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English in early 21st century Scotland: a phonological perspective

Résumé

Cet article se donne pour objet la description phonologique de l'anglais en Ecosse, plus précisément dans les Lowlands. La situation sociolinguistique y est complexe car les locuteurs y sont souvent tiraillés entre deux extrêmes : d'une part, un système qui est le pendant de la Received Pronunciation (RP) en Ecosse, à savoir le Standard Scottish English (SSE) ; de l'autre, l'Ecossais (Scots) qui a une vie souvent souterraine mais non moins réelle pour beaucoup de locuteurs. On trouvera donc ici une description des principaux traits du SSE et quelques-unes des grandes caractéristiques de l'Ecossais du point de vue phonologique. On montrera la pertinence de ces deux pôles linguistiques pour expliquer divers cas de variation. Dans de nombreux cas, néanmoins, la variation phonologique observable dans les usages écossais ne semble pas s'expliquer en termes de conflits entre dialectes mais plutôt en termes de variation inhérente au sens labovien.

0. Introduction

Nowadays, English is practically universally used in Scotland. According to Clement (1984), about half of the population of Scotland spoke Gaelic until the 16th century. Thereafter, it progressively disappeared from the south-west of Scotland and from the lower part of the east coast. The 1891 Census reported a Gaelic-speaking population of a quarter of a million, 43,738 of which were monoglot speakers. A hundred years later, the 1991 census returned 69,978 speakers. According to the 2001 census there are only 58,650 speakers of Gaelic left in the Highlands and islands of Scotland. Even if such figures are always difficult to interpret, it may be that Gaelic will ultimately disappear from the British Isles. The study of English in the areas where Gaelic used to dominate would require a separate study (see McKinnon 1984, Abalain 1989: 79-108, and Wells 1982: 412-417 for some remarks on the phonology). Here we will concentrate on the Lowlands of Scotland.

In the Lowlands, two systems have been in competition for many centuries. On the one hand, standard English continues to exercise a very strong influence through the written medium. The written norm of trade, education, law, politics, journalism is a variety of standard English close to that used in England. For instance, when the 'Cross-party group on Gaelic' meets in the new Scottish parliament, the minutes are written in a style hardly distinguishable from what would be used in Westminster:

Census 2001 – Report on Gaelic Statistics
Alan Campbell gave an overview of the outcome of the 2001 Gaelic Census Report which was published in the previous week The outcome provided a basis for optimism in that Gaelic speakers had not declined as dramatically over the past 10 years as they had over the previous 10 years. It was also a matter of optimism that approximately 30,000 people had indicated that they had an understanding of Gaelic and it was agreed this substantial sector should be regarded as a solid basis on which to build a constituency for attaining fluency of the language, over the coming years…" (Meeting of Wednesday 19th February 2003).

There are some examples of variation between written Standard English in Scotland and England. For instance, the form 'outwith' is often used with the meaning 'outside' in official texts: *This question is outwith the jurisdiction of the court*. The main differences, however, come from the lexicalisation of the structure of Scottish society, its laws and customs, and the environment. The great Scottish lakes are called *lochs*. Some Scots, especially for formal occasions such as weddings, wear a *kilt*. They might eat *haggis,* particularly during the celebration of a Burns' supper. A Scottish mayor is called a *provost* and a public prosecutor in England is a *procurator fiscal* in Scotland. Any written description of typically Scottish events in the Scottish media (newspapers such as *The Scotsman*, for instance) will include a variable range of words or expressions specific to Scotland. But, one will also come across many articles which are virtually undistinguishable from what would be used in England.

The spoken language, on the other hand, shows much more variation. At one end of a complicated patchwork, there are speakers who while born in Scotland show hardly any specific Scottish features. Typically, they belong to the upper classes, have been brought up in public schools (i.e. private institutions) and, phonologically, belong to the network of RP speakers who transcend regional boundaries within the United Kingdom (see Moore this vol.). Another category is that of speakers whose lexical and grammatical systems are mainly standard but whose Scottishness is immediately detectable through the phonology. These are often referred to as speakers of SSE, which according to authors is an acronym of either 'Standard Scottish English' or 'Scottish Standard English'. At the other end of the linguistic continuum, there is Scots (see Ford, this vol.) which will be briefly examined in section 4 below. Let us start with SSE.

1. Main phonological characteristics of SSE.

In 1.1, I will first of all consider the segmental system of SSE along traditional phonemic lines before making some brief remarks on suprasegmentals in 1.2.

1.1 Segmental properties

1.1.1 Consonantal system

The consonantal phonemic inventory of SSE is very similar to that of other varieties of English but more complex. RP is usually analysed as including 24 consonantal phonemes listed in (1) whereas, on one interpretation, SSE is characterised by 26 consonants as in (2):

(1) RP consonants /p b t d k g m n ŋ f v θ ð s z ʃ ʒ h tʃ dʒ l r h w/.
(2) SSE consonants: same as RP list + /x/ and /ʍ/ (although /ʍ/ may be interpreted as /hw/).

The voiceless velar fricative /x/ (written *ch*) is attested in words such as *loch* and typically Scottish words such as *dreich* or *pibroch*. *Dreich* /drix/ is used of the weather when the latter is dull and dreary; *pibroch* /pibrɔx/ refers to "a series of variations for the bagpipe, founded on a theme called the *urlar*. They are generally of a martial character, but include dirges." (OED). It should be noticed that, while the basic value of /x/ is velar, its realization is usually palatal in the context of a high front vowel and so *dreich* /drix/ is often actually pronounced [driç]. While quite rare within the standard lexicon, /x/ is often found in place-names (*Tulloch* /tʌlʌx/, *Auchtermuchty* /ɔxtɪrmʌxte/, *Lochwinnoch* /lɔxwɪnɔx/) and

occasionally used for Hebrew or Greek-derived words spelt with *ch*: *patriarch*, *epoch*, etc. I myself can remember an anatomy lecture delivered in Glasgow university by a local lecturer who systematically pronounced the word *trachea* as /trʌˈxiʌ/.

