Introduction

Of the linguistic features stereotypically associated with African American Vernacular English (AAVE), the variable inflection of present-tense verbs, regardless of grammatical person or number of the subject, illustrated in (1), is among the best documented.

(1) 1st person singular:
   a. I forgets about it. (SE/009/470)
   b. I forget the place where he is. (SE/009/1201)

2nd person singular:
   c. You speaks fine French (SE/006/256)
   d. When you speak with me fast, fast I don’t … know what she tell me. (SE/006/1421-4)

3rd person singular:
   e. When she come out she goes and she takes her children. When she’s on vacation well, she remain in the home. (SE/009)

1st person plural:
   f. We call her Virgie.
      (Interviewer: Why?)
      ‘Cause that’s the name we calls her. That’s her nickname. (SE/006/1643-4)

3rd person plural:
   g. They speak the same English. But you see, the English people talks with grammar. (SE/007:1104)

Our initial research into this phenomenon (Poplack and Tagliamonte 1989, 1991) confronted a legacy of different and controversial explanations for the origin and function of verbal -s. Based on its rare occurrence in AAVE 3rd p. sg. contexts, and sporadic appearance elsewhere, early quantitative work (e.g., Fasold 1972, Labov, et al. 1968) had characterized it as hypercorrection.

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1 We gratefully acknowledge the support of the Social Science and Humanities Research Council of Canada, in the form of grants to both authors, for the projects of which this research forms part. We thank Elisabeth Godfrey, who collected the Devon English data from the rural areas surrounding her home town Tiverton, mid Devon, for granting us access to her corpus. For further information about the data and detailed analysis of verbal -s in all grammatical persons, see Poplack & Tagliamonte (in press, 1989, 1991) on Samaná English, and Godfrey (1997), Godfrey & Tagliamonte (1999) on Devon English. Sandra Clarke provided the inspiration for this paper, as well as a thoughtful critique of an earlier version.

2 Examples are reproduced verbatim from speaker utterances. Codes in parentheses identify the corpus (Devon English (DEV) or Samaná English (SE)), speaker, and location of the utterance on recording or transcript.
Analyses of texts representing older forms of African American English suggested other explanations. Several scholars (Brewer 1986, Jeremiah 1977, Pitts 1981, 1986) reported having detected an aspectual function of verbal -s in the WPA Ex-slave Narratives (Rawick 1972). Assuming, with Bickerton (1975), that this function was analogous to that of a creole preverbal aspectual marker, they construed this as support for a creole origin of AAVE. Schneider’s (1983, 1989) examination of the same materials led him to a different conclusion. From the frequency, conditioning and parallel behaviour of verbal -s across grammatical persons, he inferred that its occurrence was not the result of hypercorrection, but was rather a residue of the colonial English folk speech to which early African Americans had been exposed (Schneider 1989: 71). Detailed analysis of the constraints on -s variability in diaspora varieties of Early African American English (Early AAE (Poplack and Tagliamonte 1989)) suggested a similar scenario.

The English connection

Indeed, in tracing the development of verbal -s throughout the history of the English language, we learn that its variable occurrence across grammatical persons and numbers was well-documented (e.g., Holmqvist 1922, Jespersen 1909/1949, Meurman-Solin 1993, Mossé 1952, Stein 1986, 1987, Strang 1970, Wright 1898-1905). The contemporary Standard English requirement that subject and verb agree in 3rd p. sg. in the present indicative is in fact an Early Modern English development; prior to this period, agreement was not categorical, nor was its marker (-s) restricted to 3rd p. sg. Variants have patterned differently according to grammatical person and number throughout the development of the indicative present-tense paradigm. The sociolinguistic history of -s is particularly well documented: it originated in the spoken language, and apparently remained a marker of popular, colloquial or dialectal speech until at least the early 17th century (Barber 1976: 239, Curme 1977: 53, Holmqvist 1922: 185, Jespersen 1909/1949: 19, Nevalainen and Raumolin-Brunberg 1996: 107, Strang 1970: 146). Competing variants have traditionally been associated with specific British dialect regions, and both -s in non-3rd p. sg. and zero in 3rd p. sg. contexts continue to be identified with them (Cheshire 1982, Hughes and Trudgill 1979, Trudgill 1998).

The fact that the competing realizations -s and zero occur not only in contemporary AAVE, but also in most of its putative source varieties – English-based creoles, Early AAE and older and non-standard varieties of English – makes determination of their provenance particularly intractable. As we have already observed in this connection (Poplack and Tagliamonte 1989), the simple attestation of one or the other in a language variety is not revealing; this can only be accomplished by first ascertaining their distribution in the language, as determined by the hierarchy of constraints conditioning their appearance, and comparing it with that of the putative sources. The analyses presented here illustrate this procedure (Poplack 2000, Poplack and Tagliamonte in press).

The conditioning of verbal -s


Murray (1873: 211) formulated the rule as follows: “When the subject is a noun, adjective, interrogative or relative pronoun, or when the verb and subject are separated by a clause, the verb takes the termination -s in all persons”, as illustrated in (2). In variable terms, verbal -(s would be
favored after nonadjacent nominal or pronominal subjects and disfavored after adjacent pronominal subjects.

