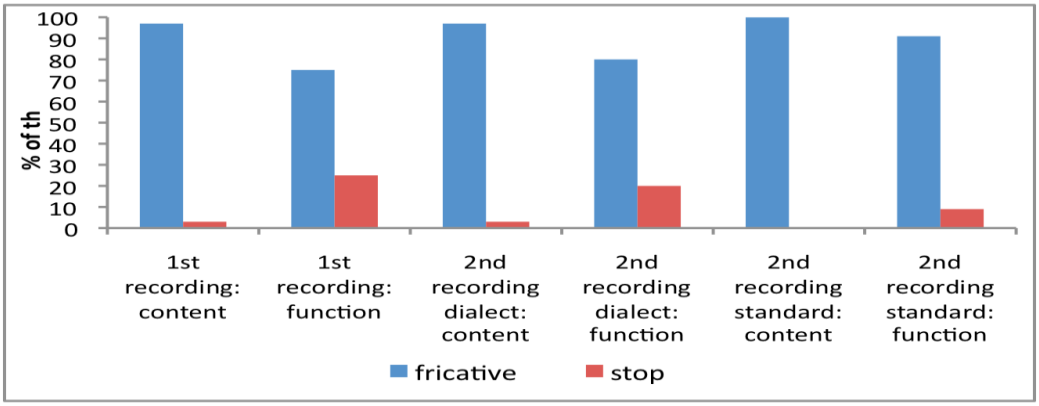


Figure 14 shows that there is no difference in patterns of use across the datasets. The use of the stop variant is higher with function words than with content words throughout[14]. Thus there is no change in constraints on use with this variable in either speaker cohort.

The analysis of constraints on use reveal that across the two recordings:

1. Despite much lower rates of use, the constraint rankings for *ken*, *hoose* and *be* perfect in the 1st recordings are maintained in the 2nd. The same is true for th-stopping,
2. For *th*- stopping, although the shift is less uniform across individual speakers, this variable too demonstrates maintenance of constraints from 1st to 2nd recording.

DISCUSSION. How can these results be interpreted? We suggested in our 2011 paper that our results showing dialect vs. non-dialect use in the younger speakers could well be the product of bidialectalism. However, Sharma (2011) notes that while sociolinguistic interviews "may capture a subset of natural speech styles…they do not routinely capture bidialectal or multilectal ability if it exists in a community". Our 2nd recordings were an attempt to capture that ability. This further study demonstrated that only half the younger speakers had access to, and used, both standard and dialect forms. The other half were

[14] Chi square tests comparing the difference between contexts is highly statistically significant for all groups and recordings ($p < 0.0001$ in all cases, $df = 1$).

monodialectal, using the standard variety only. We believe that this qualitative split amongst these speakers supports our initial interpretation of language change in Lerwick: dialect obsolescence is well advanced in this community. Just as bilingualism is a necessary condition for language shift and an integral part of the process (e.g. Fishman 1964), we suggest that the same is true for bidialectism and dialect shift. Presumably access to, and use of, the standard is a relatively recent phenomenon in Shetland, but Melchers (1983) has noted bidialectal use in Shetland in her 1983 study, a full generation before the younger speakers in our sample. What we suspect has happened over the intervening 30+ years is that there has been a further shift amongst some younger speakers to a form of Scottish Standard English only. In her study of dialect death in South Central Pennsylvania Dutchified English, Anderson (2011) characterises the younger speakers in this community as the "generation of choice". She states that this group grew up with PDE speaking parents, but exposure to Standard English through sources such as schooling and peer group led them to make one of three "choices" in their language use:

1) to retain the vernacular
2) to use both standard and dialect i.e. to be bidialectal.
3) to shift to Standard English

We suspect that the same is true in Lerwick, and our findings lead us to propose a trajectory of language use across the generations. In the older generations, only 1) and 2) are possible: in the middle-aged generations, this choice is reduced to 2); in the younger generations, the choice includes both 2) and 3). This results, in Anderson's (2011:330) words, in the "unravelling" of a dialect as the younger generations lose consistency in which "features they use and how to use them". Our 2011 paper showed that the younger dialect speakers match older speakers' constraints on use, i.e., there is maintenance of constraints. With this trajectory, however, we hypothesise that these constraints will also "unravel", and the dialect will suffer further obsolescence in the coming generations. Only 3) will remain a viable option in the further breakdown of form and function, or "dedialectalisation" (Trudgill 1996) of the vernacular. The "generation of choice" may

well become the generation of no choice.

