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Levels of Linguistic Accommodation across a National Border

Dominic Watt[1], Carmen Llamas[1], and Daniel Ezra Johnson[2]

Abstract

The political border between England and Scotland has been claimed to coincide with the most tightly packed bundle of isoglosses in the English-speaking world. The borderland, therefore, may be seen as the site of discontinuities in linguistic features carrying socioindexical value as markers of "Scottishness" or "Englishness." However, in an ongoing study of four border towns, the connection between inhabitants' claimed national identities and their use of indexical features has been found to vary depending on whether the localities are at the border's eastern or western ends, and on the speaker's age. This article examines the accommodatory strategies of a female Scottish English-speaking field-worker in her interactions with younger and older male speakers from localities on either side of the border. The linguistic behavior of the field-worker is examined at the phonological, discoursal, and lexical levels, and variability in her speech is considered in light of (1) her interlocutors' actual usage of the variables in question, (2) the interviewees' perceived status as "older" versus "younger" and as "Scottish" versus "English," and (3) the broader picture of the stability of usage of linguistic forms and of national identities in the localities in question.

Keywords

linguistic accommodation, convergence, divergence, national identity, national border, Scotland, England, age-correlated variation

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In any interaction, speakers react to the social characteristics of their interactants and may adjust their linguistic behavior as a consequence. In addition to acting in response to interactants' personal identities and actual usage of linguistic features, speakers view their interactants as members of social groups and can react to the perceived linguistic usages associated with those social groups. The socioindexical meanings attached to linguistic forms are crucial to this perceived usage, and by investigating linguistic variation in a speaker's multiple interactions we are able to shed light on accommodation processes and also on the social meaning attached to linguistic forms.

In a previous, complementary article (Llamas, Watt, & Johnson 2009), we have analyzed variation in the speech of five interviewees from the border town of Berwick-upon-Tweed in interactions with interviewers who represent the relevant and salient social categories of "Scottish" and "English." We interpreted variation in the multiple interactions using an accommodation framework. However, as pointed out by Giles (1973) and more recently Meyerhoff (1998), few studies have focused on the accommodatory behavior of the interviewer in sociolinguistic interactions. The potential for variability in the language elicited from informants as a consequence of accommodatory behavior both by and toward the interviewer is generally recognized at the design stage of sociolinguistic studies, but the actual effects of such processes merit further empirical investigation; as Mendoza-Denton (2002:479) notes, "The idea that the *researcher's* identity and ideological positioning vis-à-vis the interviewee crucially contribute to the patterning of data deserves more systematic exploration."

The current article investigates variation in a female interviewer's speech in interactions with twelve male speakers who vary not only with respect to whether they are Scottish or English but also with respect to whether they are older or younger. By observing how the interviewer adjusts her speech in the various interactions, we are able to assess the function of various linguistic forms as markers of "Scottishness" and as stable forms in the speech community, or as forms that may be recessive and therefore associated with older speakers.

Unlike the majority of studies which examine linguistic accommodation systematically through analysis of multiple interactions involving the same speaker, this study reports on variation at different levels of linguistic analysis to determine whether variation in the interviewer's productions patterns differently according to whether it is phonological, discoursal, or lexical.

We begin by presenting the theoretical frame of the study in terms of processes of accommodation before describing the context in which the study is situated. We then outline methodological issues before examining the data and considering their implications for linguistic accommodation and language change.

Background

The literature on communication accommodation theory (Giles 1984; Giles et al. 1987; Coupland & Giles 1988; Giles, Coupland, & Coupland 1991; Gallois, Ogay, & Giles 2005) holds that in response to the linguistic behavior and the social and

personal identities of the interactants, speakers may adjust the frequency with which they make use of linguistic features. Such adjustments may take the form of convergence, which is argued to result from the speaker's desire to seek an interlocutor's approval, or maintenance/divergence, which may demonstrate a lack of desire to reduce social-psychological distance (for a discussion of how this relates to the salience of linguistic forms, see Llamas, Watt, & Johnson 2009). In any interaction, participants can move along and between dimensions of high or low *intergroup* salience, through which memberships of social groups are highlighted, and high or low *interpersonal* salience, according to which speakers' personal characteristics are paramount (Watson & Gallois 2004). Furthermore, according to Gallois and Giles (1998:138), "The higher the intergroup salience of the interaction, the more important the intergroup history and stereotypes held by the interactants are likely to be." In light of this generalization, when designing the present study we held the topic of the multiple interviews constant across interactions by utilizing targeted questions that focused the participants' attention specifically on the differences between the relevant social groups "Scottish" and "English." This lent maximum prominence to the intergroup dimension, which we anticipated would have the effect of orienting participants' reactions toward their fellow interactants predominantly as members of the relevant social groups rather than as linguistic individuals.

A number of studies have examined short-term linguistic accommodation in the speech of individuals in multiple interactions. Coupland (1984), for example, analyzed the speech of an assistant in a Cardiff travel agency and found that her use of localized forms varied in line with whether she was talking to colleagues or to clients. Other examples of multiple interaction studies are, for instance, Bell's (2001) investigation of accommodation effects in conversations between male and female New Zealanders whose ethnicity was either Māori or Pakeha (of European descent) and Rickford and McNair-Knox's (1994) investigation of the speech of an African American teenager. Rickford and McNair-Knox examined the teen's interactions with both a familiar African American female interviewer and an unfamiliar European American female interviewer, revealing that for the morphosyntactic variables under scrutiny the interviewee used a greater number of standard forms with the European American than with the African American interviewer. Style shifting was interpreted as primarily a function of the interviewer's ethnicity (Rickford & McNair-Knox 1994:236), though the overt evaluation and the perceptual salience of the forms investigated were not discussed.

