

## The grammaticization of *going to* in (African American) English

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### ABSTRACT

Focusing on the process of grammaticization, whereby items with lexical meaning evolve into grammatical markers, this article examines the future temporal reference sectors of three diaspora varieties of African American English which have evolved in linguistic isolates and compares them with those of British-origin rural and mainstream varieties of English. With one exception, the same constraint hierarchies condition the selection of *going to* across the board, indicating that their future temporal reference systems are descended from a common source. All other distinctions among the varieties result from their differential positioning on the cline of ongoing grammaticization of *going to* as a future marker. Operationalization of constraints representing different stages of the development of *going to* and comparison of their probability values across communities confirm that the enclave and the rural varieties retain conservative traits, visible here in the form of variable conditioning, in contrast to mainstream English, which is innovating. We suggest that the major determinant of variability in the expression of the future is the fact that the speech of isolated speakers, whether of African or British origin, instantiates constraints that were operative at an earlier stage of the English language and that are now receding from mainstream varieties.

Alternate expressions of future temporal reference are common in language, and, with its plethora of competing tense/mood/aspect configurations (including inflections, modals, tenses, preverbal particles, auxiliaries, and periphrases), English is no exception. Indeed, its future temporal reference system has been characterized as a “mad” array of constructions of different ages and sources vying for overlapping territories (Bybee, Pagliuca, & Perkins, 1991). In addition

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to *shall*, originally a verb of obligation, and *will*, once a verb of volition or desire, future may be expressed by various periphrastic forms, notably *going to*, a verb of motion. These have been competing since the late 1400s. Bybee, Perkins, and Pagliuca (1994:243) suggested that the “apparent duplication” of grammatical morphemes for future uses is a consequence of their independent development from distinct lexical sources or from similar sources at different periods. This produces a “layering” (Hopper, 1991:23) of recently evolved markers over older ones. According to these authors, the readings often attributed to variant forms are retentions of meanings associated with their original lexical sources. Among these, in addition to those already noted, are one or more of: intention, necessity, imminence, habituality, general truth, characteristic behavior, command, polite request, and supposition. Bybee and Pagliuca (1987:112) observed that, in their progress along the continuum of grammaticization to future markers, morphemes expressing these apparently disparate semantic notions gradually develop a pure future sense according to a general pattern. For example, from signifying movement toward a tangible goal, *andative* or *go* futures come to express movement toward a figurative goal, then intention, and eventually prediction. But retention of the original senses, at least in certain contexts, would explain why a future derived from a verb meaning desire, like Old English *willan* ‘will’, sometimes connotes ‘will’ or ‘willingness’, as in the Early African American English (Early AAE) example in (1), and a future derived from a verb of movement may at times give the sense of heading along a certain path, as in (2).

(1) I definitely *will speak* there (NPR/038/1607)<sup>1</sup>

(2) a. I'm *going to get* my supper now (NPR/039/1444)  
 b. I'm *going* home. (GYE/076/185)

Extrapolating from these suggestions that the details of a grammaticizing form's lexical history may be reflected in constraints on its current distribution (Bybee et al., 1991; Hopper, 1991; Schwenter, 1994), in this article we operationalize measures of grammaticization of the competing expressions of future temporal reference and use them to help situate varieties representing Early AAE with respect to ongoing change in mainstream varieties of English.

In an earlier study of the expression of future temporal reference (Poplack & Tagliamonte, 1995), we found an interesting difference between the speech of the African Nova Scotian isolates of North Preston and Guysborough Enclave, on the one hand, and the British-origin Guysborough Village adjacent to the latter, on the other. Only in Guysborough Village had *going to* specialized for proximate future reference. In seeking to explain this finding, in this article we systematically test the hypothesis that such interdialectal differences can be linked to different stages of grammaticization, and we situate these stages with regard to mainstream developments.

In contrast to most of the other features typically associated with African American Vernacular English (AAVE), the widespread variability characteristic of fu-

ture temporal reference in English enables us to replicate our quantitative analyses of Early AAE on British-origin varieties. We examine two here. One is spoken in the rural Guysborough Village neighboring Guysborough Enclave. The other, from the cosmopolitan Canadian capital Ottawa, is representative of standard urban North American English (Chambers, 1991:93). Comparing variable future marking in enclave, rural, and mainstream situations provides an important check on the usual comparisons along ethnic lines. Incorporating the factor of contact with mainstream developments enables us to pinpoint whether the relative isolation in which the Early AAE varieties evolved in their respective enclaves has resulted in the retention of conservative features (or constraints). Our working hypothesis is that urban Ottawa should be centrally located in mainstream change, with the rural but not isolated Guysborough Village perhaps occupying an intermediate position between it and the enclaves.

The remainder of this article is organized as follows. First, we sketch the development of future marking in English, paying special attention to the grammaticization of *going to*. Next, we compare future marking in contemporary English, African American Vernacular English, and English-based creoles. We then detail our analytical method and present for each of the comparison varieties a variable rule analysis of the contribution of factors historically implicated in the grammaticization of *going to*. Finally, we offer our conclusions.

#### THE DEVELOPMENT OF FUTURE MARKING IN ENGLISH

The trajectory upon which *shall* and *will* embarked as exponents of future time reference is surely one of the best-documented (if least agreed-upon) developments in the English language: a plethora of publications is devoted solely to this theme.<sup>2</sup> The main issues revolve around: (a) whether the forms are semantically empty function words (Mossé, 1952:107) or retain shades of modality, (b) whether each is equally correct or acceptable in each grammatical person, and if so, whether they do the same semantic work throughout, and (c) whether they are in free variation or semantically constrained. In comparison, the prescriptive enterprise has been curiously reticent about the incursion of *going to* + infinitive into the future temporal reference domain, though, as pointed out by Royster and Steadman (1923:394), this neglect has had no effect on its widespread and ever-increasing usage (Fries, 1940; Luebke, 1929; Mair & Hundt, 1995; Visser, 1970).

The earliest references to future states or events in the English language were construed with the present tense form, with temporal disambiguation provided by temporal adverbs and conjunctions, as in (3a), or by context, as in (3b), rather than morphologically (Curme, 1977:356; Visser, 1970:669).

- (3) a. after þrim dagon ic **ARISE**  
 after three days I arise + present tense  
 'After three days I will arise.' (O.E. Gosp., Mt. 27, 63, cited in Visser, 1963–73:670)

- b. on Dare tu **CENNYST** bearn  
 in sorrow you bear + present tense children  
 'In sorrow you will bear children.' (Ælfred. Bede (Smith) 493.23, cited in  
 Visser, 1963–73:670)

Although constructions with Old English *sceal* + infinitive and *wille* + infinitive were common, initially they expressed present obligation and volition, respectively (Traugott, 1992; Visser, 1963–73). Only in later Old English did *sculan* and *willan* begin to lose much of their original meaning, paving the way for the rapid increase, in Middle English, of *shal* and *wil* + infinitive to express “pure” prediction (i.e., independent of the modal senses of volition or constraint). They continued to gain even more ground in the course of the Modern English period, while use of the present tense form in the same function became rarer and rarer (Visser, 1963–73). Today, the futurate present survives (as in French) mainly in temporal clauses, in addition to a small number of main clause uses, largely to refer to scheduled events (Mossé, 1952; Visser, 1963–73).

The picture usually offered for the development of *going to* as a future marker is as follows: it originated from the progressive aspect of *go* (meaning movement towards a goal) collocated with a preposition + NP complement (e.g., *I am going to Nova Scotia*). Eventually the idea of movement weakened (in the specifically future contexts of interest here), and the collocation came more and more to express purpose, intention, and determination (e.g., *I am going to go to Nova Scotia this summer*), with these meanings in turn gradually receding in favor of a more general sense of prediction (Royster & Steadman, 1923:402). It is not clear how long *going to* has been used to express pure prediction, perhaps, as has often been suggested (Harada, 1958; Pérez, 1990), because the meanings of intention and motion are so difficult to distinguish. Most situate its origins in the late Middle (Wekker, 1976) to Early Modern English (Danchev & Kytö, 1994; Pérez, 1990) periods. The example many regard as the first, as it features elements of each of movement, intention, and proximity in the future, reproduced in (4), dates from 1482. Hopper and Traugott (1993:83) observed that the directionality of *going to* is demoted here, while the inference of imminent future is promoted. This suggests that the grammaticization of *going to* was at least initiated quite early, although it was apparently not used with any real frequency as a future marker until the mid-17th century (Danchev & Kytö, 1994; Fries, 1940; Pérez, 1990; Royster & Steadman, 1923), if not later.