The sound /ʍ/ is used in *wh*-words: *when*, *where*, *which*, *while*, *why*. Scottish speakers therefore oppose *which* and *witch*, *what* and *watt*. It is however possible not to consider /ʍ/ as a separate phoneme but to interpret it as /hw/. Since /h/ is already used before the glide /j/ in words such as *hue*, *huge*, the biphonemic interpretation of [ʍ] as /hw/ is a more parsimonious analysis than the postulation of a separate phoneme but it does complicate the link up with phonetics since two underlying sounds have to be merged into one unit. I will interpret /ʍ/ as /hw/ here without making any strong claim as to the validity of this assumption, and, from this point of view, the difference between SSE and RP will be located in the phonotactics, i.e. the distribution of phonemes within syllables and morphemes. At that level, however, the major difference between RP and SSE is the presence of post-vocalic r's. Scottish varieties of English are usually rhotic like Irish English or General American (see Carr and Durand this vol.). I return to this question below in the description of the vocalic system.

There are also differences between the consonants of RP and those of Scottish English at the realizational level (for instance the /l/ is often said to be dark in all positions) as we shall see later. Finally, the lexical distribution (or incidence) of the consonants is not always the same as in RP. To limit ourselves to only one example, in SSE the word *December* is pronounced with a /z/ in third position whereas the RP pronunciation is /dɪˈsembə/.

1.1.2 The vowel system

The vocalic system of SSE is simpler than that of RP. The major reason for this is that SSE, as was pointed out above, is a rhotic accent. In other words, post-vocalic r's (more precisely non prevocalic r's) are normally realized. Thus RP /kɑː/ 'car' corresponds to SSE /kar/ and RP /ˈhɑːdə/ 'harder' corresponds to SSE /ˈhardɪr/ (or /ˈhardər/ according to transcription practices).

One specificity of SSE vowel phonemes is that length is often treated as not part of the underlying phonological system. The non-inclusion of length is a rather complicated issue as the notion of length (suitably reinterpreted within modern phonology as involving two skeletal positions or two morae) is not just a surface property of phonological systems but related to various features (morphophonological alternations, stress-attraction, phonotactic constraints, etc.). For the sake of simplicity, we will consider that SSE vowels are not marked for length at the phonological level (but see Anderson 1988 for a contrary view). We will see further down that at the phonetic level, the issue is further complicated by a process often called 'Aitken's Law' or 'Scottish Vowel Length Rule' (see Montreuil this vol., Pukli this vol.).

There is no agreed universal system for transcribing SSE vowels. In this article, I will use the same symbols as Anderson (1988), apart from length, and, for RP, I shall follow Wells' *Longman Pronunciation Dictionary* (2000) and recent editions of Jones' *English Pronouncing Dictionary* (such as Jones et al. 2003). The comparison below is based on Abercrombie (1979). Although the numbering is purely for convenience (and is not the one used in studies of Scots), it will prove a useful reference point further down.

(3) Vowel phonemes: SSE vs. RP

	SSE	RP
bead	1 /i/	1 /iː/
bid	2 /ɪ/	2 /ɪ/
bay	3 /e/	3 /eɪ/
bed	4 /ɛ/	4 /e/
	(4a /ɛ̈/)	
bad	5 /a/	5 /a/
balm		6 /ɑː/
not	8 /ɔ/	7 /ɒ/
nought		8 /ɔː/
no	9 /o/	9 /əʊ/
pull	11 /u/	10 /ʊ/
pool		11 /uː/
bud	12 /ʌ/	12 /ʌ/
side	13 /ʌi/	14 /aɪ/
sighed	14 /ai/	
now	15 /au/	15 /aʊ/
boy	16 /ɔi/	16 /ɔɪ/

A few comments are in order. Starting with the monophthongs, SSE does not make certain oppositions which are relatively stable in RP. For instance *not* and *naught*, respectively distinguished in RP as /nɒt/ vs. /nɔːt/, are both identical in SSE (/nɔt/). Again, *pull* and *pool*, respectively distinguished in RP as /pʊl/ vs. /puːl/ are identical in SSE: /pul/ (but very often realized as a high central rounded vowel [pʉl] and this is indeed the symbol adopted nowadays by many specialists). Since SSE is rhotic, there are no oppositions such as RP /pæt/ *pat* vs. /pɑːt/ *part* or /ʃɒt/ *shot* vs. /ʃɔːt/ *short*. SSE would distinguish these as /pat/ vs. /part/ or /ʃɔt/ *shot* vs. /ʃɔrt/ *short*, in line with the history of English and its orthographical system. Let us note in passing that, in RP and many other varieties of non-rhotic English, the opposition between /æ/ and /ɑː/ (and between short and long vowels in general) cannot be explained by simple reference to the presence of an historical /r/ which lengthened the vowel before disappearing. For instance, the words in (4) below are distinguished by RP speakers with some fluctuations and, since these oppositions are unpredictable in synchronic terms, they must be coded lexically. In unmodified SSE such distinctions are not made and all the examples in (4) are realized with the phoneme /a/.

(4) Some examples of non-derived lexical /æ/-/ɑː/ contrasts in RP
a. < -- mple#>
/æ/ ample, trample
/ɑː/ sample, example
b. < --- (l)m#>
/æ/ Pam, ram, cam, Sam
/ɑː/ palm, balm, calm, psalm
c. < -- nt/nd#>
/æ/ rant, ant, hand, sand
/ɑː/ grant, aunt, demand, command
d. < --- ss#>
/æ/ mass, lass
/ɑː/ pass, grass
e. < --- sC>
/æ/ mascot, masculine, masticate, pasta
/ɑː/ mask, master, pastor

Finally, in so far as the monophthongs are concerned, it should be noticed that Abercrombie (1979) tentatively includes another vowel in his diagram - i.e. (4a)): /ë/, sometimes also called Aitken's vowel in honour of the famous Scottish linguist who appear to have drawn phoneticians' attention to its existence (see Abercrombie 1979/1991: 60). Some speakers have this extra vowel in words like *never, ever(y), seven(ty), eleven, heaven, devil, next, shepherd, whether, bury*, and *next*. Some of the relevant words or potential oppositions can be found in the PAC Word-list 1, which includes: *next* (101), *vexed* (102), *leopard* (103), *shepherd* (104), *bury* (116), *berry* (117), *heaven* (118) *leaven* (119), as well as *seven, seventy*, and *eleven* in the reading aloud of the numbers preceding words in our lists (see Carr, Durand & Pukli, this vol., and Durand & Pukli 2004).

From a phonetic point of view, the RP diphthongs in 3 (*say*) and 9 (*no*) in the above diagram correspond to monophthongs in SSE. Structurally, the system of SSE monophthongs can be displayed as in (5) but all such displays may introduce more symmetry or indeed less symmetry than there actually is within a system. The reification of phonemic symbols is as dangerous as the *italics* which often acquire a life of their own in diachronic linguistics (see the salutary warning by Colman, this vol.). It is much better to operate with either distinctive features or dependency components (see e.g. Anderson 1988, Durand 1990, Carr 1992, 1993, Giegerich 1992).