An earlier study complementing the current investigation (Llamas, Watt, & Johnson 2009) focused on the accommodatory behavior of informants interviewed multiple times by three different field-workers representing the relevant social categories of "Scottish," "English," and "other" (in this case, a nonnative English speaker). We found that features that may be considered salient according to Trudgill's (1986) definition, which is based principally on phonetic distance and phonological contrast, were not accommodated to. Forms that Trudgill's criteria would classify as nonsalient, on the other hand, appeared to vary consistently in line with the perceived usage of the interviewer. This suggests that a strategy of convergence was employed during the

interactions, in spite of the forms' nonsalience and a mismatch between the interviewers' actual productions and the forms produced by interviewees (presumably) as a reaction to their perception of the social characteristics of the interviewer.

The accommodatory behavior of the interviewer rather than the interviewee in sociolinguistic interviews was first analyzed by Trudgill (1986), who, after examining the phonological variables /t/ and /aː/ in his own speech in ten interview contexts with informants for his Norwich study (Trudgill 1974), found that he appeared to be accommodating quite closely to his interviewees in his use of the glottal stop [ʔ] for /t/. The degree to which he varied his use of fronter and backer variants of /aː/ seemed to be uncorrelated with the productions of his interactants, however. In the more detailed analysis of variation in a range of variables that we present in the current article, we observe the same patterns as seen in Trudgill's Norwich data: a combination of both convergence and maintenance in different variables in the same interactions. The extended analysis discussed below, however, also brings us somewhat closer to answering the question Trudgill (1986:9) poses after presentation of his data: why are some aspects of linguistic behavior altered during the accommodation process while others remain unchanged?

The context in which we hope to address Trudgill's question is a study of accommodatory behavior in multiple interactions between an interviewer and inhabitants of two towns on either side of a national border. The locations in question are Eyemouth, a small coastal village lying five miles (eight kilometers) north of the Scottish–English border at its eastern end, and Carlisle, a medium-sized city in northern Cumbria some ten miles south of the border at its opposite extremity. These localities are two of four communities currently being investigated for the Accent and Identity on the Scottish/English Border (AISEB) project.[1] The border between England and Scotland continues to represent a significant linguistic boundary, to the extent that Aitken (1992:895) claims that "what appears to be the most numerous bundle of dialect isoglosses in the English-speaking world runs along this border, effectively turning Scotland into a 'dialect island.'" Historically the border has moved to the north and south many times, and this lack of fixity is reflected in the way that social, regional, and national identities in the border region seem similarly fluid. The complexity of the interrelationship among language use, identities, and orientations in this region constitutes the focus for the AISEB project. In this article, we assess the extent to which we can assign socioindexical meaning to linguistic forms through investigation of accommodatory behavior. This allows us, among other things, to test how far Aitken's claim can be said to hold true and more generally to systematically explore one of the processes believed to play a key role in how language changes.

Method

The interactions reported here represent different dialect contact situations. The interviewer (IvS) is a 25-year-old female Scottish English speaker from Fife, who has extensive experience as a sociolinguistic field-worker. The interviews were carried out

in Eyemouth (Scotland) and Carlisle (England), two of the four AISEB localities. These particular sites were chosen for the current investigation as they are maximally different: the Eyemouth variety is considerably richer in Scottish linguistic features than is that of Gretna (the other Scottish locality), and Carlisle English is less markedly a hybrid of Scottish and northern English features than is the variety of Berwick-upon-Tweed (the second English fieldwork site).

As the interviewer is a native Scottish English speaker, we hypothesized that she would make greater use of "Scottish" features in the interviews carried out with Scottish interviewees than in the interviews with their English counterparts. In addition, we hypothesized that the interviewer would use a higher number of traditional forms with the older speakers than with the younger ones. We infer the presence of accommodatory behavior in the interviewer's speech through differences in the distribution of linguistic variants observed in the interview settings rather than through independent knowledge of her default production patterns gathered in other contexts. The possibility of establishing what such a default baseline would be for an individual speaker is in any case open to debate (see further Llamas, Watt, & Johnson 2009).

We acknowledge that interactants' gender may influence the type and degree of accommodatory behavior, but owing to the proximity of the fieldwork sites to a national border we give priority for present purposes to the social categorization of national identity grouping. We therefore selected only male interviewees categorized for this section of the study. Given our specific interests in the relationships between language change and social change more generally (in this case the effects of Scottish political devolution, among other things), we also take speaker age as one of our social variables, and we infer change in progress from differences in the distributions of linguistic forms across age in the two localities.

In Eyemouth, the interviewee sample consists of two older speakers (OE; aged eighty-two and seventy-one) and four younger speakers (YE; aged sixteen, seventeen, and two aged eighteen). In the Carlisle sample the two older speakers (OC) were seventy-eight and sixty-five and the four younger speakers (YC) were eleven, twelve, and two were thirteen. Informants were recorded either in their own homes or in quiet rooms in institutional settings using an iRiver H120 solid-state digital recorder with a Sony ECM-MS907 microphone.