- (4) Therefore while this onhappy sowle by the vycторыse pompys of her ennyes **was going to be broughte** into helle for the synne and onleful lustys of her body. (*The Revelation to the Monk of Evesham* 1482:43, cited in Danchev & Kytö, 1994:69)

Indeed, perusal of 66 grammars of the English language spanning the entire Early Modern English period turns up only seven mentions of *going to* (Bayly, 1772/1969; Beattie, 1788/1968; Harris, 1751/1968; Pickbourn, 1789/1968; Priestley, 1761/1969; J. Ward, 1758/1967; W. Ward, 1765/1967). The sense of movement toward a goal still prevails in many 16th-century examples (see, e.g.,

the detailed analysis in Danchev & Kytö, 1994; see also Harada, 1958). In the earliest grammars, however, the meaning of intention and proximity in the future, likened to that of the Greek *paulopostfuturum* (e.g., Priestley, 1761/1969:112), was still reserved for *about to*. Gildon and Brightland (1711/1967:100) distinguished a “Mind to denote or mark a Thing, that is suddenly to be . . . *I am about to do it*” from “a Thing, that is simply to happen . . . *I will love*” (emphasis ours). It would take another century for *going to* to supplant *about to* as an auxiliary of future time, as indicated in W. Ward’s *An essay on grammar* (1765/1967), although *about to* continues to express imminence (Quirk, Greenbaum, Leech, & Svartvik, 1985:217).

The forms, *to be about*, *being about*, which are set down in the future of the infinitive mood, and in the future participle, are little used at present; for the participle *going* is now commonly substituted instead of *about*; as, *to be going to have*, *being going to have*. But this is only in the *language of conversation*. (W. Ward, 1765/1967:396; emphasis ours)

The first explicit association of *going to* with proximity that we have been able to uncover is that of Beattie (1788/1968:219–220), who attributed to *I am going to write* the meaning “I am engaged in an action that is preparatory to, or will be immediately followed by, the act of writing.”<sup>3</sup> We infer that, by the end of the 18th century, *going to* was already firmly entrenched in usage, and the associations it currently entertains with the notions of proximity in the future were in place.

In addition, as with other progressive forms (Arnaud, 1998; Strang, 1982), it had clearly already been relegated to its current colloquial or informal status (Quirk et al., 1985:214). Unlike most of the other Early AAE variables that we have examined (Poplack, 1999; Poplack & Tagliamonte, 1989, 1994, forthcoming; Tagliamonte & Poplack, 1993), no class or dialect distinction is now (nor apparently ever was) attributed to the choice of *going to*, which Royster and Steadman (1923:395) characterized as “freely used by all classes, from the selective to the most illiterate.” It has also been appropriating ever more of the future temporal reference space, crowding *will* out of many of its erstwhile uses, even in literary or written texts (Luebke, 1929; Mair, 1997; Royster & Steadman, 1923; Visser, 1970), no doubt mirroring a concomitant increase in speech. Indeed, it is generally agreed that, after *will*, *going to* is now the major variant expression of futurity in English (e.g., Wekker, 1976), and this is amply corroborated by the materials we examine later in the article.

### *The grammaticization of going to*

Pérez (1990) described how the evolution of *going* from a lexical verb meaning movement toward a goal into the core component of a future auxiliary was abetted (if not enabled) by its eventual entrenchment in the *going to* collocation. In effect, though *going*, or its etymon *gangende*, was attested in its pro-

gressive form in Old English, it simply indicated ongoing motion, with no specific allative component. It co-occurred with a variety of prepositions, but *to* did not figure prominently among them (Pérez, 1990:55; Scheffer, 1975). In Middle English, *be going to*, though rare at first, does indicate movement toward a goal, though its individual components would not be regularly collocated with the auxiliary verb *to be* and the preposition *to* until the Early Modern English period. As detailed in Bybee et al. (1991), all of these developments are well-documented cross-linguistically. When movement verbs, the primary lexical source for future markers, are coupled with an allative component, located either in the semantics of the verb and/or, as in English, in the construction in which it appears, a future reading results. Equating movement toward a goal in space with movement in time, Bybee et al. (1994:268) argued that the temporal meaning that eventually dominates the semantics of the andative construction is already present as an inference from its spatial meaning. The additional inference that the agent is already on the path and the movement is in progress explains the progressive or imperfective aspect of these constructions.

The entrenchment of *going to* as a frequently used construction was a first important step in its eventual grammaticization as an auxiliary of future time. A second step involved the extension of its co-occurrence possibilities from nominal to infinitival complements. Once this point was reached, reference time would need to be extended into the future to set the stage for the development of *going to* into a future marker. As detailed earlier, this began to take place as early as the 15th century. Since that time, *going to* not only has been increasing in frequency (Berglund, 1997; Mair, 1997), but is now reported to co-occur more frequently with an infinitival complement than with the older NP complement (Pérez, 1990:59). Moreover, among these uses, examples meaning ‘intention/future’ apparently now outweigh those meaning ‘movement towards’ (Pérez, 1990:59). Concomitantly, older restrictions on type of subject are relaxed, and subjects are no longer confined to animates capable of movement, as would be expected if the main use of *going to* were to signify motion.

#### THE FUTURE IN CONTEMPORARY ENGLISH

The lion’s share of future reference in contemporary English is expressed by only four (unequally distributed) variants of the many theoretically available (Quirk et al., 1985:213). These are collocations involving *will* (5a) and *going to* (5b) with an untensed verb, the simple present (5c), and the present progressive (5d). *About to* is exceedingly rare in our materials. *Shall* is virtually nonexistent, conveying a sense of extreme formality, as in (6).

- (5) a. When we die, us, the oldest ones, the English **will be** scarce here. (SE/004/428)
- b. It’s **gonna get** wilder. (OTT/051/118A/29.21)
- c. Next week you **eat** the blueberries. (GYE/045/275)
- d. If you go there once more, I’m **calling** the cops. (GYE/040/1574)

- (6) You ask the questions, and I *shall try* to answer them. (OTT/013/31B/27.14)

The literature, contemporary and historical, is replete with directives for and interpretations of the use of these variants, largely as a result of prescriptive efforts to redress the form/function asymmetry so rampant in this temporal reference sector. Thus, the present progressive is said to predicate a fixed arrangement, plan, or program (Palmer, 1987; Quirk et al., 1985:215–216), often in conjunction with a temporal adverb, and the simple present is preferred in conditional and temporal clauses, particularly when the future event is scheduled (Visser, 1970:679), as well as to describe immutable events (Curme, 1977:356). With the virtual demise of *shall* from productive future reference, at least in North American varieties,<sup>4</sup> the long-standing controversy over the meanings and functions of *shall* and *will* (see, e.g., Visser, 1970, for details) has been transferred to *will* versus *going to*. The essence of the debate still concerns whether and how variant choice is “colored” by different modal or attitudinal nuances, such as relative degree of volition, certainty, intentionality, point of view, and judgment (Leech, 1971), whether “expressed by the speaker with regard to his own actions or to those of somebody else, or attributed by the speaker to a third party” (Close, 1977:132). *Will* is now considered the default option but, at the same time, is widely held to connote conditionality and modality. *Going to* is variously said to encode “current orientation,” “intention” (Nicolle, 1997:375; Royster & Steadman, 1923), “future fulfillment of the present” (Leech, 1971; Quirk et al., 1985; see also Fleischman, 1982; Vet, 1993), and a sense of determination or inevitability (Nicolle, 1997:375; Palmer, 1987; Royster & Steadman, 1923). A reading of immediate or impending future is also attributed to *going to* (Poutsma, 1928; Sweet, 1898, among many others), as is an association with colloquial or informal speech styles (Quirk et al., 1985:214).