(2) The burds *cums* an’ *paecks* them but They *cum* an’ *teake* them (Jespersen 1909/1949: 15)

As early as the 10th century, as this “northern” *-s* began to diffuse southward, and its associated patterning seems to have gone with it. It is attested in late Middle English in the Midlands (McIntosh 1983: 237) and has been found to operate in a variety of Early Modern English sources (Bailey, et al. 1989, Kytö 1993, Montgomery 1991, 1997, Schendl 1994: 152). The trend has also been noted for other present-day British (Aitken 1984, Shorrock 1981, Viereck and Ramisch 1991, Wakelin 1977) as well as American (Bailey, et al. 1989, Cukor-Avila 1997, Feagin 1979, Hackenberg 1972) dialects, as in (3). Thus, *-s* inflection with full NP subjects, attested from the inception of the verbal marking system, has persisted in (nonstandard) varieties of English to the present.

(3) a. There’s always a war whenever a Democrat and Republican *changes*. (White Folk Speech, Bailey, et al. 1989)
   b. Every first of May he *remind* me. (White Folk Speech, Bailey, et al. 1989)

Poplack & Tagliamonte (1989) first linked this constraint with *-s* variability in Early AAE, thereby explaining at least some of the cases of non-3rd sg. *-s* usage previously described as “hypercorrect”. They also found (Poplack and Tagliamonte 1989, 1991) that the variable occurrence of verbal *-s*—in both 3rd p. sg. and non-3rd p. contexts—was subject to regular phonological conditioning, most notable in the conservative effect of a preceding vowel, giving rise to utterances like those in (4):

(4) a. The strength *goes* from you. (SE/002/1419)
   b. The people *buys* them here. They *buys* them. (SE/001/506)
   c. When you *get* in them big seas, and then you see all them big swells *come* up and *raise* over. (SE/002/1601-2)

The persistence of the Type of Subject constraint, coupled with the regularity of the phonological effect, led us to hypothesize that verbal *-s* marking in earlier congeners of AAVE was a relic of an older, unitary process of present-tense marking across the verbal paradigm, rather than constituting, say, an agreement marker in 3rd p. sg. and a hypercorrect insertion in non-3rd p. sg. contexts. This suggested that, far from an unpredictable phenomenon, verbal *-s* (in all persons) functioned as a (variable) present-tense marker, and in this capacity, formed an integral part of the Early AAE grammar. We further hypothesized that the conditioning of this variability, as inferred from similarities between the constraint ranking in Early AAE and observations in historical sources, must have been acquired from the varieties of English that had provided the linguistic model(s) for the early slaves. However, at the time no quantitative information was available with regard to what that model might have been.

In the last decade a number of empirical studies have been added to the body of knowledge on verbal *-s*. Much of this research has pursued the English connection, exploiting historical sources representing Middle to Early Modern English. These include the Cely Letters, written in the 15th century and taken to represent the emerging mainstream vernacular that led to the modern standard (Bailey, et al. 1989), court depositions of Londoners deported to Virginia and the Bermudas (16th and 17th centuries) (Wright to appear), logs of southwestern British sailors (17th and 18th centuries) (Bailey and Ross 1988), 19th century literary representations of southern United States speech (Ellis 1994), as well as correspondence of Blacks and Whites from the 15th to the 19th centuries (Montgomery 1997, Montgomery and Fuller 1996, Montgomery, et al. 1993, Walker 1999). The most consistent and striking result to emerge from these studies is the widespread applicability in the older materials of the Type of Subject constraint. These findings provide strong
support for the suggestion (Poplack and Tagliamonte 1989) that this effect in Early AAE could only have been acquired from the English models to which the slaves were exposed.

Poplack & Tagliamonte (1989) also uncovered an aspectual effect in Early AAE, whereby verbal -s was favored in habitual contexts, as in (5).

(5) Every time they reaches the mouth of the river, the river bucks ‘em over there.
(SE/001/506)

In contrast to the Type of Subject constraint, this effect is reminiscent of that reported by the early proponents of the creole-origins hypothesis. There is evidence that the expression of habitual aspect is consistent with, if not inextricable from, expression of the present in many languages including English (e.g., Comrie 1976), but we had not located any specific attestations in the English dialect literature linking -s to a habitual function. Thus despite the achievement of apparent consensus on one factor (Type of Subject) determining verbal -s variability, the provenance of the aspectual effect remained controversial. It comes as no surprise that these two constraints continue to figure so prominently in the renewed controversy surrounding verbal -s.