As we discuss in Smith & Durham (2011), what has caused this dramatic trajectory is most probably a combination of factors: standardising norms, globalisation, speaker attitude, in-migration and a host of other factors known to influence language change. However, the intriguing split among the younger speakers, where half have "chosen" a standardised variety and the other half bidialectalism, remains a vexing question, especially in the light of the fact that all of our younger speakers' parents used the dialect (see Smith & Durham 2011). Although we may not currently have an answer to this, perhaps more importantly, the available evidence suggests that our original interpretation of the Lerwick dialect being at a "tipping point" (Smith & Durham 2011) remains plausible.

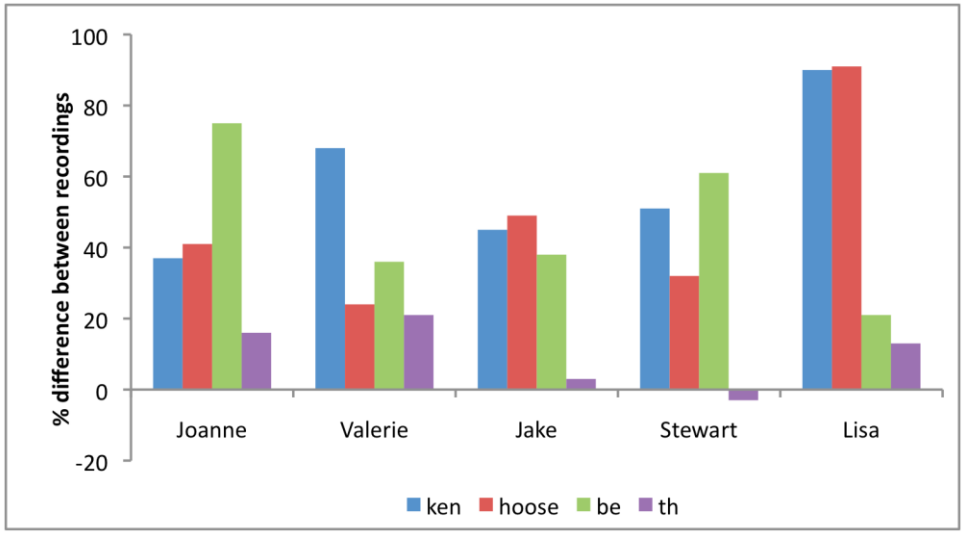
BIDIALECTALISM AND RATES OF USE. What about the remaining speakers who demonstrate use of two codes? What do their rates of use across the 1st and 2nd recordings reveal about putative bidialectalism? Figure 4 showed that the speakers have varying rates of the vernacular forms in the 1st recording as opposed to 100% use. Our previous research (Smith & Durham 2011) showed that in general, the younger dialect speakers had rates of vernacular forms in line with the older generations. Moreover, in the 2nd recordings, there is no 100% use of the standard forms but instead simply a *decrease* in use of the traditional variants across most variables. As Melchers (2004a:37) points out, instead of "discrete, definable forms of speech" the switch between standard and local in the speakers' repertoire "may well be something of a continuum", just as Labov (1998) suggests. The one exception to this is Lisa, who shows no use of either *ken*, *hoose* or *be* perfect in the 2nd interview. She is categorically standard across these variables. The explanation for this may lie in the fact that between the 1st and 2nd recording, Lisa moved to the mainland for university. This prolonged face-to-face exposure most probably accounts for her categorical rates of use and suggests that in fact there can be a categorical move from one dialect to the other across at least some variables and some speakers (see also Anderson 2011)[15]. We note too that Joanne had also moved to the

[15] Also worth noting is that Lisa's interview was conducted in Glasgow while all the others took place in Lerwick. This, too, may have had an influence on Lisa's speech patterns.

mainland but showed no such categorical use. This raises the question of whether *all* speakers can move from one system to another without overlap but simply choose not to (see also Sharma 2011). This is the subject of further research, as discussed in the Conclusion.