Traugott observed that many of these nuances are so subtle that any classification system based on semantic interpretation alone is unavoidably arbitrary (Traugott, 1972; see also Visser, 1970). This would explain why some scholars maintain that *going to* is the neutral future, while others contend that it embodies some or all of the meanings listed here. In fact, there is still no consensus on whether the variable instantiations of future temporal reference are interchangeable (Palmer, 1987:146; Quirk et al., 1985:218; Visser, 1970:678) or reflect differences in meaning (Leech, 1971:56; Nehls, 1988:303; Wekker, 1976:79). This alone would block any effort to test which readings should be associated with each variant, even if there were an objective means of identifying or measuring semantic coloring.<sup>5</sup> Detailed analysis of usage data (Poplack & Turpin, 1999) has yielded little support for the claim that the variant expressions of future temporal reference are in fact associated with the semantic readings traditionally imputed to them. Such nuances tend to reside in speaker intent and hearer inference, both of which are inaccessible to the analyst. Thus, attributions of semantic motivations or interpretations of variant selection are no more valid than the alternative assumption (which we adopt in the remainder of this article) of the “neutralization” of any functions carried by these variants in “unreflecting discourse” (see



Sankoff, 1988). Pending an objective means to establish whether particular readings were intended by the speaker or inferred by the listener, we shall have little more to say here about semantic motivations for variant selection. Instead, we focus on the magnitude and direction of effects constraining their distribution and on what these reveal about the participation of these varieties in ongoing grammaticization and change.

#### FUTURE TEMPORAL REFERENCE IN AFRICAN AMERICAN ENGLISH AND ENGLISH-BASED CREOLES

Although future marking patterns have never been singled out as particularly different in contemporary AAVE or English-based creoles, it would be helpful to be able to situate Early AAE with regard to them. AAVE, like other varieties of English, is reported to express future variably with *will*, *going to*, and the present (Labov, Cohen, Robins, & Lewis, 1968:250).<sup>6</sup> Though AAVE is generally considered (Labov et al., 1968:250; Winford, 1998:113) to prefer forms of *going to*, Labov et al. (1968:250) noted that *will* is “quite secure” in contemporary AAVE, despite the fact that frequent word-final consonant deletion may render future forms with contracted *will* indistinguishable from present tense forms (Labov, 1972:24–25).

In fact, the few published observations on the expression of future in AAVE focus not on the opposition between *will* and *going to*, but on putative distinctions among the variant forms of *going to* (e.g., *gonna*, *gon*), the phonological reduction of which is said to be “highly characteristic” of AAVE (Labov et al., 1968:250). Some authors have associated these variant forms with different meanings. Joan Fickett (personal communication, cited by Labov et al., 1968:25) suggested that the reduced form *I'ma* denotes immediate future, in contrast to *I'm gonna*, which would be more remote. Winford (1998:113) suggested a distinction between AAVE *gon* and *gonna* parallel to the creole distinction between “pure future” *go/gon* and “prospective” future *goin/gwine* (cf. Winford, 1998:133n.14), basing this analogy on Rickford and Blake's (1990:261) finding of more copula absence before *gon* than *gonna*.

More generally, the high rate of zero copula in this context has been invoked as evidence that *gon(na)* originated from a creole preverbal irrealis marker *go* (e.g., Holm, 1984; Rickford, 1998:183) or reflects the adoption of a lone preverbal form as a result of substrate influence (Mufwene, 1996:10). In contrast to the tense distinctions that characterize English, English-based creoles are said to make a basic modal distinction between realis and irrealis. Realis refers to situations that have already occurred or are in the process of occurring, while irrealis refers to unrealized states and events, including, but not limited to, predictions about the future. Indeed, future time reference is but one possible interpretation for irrealis markers (Comrie, 1985:45); they are also used to mark conditional mood (Bickerton, 1975, 1981) as well as to convey possibility and obligation (Bickerton, 1975, 1981; Holm, 1988; Winford, 1996, among others).



Interestingly, although irrealis markers differ across English-based creoles, most, if not all, derive from an English future marker: thus, *sa* (< *shall*; or possibly < Dutch *zal*) in Sranan (Seuren, 1981; Winford, 1996) and Ndjuká (Holm, 1988), and *we/wi* (< *will*) in Jamaican Creole English (Bailey, 1966; Gibson, 1992), Carriacouan Creole English (Gibson, 1992), 18th- and 19th-century Nigerian Pidgin English (Fayer, 1990), and Kru Pidgin English (Singler, 1990). The most widely used marker *go(n)/guo/o* (< *going to*) has reflexes in just about every attested English-based creole (Aceto, 1998; Bailey, 1966; Bickerton, 1975; Fayer, 1990; Gibson, 1992; Holm, 1988; Seuren, 1981; Winford, 1996; see also Faraclas, 1989; Hancock, 1987). Its frequency may explain the creole origin many impute to variants of *going to*, particularly *gon(na)*, in contemporary AAVE and in Gullah (Mufwene, 1996:8). If AAVE *gon(na)* in fact derives from this creole marker, it should show at least some parallels with it as well as some differences from English. But a closer inspection of the literature on future marking in English-based creoles reveals, as in AAVE and English, a good deal of variability. For example, both Gibson (1992:64) and Bailey (1966:46) cited *wi* as the future marker in Jamaican Creole English but noted that the future may be expressed by “the *go* periphrasis” (Bailey, 1966) as well as by the progressive marker *a* (Holm, 1988:164). Similarly, Gibson (1992) noted variation in Carriacouan Creole English between the “more conservative” *wi* and *guo*, as did Singler (1990:207) in Kru Pidgin English. Sranan expresses future, in some cases apparently interchangeably, with both *o* and *sa* (Seuren, 1981; Winford, 1996, to appear-a). Hancock’s (1987:290–291, 301) overview of future marking in 33 anglophone Atlantic creoles likewise reveals much variability, both across and within varieties. Here, then, is yet another case where not only the variants, but also co-variation among them, are attested in both English and English-based creoles. Only a comparative quantitative analysis of their distribution and conditioning would enable us to determine which underlying system gave rise to the surface forms in AAVE.

To our knowledge, no such analysis exists for any English-based creole, since creolists who have recognized this variability also tend to attribute to each of the variant forms a corresponding semantic function, invoking many of the same nuances that we have reviewed in connection with the English future auxiliaries, often with the same contradictory results. Thus, Winford (1996, to appear-b) ascribed to Sranan *sa* nuances of possibility and uncertainty as well as of posterior time, while Seuren (1981:1054) argued that it conveys “neutral predictions” and “future events or situations resulting from somebody’s insistence, order, wish, or promise,” while *o* “indicates a future event or situation resulting from some pre-established plan or from natural causes already at the time of speaking.”

We have already noted, in connection with the semantic interpretations offered for the English future markers, that for unreflecting discourse neither speaker intent nor hearer inference is accessible to the analyst. Interpretations of this type do not often lend themselves to empirical test, yet they are virtually the only explanations offered for observed variability in future marking in creoles. We therefore cannot rely straightforwardly on surface comparisons to determine whether instantiations of *will* and different forms of *going to* in Early AAE were

generated by a creole or an English grammar. On the basis of the differences uncovered thus far between Early AAE and English-based creoles in other areas of the grammar (see, e.g., the papers in Poplack, 1999), we can hypothesize that, if these variants were generated by a grammar distinct from that of English, their distribution and conditioning in discourse should differ on some parameter. We test this hypothesis in what follows.

#### DATA AND METHOD

##### *Speakers and communities*

The data on which the ensuing analyses are based come from five spoken-language corpora. Three were collected in communities formed during the African American diaspora of the late 18th and early 19th centuries, when blacks fled the United States to diverse locations. We examine Guysborough (GYE), Nova Scotia, first settled in 1783 by black loyalists (Poplack & Tagliamonte, 1991), North Preston (NPR), Nova Scotia, whose current residents descend from the Refugee Slave Immigration of 1815 (Poplack & Tagliamonte, 1991), and the peninsula of Samaná (SE), Dominican Republic, settled in 1824 (Poplack & Sankoff, 1987). Detailed validation of these diaspora varieties as evidence of an earlier form of AAVE may be found elsewhere (Poplack, 1999; Poplack & Tagliamonte, 1991). A key line of evidence involves their resistance to contact-induced change after the dispersal. We have suggested that the conservative effects of the linguistic isolation in which each has developed are at the root of this lack of linguistic convergence with surrounding varieties, despite the independent internal evolution each has undergone. In this article, we examine the extent to which the enclaves have resisted external influence by comparing their use of a linguistic variable with that of speakers from two other communities. One, the rural but not isolated Guysborough Village (GYV) adjacent to the African-origin Guysborough Enclave is populated by primarily British-origin descendants of (white) loyalists. Despite their ethnic (and psychological) identity with the larger Nova Scotian population, these speakers are geographically remote from urban developments in the province and the country more generally. The other is the Canadian national capital, Ottawa (OTT), one of the larger urban centers of Canada, which is located squarely in the mainstream.<sup>7</sup> The 117 speakers who provided the data for this study represent the oldest living generation (at the time of the interview) in each community, as outlined in Table 1.