All interviews were between thirty and sixty minutes in length and included focused questions used in the AISEB project that relate to the significance and influence of the border, claimed and attributed identities as Scottish or English, levels of interaction with speakers from the other side of the border, and so on (see Llamas 2010). Hence, the social identity of the interviewees in terms of the national identity grouping(s) toward which they oriented was highlighted in the interview, which we designed to influence the interaction in such a way that speakers would be likely to react to their interactants less as linguistic individuals and more in terms of their perceived social group membership(s). While it is possible that there are correlations between use of forms and the topic or content of the interaction at any given point, we do not in the present article investigate this connection.

The questions we are seeking to answer in the current study are as follows:

1. Do we see differences in the distribution of sociolinguistic variants in IvS's speech in line with whether the interviewees are from the Scottish locality or the English one?
2. Do we see differences in the distribution of variants in IvS's speech in line with whether the interviewees are younger or older?
3. Do the patterns of convergence or divergence/maintenance observed in IvS's speech differ with respect to the level of linguistic analysis involved (phonological, discoursal, lexical)?

The variables of interest in this study are shown in Table 1.

Each token of the variables was coded auditorily using narrow phonetic transcription where relevant, and the resulting figures were subjected to appropriate statistical testing (including Fisher's exact test for all variables).

Results: Phonological Variables

/r/: Use of the Alveolar Tap [ɾ]

The first variable we consider involves the use of the alveolar tap [ɾ] for /r/. The tap is frequent in varieties of English spoken in both Scotland and the far north of England (Johnston 2007; Foulkes & Docherty 2007; Stuart-Smith 2008) but is probably more typically associated—to the point of being stereotyped—with Scottish English, in which taps are a prominent feature even among middle-class speakers who can be assumed to speak Scottish Standard English or something very close to it (Stuart-Smith 2003).

Auditory coding of 1,899 tokens of /r/ in four phonological contexts was carried out. The contexts are as follows: V#RV (as in *a round*), #CRV (as in *brown*), VRV (as in *carry*), and VR#V (as in *far away*).

These contexts are known from earlier studies of /r/ in British English (including in the Scottish–English border area; Watt 2007) to be the environments in which taps are most likely to occur. The coding allowed for a simple alternation between the tap and an approximant [ɹ], which glosses over some of the fine detail known to exist in the rhotic consonants used in the region (Llamas, Watt, & Johnson 2009) but which is sufficient to capture the gross pattern of variation most relevant in the present study.

The top left-hand panel in Figure 1 demonstrates that [ɾ] is more commonly used by the OE and OC speakers than it is by the young males in each community. The OE and OC speakers use [ɾ] on average approximately 60 percent of the time, but in both towns the young speakers rarely do so: [ɾ] accounts for only around 10 percent of the YE sample and less still for the YC group. If one takes the generational difference to be indicative of change in the English of these two communities, it seems that the use

Table 1. Variables Examined for the Study

Phonological	Lexical	Discoursal
coda /r/	*ken* 'know' (as a main verb)	*ken* 'know' (as a discourse marker)
alveolar tap [ɾ] in syllable onsets	*f(r)ae* 'from'	
/l/-vocalization		
MOUTH monophthongization		
[e] in BOTH-class words		

of taps has sharply declined, such that the tap has gone from being the majority form to being a rather rare one. We should remember that these scores are averages and that there is in some instances substantial within-group variability.

Figure 1 also reveals that the interviewer, IvS, exhibits a distribution of taps in her own /r/ productions that resembles the "curvilinear" pattern seen among the interviewees. In both Eyemouth and Carlisle her use of [ɾ] when talking to older men is higher than when she is interviewing younger males. It is, moreover, very closely matched to the average [ɾ] score of the older men. While there is a reduction in her tap usage when talking to the younger males, echoing these groups' own highly infrequent use of the form, she does not drop her use of it below 30 percent, even with the YC group.

Coda /r/

The second way we have quantified /r/ involves the use of postvocalic /r/, that is, rhoticity or "coda /r/." Scottish English accents continue to be almost uniformly rhotic, in spite of the patterns of derhotacization in central Scottish urban varieties reported since the 1970s (Romaine 1978; Reid 1978; Macafee 1983; Stuart-Smith 2008). It is now very rare to hear coda /r/ in use in Northumberland and Cumbria, the English counties adjacent to the Scottish border, however. In this respect they follow the mainstream pattern found in practically all other regions of England. The isogloss dividing rhotic from nonrhotic accents, at least at the eastern end of the border, is thus rather abrupt and follows the political border closely (Llamas 2010). We might therefore anticipate a pattern whereby postvocalic /r/ is common among the Eyemouth men in both age groups but rare among the Carlisle males.

We examined the occurrence of coda /r/—this time taking account only of the presence or absence of some kind of rhotic consonant following the vowel—in the contexts VR#(C) (as in *car (seat)*), and VRC (as in *cart*).

The middle panel in the top row of Figure 1 shows, as predicted, high levels of coda /r/ among the Eyemouth speakers. The average use of coda /r/ is slightly higher for the YE group, indicating that derhotacization of this variety is not underway.