If there is no categorical use of one dialect or the other for most speakers, is there a percentage threshold of use one dialect or the other to be considered fully bidialectal (Hazen 2001)? A number of studies on perception in recent years have shown that listeners are sensitive to differences in frequencies as small as 10% in assigning sociolinguistic categories to speakers (e.g. Campbell-Kibler 2006; Labov, Ash, Ravindranath, Weldon, Baranowski, Nagy 2011). Figure 15 shows that the difference in rates across Valerie, Joanne, Stewart, Jake and Lisa in three of the four variables from the 1st recording to the 2nd are far in excess of 10%:

Figure 15: Difference in % of vernacular forms in 1st and 2nd recordings



The decrease in rates reported here are of a different magnitude when compared to studies of styleshifting in the attention to speech model (e.g. Labov 1972:114, Trudgill, 1972:114) with shifts of around 10% in the move from casual to careful speech. They are not much different, however, to the quantitative shifts based on audience design models (Bell 1984). For example, Coupland's (1980:7) study of styleshifting in a Cardiff work setting show dramatic rate differences across casual and "telephone" contexts across h-

dropping, intervocalic /t/ and final consonant clusters (although not with (r) or (*əʊ*)) with an overall decrease in use of vernacular variants of around 40%. Trudgill's (1981) study of t-glottalisation in his own speech in the sociolinguistic interview setting shows differences in rates around 70% depending on who he was interviewing[16]. Douglas-Cowie's (1978) study of speakers in Northern Ireland is probably the closest in design to the present study in that each speaker was interviewed by an outsider and an insider. Her results showed around 50% shift from vernacular to standard variants with some speakers across a range of variables. Sharma's (2011) study also shows very divergent rates according to context, although again this was speaker-specific. In these data, all dialect speakers shift quite dramatically but as these previous studies show, this is not unprecedented, and may lend support to Hazen's (2001) assertion that bidialectalism is at the extreme end of styleshifting.

How the rates differ across the four variables are also indicative. For *ken* and *hoose*, although there are much lower rates in the 2nd recording, they are still used prolifically in the 2nd recording, at around 50% of the time. For *be* perfect, on the other hand, two of the five dialect speakers do not use this local form at all in the 2nd recording, and of the remaining three, two show vanishingly low rates. Why might this be? We note that while *ken* and *hoose* are used on the mainland, *be* perfect is not. This suggests that variants used on mainland Scotland may be more "acceptable" in speech to outsiders, wherever they are from, whereas the "marked" nature of *be* perfect in geographic terms makes is less acceptable (e.g. Trudgill 1986, Mufwene 2001). As Melchers (2004b:40) states, "the *be* construction belongs to the 'Shetland code'" (i.e. the local dialect) rather than "Shetland English" (i.e. the standardised variety). These results may also be related to *who* the speakers in Shetland are most used to accommodating to (e.g. Giles, Taylor and Bourhis 1973). Alignment to mainland Scots may well override the fact that their interlocutor is a Swiss-American, and could be expected to be unfamiliar with *hoose*, *ken* and other Scots forms.

Finally, Melchers (2004a:37) maintains that in Shetland "certain traditional-dialect features are stable…whereas others vary with the speaker, the situation, and the topic, such as *th*- stopping". In our data, *th*- stopping was distinguished from the remaining

[16] Linnes (1998), on the other hand, found no statistically significant differences in her AAVE speakers.

three variables on two counts. First, it demonstrated intra- rather than inter-speaker variability. All speakers used *th*- stopping some of the time, even those who were completely standard with the remaining variables. Second, use of *th*- stopping did not show the more to less hierarchy across recordings: some speakers styleshifted while others did not. Why might this be so? As speakers ability to switch styles "is related to the degree of social awareness of a linguistic variable by members of the community" (Labov 2001:85), these results suggest that *th*- stopping in particular contexts of use are below the level of consciousness for at least some of the younger speakers in Shetland[17]. As a result, they continue to use it in the same way as they would with an insider as they do not know that they are using it in the first place[18]. Moreover, Auer, Barden and Grosskopf (1998, 2000) suggest that the more salient a feature is, the more likely it is to be abandoned in the course of dialect contact (see also Trudgill 1986), thus this might explain why it remains in the speech of those who have abandoned all other dialect forms[19].