(5) SSE Monophthongs
i   u
    ɪ
e   o
ɛ   ʌ   ɔ
        a

If we now turn to the diphthongs and compare SSE with RP, one immediate observation is that the centring diphthongs of RP /eə ɪə ʊə/ (as in *care, here, moor*) are absent in SSE; but one should note that there is arguably a diphthong in words like *idea* (SSE /aiˈdiʌ/) or *trachea*

(SSE /trʌˈkiʌ/), unless one interprets these words as trisyllabic. The lack of centring diphthongs is hardly surprising since SSE is rhotic and therefore the words *care*, *here* and *moor* would be represented as /ker/, /hir/ and /mur/. Like RP, SSE distinguishes *cow* and *coy* by means of diphthongs starting with a lowish vowel and tending towards high front and high back but not quite reaching these positions: instead of our /aʊ/, some specialists prefer symbols such /ʌʉ/ (or /aʉ/, /ʌu/ and /aʊ/) and /ɔe/ (or /ɔɪ/) as symbols. In reading articles on SSE, the reader will always need to do some mental conversions as far as the diphthongs are concerned. Fortunately, the symbols for the monophthongs do not exhibit the same amount of variation.

In diagram (3), modelled on Abercrombie (1979), a distinction is made between *sighed* /said/ and *side* /sʌid/. In the case of *sighed* (also transcribed /saɪd/ or /saed/), the first element is usually considered relatively long, and some specialists transcribe this word as [saːɪd] or [saˑɪd]. On the other hand, the diphthong in *side* can also be transcribed as [səid], [sʌɪd] or [səɪd]: see below). The status of the distinction between *sighed* and *side* is controversial: is it phonemic or allophonic?

One of the early precise descriptions of this question is offered in Grant (1914: 63) and this is how he described it.

"§183. Many speakers use ə as the first element is the diphthong in *rice*, *light*, etc. instead of a (see §144). This is allowable except when the diphthong ends the syllable or stands before r, z, v, ð. In əɪ, the first element seems half tense and slightly raised and the ɪ is not lowered as in aɪ. ʌi or j is in all cases dialectal. Examples are:

rise,	**raɪz**,	*rice*,	**rəɪs**,	*tie*,	**taɪ**,	*tight*,	**təɪt**,
rive,	**raɪv**,	*rife*,	**rəɪf**,	*tied*,	**taɪd**,	*tide*,	**təɪd**,
sigh,	**saɪ**,	*sight*,	**səɪt**,	*writhe*,	**raɪð**,	*withe*,	**wəɪθ**.

§184. Note that an inflectional ending does not alter the sound, e.g. *sigh,* **saɪ**, *sighed*, **saɪd**. It sometimes happens also that people who observe the rule of aɪ and əɪ are occasionally influenced by analogy, e.g. they will say **wəɪvz** instead of **waɪvz**, because of the singular **wəɪf**."

As this description stands, the difference between Grant's **aɪ** (our [ai]) and **əɪ** (our [ʌi]) does not seem phonological since the presence of one or the other is determined by the (morpho-)phonological context, and interestingly, in his transcriptions, Grant uses only the symbol **aɪ** for all the words corresponding to RP /aɪ/. However, in other varieties belonging to Scots (see §4), the two diphthongs can be contrastive since some speakers oppose, for instance, *pay* /pʌi/ and *pie* /pai/ (see §4 below) and, even within SSE, specialists claim that unpredictable cases can be found suggesting that the opposition might be phonemic (e.g. the word *spider* pronounced with [ai] when [ʌi] is expected).

In comparing RP and SSE in (3), we have left aside a number of issues. One important one, intimately connected with our discussion of [ae]-[ʌi] above, is the so-called Scottish Vowel Length Rule (SVLR) or Aitken's Law in honour of the linguist who has described it

most extensively (see e.g. Aitken 1981). If we assume that Scottish vowels are underlyingly short or not specified for length, there is a process which appears to lengthen a subset of them, often described as the tense vowels /i e u o ɔ a/, in certain contexts. One classical formulation is the following (Grant 1914: 84, Giegerich 1992: 228-234):

(6) SVLR
Lengthen all tense vowels which (a) are followed by r, z, ʒ, v, ð or (b) which are final (i.e. precede a word-boundary).

In accordance with (6)(a) consider the following examples borrowed from Giegerich (1992: 229-230):

(7)	Long vowels	Short vowels
/i/	breathe, leave, ease, ear, see	Leith, leaf, leash, leap, feel, keen
/e/	wave, maze, bear, day	pace, waif, fake, fade, fail, name
/a/	halve, vase, par, spa	half, pass, mad, cap, calm
/u/	smooth, groove, sure, shoe	youth, hoof, use, loot, fool, tune
/o/	loathe, grove, pose, shore, go	loaf, close, loath, coat, foal, foam
/ɔ/	pause, paw	cough, loss, bought, cot, call, don

In accordance with (6)(b), SSE speakers oppose for instance *greed-agreed* ([grid]-[əgriːd]), *brood-brewed* [brud]-[bruːd], etc. (see PAC Word-list 1: items 69-72, Carr, Durand & Pukli, this vol., Pukli, this vol.).

There are, however, many disputes surrounding SVLR. How does SVLR interact with phonetic vowel lengthening which tends to increase in a progressive manner according as to whether the following consonant is a voiceless stop, a voiced stop, a voiceless fricative, a nasal, a lateral, a voiced fricative (see Agutter 1988a,b, Anderson 1988, McMahon, 1991, 1994: 63)? Which phonemes can be part of the input? Giegerich (1992) includes /a/ in the set of vowels (cf. (7) above) which are lengthened by SVLR, but Grant (1914) did not, and many specialists would concur with him. In fact, in some fascinating experimental work by Scobbie and his collaborators, it has been claimed that only the high vowels /i u/ are reliably implicated in this process (see Scobbie, Hewlett and Turk 1999a,b). What is the exact motivation for the right hand context? Why is the process triggered by either segments or a word boundary? What is common to these contexts? Word-boundary, even if interpreted to apply to inflectional suffixes and weak suffixes (such as *-ly*) which do not affect the base (and were preceded by # in Chomsky and Halle 1968) can be given an interesting interpretation in lexical phonology (see McMahon 1991, 1994, Kamińska 1995, and Harris 1990 on the general issue). But morphological information does not seem sufficient anyway. As noted by Anderson (1988), and neglected by some recent accounts (see Carr 1992), syllable boundaries are also implicated since SVLR also applies in cases like:

(8) bias, hiatus.