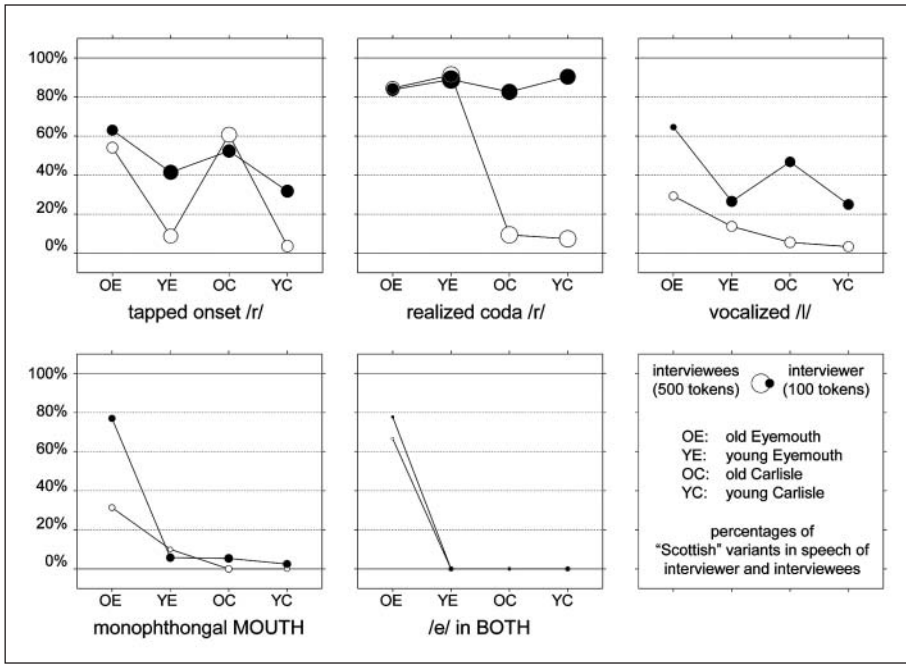

Figure 1. Frequencies (%) of tapped onset /r/, coda /r/, vocalized /l/, MOUTH monophthonging, and [e] in BOTH-class words in the speech of the Scottish English-speaking interviewer and four informant groups in Eyemouth and Carlisle
The size of data points represents sample size.

These high levels of coda /r/ contrast with those among the Carlisle speakers, whose average rates of coda /r/ usage are negligible. There is a very slight age effect apparent here, whereby there is marginally less coda /r/ among the YC group. On the basis of these data it can legitimately be observed that the process of derhotacization is essentially complete in Carlisle English.

As seen in the alveolar tap data in the section above, IvS's use of coda /r/ is very closely matched with that of the Eyemouth interviewees. IvS does not use coda /r/ categorically in her speech to either the OE or the YE speakers, but her usage is maintained at about the same level in interaction with every cohort.

/l/-vocalization

/l/-vocalization, whereby the apical gesture of /l/ is deleted in coda positions (as in *feel*, *sold*, *healthy*) such that the consonant is realized as a back rounded vowel such as [o u ɤ], is a well-established feature of several accents of English in the UK (Wells 1982; Johnson and Britain 2007) and elsewhere in the world (Wolfram

& Schilling-Estes 2006; Horvath & Horvath 2001; Gordon et al. 2004; Deterding, Wong, & Kirkpatrick 2008). It is common in Scottish English, particularly Glaswegian (Stuart-Smith, Timmins, & Tweedie 2006).

/l/-vocalization of this sort is thought to be a relatively recent sound change that took hold, particularly in southeastern England, over the course of the twentieth century (Johnson & Britain 2007), although there are indications that it was present in some accents earlier than this. In Scotland and northern England an additional wave of /l/-vocalization affecting a set of words including *all*, *ball*, *call*, and *full* and resulting in spellings such as *a'*, *baw*, *caa*, *fu'*, and so forth is reported in eighteenth-century sources (Jones 1997:319-320).

/l/-vocalization is now generally absent from accents of the far north of England, however. Carlisle does not share with Tyneside and Northumberland varieties the occurrence of clear (palatalized) /l/ in both onset and coda positions (Beal 2008:140) but rather conforms to a standard-like pattern whereby /l/ is clearer in onsets than in syllable codas. /l/-vocalization does occur sporadically in Carlisle English (Wright 1977), and velarized [lˠ] can be heard in syllable onsets, but neither is frequent.

The data shown in Figure 1 reveal a fairly high level of /l/-vocalization (50.0 percent) by IvS when she is interacting with the OE group and to a lesser extent with the OC speakers (46.5 percent).[2] Her use of vocalized /l/ in the interviews with the YE and YC groups is lower still, and her average use of the variant matches in both locales (25.5 percent). The pattern here is similar to that seen in Figure 1 for [ɾ], whereby IvS's use of the "Scottish" variant is higher (but not categorical) when she is talking to older informants and at its highest when she is in conversation with the OE speakers.

However, unlike [ɾ], there is only weak similarity between IvS's use of vocalized /l/ and the figures for the Eyemouth and Carlisle informants. While the OE speakers use vocalized /l/ around one-third of the time, it is less frequent on average (22 percent) among the YE informants and is used to a negligible extent by both Carlisle groups. The latter pattern might be expected, given the reported infrequency of /l/-vocalization in the northernmost counties of England. On the whole, vocalized /l/ appears to be much less frequent in the speech of the interviewees than it is in IvS's speech.