As noted earlier, the makeup of these communities enables comparison not only along ethnic lines, but also according to degree of (presumed) integration in the mainstream. Residents of the diaspora enclaves are assumed to have minimal contact with mainstream developments and residents of urban Ottawa maximal contact with the rural Guysborough Village intermediate between these two extremes. This sample design, in conjunction with the fact that variability in future temporal reference has been unaffected by social stigma (resulting in robust variability in all of the comparison varieties), allows us to clarify whether eventual

TABLE 1. *Sample design*

	Enclaves			Rural	Mainstream
	SE	NPR	GYE	GYV	OTT
Male	10	9	15	5	8
Female	10	27	20	6	9
Total	20	36	35	11	17

intergroup linguistic differences are best explained as an ethnic heritage or arise from lack of participation in ongoing change.

### *Circumscribing the variable context*

Because future time is expressed in English by morphological forms also denoting other (non-future) temporal, modal, and/or aspectual meanings, in this article we take temporal reference as our starting point, regardless of the variants used to express it, and restrict the variable context to clear predictions about states or events transpiring after speech time. This involved identifying and excluding (a) forms referring to “alternative worlds” (Comrie, 1985:44), such as those associated with a modal rather than temporal interpretation, as in (7), (b) counterfactual conditions not referring to the future (e.g., the hypothetical past, which “implies the nonoccurrence of some state or event in the present or future”; Quirk et al., 1985:188), as in (8), and (c) forms denoting habitual action in the present or past, as in (9).

(7) And today, I **wouldn't do** that for the queen for two dollars. No, I'd **tell** her to go powder her bird. (GYE/048/155–6)

(8) If it **was** up to me, I'd have fish on Sunday. (NPR/001/367)

(9) And we **would go** hitting each other brothers and then we **would fight**. (NPR/006/165–6)

Other non-future uses include interrogative types, as in (10), imperatives, as in (11), and directives, as in (12), none of which are considered here. As is standard in variationist studies, fixed or frozen expressions and other invariant contexts were also excluded from the quantitative analysis.

(10) Why don't you put on Jerry's old pants? (GYE/048/217)

(11) You go right ahead and have her arrested . . . (GYE/048/227)

(12) a. You boil that with pee . . . (SE/002/246)

b. You get the juniper. That supposed to clean you out. (GYE/063/867)

TABLE 2. Overall distribution of variant expressions of future temporal reference in *Samaná* (SE), North Preston (NPR), Guysborough Enclave (GYE), Guysborough Village (GYV), and Ottawa (OTT)

	Enclaves						Rural		Mainstream	
	SE		NPR		GYE		GYV		OTT	
	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>
<i>will</i>	38	170	34	347	43	511	50	130	40	163
<i>going to</i>	50	226	38	382	40	477	27	69	34	140
Present progressive	5	21	17	174	8	95	10	26	9	38
Futurate present	8	36	11	113	9	110	13	33	16	67
Total		453		1,016		1,193		258		408

By strictly circumscribing the conceptual space examined here to contexts that are clearly temporal and make reference to future time, we ensure that the forms considered are comparable on the parameter of temporal reference. All verb forms referring to future states or events, thus defined, were extracted from each of the five data sets, for an initial overall total of 3,585. These were coded for a number of factors to be described later.

### *The analysis*

We analyzed these data by means of GOLDVARB (Rand & Sankoff, 1990), a variable rule application for the Macintosh. Variable rule analysis aids in determining which factors contribute statistically significant effects to variant choice when a number are considered simultaneously. But the usual disparities in the amount of data available from the different corpora, coupled with different overall rates of *going to* usage across communities (see Table 2), means that the stepwise option in the multiple regression procedure incorporated in GOLDVARB may not always be meaningful in the establishment of statistical significance. This is especially true when comparing varieties, since significance depends on not only effect size, but also sample size. We therefore focused on the direction of effect or “constraint hierarchy” governing each factor group—in particular, the extent to which this hierarchy is shared across varieties. We also measured the relative importance of each factor, as assessed by its range, and compared this as well.

## RESULTS

### *Overall distributions*

Table 2 depicts the overall distribution of the major variants of future temporal reference by variety. Note that the basic forms cited in the literature—*will*, *going*

*to*, the present progressive, and the futurate present—are well represented in all the corpora, though in somewhat different proportions.<sup>8</sup> The few previous quantitative studies of future temporal reference reported *will* to predominate, with *going to* lagging far behind: 7% *going to* in Royster and Steadman (1923:394), around 5% in the Lancaster–Oslo–Bergen Corpus of Present-Day British English, the Brown corpus of Present-Day American English, and the Kolhapur Corpus of Indian English, with highs of up to 21% in the London–Lund Corpus of Spoken English (Berglund, 1997).<sup>9</sup>

Though *will* is also a major variant in the materials under investigation, its frequency is rivaled or exceeded by that of *going to* in all but Guysborough Village. In fact, rates of *going to* in urban Ottawa (34%) are on a par with those of the African Nova Scotian enclaves (38%–40%), a curious finding in view of the widespread association of this variant with AAVE and English-based creoles. The simple present, generally characterized as second in frequency only to *will*, represents about 10% of future uses in these data, a rate roughly equivalent to that of the progressive in most cases. In keeping with prescriptive characterizations (Quirk et al., 1985:215), the latter variants tend to occur in very specific environments. The simple present is largely restricted to temporal clauses, as in (13), while the progressive occurs in contexts of imminent and/or scheduled events, with verbs marking a transition between states or positions, as in (14). These contexts in turn do not admit some or all of the other variants.

- (13) a. So, next time *when* you *come* down, I'll show you. (GYE/063/1181)  
 b. '*Fore* I *let* my daughter get married to you, I sooner follow her to her grave. (NPR/030/751)

- (14) a. Aunt Stella said, "what *are* you *having* for dinner *today*, Eleanor?" I say, "Oh, we're *having* chickens. We're *having* chicken soup. (NPR/015/367–8)  
 b. You see, I *am going now direct*, I *going now* to my sister. (SE/010/859)

In fact, only *will* and *going to* co-vary (relatively) freely in the future temporal reference context we have defined, as noted by Close (1977:132). Ensuing analysis is therefore limited to these variants, totaling 2,615 tokens in all, exemplified in (15).

- (15) a. She say, "if you looking for good you'll *find* good . . . you looking for bad, you *gon find* bad. Ain't it true? (SE/003/1282)  
 b. It's like everything else. Some'll *work*, and some *is* not *gonna* work. (NPR/074/1308–10)  
 c. I think it's *gonna get* worse before it'll *get* better. (OTT/117/224B/17–20)  
 d. I knew he *wasn't gonna be* any better, and he'd *be* an invalid all his life because I knew he *would* never *be* any- I thought I *was gonna be* sick right away. (GYV/101/B2A/7.07)

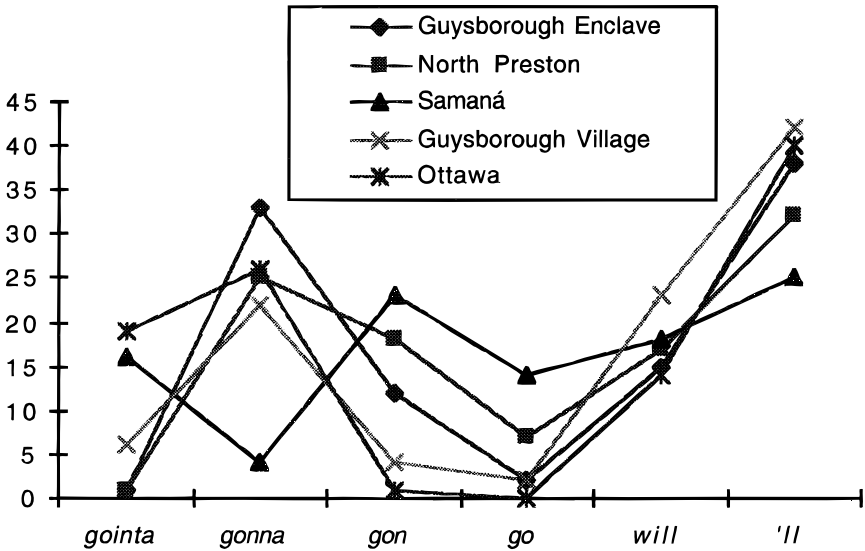


FIGURE 1. Frequency of variants of *gonna* and *will* by community.