Indeed what is common to /r/ and the voiced fricatives? Is this a natural class? We can decide to label all these sounds voiced fricatives but /r/ is either an approximant or a tap for most SSE speakers (see (3) below). Finally, how does SVLR interact with the [ai]-[ʌi] question? The reader may have noticed that the context in which /ai/ appears is the same as the context

for vowel lengthening in SVLR. We have pointed out that /ai/ is often described as a long(ish) diphthong ([aːɪ] or [aˈɪ]) in this context, which favours the idea that we are dealing with the same process. I shall not attempt to give yet another interpretation of the SVLR but will merely refer the reader to Montreuil (this vol.) and Pukli (this vol.) for detailed discussions and further references. What is certain is that SVLR is one of the areas giving rise to most variation (both diatopically and diastratically) and will continue to remain a rich field of investigation for years to come.

One important further issue, from a distributional point of view, is the nature of the vocalic oppositions allowed before /r/ in closed syllables. As is well known, in RP, historical coda /r/'s have led to the development of various long vowels and diphthongs as well as to extensive mergers. Thus, despite the different spellings, words like *earn*, *word*, *fir, fur, serve* are all pronounced with the phoneme /ɜː/ in RP. In American English, all these words contain an /r/ but are pronounced with the same vowel (sometimes transcribed /ɜʳ/). SSE is probably the variety of rhotic English maintaining most contrasts before /r/ since the following oppositions are attested (Abercrombie 1979/1991: 65, Wells 1982: 408):

(9) Oppositions before /r/ (with Abercrombie's numbering)

---- r #	---rC	SSE	RP
fear	fierce	1 /i/	18 /ɪə/
stir	bird	2 /ɪ/	17 /ɜː/
fair	scarce	3 /e/	18 /eə/
err	heard	4 /ɛ/	17 /ɜː/
	(herd	4a /ɛ̈/	17 /ɜː/)
bar	hard	5 /a/	6 /ɑː/
war	horse	8 /ɔ/	8 /ɔː/
wore	hoarse	9 /o/	8 /ɔː/
poor	gourd	11 /u/	9 /ʊə/
fur	word	12 /ʌ/	17 /ɜː/

It should, however, be pointed out that not all SSE speakers use this full set of contrasts. A number of speakers collapse two or more vowels in *bird*, *pert* and *word* and my own observations suggest that it is not uncommon in the West of Scotland to observe *air* and *err* pronounced in the same way as either [er] or [ɛr] (or some intermediary unrounded mid front vowel + r). This latter merger might however be argued not to be part of SSE.

Finally, it cannot be assumed that all varieties of English have exactly the same set of vocalic oppositions in unstressed positions. Many specialists of SSE draw attention to the fact that SSE speakers manage without the schwa /ə/ and tend to use either [ʌ] or [ɪ] in unstressed position: e.g. *above* = /ʌˈbʌv/ (vs. RP /əˈbʌv/), *better* /ˈbetɪr/ (vs. RP /ˈbetə/), *comma* = /kɔmʌ/ (vs. RP *comma* = /ˈkɒmə/). On the other hand, /e/ is also allowed in final position in SSE yielding a three way opposition where only two contrasts are allowed in RP:

(10) Final contrasts (Abercombie 1979/1991: 66)

	SSE	RP
china	12 ʌ	
father		22 ə
	20 ɪ	
pitted		2 ɪ
pitied	3 e	

This issue is quite complex since even RP exemplifies many unstressed contexts where the opposition between /ə/, /ʌ/ and /ɪ/ is neutralised and /ə/ in RP has many colours (including [ʌ] in certain contexts).

2.2. Suprasegmental properties

An adequate study of suprasegmentals in Scottish English would require a separate study. We shall only make a few remarks here. The stress system of SSE, both at word and utterance level, seems fundamentally the same as that of other varieties of English but there are some small occasional differences. To take one example, the suffix -*ize* which is neutral in RP tends to attract the main stress in SSE: e.g. realIZE, colonIZE. The rhythmic structure of SSE appears however to be more distinctive. Abercrombie (1979/1991: 67-68) claims that in a word like *table*, where the length of the two syllables is either long-short or equal-equal in English-English, there is an unusual relationship between the two syllable-lengths in Scotland: "the first syllable is short and the second long. There is, curiously enough, an interesting parallel to this in Scottish music; it is known as the 'Scotch snap', which is typical of Strathpeys and is found in many songs". Abercrombie also stresses that Scottish speakers (like French speakers) make as many syllables open syllables as possible (*olive oil* --> *oli.voil*); but this does not appear to have been tested experimentally. The intonation of Scottish speakers varies geographically. In Glasgow, for instance, a final rising intonation pattern, even in statements, has been in use for a long time and is not linked to the spread of the 'high rise' across the English speaking world (see Stuart-Smith 1999: 211, and Przewozny this vol. on the high rise in Australian English). Chirrey (1999: 229), on the other hand, does not report this trend for Edinburgh and stresses, on the contrary, that there is "an overwhelming tendency to favour intonation patterns which terminate with a mid- to low fall even with questions" (see Wells 1982: 414-415 for further remarks). Finally, voice quality is receiving more and more attention in recent work (see Stuart-Smith 1999).

To help the reader, we include below a broad transcription in SSE of the famous text, 'The North Wind and the Sun', used in the tradition of the International Phonetic Association. The symbols are the ones introduced above. No attempt has been made to reflect the application of the Scottish Vowel Length Rule. The stresses are also assumed to be the same as that of RP or American English (see Durand 2001, 2004 for more details on symbols and transcription within the IPA). We are not having recourse to schwa as a reduction vowel here. While this is controversial, this assumption is quite widespread in descriptions of Scottish English.