MOUTH *Monophthongization*

The use of a monophthongal rather than a diphthongal pronunciation of the vowel in (a subset of) words of the MOUTH set in varieties of English spoken in Scotland and the north of England results from the lack of the breaking of /uː/ during the Great Vowel Shift (Wells 1982; McMahon 2006). The original Middle English vowel is therefore preserved in traditional forms of northern British English and indeed is a stereotypical feature of both Scottish (Johnston 1997; Eremeeva & Stuart-Smith 2003) and northeastern English English (Beal 2008). Where it occurs south of the border, it is most particularly associated with Newcastle upon Tyne (Watt & Milroy 1999; Beal 2000), but it is also attested as a traditional feature of Carlisle English and other Cumbrian

varieties (Wright 1977, 1978). The quality of the vowel in Scottish English tends to be fairly or markedly fronted—[ʉ] and [ʏ] are typical pronunciations (Stuart-Smith 2008)—while the vowel (at least that of the GOOSE set) in Cumbria is backer or fully back. However, monophthongal pronunciations are not found in all MOUTH-class items: the subset containing common forms like *out*, *round*, *down*, *about*, and so on (sometimes labeled the OUT set) contains those most liable to be realized with monophthongs. Also, both monophthongal and diphthongal pronunciations alternate in the same words for the same speakers. Consequently, monophthongal MOUTH is not as common as the stereotypes of Scottish and northern English English would suggest. When monophthongs are used, however, they appear to be unusually salient to listeners.

The data shown in the lower left-hand panel of Figure 1, which are for the most frequent alternating MOUTH-class words *now*, *out*, *about*, and *down* ($N = 513$), indicate that monophthongal pronunciations are present among the OE speakers at an average rate of 31 percent and are also in use among the YE group (10 percent; the monophthong is most frequent in the words *out* and *about* for this group). Monophthongs are not used at all among the Carlisle speakers.

IvS's own usage pattern for monophthongs in MOUTH-class items matches this broad pattern closely, except that in conversation with the OE speakers she uses monophthongs much more frequently (more than twice as often, in fact) than do the OE men themselves. However, she uses far fewer monophthongs in conversation with the YE males—her rate of usage is indeed almost exactly the same as theirs—and she uses a similarly low proportion of monophthongs with the OC speakers. IvS exhibits no age effect here comparable to that seen in her data for the Eyemouth speakers, in that she uses the monophthongal variant hardly at all with any of the Carlisle informants.

[e] in BOTH-class Words

Traditional forms of Scottish English—those most heavily influenced by Scots (Johnston 2007)—exhibit an alternation whereby words such as *more* /mor/ and *mair* /mer/ are effectively interchangeable (Stuart-Smith 2008:56). Other items in this class, which Stuart-Smith (2003:116) labels with the keyword BOTH, include *most*(*ly*), *stone*, *snow*, *so*, *sore*, and *both*. Traditional accents of northern England preserve essentially the same pronunciations (Orton & Halliday 1963): spellings such as *mair*, *maist*, *sair*, *sae*, and so forth are frequent in informal representations of local accents throughout the far northern counties, including Cumbria (Wright 1978). The alternation, which is of considerable antiquity, may be described as lexical rather than purely phonological in that it is phonetically abrupt rather than gradient. In this analysis, however, we treat it as a phonological variable with two possible variants.

For present purposes, we chose to examine only the higher frequency pairs *mair~more*, *sae~so*, *baith~both*, and *maist(ly)~most(ly)* in the speech of IvS and the twelve interviewees. While the number of tokens involved is not especially large ($N = 148$), the pattern we can observe in the data is nevertheless a striking one and one very similar to that already seen for MOUTH-monophthonging.

The [e] frequencies for IvS and among the Eyemouth and Carlisle informants are closely matched in the sense that for three of the four interviewee groups neither IvS nor the informants use any [e] at all. It is clear, however, that the OE speakers use a substantial proportion of the pronunciation in relevant words (group average 60 percent). This is not unexpected for these speakers, as it seems reasonable to assume that they will use [e] in BOTH-class words fairly frequently in conversation in any case. IvS's use of [e] actually exceeds that found among the OE group, a point we return to in the discussion.

We turn next to consider two lexical variables (*f(r)ae* and *ken* as a main verb) and a discourse variable (*ken* as a discourse marker).

Results: Lexical and Discourse Variables

F(r)ae versus from

Frae and *fae* 'from' are reflexes of Old Norse *frá* that, according to the *Oxford English Dictionary* (OED 1989a, 1989b), are now only Scottish and dialectal. The OED does not specify in which non-Scottish dialects *frae*, and its variant spellings (including *fro*), occur in contemporary English. The alternant *fae* is listed as a reduced form of *frae*. *Fae* is attested more than 1,300 times in the online Scottish Corpus of Texts and Speech (n.d.-a, n.d.-b), while *frae* occurs over 2,000 times.[3] For present purposes we group *frae* and *fae* together, as we believe them to be equivalent in terms of their sociolinguistic indexicality, and we compare their frequency against that of the standard form *from*.