Back to -s

Verbal -s has recently been independently examined in two additional communities which are particularly relevant to the transmission of variable constraints, since both, according to their authors, present optimal conditions for preservation of the input vernacular, largely due to the relative isolation of the settler cohort from surrounding varieties. One study involves Newfoundland Vernacular English (Clarke 1997a), a dialect of Canadian English featuring productive use of non-concord -s. One of the first areas of the New World to be settled, its input population hails from only two source areas. Of particular interest to us is West Country England, especially the county of Devon, whose contemporary dialect we analyze in ensuing sections. Despite its insularity from external linguistic influences since settlement, Clarke (1997a: 241-3) notes that the encoding of verbal aspect in Newfoundland Vernacular English differs from that of its input varieties. In particular, periphrastic do (which she assumes to have constituted a component of both source dialects) is absent from Newfoundland Vernacular English. On the other hand, habitual aspect is regularly expressed throughout the present-tense paradigm by -s, just as in Early AAE. because this feature is not typically cited in the British dialect literature, and neither the Type of Subject constraint nor any phonological effect was detected in Newfoundland Vernacular English, Clarke (1997a: 251-2) suggested that linguistic features alone were insufficient to establish historical relationship between source and emergent varieties, and by extension, to conclude that Early AAE does not reflect the verbal -s patterns of non-standard white varieties (Clarke 1997c). This casts doubt on the validity of studies making use of contemporary data to infer the nature of the input variety (Poplack 2000, Poplack and Tagliamonte 1989, in press, Singler 1989). It is not clear, however, to what extent Clarke or Wolfram (2000) intend to implicate the entire enterprise of reconstruction in linguistics.

A second study involves Liberian Settler English. This variety was transported to Liberia by African Americans who immigrated there at about the same time as their counterparts were settling in Samaná and parts of Nova Scotia (Singler 1989). For many of the same reasons invoked by Clarke (1997a), Singler (1989, 1991) characterizes Liberian Settler English as a direct descendant of the language spoken by African Americans in the U.S. in the early 19th century. Like Clarke (1997a) and Poplack & Tagliamonte (1989), Singler (1997) also found habitual aspect to favour verbal -s; however, he specifically linked this result to an underlying creole grammar for Liberian Settler English (and by extension, to other modern congeners, like AAVE). He adduces support for this conclusion from his additional finding that the Type of Subject constraint—which we now know to have been transmitted from English—did not apply (as in Newfoundland Vernacular English). Finally, although verbal -s is sensitive to phonological environment in Liberian Settler English,
Singler suggests that this is also a probable result of prior creolization or influence from an African first language (Singler 1997).

Summarizing, Clarke’s inferences about Newfoundland Vernacular English and Singler’s for Liberian Settler English are remarkably similar on the core constraints. Singler’s logic would attribute the former as well as the latter to creole influence despite the fact that the direct linear descent of Newfoundland Vernacular English from English is not in doubt.

Implicit in these cross-linguistic comparisons of verbal -s behavior is the idea that contemporary varieties fulfilling certain conditions, particularly of post-settlement insularity and resistance to contact with and influence from surrounding varieties, can be taken to represent a faithful reflex of their precursors. Clarke’s observations regarding Newfoundland Vernacular English raise important questions about this assumption. Key among them are issues of linguistic transmission and reconstruction: What circumstances promote successful transmission of source variety features, and what do the features transmitted reveal about the structure of the source? More generally, what kind of linguistic evidence is necessary and sufficient to establish genetic links between varieties?

This study contributes new insights to these questions by confronting the conflicting interpretations in the literature on verbal -s with a comparison of its behaviour in an extraterritorial variety and its likely British source. This exercise furnishes an empirical test of the validity of inferences made about the structure of the source on the basis of the features transmitted to its descendants (e.g., Poplack 2000, Poplack and Tagliamonte in press).

First, building on critiques of our earlier research, we reanalyze our Samaná English data, repairing methodological inconsistencies in (Poplack and Tagliamonte 1989), and focussing on the key factors for which claims have been made—Type of Subject, Phonological environment and Verbal Aspect. Using consistent analytical and methodological procedures, we replicate this analysis on a contemporary dialect of British English characterized by productive nonconcord -s usage, whose precursors are known to have constituted an input variety to Newfoundland and large parts of the American South (hence, arguably to AAVE) as well as to the Caribbean.

The Data

The analyses that follow are based on data extracted from two corpora. The first is a set of tape-recorded interviews with native English-speaking descendants of African Americans who settled in Samaná, Dominican Republic, in 1824. As detailed elsewhere (Poplack and Sankoff 1987), their dialect is an offshoot of the English spoken by African Americans in the early 19th century. It had been in minimal if any contact with other dialects of English, standard or otherwise, since settlement, and has subsequently been shown (Poplack 2000, Poplack and Tagliamonte in press) to share the grammatical structure of several other contemporaneous varieties of Early AAE. The 21 informants included in this study, aged 71-103 in 1982, constituted the oldest living generation of native speakers of English at the time of data collection.

The second corpus consists of recordings of eight elderly speakers of Devon English (Godfrey 1997, Godfrey and Tagliamonte 1999) matched in age, insularity and other sociocultural characteristics with the Samaná informants. These speakers are clearly identifiable as users of the traditional vernacular and feature all the folk characteristics of dialect speakers (Wakelin 1977: 3).