SSE | ðɪ 'nɔrθ 'wɪnd n ðɪ 'sʌn |

| ðɪ 'nɔrθ 'wɪnd n ðɪ 'sʌn | wʌr dɪs'pjutɪŋ 'hwɪtʃ wʌz ðɪ 'strɔŋgɪr | hwɛn ʌ 'travlɪr kem ʌ'lɔŋ | 'rapt ɪn ʌ 'wɔrm 'klok | ðe ʌ'grid ðʌt ðɪ 'wʌn hu 'fɪrst sʌk'sidɪd | ɪn 'mekɪŋ ðɪ travlɪr tek ɪz 'klok ɔf | ʃud bi kʌn'sɪdɪrd 'strɔŋgɪr ðʌn ðe 'ʌðɪr | ðɛn ðɪ 'nɔrθ 'wɪnd 'blu ʌz 'hard ʌz

hi ˈkud | bʌt ðɪ ˈmor hi ˈblu | ðɪ ˈmor ˈklosle dɪd ðɪ ˈtravlɪr ˈfold ɪz ˈklok ʌˈraund ɪm | ʌnd ʌt ˈlast | ðɪ ˈnɔrθ ˈwɪnd ˈgev ˈʌp ðɪ ʌˈtɛmpt | ðɛn ðɪ ˈsʌn ˈʃɔn ˈaut ˈwɔrmle | ʌnd ɪˈmidʒɪtle ðɪ ˈtravlɪr ˈtuk ˈɔf ɪz ˈklok | ʌnd ˈso ðɪ ˈnɔrθ wɪnd | wʌz ʌˈblaidʒd tɪ kʌnˈfɛs ðʌt ðɪ ˈsʌn wʌz ðɪ ˈstrɔŋgɪr ʌv ðɪ ˈtu |

3. The pull of RP and London English

Apart from phonemic inventories, there are of course many differences between southern British English and SSE at the realizational level. A number of them go in a different direction from the southern English standard. For instance, the phoneme /l/ is dark (velarized) in all positions for many Scottish speakers and even vocalised by some speakers (see Scobbie & Wrench 2003, Wrench and Scobbie 2003 for experimental investigations). The voiceless plosives are often weakly aspirated. However, some of the current variation within Scottish English can plausibly be interpreted as resulting from, or (more appropriately) being favoured by, the influence of English-English. The status of RP is controversial in Scotland. Thus Stuart-Smith (1999: 204) points out that "RP has little status in Glasgow, and is regarded with hostility in some quarters", but she admits that "[t]he position of other accents of English is less clear. Certain specifically English English features in the speech of some younger Glaswegians, such as TH-fronting, suggest that a non-standard English English model may be becoming more relevant". But, if RP does not have overt prestige, it may well have covert prestige. Moreover, since most work in historical linguistics and in sociolinguistics demonstrates that, for at least 500 years, London has had an overwhelming influence on other varieties of English within the United Kingdom (see Carr this vol.), and since the structure of RP and popular London English can be argued to be isomorphic at many levels of analysis, it is difficult to discount the influence of RP, especially as one goes up the social scale. Anecdotally, when I taught linguistics and phonetics in 1973-1974 in the School of Speech Therapy of the then Robert Gordon's Institute of Technology in Aberdeen, the students had to follow elocution (RP) classes (allegedly) in order to give them poise and confidence in dealing with patients. Whether speaking to Scottish patients with an outside accent yielded the expected results has of course never been verified!

It seems to me that SSE speakers who professionally interact a lot with RP speakers (e.g. politicians, lawyers, doctors, judges, university lecturers) can often be observed to adjust their system towards English-English. One way in which the basic SSE vowel system can be modified is in making a distinction between e.g. *ant-aunt* (5-6), *cot-caught* (7-8) and *pull-pool* (10-11), by reference to the numbering adopted in (3) above. Abercrombie (1979) hypothesizes that there is an implicational scale in that the presence of a contrast such as *pull* vs. *pool* implies the presence of *cot* vs. *caught*; and that in turn the latter implies the presence of *ant* vs. *aunt*. This remains to be validated on a large sociolinguistic scale but it applies to the individuals I have been able to observe. The adoption of these oppositions gives rise to much variation and hypercorrection. One story quoted to me is the pronunciation of *gas mask* during the 1939-45 world war. Apparently, SSE speakers in the well-to-do parts of Glasgow (Kelvinside) and Edinburgh (Morningside) could be heard referring to their [gɑ(ː)smæsks] (RP [gæsmɑːsks]). Whether the story is true or apocryphal, the 'gas mask' shibboleth is a hurdle for SSE speakers trying to cross this boundary towards English-English. As noted by Abercrombie (1979), the adoption of the /æ/-/ɑː/ opposition often make an SSE speaker sounds even more Scottish because the distribution is not necessarily the same as in English-English (recall the complexity of the examples in (4)) . Thus the speakers in question may

well pronounce *gather* and *rather* or *salmon* and *calmer* with the same vowel [ɑ(ː)]. In RP and London English, these are distinguished: cp. /gæðə/ and /rɑːðə/, /sæmən/ and /kɑːmə/. It should not be thought, however, that this different distribution is necessarily a recent 'confusion'. Rather it may reflect features of RP in former periods such as the 18th century, for instance (Caroline Macafee, personal communication). Two other areas where convergence with English-English can be observed are: (i) the lack of an [ai]-[ʌi] distinction, whether this is phonemic or not (cf. Stuart-Smith, 1999: 207, who notes, for instance, that in Kelvinside both can merge as /ai/ ([ae] in her transcription)); (ii) the merger of the pre-/r/ vowels of *bird*, *word* and *heard* as [ɜ], which is well attested in Edinburgh, for instance, and which is frequent among Scottish speakers who have lived outside Scotland for extensive periods.

In terms of consonants, we have noted that the phonemic inventory of SSE is the same as that of English-English apart from /x/ and /hw/ (= [ʍ]). SSE speakers who are proud of their roots tend to maintain these distinctions. Indeed, throughout the twentieth century, elocution teachers in Scotland have continued to teach the opposition between /hw/-/w/ as part of the British norm although it has not been a feature of general RP for a long time. Walker already notes the loss of /hw/ in the 18th century "particularly in the capital, where we do not find the least distinction of sound between *while* and *wile*, *whet* and *wet*, *where* and *were*, &tc" (1791: xiii, quoted in MacMahon 1998: 384). Some sociolinguistic studies are however beginning to report the loss of the opposition between /w/ and /hw/ across social classes in Scotland (see MacCafee, 1983: 32, Lawson 1998 Chirrey 1999, Stuart-Smith 1999: 210). Indeed, in a recording of five speakers I made in 1999 in Dundee, I was surprised to hear three fifteen-year-old triplets not making the /k/-/x/ distinction (*lock-loch*). The private school they attended in Dundee might have favoured a "de-Scottification" of their system but the rest of their phonemic inventory was distinctly Scottish (including /w/-/hw/) and their parents, who are Scottish, systematically observed the /k/-/x/ distinction (see too Stuart-Smith 2001). Another area where the influence of English-English might be invoked is the current spread of the glottal stop (as a realization of /t/, and sometimes /p/ and /k/) across young speakers of English throughout Scotland. It is true that the glottal stop has been a feature of popular Glasgow and Edinburgh for many generations but its fast extension throughout the British Isles is far more likely to be due to the influence of London English than to Glasgow speech. One last example considered below is the phonetic realization of /r/.