To judge from the fact that no examples of *f(r)ae* (or anything resembling it) are heard in our Carlisle recordings, the form does not appear to be in circulation among speakers of the Carlisle variety.[4] However, in Eyemouth *f(r)ae* is the majority form among the OE men (average 73 percent) and is also moderately common among the YE speakers, who use it in 19 percent of cases (Fisher's exact test, $p = .0008$). A more extreme version of this pattern is seen in IvS's productions: she uses *f(r)ae* almost categorically when talking with the OE speakers, but she avoids it altogether with the YE males ($p < .0001$). As with two of the other variables ([e] in BOTH and monophthongal MOUTH), IvS's usage of the "Scottish" form exceeds that of the OE group. No significant difference is found between the rates of use of *f(r)ae* by the OE group and IvS, though these are based on small numbers of tokens. The difference between the YE speakers and IvS is more marked, however, and is a result in which we can have greater confidence in view of the larger token counts involved (IvS = 0/34, YE = 6/32 *f(r)ae*; $p = .01$).

Ken as a Main Verb

The use of *ken* rather than Standard English *know*, particularly in the tags *(ye) ken?* and *ken what I mean?*, is a well-known stereotype of Scottish English, although as with other variables discussed here it is not historically exclusive to that variety (it occurs,

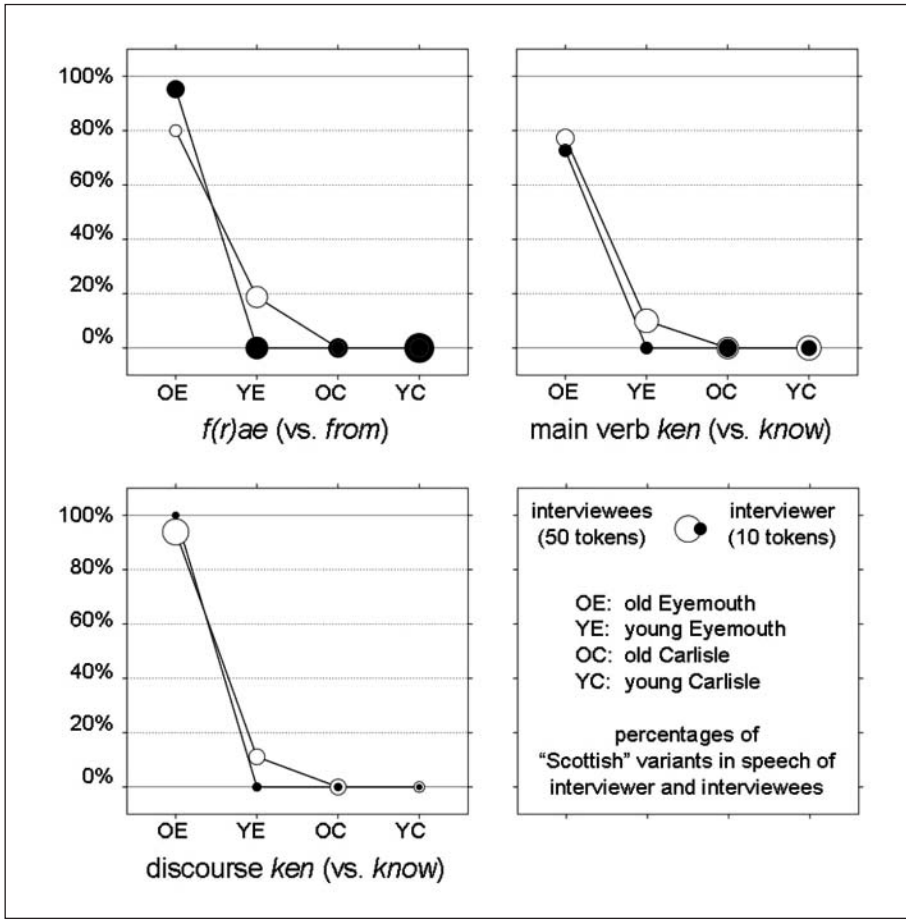

Figure 2. Frequencies (%) of *f(r)ae* 'from,' *ken* as a main verb, and *ken* in discourse marker constructions in the speech of the Scottish English-speaking interviewer and four informant groups in Eyemouth and Carlisle
The size of data points represents sample size.

e.g., in the Cumbrian folksong "D'ye ken John Peel?"). We distinguish here between the use of *ken* as a main verb (as in *Do you ken Burnmouth?*) and *ken* as a discourse marker (as in *I've never been there, ye ken*), and we quantify its occurrence relative to use of *know*, which in the Eyemouth variety is available as an alternative to *ken* and in Carlisle is the only attested form in our recordings. In our quantification ($N = 199$) we include *don't know/dunno* and ignore for present purposes the fact that *know* may occur in several phonetic forms, including [naː], which is often written *knaa* in dialect literature (Bowness 1868).

Figure 2 shows that the OE speakers use a high proportion of *ken* (77 percent) while the YE group use it only sporadically, at an average rate of 10 percent. Fisher's exact tests run on these data show a highly significant age effect ($p < .0001$). The Carlisle speakers do not use *ken* at all. As with the [e] in BOTH and *f(r)ae* variables, IvS matches the OE group's usage rate very closely, but she makes no use of *ken* whatever when interviewing the YE males ($p = .001$). Nor does she use *ken* with the Carlisle speakers.