Goin(g)ta, gonna, gon, go: *Variants of a variable?*

We have noted that, although *will* is a lexical source for the irrealis marker in a number of English-based creoles, it is *going to* that is most readily identified with such languages (as well as with AAVE, albeit to a lesser extent). *Going to* actually subsumes a number of phonetically distinct forms, variously realized as *goin(g)ta*, *gonna*, *gon*, *go*. Before making any assumptions regarding their status as variants of an English future marker, we need to rule out the possibility that what we have been referring to as *going to* is simply a Eurocentric label for a variety of morphemes originating from different underlying grammars and/or embodying different meanings. From the distribution of these forms across communities, plotted in Figure 1, we can confirm that both full and contracted variants of *will*, the original English future marker, remain quantitatively important across the board. Variants of *going to* are also attested in all of the communities, though at rates that are unique to each.

In particular, *gon* and *go*, though not entirely absent elsewhere, are in fact concentrated in the diaspora communities of North Preston, Samaná, and, to a lesser extent, Guysborough Enclave. Their phonetic resemblance to some creole irrealis markers raises the question of their grammatical identity. Are any of these variants instantiations of these creole counterparts? If so, they should pattern differently from the other (non-creole) variants of *going to* on some parameter. As discussed earlier, no explicit predictions have yet been offered regarding the factors conditioning the alternating forms in creoles. Nonetheless, in the light of suggestions that reduced forms of *going to* are preferentially associated with

proximate future reference, we explicitly tested this hypothesis, as displayed in Figure 2. For each community and each variant of *going to*, the sum of the percentages over Figures 2a to 2d adds up to 100.

Examination of the distribution of the four variants of *going to* in the diaspora varieties according to this metric reveals that the hypothesis that some originate from a non-English system is not supported. On the contrary, the variants of *going to* appear basically undifferentiated with respect to proximity in the future, where data are sufficient to judge. Beginning with the potentially creole-derived variants *gon* and *go*, we observe from Figure 2a that proximate and distal contexts provoke almost identical rates of *gon* in each of North Preston, Guysborough Enclave, and Samaná. We infer that *gon* does not distinguish temporal distance in any of them. Figure 2b reveals that, while proximate future contexts do provoke more *go* in North Preston, they are associated with less of this variant in the other diaspora communities. We thus observe no systematic association of immediacy with *go*. Proximate contexts slightly disfavor *gonna* in North Preston and Guysborough Enclave, and so this variant is not associated with immediacy either (in contrast to the situation in the white communities). The unreduced variant *gointa* occurs only in Samaná, where it is marginally favored by distal contexts, as in the mainstream. The inherent variability among the forms of *going to* is illustrated in (16); it obtains regardless of whether reference to the future is proximate (16a–c) or distal (16d–e).

- (16) a. I'm *gon*' give the page of it and ... I'm *goin*' sing. (SE/017/522–24)  
 b. I'm still *gonna* take my pills. But I'm *gon*' take my inhaler. (NPR/019/139–40)  
 c. Well, Stub, I'm *gon*' tell you ... I know you're not *go* believe it. (GYE/055/117)  
 d. If someone *gon*' die in the family and you *gonna have* a big trouble in family. (NPR/016/308–9)  
 e. She told me I was *gointa have* thirteen children over water, a big body of water ... and I was *gonna live* in a house that had three rooms. (GYE/041/719–722)

To summarize, of the two potentially creole variants, one (*gon*) does not discriminate temporal distance (contrary to the creole origin scenario), and the other (*go*) shows no systematic pattern. If anything, it is (marginally) associated with distal contexts, again contrary to expectations. Only *gonna* (and, in Guysborough Village, *gon*) is clearly associated with proximate future. But this effect is restricted to the white varieties; it obtains in none of the diaspora communities.

In addition, if some of the variants of *going to* descend from a(n) invariant creole grammar, choice among them should not be affected by phonetic environment. But when variant distribution is examined according to place of articulation of the following segment, as in Figure 3, a clear pattern of phonological conditioning emerges, implicating phonetic assimilation in the reduction of *going to*.

The effects of co-articulation are evident in all the varieties with the exception of Ottawa: *gon* is preferred in alveolar stop contexts (17), while *gonna* prevails elsewhere, as in (18).<sup>10</sup>



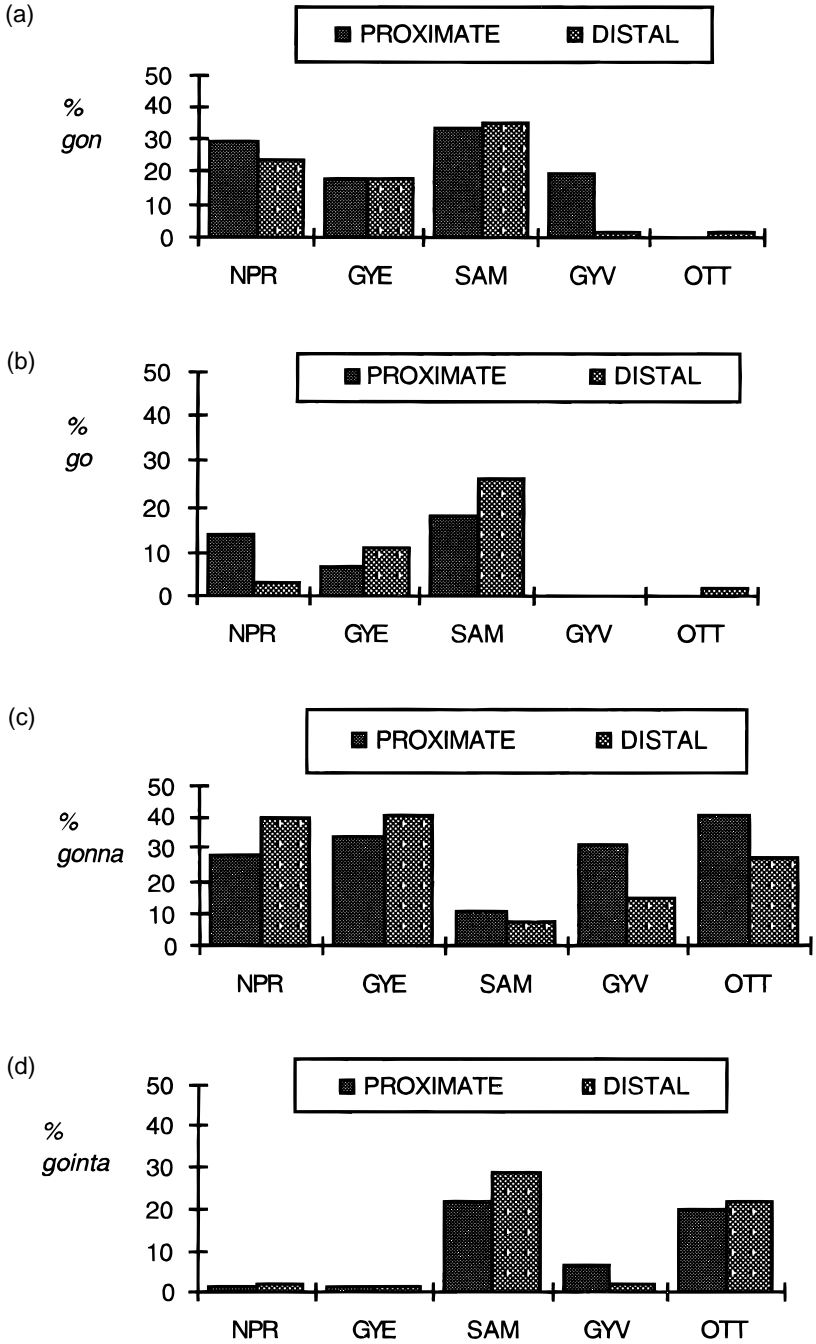


FIGURE 2. Effects of proximity in the future on the variant realizations of *gonna*: (a) *gon*, (b) *go*, (c) *gonna*, (d) *gointa*.