Taken together, these results in rates of use across the different variables suggest that features taken from different levels of the grammar may pattern differently across contexts, just as they do in styleshifting more generally (e.g. Bickerton 1980:43, Rickford & McNair-Knox 1994, Kerswill 1987). We should point out, however, that the differential use of variants across the 1st and 2nd recordings, and hence what might be salient, is most likely community specific (see e.g. Kerswill & Williams 2002). In our previous research on acquisition of variation in pre-school children in Buckie, a small community in north east Scotland (Smith, Durham & Fortune 2007, 2009, Smith, Durham & Richards, in press) we found that morphosyntactic variables were not salient

[17] We stress that speakers may not be aware of th- stopping *in particular contexts of use* as they clearly are aware of this variant in some contexts. For example, it is regularly represented in dialect writing and even appears in shop names. We also note that gender may play a role: four of the five non-shifters are male, while three of the four shifters are female (e.g. Labov 2001).

[18] We note that *th*- stopping is a stable variable in many varieties of English (e.g. Labov 2006:235-238). However, Figure 3 suggests that this variant is in decline in this community (albeit at a much slower rate than the other variables). As styleshifting with this variable is much more consistent in other dialects (e.g. Labov 2001:99), the individual differences in these data may provide support for the claim that "style-shifting for variables undergoing change is different than it is for stable sociolinguistic variables" (Eckert 2001:10). We are currently conducting a more in-depth analysis of this variable which may shed more light on exactly where speakers retain this variant, and why (Smith, Holmes & Durham, in progress).

[19] But see Blevins (2006) who argues that stops are the 'natural' default in varieties of English, with fricatives maintained as a result of prescriptive norms.

for the caregivers and thus weren't for the children either: the vernacular form was used in both formal and informal contexts. With lexical, phonetic and phonological variables, there was styleshifting. This has implications for how bidialectalism operates across different communities: in stark contrast to Lerwick, we predict that in Buckie there would be no systematic codeswitching with some morphosyntactic variables but switching with others in the adult community. Uncovering universal vs. dialect specific constraints on bidialectalism is the subject of future research.

BIDIALECTALISM AND CONSTRAINTS ON USE. Recall Lim & Guy's (2005) claim that change in constraint rankings for a variable may provide a good diagnostic for distinguishing bidialectalism from styleshifting. They state that "within a single grammar, constraint weights do not vary, leaving style shifting to affect only the overall rates of usage of a form. When constraint weights differ, however, different grammars are involved, and hence, the speaker who commands multiple grammars is not simply style-shifting but is multi-dialectal" (ibid:169). In our data, we hypothesized that if constraints found in one dialect were evident in another, then this would be evidence for extreme styleshifting, rather than use of a separate, discrete system. We found maintenance of constraints across the four variables we analysed. For example, *ken* vs. *know* showed the more-to-less hierarchy in verb vs. discourse marker use in both 1st and 2nd recordings, despite reduced rates. *Hoose* showed a systematic decline in use of the monophthongal variant across all lexical types. *Be* perfect had extremely low rates in the 2nd interview, yet the constraint on tense was still visible. *Th-* stopping showed no change in either rates or constraints. This leads us to conclude that these younger speakers in Shetland have one grammar, and within that grammar, two co-existent systems, where rates of use, but not constraints on use, change from one interlocutor to another. In other words, in the supposed switch from one dialect to another, there is no clean break: the constraints "travel" in the same linguistic bag.

The details of the constraints may provide further insight. In the use of *ken* for *know*, there are much lower rates of *ken* in verb function when compared to discourse marker use. The semantic weight of the verb may outweigh the pragmatic weight of the discourse marker, hence making the verb function more susceptible to standardization in

interaction with an outsider. The peripheral nature of discourse markers - they occur outside the grammar (e.g. Schiffrin 1987) - may also affect its use. For the *hoose* variable, one lexical item stands out - *south* –with 100% vernacular variant *sooth*. In this context, this lexical item designates "not Shetland" thus we suggest that it is iconic in the speech of Shetlanders: a them and us where *south* is a shift too far[20]. An equivalent would be *toon* in Newcastle (e.g. Beal 2000), where standard *town* may mean something different. For *be* perfect, we note that past tense contexts are far fewer than present, thus making this context more susceptible to innovative forms (e.g. Bybee 2007). Thus both linguistic and social influences affect the different constraint weights in the move from insider to outsider interaction.

Perhaps most importantly, these results for constraints support claims that bidialectalism is much like styleshifting more generally (e.g. Labov 1998, Hazen 2001).