Ken as a Discourse Variable

The distribution of *ken* as a discourse marker, as in the tag *(ye) ken?*, is practically identical to that of *ken* as a main verb, as a comparison of the upper right- and lower left-hand panels of Figure 2 reveals very clearly ($N = 107$). The key difference, albeit one that does not achieve statistical significance, is that *ken* as a discourse marker is used more frequently than is *know* by both IvS and the OE interviewees. Indeed, IvS uses only *ken* in these contexts, and its use among the OE speakers is virtually categorical at more than 90 percent, in which they differ strongly from the YE group (Fisher's exact test, $p < .0001$; this result is mirrored in the difference between IvS's *ken* frequency with the OE and YE groups, where $p = .018$). IvS's use of discourse *ken* matches closely with that of the YE, OC, and YC interviewees, in that it drops to zero. In this respect she matches exactly with the Carlisle speakers, who, as we saw with main verb *ken*, use no examples of discourse *ken*. However, two YE speakers use discourse *ken* once each during their interviews, so it is present, if very infrequently, in their samples. Since IvS does not use discourse or main verb *ken* even once in either of the interviews with the YE males, it cannot be the case that they are accommodating to her actual usage, though their perception of IvS as a Scottish English speaker may well be influential.

The patterns we observe for *ken* suggest, then, that in practice there is little difference between the distributions of *ken* as a main verb and as a discourse marker in the Eyemouth and Carlisle samples and that the distribution of *ken* as opposed to *know* is extremely polarized both in IvS's usage and in that of the interviewees. Among the latter, the use of *ken* seems tied to Scottishness and to the speaker's age.

Discussion

When considering IvS's variable behavior, three broad patterns emerge. We see evidence for what we call "overshoot" (in MOUTH-monophthonging, [e] in BOTH, *f(r)ae*, and *ken*) as well as patterns of maintenance (in coda /r/) and convergence ([ɾ] and /l/-vocalization). The level of linguistic analysis does not appear to correlate with the distributions observed. Rather, which linguistic variables follow which patterns appears to link to the stability of the forms in the speech communities and also the socioindexical meanings that may attach to them.

The overshoot pattern occurs in the data for the variables for which we see a significantly higher use of the form in a single cohort—the older Scottish speakers—than in the other groups, including the younger Scottish speakers. In this pattern IvS

mirrors the informants' distributions by using the form very frequently in interactions with the older Scottish males, but she demonstrates near-categorical non-use with the other three cohorts. Although the direction of variation in IvS's usage follows that seen in the interviewees' data, we observe IvS overshooting, to a considerable degree, the average frequency of "Scottish" forms produced by the older Scottish informants. The forms that exhibit the overshoot pattern appear to be restricted almost exclusively to the speech of the older Scottish speakers, although some usage is apparent in the speech of the younger Scottish males. To this extent, in producing virtually no tokens of the forms at all IvS can be seen also to overshoot the *low* frequency of the forms when talking to the younger Scottish speakers. The forms in question are to some extent stereotypical of Scottish English (see below for further discussion). IvS's use of these forms might indicate that she is reacting primarily to the categorization of the interviewees as either Scottish or English, and she is responding to the variety she associates with that categorization rather than to the interviewees' actual usage patterns. As we also see an interviewee age effect whereby IvS drops her usage to a level below that of her interactants, we may hypothesize that these forms are not only indexical of "Scottishness" but also traditional forms associated with older speakers. The dramatic drop in use across apparent time in the Scottish interviewees' speech suggests that these forms are now recessive. In the overshoot cases, the interviewer appears to be reacting to both the "Scottish versus English" categorization and the "old versus young" dimension simultaneously. We might interpret the overshoot pattern as representing a "hyper" version of IvS's own native variety, but ascertaining what her default production patterns are would be neither a self-evident nor a trivial task (see further Llamas, Watt, & Johnson 2009).

The second pattern in evidence is one in which IvS maintains her level of use of the linguistic form regardless of that form's frequency in the speech of her interlocutors. In her use of coda rhoticity, IvS remains near categorical with both Scottish and English informants. In the interviewees' speech, by contrast, there is a very clearly marked difference in usage correlating with nationality. This variable appears stable across age in the speech communities under investigation. The interviewer therefore does not react to the age of the informant, but neither does she react to the national identity categorizations in the various interactions. As coda rhoticity forms part of the interviewer's native variety, she maintains her use of this feature even with the non-rhotic English interviewees. This may be seen as a feature that carries, to use Trudgill's (1986:37) term, "extra-strong salience," and as such it will not be accommodated to. Coda /r/ has been claimed to carry strong socioindexical meaning as a characteristic feature of Scottish English (Scobbie 2007; Stuart-Smith 2007), but unlike the forms in the overshoot category, the presence or absence of coda /r/ is stable within each speech community. Furthermore, usage and perception of usage do not appear to be in disagreement. In this case, coda /r/ should not be considered a stereotype in the Labovian sense, that is, a form so far above the level of conscious awareness that it is seen as a defining characteristic of a variety, even if its actual use has become negligibly low (Labov 1966). Perceptual testing planned as a strand of the AISEB project

will extend our understanding of the socioindexical meaning attached to coda /r/ in the border region.