The phoneme /r/ in Scottish English is often assumed to be a strong coronal trill ([r]) formed by a rapid succession of taps of the tip of the tongue against the teeth-ridge. Grant (1914: 35) describes the trill as "the characteristic Scottish sound corresponding to the letter *r*" but adds: "Within recent years there has been a tendency to attenuate the force of the trill especially in final positions and before another consonant. This tendency is probably due more to imitation of Southern speakers than to a natural development in the pronunciation" (p. 35). He notes with regret the reduction of the trill to a single tap [ɾ] (finally and before consonants) or even to a fricative [ɹ]. Jones too, in his *Outline of English Phonetics* (1964, ninth edition), sees the alveolar trill as typical of Scotland. More recent descriptions do not however see the trill as the Scottish 'norm' and the regrets expressed by Grant may well indicate that this was already the case at the beginning of the 20th century.

Wells (1982, vol. 3: 411) points out: "Today, although [r] is still to be heard, particularly in the more northernly parts of the country, it is not really general. Even before the Second World War it was being reported (McAllister 1938: 94) that not more than three Scottish students out of ten used [r]; today the proportion would be still lower". Ladefoged

and Maddieson (1996: 236) concur: "In Scottish cities such as Edinburgh and Glasgow the norm is an alveolar tap ɾ. Despite stage caricatures of Scottish speakers, it is only in the Scottish Lowlands (for example in Galashiels) that an alveolar trilled r is the most common form". *Gimson's Pronunciation of English* (Cruttenden 1994: 188) also sees the tap as a basic Scottish variant. In fact, as correctly noted by Wells, the most typical realizations of /r/ in Scotland are either an alveolar tap or a post-alveolar or retroflex approximant [ɹ, ɻ] and recent sociolinguistic investigations confirm Wells' assertion: e.g. Stuart-Smith 1999: 210, Chirrey 1999: 228. One should therefore not be surprised that Carr (1999: 156-159) adopts /ɹ/ as the basic phonemic symbol for 'r' in SSE.

An explanation of the probable changes concerning /r/ in terms of the influence of English-English does not seem unreasonable. Beyond the actual quality of the /r/ phoneme, many studies show that rhoticity in England is recessive whereas the opposite is true in the United States where r-deleting accents are less prestigious (see Durand 2001, Durand, Laks, Lyche 2003 for further references). For instance, Burnley in Lancashire is described in the *Survey of English Dialects* (Orton 1962-1971) as rhotic. A study of Burnley speakers in 2002-2003 within the PAC project show all of them to be non-rhotic (see Noel 2003). Even in Scotland, there is probably a slow ongoing change towards r-deletion. One of the first detailed studies which drew attention to this phenomenon was Romaine (1978) who reported occasional but significant zero realizations of word-final /r/'s among young children in Edinburgh. R-deletion was confirmed in Lodge's detailed study of two Edinburgh informants which also contains a wealth of fine-grained phonetic observations (Lodge 1984: 80-94). Now, this trend has been noticed across social classes in other areas (see Stuart-Smith 2001); and our own PAC recordings show r-deletion to be definitely present in Ayrshire despite the conservative traits of this accent (see Pukli this vol.).

4. Scots

At the other end of the linguistic continuum from standard English and SSE, there is Scots (see Ford this vol. and the references in §5). Whether Scots is a separate language or a traditional-dialect of English (to use Wells' 1982 terminology) has long been a matter of debate. The labelling of any given speech variety as a 'language' depends far more on social and political factors than on structural principles. As is well known, the fact that modern Norwegian and Swedish, which share a very large number of features at all levels, are considered as two different languages is simply the result of their separate political existence. Should they become one country politically (let's call it Norsweden), one could easily envisage calling them dialects of one language (Norswedish). Following the official recognition conferred by the UK government in including Scots in the European Charter for Regional or Minority Languages, the matter can be considered as settled: Scots is a language. But this issue is so linked to questions of norms and identity that debates will continue to rage.

Historically there was a form of language in Scotland which, while part of the continuum of Anglo-Saxon tongue(s) spoken from Northumbria to the south of England, functioned as a separate language on socio-political grounds. This variety had a written norm which was different from that used in England but which was abandoned in the wake of major political events such as the Union of the Crowns of England and Scotland in 1603 and the Union of Parliaments in 1707. The literary revival which took place in the 18th century did not help matter as it was conducted in an orthographic form largely discontinuous with Older

Scots. Factors such as universal education, urbanization, increase in transport and commerce, military service, world wars, and the like, have drastically reduced the role of Scots as a language of official communication. The lack of a Bible in Scots and the bringing in of an English Bible after the Reformation have also often been cited as a factor in the downgrading of this language. As McMahon (1992: 59) wittily observes: "And if God appeared to speak English, we can hardly blame the Scots for trying to do the same". While the death of Scots has been predicted for centuries there are still elderly Scots monoglots in Morayshire (see Horsburgh & Murdoch 1996) and perhaps in Orkney and Shetland and indeed elsewhere. Moreover, while the status of Scots is not always clear for part of the population (see e.g. Hardie 1996), it is demonstrable that many Scottish speakers (whether actively or passively) have access to lexical, grammatical and phonological resources which are quite different from standard English. One of the problems, however, is that Scots has been fragmented for quite a long time and, that there is no agreed spelling. The role of the Scots Language Society is controversial since, in the eye of some Scots specialists, it discredited the perfectly well-accepted, if internally inconsistent and variable, spelling system of the early twentieth century (see Macafee 2000).