CONCLUSION. This research had two aims. The first was to discover whether our previous results on change in this dialect indicated obsolescence or use of different codes in the sociolinguistic interview setting. We found that only half the younger speakers in Shetland were bidialectal, leading us to conclude that the dialect in Lerwick may well be subject to dialect obsolescence. The second aim was to uncover the qualitative and quantitative patterns of use of those speakers who had access to two codes. We found that rates of use differed across three linguistic variables in conversation with two different interlocutors, but the constraints remained the same. With one variable, th- stopping, the rates of use were mixed, but the constraints remained the same. This led us to conclude that a bidialectal speaker is very different to a bilingual speaker. A bilingual speaker has two different grammars for, e.g., French and English (e.g. Roeper 1999)[21], but a bidialectal speaker has one grammar, and within this, two dialects, resulting in a "mixing

[20] An alternative explanation is that the result is a function of frequency effects, with *house* much more frequent than *south* in discourse. In these data, *south* appears 35 times, and *house,* 45 times, thus it is unlikely that the results are due to low Ns with particular lexical items.

[21] But see experimental data on how phonetic subsystems of bilinguals can converge, suggesting that there may not show clear-cut differences in constraints across languages (e.g. Flege 2007).

of variants" or "co-existent systems" (Labov 1998:140) which "bleed" into each other in everyday use[22].

What this study has not tackled is the question of intra-recording styleshifting between standard and vernacular (e.g. Moore and Podesva 2009, Sharma 2011, Schilling-Estes 2004). This may help answer our question above regarding whether all speakers have the ability to shift completely to one dialect in particular situations, as Lisa did in the 2nd recording. This will be the next phase of data analysis. As Labov (2001:85) observes "In the course of linguistic change, children learn to speak differently from their parents, and in the same direction that their parents learned to talk differently from their own parents. To trace this post-vernacular reorganization, we will need to record the dynamic inter-play between speakers and their styles in the social settings of most significance to their life chances". A more in-depth ethnographic study of Lerwick may help shed more light on the extreme post-vernacular reorganisation in this community of speakers as they move from vernacular to bidialectal to standard in this and the coming generations.

ACKNOWLEDGEMENTS

We gratefully acknowledge the support of the Economic and Social Research Council for award no. 000-22-2052 and the British Academy for award no. SG45936. We would like to thank two anonymous reviewers for their extremely helpful comments. We would also like to thank Sophie Holmes for help in coding of data. Thanks are also due to our on-site fieldworker 'Lisa' who proved to be a great interviewee and even better interviewer. And finally, thanks to the young speakers of Lerwick, Shetland, who agreed to be recorded not once, but twice, in the name of sociolinguistic research.

[22] A further test of this hypothesis would be to analyse a variable which is used in both dialects, as with Lim & Guy's (2005) study. Candidates for future analysis include (t, d) deletion, future temporal reference and t-glottalling.

REFERENCES

Anderson, Vicki. 2011. *Bidialectalism in intense language variety contact: An "unexpected" development in the death of Pennsylvania Dutchified English*. Unpublished PhD dissertation, University of Indiana.

Auer, Peter, Birgit Barden and Beate Grosskopf. 1998. "Subjective and objective parameters determining 'salience' in long-term dialect accommodation". *Journal of Sociolinguistics* 2: 163-188.

Auer, Peter, Birgit Barden, and Beate Grosskopf. 2000. "Long-term linguistic accommodation and its sociolinguistic interpretation: evidence from the inner-German migration after the Wende". In *Dialect and migration in a changing Europe,* ed. Klaus Mattheier, 79-98. New York: Variolingua 12.

Bailey, Guy. 2002. "Real and apparent time". In *The Handbook of Language Variation and Change,* ed. J.K. Chambers, Peter Trudgill, and Natalie Schilling-Estes, 312-331. Oxford, England: Blackwell.

Baratz, J. C. (1969). "A bidialectal task for determining language proficiency in economically disadvantaged negro children". *Child Development* 43: 889-901

Barnes, Michael. 1998. *The Norn Language of Orkney and Shetland*. Lerwick: The Shetland Times Ltd.

Bell, Allan. 1984. "Language style as audience design". *Language in Society* 13: 145-204.

Beal, Joan. 2000. "From Geordie Ridley to *Viz*: popular literature in Tyneside English" *Language and Literature* 9: 343-359.

Bickerton, Derek. 1980. "What happens when we switch?" *York Papers in Linguistics* 9: 41-56.

Blevins, Juliette 2006. 'New perspectives on English sound patterns. "Natural" and "Unnatural in evolutionary phonology"', Journal of English Linguistics 34.1: 6-25.