Devon is the ideal place to study verbal -s variation. It represents one of the very few contemporary varieties of English in which nonconcord -s is not simply a remnant, but remains productive (and variable) in all grammatical persons, as in (6).
(6) **1st person singular:**
   a. I *forgets* now how long I stayed there. Quite a good while I *think* I stayed with ‘em. (DEV/001/544-5)

2nd person singular:
   b. You *goes* up that lane and you *goes* down another road. (DEV001/534)
   c. You *pack* up for a fortnight, *put* your kit on your back, you *go* out, have a beautiful time. (DEV/002/376)

3rd person singular:
   d. Nice maid, her. But her *likes* more the bloody old boy than her *do* the maid. (DEV/007/280)

1st person plural:
   e. We *gets* a lot of trips, don’t we? Once a month we *go*. (DEV/003/084-088)

3rd person plural:
   f. Yeah they *drives* ‘em ... They *help* out. (DEV/005/118-122)
   g. The cattle all *goes* to, to the big markets, these days ... they *go* straight to the slaughter house. (DEV/008/267)

From a linguistic point of view, then, this dialect is eminently comparable to the Early AAE materials we have investigated. This fact enables us to overcome the limitations necessarily imposed on studies of other varieties (Clarke 1997a, Singler 1997) whose particular trajectory of evolution has resulted in sparse, invariant or otherwise poorly distributed data in some of the key linguistic contexts. Despite the ready availability in Devonshire of a mainstream English target variety, in contrast to the situation in Samaná where speakers were surrounded by Spanish monolinguals, the fact that the variety has evolved in a sociolinguistically *peripheral* dialect region explains the preservation of the regional vernacular in the face of external standardizing influences (Godfrey 1997). Moreover, in contrast to the spoken varieties typically examined in efforts to reconstruct the grammar of -s usage at earlier stages of the English language, Devon English is unique in having remained *in situ*, and thus, relatively impervious to the often traumatic mix of linguistic inputs, external contacts and social reorganization that typify extraterritorial varieties of English. These extralinguistic facts, in conjunction with the age and insularity of the speakers in our sample, make this variety of Devon English particularly apt to have preserved (*pace* internal evolution) the conservative features of its linguistic precursor(s). Because Devon figured prominently among the British counties supplying settlers in the 17th century migrations from Bristol (southwest England) to North America and the Caribbean (Campbell 1967, Clarke 1997a: 252-3, Le Page and Tabouret-Keller 1985: 39); those features (variable -s usage among them) were likely represented in the colonial English models they transported there. Analysis of these varieties thus provides an unprecedented perspective on the transmission of features to Early AAE from at least one of its probable sources.

From tape-recorded interviews with these speakers, we extracted each lexical verb occurring in a simple present-tense context. To enhance comparison with other studies, we distinguish 3rd p. sg. from 3rd p. pl. contexts. We omitted, as detailed in Poplack & Tagliamonte (1989, in press, chapter 7) neutralized, ambiguous or otherwise exceptional tokens. This yielded 1281 tokens from the Samaná data base and 622 from the Devon English corpus, each of which was coded for the four conditioning factors described above.
An analytical excursus

Despite the accumulating knowledge on verbal -s in an increasing number of English dialects, research advances have been hindered by the familiar lack of comparability among analyses. Clarke (1997a) details the contributing factors. In addition to reliance on comparison among contemporary spoken and possibly incommensurable written materials, they include 1) selective testing of only some factors to the exclusion of others, 2) differences in configuration of the data (into 3rd sg. vs. other persons) and 3) the difficulty in establishing direct historical links between contemporary emergent and older source varieties.

We review each of these in turn. With few exceptions (e.g., Clarke 1997a, Poplack and Tagliamonte 1989, 1991, Singler 1997), the major features reported to condition the occurrence of -s have rarely been treated together in the same analysis. While there is remarkable consistency on the operation of the Type of Subject constraint in historical varieties (Bailey and Ross 1988, Montgomery 1997, Montgomery and Fuller 1996, Montgomery, et al. 1993), neither verbal aspect nor phonological effects were considered in those studies. It is thus unclear whether the full complement of constraints is operating in the few remaining contemporary s-ful varieties of English, African and European, that have been studied to date. Nor do we know whether they are operative in English-based creoles, since, to our knowledge, none of them has been systematically examined in such languages.

Lack of comparability also stems from different data configurations. For example, to determine the extent to which constraints on verbal -s were shared across the paradigm, Poplack & Tagliamonte (1989, 1991) distinguished 3rd p. sg. from other grammatical persons. Montgomery & Fuller (1996) only compare -s presence after the pronoun they vs. 3rd p. pl. subjects. Other divisions may have been dictated by the frequency and distribution of verbal -s in a corpus. In varieties like Newfoundland Vernacular English where -s occurs categorically on main verbs in 3rd p. sg. contexts, constraints on variable -s presence can only be analyzed in non-3rd p. sg. contexts (Clarke 1997a). Where the overall frequency of verbal -s is extremely low, as in Liberian Settler English (approximately 2% [25/1125]) in all non-3rd p. sg. contexts taken together (Singler 1997), separate analyses by grammatical person may be unfeasible or statistically unreliable. Thus, in most documented cases, either the data or the analyses do not permit assessment of which effects are relevant in different grammatical contexts.