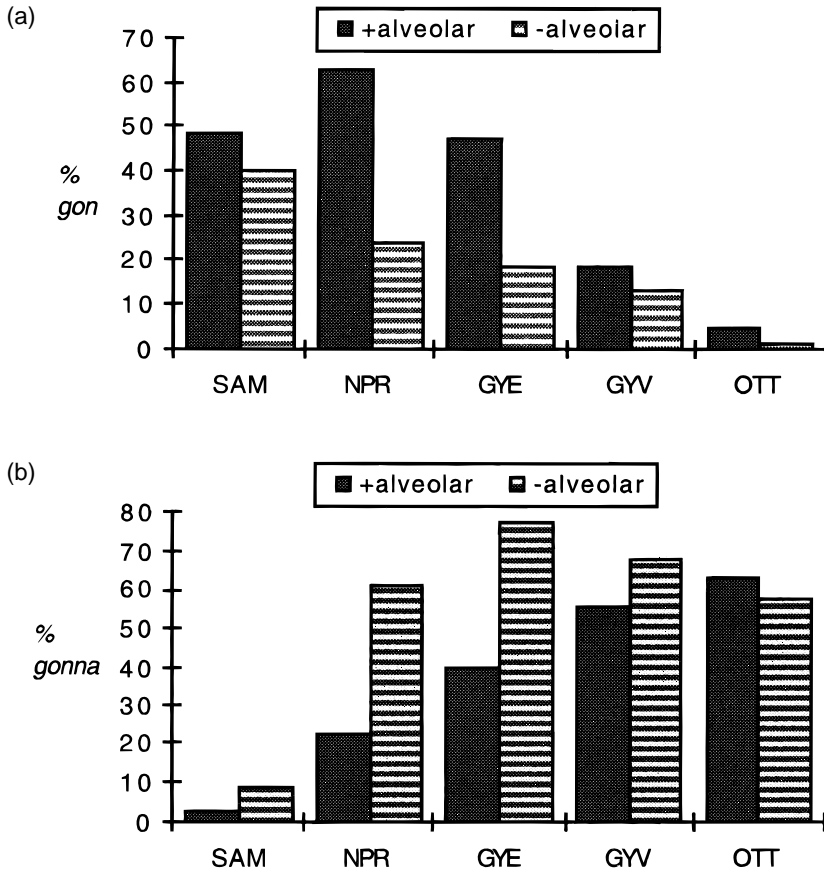


FIGURE 3. Effects of co-articulation on the realization of variants of *going to*: (a) *gon*, (b) *gonna*.

- (17) a. That vessel *ain't gon'* turn 'round no more. (SE/001/681)  
 b. She said, "you *gon'* drink yourself to pieces." (NPR/030/1608)  
 c. Well dear, I'm *gon'* tell you the difference. (GYE/072/892)  
 d. What you *gon'* do with it, put it in the paper? (GYV/101/B1A/9.41)  
 e. Next year we'll- my daughter's *gon'* take me along to that. (OTT/114/220A/9.21)
- (18) a. He's *gonna* blame me for it. (GYE/048/193)  
 b. You're *gonna* get a beating. (NPR/015/262)  
 c. They *gonna* say they killed him. (SE/003/1156)

Thus, efforts to distinguish among the variants of *going to* according to their behavior on an independent metric (here, proximity of future reference) reveal no

difference among them. We have seen, however, that their realizations are a function of the phonetic environment, a situation not predicted by the hypothesis of creole influence on the selection of some of these forms (Winford, 1998:113). This effectively obviates the explanation that the variants were generated by different (creole vs. English) grammars. Indeed, the allomorphy and phonological reduction evident in these data are well-documented hallmarks of grammaticization in general and of *going to* in particular. As a grammaticizing morpheme reduces semantically, it tends to become more dependent on adjacent material (Bybee et al., 1994), leading to phonological conditioning of the sort we observe here. For this and other reasons, in what follows we treat these realizations as variants of *going to* and consider them and the variants of *will* to be alternate ways of expressing future temporal reference.

### *Using factor weights to measure grammaticization*

We now detail how evidence from lexical sources and retention of earlier uses allow us to trace the progress of their offspring along the cline of grammaticization from lexical verb to grammatical morpheme. We do this by operationalizing elements historically implicated in the change as factors in a variable rule analysis. For example, future markers deriving from movement sources are initially restricted to human agents and the expression of intention. These uses eventually yield to others that are semantically more general, culminating in prediction, the prototypical function of future markers (Bybee et al., 1994:270). When co-occurrence restrictions are relaxed enough to permit verbs and/or subjects that are incompatible with their source meanings (e.g., epistemic verbs or inanimate subjects incapable of movement or volition), grammaticization may be inferred to be underway. Where early effects are no longer operative (i.e., where they have been neutralized), we may infer that the change, if not complete, is well advanced, at least with respect to the parameter in question.

Table 3 displays the results of five independent variable rule analyses of the contribution of factors to the choice of *going to* versus *will* and compares their respective effects in each of Samaná, North Preston, Guysborough Enclave, Guysborough Village, and Ottawa.<sup>11</sup> For reasons discussed earlier, the results are taken from analyses in which all factors are “forced” into the regression, as shown in the first iteration of the stepdown analysis. Those selected as statistically significant are indicated in boldface. The factors investigated capture what Danchev and Kytö (1994) referred to as the “paradigmatic expansion” of *going to* beyond its original syntactic locations (future-in-the-past contexts and subordinate clauses) as well as the “ratio of grammatical to lexical meaning expressed,” as measured by the propensity of *going to* to be collocated with subjects not capable of volition and/or movement as well as with verbs of motion. We also examine the effect of proximity in the future on variant choice.

We interpret the findings in terms of the progress of each variety along the cline of grammaticization of *going to* as a marker of future time. Where the factor incorporates early constraints, as is the case of animacy, we can assess whether these continue to be reflected in the variety in question or are neutralized. Other

TABLE 3. *Five independent variable rule analyses of the contribution of factors selected as significant to the probability that going to will be selected in Samaná (SE), North Preston (NPR), and Guysborough Enclave (GYE), Guysborough Village (GYV), and Ottawa (OTT)*

	Enclaves			Rural	Mainstream
	SE	NPR	GYE	GYV	OTT
Overall tendency	.59	.55	.50	.31	.48
Total <i>N</i>	396	723	994	199	302
Point of reference					
Past	<b>.85</b>	<b>.86</b>	<b>.86</b>	<b>.67</b>	<b>.92</b>
Speech time	<b>.44</b>	<b>.40</b>	<b>.43</b>	<b>.45</b>	<b>.40</b>
Range	41	46	43	22	52
Type of clause					
Subordinate	.58	<b>.68</b>	<b>.69</b>	.59	.55
Main	.48	<b>.46</b>	<b>.45</b>	.47	.48
Range	10	<b>22</b>	<b>24</b>	12	7
Animacy of subject					
Human	.50	.50	.50	.50	.48
Non-human	.49	.52	.53	.48	.59
Range	1	2	3	2	11
Grammatical person					
Non-first person	.50	.51	<b>.57</b>	.54	<b>.61</b>
First person	.50	.49	<b>.42</b>	.46	<b>.38</b>
Range	0	2	<b>15</b>	8	<b>23</b>
Lexical content					
Verb of motion	<b>.34</b>	<b>.33</b>	<b>.35</b>	<b>.32</b>	.51
Other verb	<b>.56</b>	<b>.54</b>	<b>.54</b>	<b>.61</b>	.50
Range	<b>22</b>	<b>21</b>	<b>19</b>	<b>29</b>	1
Proximity in the future					
Immediate	.47	.49	.53	<b>.66</b>	.59
Non-immediate	.51	.52	.48	<b>.35</b>	.43
Range	4	3	5	<b>21</b>	16

Note: Factor groups selected as significant are in boldface.

measures (e.g., grammatical person) reveal further (at times, unexpected) developments, and we can also determine which varieties participate in them. We make use of this information to situate the Early AAE varieties with regard to each other as well as to rural and mainstream varieties of English. A major goal is the assessment of whether any differences are best explained as an ethnic heritage (as would be confirmed if the African-origin enclaves differed as a group from the European-origin cohort) or as the result of isolation from mainstream developments, as one could infer if Ottawa English showed substantial differences from the other varieties. We now review the results of this analysis.