Some idea of the historical diversity of Scots can be gathered from the introduction by Grant to *The Scottish National Dictionary* (1931: xviii) where we are told: "Take for instance a sentence such as this: 'Who whipped the poor little whelp that stood between you and me near that old stone dike?' In Standard Scots it might be written: 'Wha wuppit that puir wee whalp at stude atween you an' me near the aul(d) stane dyke?' *Whae*, *pair*, *stid*, *auld*, *stane*, would indicate a Lothian Scottish speaker, but *whaw*, *puir*, *stude*, a Fife or Perthshire man; *yow* and *mey*, *stee'n*, a Roxburg and east Dumfries speaker; *fa* for *who* can be heard along the coast from the mouth of the Tay to the Pentland Firth; *fuppit* for *whipt* and *folpie* for *whelp* have their southern limit just south of the Dee; *steen* for *stone* is heard along coast from the Tay to the Spey; *puir* becomes *peer* along the coast between the Dee and the Spey, but is pronounced with the diphthong of *fewer* in the Lowlands situated between the Spey and the Pentland Firth; it takes the sound of the Fr. *eu* [ø, œ] in Fife, Perth, Angus; and the Mearns, Galloway and southern Scots, Orkney and Shetland. In the insular area *that*, adj, and *the* are pronounced *dat* and *de*" (NB all abbreviations have been spelled out, JD). Even if we leave aside questions of lexis and grammar, we can infer from this quote that the pronunciation of varieties of Scots can be quite complex. For instance, the following words - *book*, *bull*, *foot*, *boot*, *lose*, *loose* would all have the /u/ phoneme in SSE but in Glenesk, Tayside, they would be respectively pronounced as follows: *b*[u]*k*, *b*[ʌ]*ll*, *f*[ɪ]*t*, *b*[ø]*t*, *l*[o]*se*, *l*[ʌu]*se* (Catford 1958 quoted from Wells 1982: 397). For some other Scots speakers, the phonemic inventory would appear to be very much like that of SSE but with a lexical distribution which often baffles speakers of English from outside Scotland:

(10) Vowel inventory of some Scots speakers (Central Scots)

/i/   tree, meet, meat, clean, heid (head), dee (die), ee (eye), wee (small), dreich, seek (sick)

/ɪ/   nicht (night), brig (bridge), bid, pit (put), his, gird (hoop), blin (blind), wird (word), birn (burn), guid (good), yis (use (noun))

/e/   hame (home), mare (more), stane (stone), stain, pair, puir (poor), dae (do), yaise (use (verb))

/ɛ/   ken (know), met, bed, meh ('cry of sheep'), ser (serve), erm (arm), bress (brass), denner (dinner)

/a/   back, ask, that, tak (take), watter (water), tap (tap, top)

/ɔ/   law, cause, auld (old), aw (all), saut (salt), haun (hand)

/o/   boat, thole (endure), afore (before), coat, cot, loch, dochter (daughter), horse

/u/   out, about, cow, fou (full), doo (dove), mou (mouth), teuch (tough), spew, dew

/ʌ/   fur (fur, for, fir), pull, burn (stream), grun (ground), muckle (much), wull (will), whussle (whistle)

B. Diphthongs

/ai/   fry, aye (yes), kye (cows), fire

/ʌi/   price, wild, pay, way, ay (always), gey (very), vice (vice, voice), pint (pint, point)

/oi/   avoid, boy, noise

/au/   louse (loose), loup (leap), fower (four), grow, cowt (colt), gowd (gold)

On the assumption that we are dealing with a speaker of English in Scotland who also speaks Scots, one the main difficulties is to establish which variety of Scots they use. Moreover, if for the sake of the argument, the speaker in question uses SSE when speaking English, we may in effect be dealing with a bilingual speaker. Bilinguals differ in how much they keep languages separate but it is rare to have authentic bilingual communities without interferences. A classical explanation for much phonological variation that is observed in Scotland is that speakers are pulled between Scots and SSE (and standard English from a lexical and grammatical point of view). This gives rise to dialect mixture. One feature widely attested in Scots is the pronunciation of many words which have /aʊ/ in English-English with an /u/ e.g. *hoose* for *house*, *moose* for *mouse*, etc. Our hypothetical bilingual speaker will therefore shift between /aʊ/ and /u/ and, since the sociolinguistic situation will not always be clear-cut, some intermediate forms will occur: e.g. [ʌu], [əu], etc. Although this type of bilingual situation is indeed attested and does explain a fair amount of variation in Scotland, it does not seem always appropriate. For a start, it may carry the implication that speakers switch between an 'ideal' Scots with a clear-cut structure and another system equally well defined. Aitken (1984: 519-523) has drawn attention to the pitfalls of a binary approach and indeed of separate pigeon-holes in this area. One can certainly define strata and classify 'ken', for instance, as clearly Scots and 'know' as clearly English, but this can be misleading in that, both diachronically and synchronically, many synonyms are more interchangeable than one thinks. As pointed out by Aitken (1984b: 519): "The attractions of the great literature of late medieval and early modern southern English, the fact that the Scottish Reformed Church, before and after the Reformation of 1560, depended upon Tudor English versions of the Bible and Psalter, and other political and social influences predictable from the history of the times (the Union of the Crowns of the two nations came in 1603) led to the adoption by Scottish writers, from about the middle of the sixteenth century, of a 'mixed dialect' in which both Older Scots and Tudor English equivalent forms (e.g. both *guid* and *good*, both *hale* and *whole*, both *kirk* and *church*, both *ken* and *know*) co-existed as options". This 'mixed dialect' went on gaining strength in the following centuries.

Our own recordings of Ayrshire speakers within the PAC project shows that even when speakers are among themselves in an informal setting there is much variability which appears to be 'inherent' (in the Labovian sense) rather than always relatable in a direct way to features of the co-text or the context. The following two transcriptions are based on a recording (2003) between an aunt (A: aged 73) and her niece (B: aged 48) in a small ex-

mining village in Ayrshire (Annbank) some fifteen miles from Ayr. They are both sitting in B's lounge and no other witness is present. The names of the people referred to are replaced by variables such as X, Y, Z. To be appropriately discussed the conversation should be given in broad and narrow phonetic transcription. We shall content ourselves with two orthographic transcriptions here: a first one using familiar Scottish spellings (with some broad phonetic transcriptions in brackets), the other one in standard English whenever possible with the occasional observation.

CONVERSATION 1 Modified spelling
A: Och aye [ɔx ae]. Barry was asking me about [ʌˈbəʉt] X.
B: Is he in th/?
A: He's in the Ailsa.
B: And (hesitation), how, is he cher/, he'll be cherged [tʃeɹdʒd] noo [nʉ]?
A: I don't ken, in the Ailsa, I don't know [no].
B: Because Y said to us, that nicht [nɪxt] that happened, he says, 'if he gets cherged with attempted murder, the Ailsa'll no want him. It'll be Carstairs, because that's fae the, the criminal'.

CONVERSATION 1 Standardised spelling
A: Och aye. Barry was asking me about X.
B: Is he in th/?
A: He's in the Ailsa.
B: And (hesitation), how, is he char/, he'll be charged now?
A: I don't ken, in the Ailsa, I don't know.
B: Because Y said to us, that night that happened, he says, 'if he gets charged with attempted murder, the Ailsa [a hospital in Ayr] will not want him. It'll be Carstairs, because that's for the, the criminal'.