This is problematic, since as early as the 10th century, when verbal -s was first attested, its distribution was already highly differentiated across the verbal paradigm (Stein 1986: 641). At that time, 2nd p. (sg. or pl.) favored the incoming suffix, and 3rd p. sg. contexts were least likely to be marked. But by the Early Modern English period, through a series of developments which are still not entirely clear, the vast majority of -s is attested in 3rd p. sg. and pl. contexts, both singular and plural (Stein 1986: 644). Differential rates and conditioning according to grammatical person persist in the non-standard dialects of English which constitute the contemporary reflexes of the older situation. It is thus particularly relevant to evaluate not only the frequency, but also the function, of verbal -s in these key contexts.

To assess whether the various occurrences of verbal -s represent a single process (as per Poplack and Tagliamonte 1989) or many (cf. Montgomery and Fuller 1996), the configuration of constraints operating in 3rd sg. must be compared with that for 3rd pl. contexts. If the same factors contribute effects in the same direction, this will be evidence that verbal -s inflection represents the same fundamental mechanism (of simple present-tense marking) in each context. Poplack & Tagliamonte (1989) first reported the Type of Subject effect for all non-3rd p. sg. contexts taken together. But as observed by Montgomery and associates (Montgomery 1997, to appear, Montgomery and Fuller 1996, Montgomery, et al. 1993), this effect operates only in 3rd p. pl. contexts. Any analysis which tests the effect of subject type on all non-3rd p. sg. contexts necessarily includes contexts (1st and 2nd p.) in which the distinction between subject types is
neutralized, since full NP subjects only occur in 3rd p. Such methodological anomalies may account for at least some of the discrepant results among studies noted above.

Finally, most of the research focusing on contemporary spoken varieties qua remnants of older source varieties has of necessity had to infer the structure of the latter from the patterns of variability in the emergent variety, since, as Clarke notes, “adequate data bases for regional varieties of British & Irish vernacular English of some 2-300 years ago are unavailable” (Clarke 1997c: 11).

Method

For these reasons, the analyses that follow distinguish 3rd p. sg. from 3rd p. pl. contexts, comparing the effect of each of the four major factors reported to condition verbal -s when all are considered simultaneously. The multiple regression procedure incorporated in the variable rule program allows us to evaluate the relative strength of effects in each person, and to determine whether they are operative across the paradigm or are overridden in 3rd p. sg. by the standard pattern. The analyses we report in the next section confirm our earlier conjecture that both presence and absence of verbal -s involve a single variable process of simple present-tense inflection, operative in 3rd p. sg. and pl. contexts, and constrained by type of subject, verbal aspect and phonological processes. Even more surprising are the striking similarities between Samaná English and a source variety which has retained the older, regional feature under investigation: Devon English. These are detailed in ensuing sections.

Comparative analysis of verbal -s inflection in two peripheral varieties of English

A first comparison of the overall rates of verbal -s usage by grammatical person (Figure 1) reveals that the distributions are nearly identical in the two varieties, including the favouring, though noticeably variable, effect of 3rd p., especially in the sg., on choice of verbal -s

**FIGURE 1:** Comparison of verbal -s rates according to grammatical person in Samaná English and Devon English.

Rates of verbal -s are in fact higher in Devon, not only in 3rd sg., but in all grammatical persons. Since differences in overall rate may fluctuate for any number of reasons without affecting
grammatical structure, here represented by the hierarchy of constraints on variant selection, we shall have no more to say about them here. To address the issues of whether the varieties share the same grammar, and whether -s fulfills a like function in both persons, we focus instead on the conditioning of the variability, as revealed by the results of variable rule analysis.

**Multivariate analysis of constraints on verbal -s variability**

Table 1 presents the results of four independent variable rule analyses of the main linguistic constraints reported to condition verbal -s variability: Type of Subject, Phonological environment and Verbal Aspect. The analyses contrast 3rd p. sg. with 3rd p. pl. contexts in each of Samaná English and Devon English. Because of the paucity of verbal -s in some contexts, and the disproportion of -s across corpora, we do not rely on the stepwise option in the multiple regression procedure incorporated in the variable rule program (Rand and Sankoff 1990) to determine statistical significance when comparing varieties. When a variable is affected in the same way by the same set of factors in different analyses, an analysis with a larger number of tokens will tend to detect more of these factors as statistically significant than one with fewer tokens. We can, however, expect the constraint hierarchy to be similar, albeit to fluctuate more in the smaller data set. This is why we focus instead on the hierarchy of constraints constituting each factor, which we take to represent the grammar of -s variability. Thus Table 1 displays the results for factors that were selected as statistically significant as well as those that were not (indicated in square brackets). In the case of the latter, we provide the results of an analysis in which all factors were included in the regression. If the direction of effects constituting this variable grammar is parallel across 3rd sg. and pl. contexts, this will be evidence that the grammatical function marked by -s is the same in both. If this function in turn is shared by the two varieties, we will infer that they have inherited it from a common source.
Table 1: Four independent variable rule analyses of the contribution of factors conditioning the occurrence of verbal -s in Devon English and Samaná English.