Bybee, Joan. 2007. *Frequency of Use and the Organization of Language*. Oxford: Oxford University Press.

Cornips, Leonie and Aafke Hulk. 2006. “External and Internal Factors in Bilingual and Bidialectal Language Development: Grammatical Gender of the Dutch Definite Determiner”. In *L2 Acquisition and Creole Genesis: Dialogues*, ed. Claire Lefebvre, Lydia White and Christine Jourdan, 355-378. Amsterdam/Philadelphia : John Benjamins, 2006.

Coupland, Nikolas. 1980. “Style-shifting in a Cardiff work setting”. *Language in Society*, 9: 1-12.

Douglas-Cowie, Ellen. 1978. “Linguistic code-switching in a North Irish Village”. In *Sociolinguistic Patterns in British English*, ed. Peter Trudgill, 37-51. London: Edward Arnold.

Dorian, Nancy C. 1994. “Varieties of variation in a very small place: Social homogeneity, prestige norms, and linguistic variation”. *Language* 70: 631– 96.

Eckert, Penelope. 2008. Variation and the indexical field. *Journal of Sociolinguistics*. 12: 453-76.

Fishman, Joshua A. 1964. “Language maintenance and language shift as a field of inquiry”. *Linguistics* 9: 32–70.

Giles, Howard, Donald Taylor, and Richard Y. Bourhis. 1973. “Towards a theory of interpersonal accommodation through language: Some Canadian data”. *Language in Society* 2:77-192.

Hazen, Kirk. 2001. “An introductory investigation into bidialectalism”. In *Penn Working Papers in Linguistics: Selected papers from NWAV 29*, ed. Daniel Johnson and Tara Sanchez, 85-99. Philadelphia, Pennsylvania: University of Pennsylvania.

Hazen, Kirk. 2006. The final days of Appalachian heritage language. In *Language variation and change in the American Midland*, ed. Thomas E. Murray & Beth Lee Simon, 129-150. Philadelphia: John Benjamins.

Houston, S. H. 1969. “A Sociolinguistic consideration of Black English of children in Northern Florida”. *Language* 45: 599-607.

Irvine, Alison. 2008. “Contrast and convergence in Standard Jamaican English: the phonological architecture of the standard in an ideologically bidialectal community”. *World Englishes* 27: 9-25.

Johnston, Paul. 1997. “Regional variation”. In *The Edinburgh History of the Scots*

Language, ed. Charles Jones, 433-513. Edinburgh: Edinburgh University Press.

Kerswill, Paul. 1987. "Levels of Linguistic Variation". *Journal of Linguistics* 23: 25-49.

Kerswill, Paul and Ann Williams. 2002. "'Salience' as an explanatory factor in language change: Evidence from dialect levelling in urban England". In *Language change: The interplay of internal, external and extralinguistic factors,* ed. Mari C. Jones and Edith Esch, 81-110. New York: Mouton de Gruyter.

Knooihuizen, Remco. 2005. "The Norn-to-Scots language shift: another look at socio-historical evidence". *Northern Studies* 39: 105–117.

Knooihuizen, Remco. 2010. "Perspectives on the Norn-to-Scots language shift in Shetland". In *Jakob Jakobsen in Shetland and the Faroes,* ed. Turið Sigurðardóttir and Brian Smith, 85-98. Lerwick: Shetland Amenity Trust.

Kytö, Merja. 1997. "*Be/have* + past participle: The choice of the auxiliary with intransitives from Late Middle to Modern English". In *English in transition: Corpus-based studies in Linguistic Variation and Genre Styles,* ed. Matti Rissanen, Merja Kytö and Kirsi Heikkonen, 17-84. Berlin: Mouton de Gruyter.

Labov, William. 1966. *The social stratification of English in New York City*. Washington, DC: Center for Applied Linguistics.

Labov, William. 1972. *Sociolinguistic patterns.* Philadelphia: University of Pennsylvania Press.

Labov, William. 1994. *Principles of linguistic change: Internal factors.* Oxford: Blackwell.

Labov, William. 1998. "Co-existent systems in African-American Vernacular English". In *The structure of African-American English: Structure, history and use,* ed. Salikoko Mufwene, John Rickford, Guy Bailey and John Baugh, 110-153. London and New York: Routledge.