*Point of reference.* Reference to future time may be predicated from the perspective of speech time, as in (19a), or from a point anterior to speech time, as in (19b).

- (19) a. I'm goin' up now and split now and I'll **come** back and I'll **get** a cup of tea or something or other and then I'll **go back** up for another hour or so. (GYV/107/15.45)  
 b. I knew it **was gonna** hurt me. (NPR/030/571)

Though point of reference does not typically figure among the factors cited in the prescriptive literature as explaining variant choice, we have noted that *going to* first entered the future reference system via future-in-the-past contexts, which we saw to be the loci of the earliest attestations of the form. Royster and Steadman (1923:400) also observed that, in its role as “immediate” future, *going to* is used more frequently from the perspective of time past than from the point of view of the present. This effect is clearly retained in all of the data sets: point of reference may be seen to contribute a strong (if not the strongest) statistically significant effect across the board, with *going to* clearly favored in future-in-the-past contexts, as illustrated in (19b).

*Type of clause.* The fact that the majority of future-in-the-past contexts are also subordinate may have been implicated in the early expansion of *going to* into embedded clauses more generally. Volitional coloring also seems to be reflected in the syntactic structure of the phrase, with volition stronger in main clauses, as in (20a), and weaker in subordinate clauses, as in (20b).

- (20) a. God **is gonna give** us our justice. (GYE/045/546)  
 b. And they told him in the conference that uh, they **was going to give** him the bishop crown. (SE/011/9014)

*Going to*, with purportedly less volitional import, is said to occur more frequently in subordinate clauses (Royster & Steadman, 1923:400). As grammaticization proceeds, the contribution of clause type, as an instantiation of both the original point of entry of *going to* and the persistence of both the volitional meaning associated with *will*, would be expected to decrease as we proceed from the more conservative enclaves to the mainstream variety. This is exactly what we observe in Table 3.<sup>12</sup> The favorable effect of a subordinate clause on selection of *going to* is shared by all varieties, but the importance of this factor is minimal in mainstream Ottawa English.

*Animacy.* Volition is also reflected in the animacy or agentivity of the subject:<sup>13</sup> human subjects, as in (21), are capable of more volition than non-human animate subjects, as in (22), which are in turn capable of more volition than inanimate subjects, as in (23).

- (21) a. Now she's **gonna make** sandwiches and bologna. (GYE/048/404)  
 b. I'll **be** ninety-five in November. (GYV/101/B1A/0.52)
- (22) a. The horse **will stay** out tonight. (GYE/040/667)  
 b. The fly'll **be** gone, the time they comes up. (GYE/068/499)

- (23) a. *Ain't* no airplane *gonna kill* me, not tonight. (NPR/025/353)  
 b. "But your vessel'll never *come back*." She said. (GYV/109/J1B/24.34)  
 c. We don't know what eighty-three *gon' bring* forth. (SE/003/1002)

Bybee et al. (1991) observed that agent-oriented uses, which predicate certain conditions on the agent with respect to the completion of the action, are close to the lexical meaning of the original source material and thus tend to occur early in the evolution of the form. Indeed, *going to*, used in its original sense of movement toward a goal, initially occurred with animate (usually human) subjects and only began to appear with non-human subjects as its meaning generalized from movement to intention to prediction (Bybee et al., 1994:5; Pérez, 1990:50). Lapses in co-occurrence restrictions, such as that affecting the type of subject collocated with *going to*, occur as the item is generalizing in meaning. And while Table 3 shows that the animacy distinction has in fact been neutralized in each of the African-origin varieties as well as in rural Guysborough Village, in mainstream Ottawa we observe a reversal: *going to* has advanced to the point where it is now favored with non-human subjects. This innovation is not shared by the other communities.

*Grammatical person.* This same type of reasoning has been invoked with regard to grammatical person of the subject. Royster and Steadman (1923:400) observed that the dominant use of *going to* as "expressive of speaker intent" is almost always colored by a modal sense, which reveals the speaker's attitude toward some future act. Since attitude is most commonly expressed in the first person, as in (24a), the generalization of *going to* to non-first person subjects, as in (24b), would be indicative, by the same logic, of desemanticization or grammaticization.

- (24) a. He said, "I'll never *look* a ... bull in the face again." (GYE/043/1167)  
 b. Them days *is* never *gonna come* back no more. (NPR/004/630)

Table 3 shows that first person is no longer distinguished from other grammatical persons in any of the varieties. It has been neutralized in Samaná and North Preston and reversed in the other communities, where non-first person subjects favor *going to*, consistent with the findings of Wekker (1976:124) for contemporary British English. With regard to this innovation, mainstream Ottawa is clearly in the lead, to judge by the magnitude of effect, as expressed by a range of 23. We likewise infer that it is at least incipient in rural Guysborough Village (range = 8) and somewhat further advanced in Guysborough Enclave (range = 15). Which of the latter two communities is the source of this reversal in effect is unclear; in any event this is the only factor for which the adjacent Guysborough communities behave similarly in contrast to the others.

*Lexical content.* We noted that selection of *going to*, originally a verb of motion, with another verb of motion, as in (25) and (26), implies bleaching or desemanticization of its original lexical content.

- (25) a. He was telling me when he *was going to come*. (013/31B/19.27)  
 b. 'Cause when I get tired cooking, you're *gonna come down* and barbecue. (051/118A/7.01)  
 c. *Are we gonna walk* or are we gonna take a bus? (051/118B/7.01)
- (26) a. I said, "I'll *go* get some candy and I'll *come back*." (NPR/039/810)  
 b. I think I'll *go* with you. (GYV/101/B2A/13.41)

Hence, the occurrence of such collocations as those highlighted in (25) is consistent with advanced grammaticization of *going to*. Table 3 reveals that such a tendency is not characteristic of either the enclave or the rural varieties: all agree in showing a strong and statistically significant avoidance of *going to* (and concomitant preference for *will*) with verbs of motion, illustrated in (26). In Ottawa English, on the other hand, the choice of *going to* with a verb of motion is as likely as with any other verb, suggesting that here again the mainstream variety has proceeded further along the grammaticization path than any of the others.

*Proximity in the future.* We have observed that the association of *going to*, by grammarians and linguists alike, with notions of immediacy, imminence, proximity, and current relevance dates back (at least) to 1788. We detailed how this use, exemplified in (27), comes to be associated with *andative* futures as an inference that falls out from their sense of movement along a path. We coded verbs as "proximate" when the event, process, or state they referred to could be inferred to have occurred up to a month after the utterance, as in (27), and as "distal" when they referred to a time one year or more in the future, as in (28).<sup>14</sup>

- (27) Papa *ain't gonna be* mad at us tonight. (GYE/070/151)
- (28) a. I can't imagine, you know, how things *are going to be* in another generation. (OTT/020/44A, 2.42)  
 b. You *gonna* grow old someday yourself. (NPR/016/25)

Table 3 shows that *going to* is clearly associated with proximity in the future in both British-origin varieties (especially rural Guysborough Village, where the effect achieves statistical significance). In the African enclaves, this factor has no effect on choice of *going to*. Of the linguistic constraints examined thus far, proximity in the future is the only one that distinguishes the communities along ethnic lines. Though it is unclear just when *going to* began to be associated with proximity in the spoken language, our historical review, coupled with the fact that the sense of proximity is more specific than that of simple prediction (Bybee & Pagliuca, 1987; Bybee et al., 1991), suggests that the reading of proximity is a relatively later one. Indeed, our earlier discussion suggests that this nuance may have been only incipient, if even present, in the future temporal reference systems of participants in the second major wave of migration (1760–1775) from Britain, whose speech patterns were likely models for the ancestors of the Early AAE



speakers. Given what we know about linguistic transmission (e.g., Trudgill, 1999; Wolfram, 1999), this would explain the lack of a proximity effect on variable future expression in Early AAE. Of course, we have no way of assessing the magnitude of such an effect, if one in fact obtained, at an earlier stage of English.<sup>15</sup> But such detailed parallels as those we report cannot be due to chance.