Factor groups not selected as significant in brackets. DVN.3SG.Lip.Cnd; CVN.3PL.Lip.Cnd; SAM.3SG.5.Cnd; SAM.3PL.5.Cnd

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We begin with the effect for which there is general consensus with regard to its source in vernacular British English dialects, and lack of attestation in English-based creoles—the propensity of -s to appear on verbs whose subject is a nonadjacent NP or pronoun. As in other dialects of English cited above (though not Newfoundland Vernacular English), Table 1 shows that this constraint remains fully operative in the relevant 3rd p. pl contexts in both Devon and Samaná English, with parallel constraint rankings, as illustrated in (7).

(7) Adjacent:
- a. Tractors *runs* away and stuff like that. (DEV/006/245)
- b. The old people *likes* to quarrel. (SE/003/174)

Non-adjacent:
- c. I have two of ‘em there, *reads* a very little. (SE/016/574)
- d. They always *tries* to be obedient. (SE/009/458)
- e. They turn round and *says*, “if that old so and so can do it, so can I”. (DEV/002/98)
- f. They all *plays* duets. ‘Tis jolly nice, really. (DEV/00X/400)

The provenance of the remaining constraints is more controversial.
Phonological context

The contribution of phonological effects to verbal -s variability has long been a vexed question. Phonology has been widely reported (Bickerton 1975) to play little if any role in constraining -s occurrence in AAVE or English-based creoles. Based on the view (Labov 1972) that the syntax generates forms which may subsequently be removed by phonological operations, this finding constitutes the crux of the argument that verbal -s is not part of the underlying grammar of these languages. Contrary to an insertion analysis, however, regular phonological conditioning of verbal -s was found in all grammatical persons in the Early AAE varieties investigated by Poplack & Tagliamonte (1989) and Schneider (1983).

The analyses in Table 1 also reveal a clear phonological effect in Samaná English: in both preceding and following phonological contexts, vowels favor the realization of verbal -s while consonants disfavor, as in (8), a pattern which is also evident in Devon English 3rd p. sg. (as well as in non-3rd p. (Poplack and Tagliamonte in press)) contexts3, as in (9).

(8) Following vowel:
   a. And that goes over yonder. (SE/003/1337-1339)
   b. They goes and comes ... (SE/002/876)

   Following consonant:
   c. Ah, you see. He understand what I say. (SE/005/726-7)
   d. The next one stay there where you see they got a factory. (SE/001/1291-2)

(9) Following vowel:
   a. People goes organic now though don’t ‘em? (DEV/001/054)
   b. I don’t think there’s a lot comes in Cheriton, any rate. (DEV/005/202)

   Following consonant:
   c. It prove that so many times you can get anything you like out of anybody.
       (DEV/002/114)
   d. He reckon that the iceberg was carrying the ship. (DEV/007/429)

Consonant cluster simplification and final consonant weakening are well-documented processes which may be consistent with a number of scenarios, including a creole origin for AAVE and its overseas congeners, as recently suggested by Singler (1997). The parallel patterning in Devon English, however, requires an alternative explanation. Phonological processes have also contributed to the current form of the English affix, as studies of Middle and Early modern English texts (Kytö 1993, Stein 1987) reveal. Though we can only speculate on the provenance of the phonological effects displayed in Table 1, it is clear (contra Singler 1997) that they need not entail a creole origin. On the contrary, they can as readily be traced to the English language or to linguistic universals as to any other source.

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3 The phonological effects are the same as those reported in Poplack & Tagliamonte (1991), despite Singler’s (well-founded) concern (1997) that interaction of factor groups, corrected in the present analysis, may have skewed the results.
Table 1 shows that verbal -s is again clearly favoured in Samaná English when the reading of the verb is habitual, whether the context is singular or plural, as illustrated in (10). This effect is mirrored in Devon English (see Godfrey and Tagliamonte 1999 for detail), as in (11).

(10) 3rd singular:
   a. She comes sometimes and passes the night with me. (SE/009/171)

   3rd plural:
   b. They climbs all them trees. They climbs up all them trees picking coconut, mango. (SE/001/1342-3)

(11) 3rd singular:
   a. Her goes with one of ‘em somewhere, dos most of the shopping, like. (DEV/005/336)

   3rd plural:
   b. A lot of ‘em goes up from Sanford, parks their car at Sandford, walks up to Westleigh. (DEV/002/149)

The existence and interpretation of an aspectual reading for verbal -s remains perhaps the least understood and most contentious element of the debate surrounding the origin and function of this form. As noted above, in creole verbal systems, generally characterized as aspect-prominent, choice of verbal mark is reported to be determined by aspectual considerations. Thus Bickerton (1975), Roberts (1976), Pitts (1981, 1986), Brewer (1986) and Singler (1997), among others, all linked this “aspectual” use of -s by speakers of African origin to creole grammar. But the aspectual role of -s in the expression of present temporal reference in creole grammar remains unresolved (Poplack and Tagliamonte in press, chapter 7). This may explain the lack of consensus as to which aspect actually embodies the creole effect, durative and/or habitual.\(^4\)

Poplack and Tagliamonte (1989, 1991) also found verbal -s to be associated with habitual aspect in previous studies of Early AAE. Noting that the most characteristic use of the present tense was to refer to situations which could be construed as “habitual” or “durative”, we suggested that the effect was a concomitant of the general association between habitual aspect and simple present tense. Indeed, because there is apparently no separate habitual tense apart from the present, the grammatical expression of habituality will always be integrated into the aspectual or modal system rather than into the tense system (Comrie 1976: 68). Thus, we argued, along with Comrie (1976), that a “pure” aspectual function for -s could not be distinguished from its tense function.