CONVERSATION 2 Modified spelling
B: She got [got] on [on] the bus with her mother and she's that, that lassie's that dreich [driç] and kin' a dippy and, och, she used to come into that job [dʒob] centre and she'd done my heid [hid] in, she would not tak a job [takʌdʒob].
A: Nae wull Z.
B: I don't ken her.
A: Z.
B: Oh Z is desperate to work [wʌɹk] tae but she's no qualified for onythin' 'cos [kɔz] it's all part time and she cannae afford tae dae part time.

CONVERSATION 2 Standardised spelling
B: She got on the bus with her mother and she's that, that lassie is that dreich [NB normally used for the weather but extended here to a person who is 'drab' or 'dour' or "gloomy"] and kind of dippy [i.e. "a bit odd"] and, och, she used to come into that job centre and she had done my head in [i.e. "she had exhausted me"], she would not take a job.
A: Nor will Z.
B: I don't ken her.
A: Z.
B: Oh Z is desperate to work too but she's not qualified for anything because it is all part time and she cannot afford to do part time.

The reader will have noticed that A shifts from 'I don't ken' to 'I don't know' without any obvious trigger in the co-text / context and that, later on, B herself says 'I don't ken her' where 'I dinnae ken her' might have been predicted on grounds of consistency. Of course, it might be objected that they are not true Scots speakers but then who is? The difficulty is that the base system of these speakers probably contains areas of inherent variability at all levels of linguistic analysis from lexis to phonology. Moreover, while their style is somewhat different in the more formal interviews, phonologically, it never quite shifts to SSE and even less to English-English. Scots is therefore alive in Scotland for a number of speakers but not in an idealized form. If one accepts this, the search for Scots must both encompass the countryside (the locus of traditional dialectology) as well as towns and cities. Beside the work of linguists, excellent sources of information are novels, autobiographies, songs, films and standup comedians.

One well known example relating to Edinburgh (for those who can stomach the omnipresent use of expletives) is *Trainspotting* (1993) by Irvine Welsh. Here is an example (p. 169):

> "Everybody gits a bit pished quickly. Ma embarrasses Billy n me, by talking about her periods. Jist because she wis forty-seven n still goat periods, she hud tae make sure everybody kent aboot it.
> --- Ah wis flooded. Tampons ur useless wi me. Like trying tae stoap a burst water main wi an *Evening News*, she laughed loudly [...]
> --- Awright Ma, ah sais.
> --- Dinnae tell us yir auld mother's embarrassing ye? She grabs ma thin cheek in between her thumb and forefinger. Ah'm jist gled thit thuv no taken ma wee bairn away. He hates being called that. Ye'll always be ma wee bairns, the two ay yis."

For Glasgow speech, a famous figure has been the comedian and singer Billy Connolly and, for those who find his jokes difficult to understand, a good idea of Glaswegian life, language and culture can be gleaned from Pamela Stephenson's biography *Billy* (2002). In recent years, television programmes such as *Rab C. Nesbit* and *Chewing the fat* have offered a wide selection of Scottish speech ranging from 'coarse' Glaswegian to 'posh' Edinburgh Scots aping the English. All these examples cannot replace the scientific study of language (such as Macaulay 1977, Macafee 1994) but usefully complement the inevitably incomplete data-bases constructed by professional linguists. They warn us that accounting for language-use requires models which can cope with both structural stability and variability. At the moment, despite valiant attempts within phonology, phonetics, psycholinguistics and sociolinguistics, the models that are on offer fall short of these goals. This is not a reason for not theorising, on the contrary, but in the meantime we need to improve our data-collection and our descriptions - the central goal of our PAC project (see Carr, Durand, Pukli, this vol.) and its sister French project PFC (see Durand, Laks, Lyche 2003, Durand & Lyche 2003).

5. Conclusion

In this paper, I have attempted to give an overview of some of the main features of the phonology of English in Scotland, more specifically in the Lowlands. We have looked at two polar opposites within the Scottish continuum -- Standard Scottish English (SSE) and Scots --, and then briefly considered the nature of the phonological variation in a Scottish context. The literature on Scots and English in Scotland is extensive and the references given in the next

paragraph cannot claim to be more than a short 'personal best' list. The reader in search of more exhaustive references is advised to browse websites on the internet and, in particular, that of the *Scottish Language Resource Centre* and the *Selected Classified Bibliography of the Scots Language*, compiled by Caroline Macafee and maintained by Marina Dossena at the University of Bergamo:

> http://scotsyett.com.
> http://wwwesterni.unibg.it/siti_esterni/anglistica/slin/scot-bib.htm

Highly recommended are the resources offered on the websites of Scottish Universities such as Aberdeen, Edinburgh or Glasgow:

> http://www.abdn.ac.uk/~enl038/web.htm
> http://www.abdn.ac.uk/~enl226/clr.html
> http://www.englang.ed.ac.uk/scots.html
> http://www.arts.gla.ac.uk/SESLL/EngLang

For brief overviews of the nature and status of English in Scotland , the reader is referred to McCrum, Cran & McNeil (1986: ch. 4), Crystal (1988: 219, 2002: 328-333), McClure (1994), Graddol, Leith & Swann (1996: 192-194). Concerning the pronunciation of English in Scotland, in addition to the references in the text, the reader might profitably consult Simpson (1979: 78-85), Hughes & Trudgill (1996), Trudgill & Hannah (1985: 82-89), Davenport & Hannahs (1998: 54-55). A very informative account with recordings is Robinson & Crawford (2001). For a detailed theoretical analysis of SSE from a generative standpoint, see Kamińska (1995).

For Scots, one will find a spirited defence and illustration of the language in Kay (1996) and McClure (1997). A readable overview of Scots grammar will be found in Purves (2002). As is obvious from earlier sections, the work of the late A.J. Aitken (e.g. 1981, 1984a,b, 1987, 1992) is indispensable. Important additional information can be obtained in the work of Macafee (1997, 2000, to appear a, b, Macafee & Aitken to appear). For a detailed diachronic perspective on Scots, see Jones (1997), Corbett & McClure (2003). *The Scottish National Dictionary* 1931-1976 and *The Linguistic Atlas of Scotland: Scots Section, Phonology*, vol. 3, edited by Mather & Speitel (1986) are mines of information.

ACKNOWLEDGMENT

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