The third pattern we observe is convergence. The overshoot pattern described above is of course a form of convergence, but it is one that demonstrates an unexpectedly large change in IvS's production in response to her interlocutors' behavior. By contrast, the convergence pattern is restricted to cases in which we observe a closing of the gap between the interlocutors' frequencies of usage without extreme excursions on the interviewer's part toward the upper and lower bounds of the frequency scale. For example, IvS's use of monophthongal MOUTH accounts for almost 80 percent of her productions in conversation with the older Eyemouth cohort but for less than 10 percent when talking to the other three groups.

Convergence is manifested by the curvilinear pattern noted with the alveolar tap data, suggesting that IvS is reacting to the age of the informant by increasing or decreasing her use of forms depending on whether her interactants are older or younger, rather than whether they are Scottish or English. These forms, particularly [ɾ], appear to be undergoing change in the community. Older speakers in both the Scottish and the English speech communities use more [ɾ] and more vocalized /l/ than younger speakers. IvS's speech reflects this, in that she uses more [ɾ] and more vocalized /l/ with older speakers than younger ones in both localities. The interviewer does also appear to be responding to the national identity groupings of the informants, however, as she uses more [ɾ] and more vocalized /l/ with the older Scottish speakers than with the older English speakers, even though the latter group uses more [ɾ] than the former group does. Again, the interviewer may be reacting to the perceived variety of the speaker rather than actual usage.

In summary, then, we are unable to predict which of the three patterns will emerge in an individual linguistic variable on the basis of whether it is phonological, discoursal, or lexical. To this extent, the present data are not supportive of claims made by some contact linguists (e.g., van Coetsem 1988, 2000; Howell 1993; Winford 2005) that lexical variables tend to be less diachronically stable—and therefore are more prone to be affected by convergent accommodatory behavior—whereas phonological and grammatical variables are less susceptible in this way owing to their relative stability.

Rather, the data presented in this article suggest that the social category associations attached to the forms in question and the forms' stability in the speech community appear to be stronger predictors of the pattern of accommodation evident in the distribution of variants in multiple interactions.

Conclusion

This article has presented data on levels of linguistic accommodation across the national border separating Scotland and England. The levels of linguistic accommodation of the title refer to not only different levels of linguistic analysis—phonological, lexical, and discoursal—but also different levels of convergence and maintenance.

Through analysis of a Scottish female's linguistic behavior in multiple interviews with older and younger Scottish and English male interviewees, we see that the level of linguistic analysis does not predict the level of convergence/maintenance. Rather, the social category associations attached to the linguistic forms under examination and their stability in the speech community in question appear to correlate with the patterns of accommodation evident in the speech of the interviewer.

The data show evidence of the interviewer reacting to both the national identity category and also the age grouping of her interactants. With traditional forms in the Scottish variety that are present among the older speakers but not the younger ones, the interviewer tends to overshoot the actual usage of her interactants by producing levels of usage substantially higher and lower than those of the older and younger speakers respectively. By so doing she may be reacting to her perception of the usage of traditional forms, which she associates with both Scottish English and with older speakers.

With forms that are present but that are currently undergoing change in both communities and are therefore less strongly associated with the national groupings under consideration, we see in the interviewer's speech a reaction, in the form of convergence, toward the age of the interactant, as IvS's level of usage varies depending on whether the interactant is older or younger. This is the case even if, in the case of the English speakers' use of vocalized /l/, for example, this does not closely correspond to the speakers' actual usage.

Finally, the interviewer demonstrates the maintenance of a form that remains stable regardless of the national grouping or age of her interactant. This feature, coda rhoticity, is both stable *within* the two speech communities and effectively categorically different *between* the two speech communities. Such a feature can be said to carry extra-strong salience (Trudgill 1986) and, as such, will not be accommodated to.

Investigation of the accommodatory behavior of speakers in situations wherein interactants vary in terms of the social groups they belong to allows us to assess how forms are marked for socioindexical meaning and their stability in the speech community. The data presented in this article are strongly suggestive of accommodatory patterns that can be modeled thus: if forms are stable and near categorical, then accommodation is unlikely; if forms are unstable in the community, then accommodation appears likely. This accommodation may manifest itself in an adjustment toward perceived usage estimated through assessment of the social identity of the interactant rather than his or her actual usage. These are patterns we may see recurring in other data sets depending on the stability and socioindexicality of forms. Although we have presented analysis of accommodatory behavior in multiple interactions of interviewees in a previous article (Llamas, Watt, & Johnson 2009), the validity of the current claims and the predictive potential of the model proposed rest on further systematic, perhaps experimental testing that should incorporate multiple interactions from both the interviewer(s) and interviewee(s) under examination. Nonetheless, findings presented here reveal how the capacity of forms to index social meaning is crucial to whether or not features will be accommodated to. Consequently, awareness of this social meaning of forms is central to an understanding of the process and progress of linguistic change in the speech community more generally.

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The author(s) declared no potential conflicts of interest with respect to the authorship and/or publication of this article.

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2. It should be noted that, for bivalent variables of the sort we are examining here, the possibility exists that values around 50 percent are simply the result of chance intraspeaker variation rather than accommodatory convergence. Nonetheless, we believe that the patterns in the present data indicate directionality of movement that is plausibly interpreted as the latter.
3. *Fae* 'foe' also occurs in literary Scots texts, such as Robert Fergusson's "Auld Reikie" and Robert Burns's "Lament of Mary Queen of Scots."
4. This observation is confirmed by Sandra Jansen (personal communication, November 6th, 2009; see Jansen, forthcoming).

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