We recently learned that the same association between -s and habitual aspect had also been reported in a number of regional British dialects (e.g., Aitken 1984, Elworthy 1877, Shorrocks 1981, Viereck and Ramisch 1991). It has also been confirmed quantitatively for the extraterritorial -s-conserving Newfoundland Vernacular English (Clarke 1997a). Though none of these studies has addressed the question of whether the expression of habitual aspect in -s-conserving varieties falls out from the semantics of the simple present, or is more directly associated with one of its morphological exponents (i.e. -s), Walker (2000) has now shown that the aspectual readings of the present tense

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\(^4\) To cite but one of the most recent examples, despite Singler’s (Singler 1997: 6) emphasis on the favourable effect of habitual aspect on verbal -s in Liberian Settler English, his marginal results show that -s is actually a good deal more frequent in continuous (23\%) than in habitual (7\%) contexts, though these contributions are reversed in the multivariate analysis he reports (Ibid.). Such reversals indicates severe interaction amongst these (and possibly other) factor groups. Short of a more detailed analysis of the interaction, little can be concluded.
have been divided (in Early AAE) between its two instantiations: -s is preferred in habitual contexts and zero for durative readings.

**Discussion**

In summary, each of the predictors we have investigated—phonological, syntactic and aspectual—has a part in constraining verbal -s variability. The type of subject contributes a strong and consistent effect, most relevant to 3rd p. pl. contexts. The occurrence of -s is also affected by the nature of the stem-final segment to which it is affixed, as well as by the independent (and occasionally competing) process of consonant cluster simplification. Finally, verbal aspect plays an important role in promoting -s in habitual contexts, both singular and plural.

We noted above that discrepancies in total Ns across contexts and varieties do not permit strong claims about statistical significance (here, or in the few other studies making use of multivariate analysis to study -s). In the “meta-analysis” carried out in this paper, we have stressed instead the striking parallelisms in the details of the constraint hierarchy of each factor across analyses. These illustrate, first, that with only minor exceptions mostly involving phonological conditioning, constraint rankings are shared in 3rd p. sg. and 3rd p. pl. This provides strong confirmation of our earlier suggestion (Poplack and Tagliamonte 1989, 1991) that variable affixation with -s represents the contemporary reflex of an earlier variable process of present-tense marking across the verbal paradigm, rather than an agreement (or other) marker in 3rd p. sg., and a hypercorrect insertion elsewhere. This process is variably conditioned by a number of factors, themselves inherited from earlier developments in the English language, causing -s to be preferred in some environments (e.g. nonadjacent subjects or habitual aspect) over others. There is thus no reason to posit the existence of six separate -s morphemes, as recently suggested by Montgomery & Fuller (1996).

Our analyses also reveal a number of parallelisms between two apparently diametrically opposed varieties of English which have nonetheless evolved in like circumstances of sociolinguistic peripherality. The patterning of variable constraints is essentially the same in these dialects, and parallel, in turn, to that reported through the development of the English language. This is true even of the effect of habitual aspect, traditionally associated with an underlying creole grammar. There is thus little to distinguish Samaná English and Devon English with regard to the hierarchy of constraints operating on verbal -s. In view of the vast differences between the communities in terms of geographical location, likely external influences, and ongoing internal developments, the existence of such correspondences, not merely in terms of frequency, but also in the details of the constraint ranking of each factor, are little short of remarkable.

If anything, then, the exercise reported in this paper has renewed our faith in the comparative endeavor we embarked upon in 1989. At that time we discovered a Type of Subject constraint operating in Samaná English, and following observations in historical grammars, succeeded in tracing it (or an analogous effect) to earlier stages of the English language. This coupled with the fact that no such effect had been reported for the other putative source varieties of Early AAE—English-based creoles and African languages—led us to conjecture that its existence in Early AAE was likely inherited from English, and further, could be used to reconstruct some of the details of the particular variety(ies) of that language that had been acquired by the early slaves. By analogy, we also hypothesized that the aspectual effect we had uncovered, but for which we had located no specific dialect attestations (though we knew it to be consistent with the general uses of the present tense in English), might likewise have been inherited from the same precursor variety. More than a decade of empirical research on the behavior of verbal -s in a wide variety of spoken and written dialects of English of British- and African-origin populations has now proved these two conjectures correct.