Labov, William. 2001. "The anatomy of style-shifting". In *Style and sociolinguistic variation,* ed. Penelope Eckert and John Rickford, 85-108. Cambridge: Cambridge Univ. Press.

Labov, William, Ash, Sharon, Ravindranath, Maya, Weldon, Tracey, Baranowski, Maciej, Nagy, Naomi. 2011. Properties of the Sociolinguistic Monitor. *Journal of Sociolinguistics*. 15(4):431-463

Lim, Laureen and Guy, Gregory. 2005. “The limits of linguistic community: speech styles and variable constraint effects”. *Penn Working Papers in Linguistics* 10: 157-170.

Linnes, Kathleen. 1998. “Middle-class AAVE versus middle-class bilingualism:

Contrasting speech communities”. *American Speech* 73: 339-67.

Lippi-Green, Rosina. 1997. *English with an Accent: Language, ideology, and discrimination in the United States*. London: Routledge.

Macafee, Caroline (1997). Ongoing change in modern Scots: The social dimension. In Charles Jones (ed.), *The Edinburgh history of the Scots language*. Edinburgh: Edinburgh University Press. 514–548.

Macaulay, Ronald K. S. (1991). *Locating dialect in discourse: The language of honest men and bonnie lassies in Ayr*. New York: Oxford University Press.

Melchers, Gunnel. 1983. *NORN, The Scandinavian element in Shetland dialect, report No. 1: a presentation of the project*. Department of English, Stockholm University.

Melchers, Gunnel. 1991. Norn-Scots: A complicated language contact situation in Shetland. In *Language Contact in the British Isles: Proceedings of the Eighth International Symposium on Language Contact in Europe, Douglas, Isle of Man, 1988,* ed. P. Sture Ureland and George Broderick, 461-477. Linguistische Arbeiten 238. Tübingen, Germany: Max Niemeyer.

Melchers, Gunnel. 1996. "’We're aa da same here - but different, too’: some notes on regional linguistic variation in Shetland”. In *Shetland's northern links: language and history,* ed. Doreen Waugh and Brendan Smith, 44-51. Edinburgh: Scottish Society for Northern Studies.

Melchers, Gunnel. 2004a. “English spoken in Orkney and Shetland: Phonology”. In *A Handbook of Varieties of English, Vol. 1 Phonology,* ed. Bernd Kortmann and Edgar Schneider, 35-46. Berlin: Mouton de Gruyter.

Melchers, Gunnel. 2004b. “English spoken in Orkney and Shetland: Morphology, syntax and lexicon”. In *A Handbook of Varieties of English, Vol. 2 Morphology and Syntax,* ed. Bernd Kortmann and Edgar Schneider, 34-47. Berlin: Mouton de Gruyter.

Millar, Robert. 2007. *Northern and Insular Scots.* Edinburgh: Edinburgh University Press.

Miller, James. 1993. The grammar of Scottish English. In *Real English: The Grammar of English Dialects in the British Isles*, ed. James Milroy and Lesley Milroy, 99-138. Harlow: Longman.

Moore, Emma and Robert J. Podesva. 2009. "Style, indexicality and the social meaning of tag questions". *Language in Society* 38: 447-485.

Mufwene, Salikoko. 2001. *The Ecology of Language Evolution.* Cambridge: Cambridge University Press.

Papapavlou, Andreas. 2004. "Verbal fluency of bidialectal speakers of Standard Modern Greek and the role of language-in-education practices in Cyprus". *International Journal of the Sociology of Language* 168: 91–100.

Pavlenko, Alexander. 1997. "The origin of the be-perfect with transitives in the Shetland dialect". *Scottish Language* 16: 88-96.

Roeper, T. (1999) "Universal bilingualism". *Bilingualism: Language and Cognition* 2, 169- 186.

Rickford, John and Faye McNair-Knox. 1994. "Addressee- and topic- influenced style shift: A quantitative sociolinguistic study". In *Sociolinguistic Perspectives on Register,* ed. Douglas Biber and Edward Finegan, 235-276. New York, Oxford University Press.

Robertson, T. A. and John Graham. 1952/1991. *Grammar and Usage of the Shetland Dialect.* Lerwick: Shetland Times Ltd.

Schiffrin, Deborah. 1987. *Discourse markers*. Cambridge, UK: Cambridge University Press.

Schilling-Estes, Natalie. 1998. "Investigating 'self-conscious' speech: The performance register in Ocracoke English". *Language in Society* 27: 53-83.