#### SUMMARY AND DISCUSSION

A first remarkable finding is that on virtually every measure the African-origin varieties show constraint hierarchies that are basically identical. This confirms that they descend from a common stock (see also the papers in Poplack, 1999) and vitiates the idea that any similarities between the adjacent Guysborough varieties, say, are specifically due to post-settlement contact-induced convergence. Moreover, with the notable exception of proximity—the sole factor that clearly discriminates African-origin from British-origin varieties—the same constraint hierarchies are also evident in Guysborough Village and in Ottawa. All other distinctions emerging from Table 3 result from the differential positioning of the varieties on the cline of change. In view of the cross-community discrepancies in overall rates of *going to*, this finding is particularly telling. It indicates that the future temporal reference systems in these varieties are reflexes of a common source. Despite the dearth of information on the factors constraining variability in the expression of the future in English-based creoles or in contemporary AAVE, the evidence we have presented suggests that this source is (an earlier stage of) English. Winford (1998:113) suggested (though he did not motivate the assumptions underlying this suggestion) that a preponderance of *will* in (Southern White Vernacular) English would support the explanation of creole influence on selection of *gonna* in AAVE. Yet, contrary to received wisdom, we have shown that rates of *going to* in Early AAE are in fact no higher than those in mainstream Ottawa (see Table 1).<sup>16</sup> We also tested the suggestion that reduced variants of *going to* could be distinguished from full forms in expressing proximity. Our analysis revealed no grammatical conditioning of variant realization but rather a consistent phonological effect not specific to creole languages. These results, coupled with the behavior of the Early AAE varieties vis-à-vis the constraints implicated in the development of the English future, confirm the English origins of these variants.

Indeed, of the five principles of grammaticization enunciated by Hopper (1991), three are particularly relevant to the findings we have reported here. We have focused on the layering, or co-variation, of newer with older forms in a functional domain, initiated in the late 1400s with the advent of *be going to* into the future temporal system of English. As they grammaticize, the variant forms are distributed in accordance with the principle of specialization—the diminution of choices and the assumption by surviving forms of more general meanings. This is what we observe as the original meanings of motion/intention associated with *going to* are replaced with a more general reading of prediction. Finally, perhaps most

striking is the empirical confirmation we have furnished that the lexical history of a grammaticizing form may be reflected in variable constraints on its grammatical distribution—Hopper’s principle of persistence. By operationalizing factors implicated in the development of the English future as measures of grammaticization, we have shown that this history is still apparent, to a greater or lesser degree, depending on the measure and the community.

Hopper specified that his principles speak only to the quantitative notions of more or less. Grammaticization is always a question of degree. Different members of a language family may be located at different points along the trajectory, and this is what we have observed here. In selecting a variable that is itself widely considered to be implicated in ongoing change, we were able to show that the different varieties are located at different points on the continuum of that change. Operationalization of constraints representing different stages of the development of *going to* and comparison of their probability values across communities enabled us to confirm empirically that the enclave varieties retain conservative traits, visible here in the form of variable conditioning, in comparison to mainstream Ottawa English, which is presumably participating fully in ongoing linguistic developments. Nowhere is this more clearly revealed than in the strong and statistically significant tendency we uncovered to eschew *going to* with a (main) verb of motion. This avoidance of “redundancy,” dating back to the time that *going to* was itself perceived as principally a motion verb, today is evidenced only in the enclave and rural communities, but has been neutralized in Ottawa. In contrast, an Ottawa innovation favoring *going to* with non-human subjects cannot be detected in any of the other varieties.

The position of the rural, semi-enclave Guysborough Village is particularly intriguing in this regard. Perched uneasily between the enclave and the mainstream, Guysborough Village shares the remoteness of the neighboring Guysborough Enclave (as well as the other enclaves), while sharing the ethnic, racial, and other attendant characteristics of urban Ottawa. But in its progress along the cline of grammaticization, as measured by the magnitude of effect, or range, of the various factors, the Nova Scotian Vernacular English spoken in Guysborough Village appears to be more closely aligned with the three isolates. The older effects of clause type and lexical content remain greater in these varieties than in Ottawa, while the effects of animacy and grammatical person of the subject have been or are being neutralized. On a fifth measure, point of reference, Guysborough Village is odd man out, with a much lower range than any of the others. Only on one measure, proximity in the future, is Guysborough Village aligned with urban Ottawa along racial and ethnic lines.

This result, bolstered by parallel independent findings of Tagliamonte and Smith (1999) on *was/were* variation, suggests that the major determinant of variability in the expression of future temporal reference is not the operation of constraints originating from a distinct underlying (creole) grammar, but the fact that the language spoken by isolated speakers, whether of African or British origin, instantiates constraints that were operative at an earlier stage of the English language and that are now receding from mainstream varieties.

## NOTES

1. Codes in parentheses identify speaker and line number in text files or tape and counter number in audio files in corpora collected in the following locations: North Preston, Nova Scotia (NPR), Guysborough Enclave, Nova Scotia (GYE), Guysborough Village, Nova Scotia (GYV), Samaná, Dominican Republic (SE), and Ottawa, Ontario (OTT).
2. Typical are William Belcher's (1813) *Observations on the use of the words shall and will, chiefly designed for foreigners and persons educated at a distance from the metropolis, and also for the use of schools, containing XXXV rules* and F.'s (1838) *The grammarian: or the English writer and speaker's assistant, comprising shall and will made easy to foreigners, with instances of their misuse on the part of natives to England*. See also Molloy's (1897) *The Irish difficulty*, with uses of *shall* and *will* "that must be acquired by all who would speak and write the English language correctly" (p. 9).
3. Contemporary interpretations ascribing to *go* futures connotations of "current relevance" (e.g., Fleischman, 1982) or a present state preparatory of a future eventuality (Vet, 1993) are likewise foreshadowed (by two centuries) by Beattie (1788/1968).
4. In addition to formal or formulaic uses, *shall* basically persists only in first person interrogatives. See Linguist List, September 1993, Subject: The modals are a-changin', on the "death" of *shall* in North American English.
5. Even Myhill's (1994) attempts to concretize the subjective readings typical of the literature by providing "technical" definitions for such modal distinctions as "prediction," "intention," and "willingness," among many others, yields no fewer than 22 different types of future meaning, most of which are also difficult, if not impossible, to apply consistently.
6. AuCoin (1997) reported on the use of *fonna/fon* (< *fixing to*) in Chicago AAVE.
7. The Guysborough Village data were extracted from the Nova Scotian Vernacular English Corpus (Poplack & Tagliamonte, 1991). The Ottawa data come from an age-matched sample of anglophone residents of the Ottawa–Hull region taken from the Ottawa–Hull Spoken Language Archives, recorded by Urban Dialectology students between 1983 and 1998.
8. There were only three tokens of *shall*, two in Guysborough Enclave and one in Ottawa.
9. These differences in rates of *going to* have been interpreted as the result of the "colloquialization" of written English that has taken place over the past 30 years (Mair, 1997:1541).
10. That Ottawa does not appear to be sensitive to point of articulation is explicable by the fact that it does not participate in the *gonna/gon* alternation. The variants it favors, *gonna* and *gointa* (Figures 2c and 2d, respectively), are phonetically conditioned in the same way.
11. Probabilities for *will* may be derived by subtracting the factor weights for *going to* from 1.
12. Similar results have been found for the distribution of progressives in present (Walker, 1999, in progress) and past (Tagliamonte, 1998) temporal reference contexts.
13. As is "control" (Coates, 1983:183; Myhill, 1994), which also relates to volition and intention.
14. Finer distinctions originally made between "immediate," occurring up to one hour after speech time, as in (i), and "proximate" future reference were not maintained since these proximity categories patterned similarly in the data.

(i) Girl, girl, I'm *gonna tell* you right now. (NPR/030/461)

Contexts for which one of these temporal distances could not be inferred were not considered in this portion of the analysis.

15. Note that the effect of proximity is only statistically significant in one of the two British-origin communities studied here.

16. Though they are sharply reduced in Guysborough Village.

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