How can these results be interpreted in terms of the objections raised by Clarke (1997a, 1997b, 1997c)? Though we agree with much else in Clarke’s cogently argued work, particularly with
regard to the need for more research on the transmission of linguistic features, we cannot share her pessimism with regard to the feasibility (and accuracy) of reconstructing the linguistic antecedents of New World varieties. On the contrary, we stress that though it may not be possible to predict the outcome of historical linguistic processes from the input, this does not mean we cannot reconstruct the input from the output. Any individual outcome may be unpredictable, but given two or more actual independent outcomes, their characteristics reveal a great deal about, and severely limit, the set of possible inputs. Indeed, the comparative method in historical linguistics rests on just this principle. Obviously, once a merger has taken place, the conditioning of the erstwhile distinctions can no longer be inferred. Where, however, a distinction persists independently in some populations, and this distinction is comparable in some detail across them, then no matter how widespread the merger elsewhere, the fact that it failed to occur in two or more far-flung locales can only be explained as a shared retention from a common ancestor. Whether this distinction is lost in other dialects is irrelevant.

As to why neither Newfoundland Vernacular English nor Liberian Settler English feature the Type of Subject constraint, nor Newfoundland Vernacular English the phonological constraint (and we can test the claims to this effect in recent papers), any number of reasons are possible, independent linguistic drift chief among them. To these we would add the following statistical caveats. If one of the variants of, or key contexts for, a variable is very rare, even a genuine effect may not register as statistically significant. We invoked this problem in reference to the comparison between Samaná English and Devon English. It is also relevant to the study of Liberian Settler English cited above. For example, Liberian Settler English features very few full NPs, a disproportion which is compounded by an approximate rate of only 2% -s overall (though the verbal contexts studied number well in excess of 1000). Nonetheless we note that -s in fact occurs four times as frequently in Liberian Settler English with an NP as with a pronominal subject (Singler 1997: 6), though far more tokens of -s than Singler had at his disposal would have been required for this difference to achieve statistical significance. The direction of effect exactly parallels the pattern of the Type of Subject constraint. Its applicability to Liberian Settler English is thus far from settled.

Whereas lack of transmission or even loss of some particular feature is in no way remarkable, the systematic persistence of a whole hierarchy of constraints is. For a complex of interlocking factors, such as those we report in these analyses, to arise independently in geographically distant varieties would be little short of incredible. In this context the fact that both Early AAE (including Samaná English, African Nova Scotian English, the Ex-slave Recordings and Liberian Settler English) share a habitual effect with Newfoundland Vernacular English and Devon English, has a straightforward explanation. Despite the dearth of dialectological attestations, the most logical interpretation is that it was acquired from a common ancestor. The precursor of Devon English, most likely to have undergone internal evolution only, and which may well have figured as input to the descendant varieties studied here, is an excellent candidate. That all but one of these varieties display (at least traces of) the Type of Subject constraint further bolsters this suggestion.

We have noted striking and unexpected similarities between two contemporary nonstandard varieties of English. One has evolved in a peripheral dialect region of the British Isles under conditions conducive to retention of older features; the other was transplanted over a century and a half ago to the remote peninsula of Samaná in the Dominican Republic. The detailed nature of these parallels, together with the ample sociohistorical documentation, suggests that both descended from a common British source. That other descendants of this or related sources did not participate in these retentions does not detract from this demonstration, since shared innovations carry far more

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5 The Devon results are a reminder that the dialect literature is selective, not exhaustive. In the case of verbal -s, reliance on such descriptions as evidence about linguistic structure is misleading (see also Montgomery to appear).
weight than common losses in reconstructing ancestry. This is true not only of linguistic reconstruction, but also of such diverse fields as evolutionary biology and manuscript affiliation.

The findings we have presented suggest that verbal -s variability was already inherent in the language transported to the U.S. by emigrants from Devon and elsewhere, and hence in the language acquired by the ancestors of the Samaná informants before they in turn transported it to the Dominican Republic. They also demonstrate convincingly that whatever the contact circumstances in early 19th century North America, they clearly permitted acquisition of the variable constraints operating on verbal -s. These results thus establish a direct relationship between the emergent Early AAE and an English dialect source, proving that it is indeed possible to reconstruct an ancestral variety on the basis of the variable linguistic structure of its descendants.

References


Clarke, Sandra, ‘The search for origins: Habitual aspect and Newfoundland Vernacular English’, Paper presented at NWAVE 26, Laval University, Quebec City, Canada, 1997c.


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6 Of course, by our own comparative axiom cited above, even such parallelisms do not rule out contributions from non-English varieties, at least to Early AAE. In light of the dialectal evidence we have provided, we hope that creolists will subject these constraints to empirical investigation in known English-based creoles as well as in African languages. Until such time, however, any creole connection for verbal -s will remain conjecture.


Rand, David and Sankoff, David, GoldVarb: A variable rule application for the Macintosh Version 2. Centre de recherches mathématiques, Université de Montréal, Montreal, Canada, 1990.


Shorrocks, G., ‘Grammar of the dialect of Farnworth and District (Greater Manchester County, formerly Lancashire)’, Ph.D. dissertation, University of Sheffield., 1981.


Walker, James, ‘Using the past to explain the present: Tense and temporal reference in Early African American English’, Paper presented at Methods X, Memorial University of Newfoundland, St. John’s, NF, 1999.