Schilling-Estes, Natalie. 2004. "Constructing ethnicity in interaction". *Journal of Sociolinguistics* 8: 163-195.

Sharma, Devyani. 2011. "Style Repertoire and Social Change in British Asian English". *Journal of Sociolinguistics* 15: 464-492

Smith, Brian. 1996. The development of the spoken and written Shetland dialect: a historian's view. In *Shetland's Northern Links: Language and History,* ed. Doreen Waugh and Brendan Smith, 30-43. Edinburgh: Scottish Society for Northern Studies.

Smith, Jennifer & Mercedes Durham. 2011. "A Tipping Point in Dialect Obsolescence? Change across the Generations in Lerwick, Shetland". *Journal of Sociolinguistics* 15: 197-225.

Smith, Jennifer, Mercedes Durham & Liane Fortune. 2007. "Community, caregiver and child in the acquisition of variation in a Scottish dialect". *Language Variation and Change* 19: 63-99.

Smith, Jennifer, Mercedes Durham & Liane Fortune. 2009. "Universal, dialect-specific pathways of acquisition: Caregivers, children and t/d deletion". *Language Variation and Change* 21: 69-95.

Smith, Jennifer, Mercedes Durham & Hazel Richards. (in press). "The social and linguistic in the acquisition of sociolinguistic norms: caregivers, children and variation". Special issue of *Linguistics.*

Smith, Jennifer, Sophie Holmes and Mercedes Durham. (in progress). "Dis 'n' dat: constraint change across the generations in Lerwick, Shetland".

Stuart-Smith, Jane. 2003. "The phonology of Modern Urban Scots". In *The Edinburgh Companion to Scots,* ed. John Corbett, J. Derrick McClure and Jane Stuart-Smith, 110-137. Edinburgh: Edinburgh University Press.

Tagliamonte, Sali. 2000. "The grammaticalization of the present perfect in English: Tracks of change and continuity in a linguistic enclave". In *Pathways of Change: Grammaticalization in English,* ed. Olga Fischer, Anette Rosenbach, and Dieter Stein, 329-354. Amsterdam: John Benjamins.

Tait, John. 2001. "Whit is Shetlandic?", *Lallans* 58: 7-16.

Thelander, Mats. 1982. "A qualitative approach to the quantitative data of speech variation". In *Sociolinguistic variation in speech communities,* ed. Suzanne Romaine, 65-83. London: Hodder Arnold.

Trudgill, Peter. 1972. "Sex, covert prestige, and linguistic change in the urban British English of Norwich." *Language in Society* 1: 179–195

Trudgill, Peter. 1981. “Linguistic accommodation: Sociolinguistic observations on a sociopsychological theory”. In *Papers from the Parasession on Language and Behavior,* ed. Roberta Hendrick, Carrie Masek, and Mary Frances Miller, 218–237. Chicago: Chicago Linguistics Society.

Trudgill, Peter. 1986. *Dialects in contact*. Oxford: Basil Blackwell.

Trudgill, Peter. 1996 “*Two hundred years of dedialectalisation*: the East Anglian short vowel system”. In *Samspel och variation,* ed. Mats Thelander, 469-478. Uppsala: Uppsala Universitet.

van Leyden, Klaske. 2004. *Prosodic Characteristics of Orkney and Shetland Dialects. An Experimental Approach.* PhD Dissertation, Leiden University (LOT Dissertation Series 92). Utrecht: LOT.

Weener, P. D. 1969. “Social dialect differences and the recall of verbal messages”. *Journal of Educational Psychology* 60: 194-199.

Weinreich, Uriel. 1954. "Is a structural dialectology possible?". *Word* 10: 388–400.

Wells, John, C. 1982. *Accents of English*. Cambridge: Cambridge University Press.

Williams, Ann & Kerswill, Paul. 1999. “Dialect levelling: change and continuity in Milton Keynes, Reading and Hull”. In *Urban voices. Accent studies in the British Isles*, ed. Paul Foulkes and Gerard Docherty, 141-162. London: Arnold.

Wolfram, Walt. 1996. “Delineation and description in dialectology: The case of perfective I'm in Lumbee English”. *American Speech* 70: 5-26.

Yiakoumetti, Androula. 2006. “A Bidialectal Programme for the Learning of Standard Modern Greek in Cyprus”. *Applied Linguisitcs* 27: 295-317.