A twice-mixed creole?

Tracing the history of a prosodic split in the Saramaccan lexicon

Jeff Good

University at Buffalo

Abstract

community.

Saramaccan, a maroon creole of Suriname, shows evidence of having a split lexicon where the majority of its words are marked for pitch accent but an important minority are marked for tone. The basic origins of this split would appear to be clear: pitch-accented words represent transfer of a European-like accent system, while tonal words represent transfer of an African-like tone system. If this is the right account, its apparent simplicity raises an important question: Why didn't it happen more often? While a definitive answer cannot yet be given, it is suggested that a likely explanation is that the split lexicon was not a product of creolization but, rather, the result of a restricted kind of language mixing, which took place after marronage, and that this mixing was employed as a means of establishing a distinct speech variety for the nascent Saramaccan

A twice-mixed creole?

Tracing the history of a prosodic split in the Saramaccan lexicon*

Jeff Good

University at Buffalo

1 Introduction

Saramaccan is an Atlantic creole spoken mostly in Suriname. It is generally classified as an

English-based creole, though its lexicon also shows substantial Portuguese influence (see, for ex-

ample, Smith (1987b), Bakker et al. (1995), and Smith and Haabo (2004:526) for discussion). It is

a maroon creole—that is, a creole spoken by descendants of slaves who escaped from plantations.

A number of African languages have been reliably identified as substrates for Saramaccan, most

prominently Gbe languages and Kikongo (Arends 1995:240–253), with the Gbe languages gener-

ally believed to have had an especially strong influence on the language's development (Kramer

2002:12-19).

Good (2004a, 2004b, 2006) discusses evidence for a split lexicon in Saramaccan where the

majority of its words are marked for pitch accent but an important minority are marked for tone.

No other language appears to have been reported as showing such a split, making Saramaccan (at

least for now) unique in this regard. The existence of this split, therefore, immediately raises the

question as to what special historical processes were responsible for its creation.

At a very general level, of course, the source of the split seems straightforward: Tonal "African"

words and accentual "European" words both contributed to the Saramaccan lexicon without lev-

eling of the language's prosodic structure in favor of one type of system over another. However,

the very ease with which one can describe such a scenario immediately makes one wonder why it

did not happen more often in European-African contact situations. The purpose of this paper is,

therefore, to evaluate various possible explanations for why Saramaccan is "different". Ultimately,

it will be argued that the most likely explanation, given presently available evidence, is that the

language's lexicon did not "start out" as unique but, rather, its split prosody developed well after

1

creolization as a result of a restricted type of language mixing.

Like the similar work of Aceto (1996), which discusses the development of Saramaccan syllable structure, this paper can be partially understood as a cautionary tale regarding the danger of assuming that a grammatical feature found in a given creole is, in fact, a "creole" feature—that is, that its presence in the language is connected, in some way, to the process of creolization. In principle, of course, no one would deny that a creole, once formed, would be subject to the same historical forces that shape non-creole languages. However, in practice, an understandable emphasis on understanding the nature of the creolization process itself, coupled with a frequent lack of documentation on the early histories and structures of attested creole languages, has resulted in a comparative lack of study on developments affecting creoles after their initial formation. Fortunately, in the case of the Surinamese creoles, there is a comparative wealth of documentation both of the early states of the languages themselves and of the sociohistorical context in which they developed. The latter type of information will be especially valuable here.

This paper is also intended to make a contribution to the study of prosodic typology, by explaining how a rare type of prosodic split could develop, as well as, of course, to the study of the genesis of Saramaccan. If the conclusions that will be reached here are correct, then they have the interesting consequence that Saramaccan could, in some sense, be classified as a "doubly mixed" language. The first mixture would be that of an English-based creole with either Portuguese or a Portuguese-based creole, accounting for the significant Portuguese element in the language. And the second would be the mixture of the resulting creole with various African languages. This would make Saramaccan a quite interesting, and seemingly rare, type of contact language—a twice-mixed creole.

The rest of this paper is as follows. Section 2 gives relevant background information on Saramaccan history. Section 3 gives a brief descriptive overview of Saramaccan phonology, with a focus on the prosodic structure of the Saramaccan lexicon. Section 4 situates Saramaccan split prosody with respect to relevant features of the phonology of other Atlantic creoles and to other languages showing similar kinds of phonological splits. Section 5 outlines some imaginable sce-

narios through which a split lexicon could develop. Section 6 applies one of these scenarios, language mixture, to the Saramaccan case. Section 7 offers a brief conclusion.

2 Sociohistorical background of Saramaccan

In order to come to an understanding of how the split lexicon in Saramaccan developed, it will first be useful to have an understanding of the history of the speakers language. Of foremost importance is the fact that Saramaccan is a maroon creole—that is, it is spoken by descendants of slaves who escaped from plantations (see Price (1976) for a general overview of the history of the maroons of Suriname).² There are a number of other maroon creoles spoken in Suriname, including Ndyuka, whose tonal system will prove of interest below in section 4.2. In addition to the maroon creoles, there is another creole spoken in Suriname, Sranan, which is associated with urban and coastal areas and serves a general lingua franca in the country.

Permanent European settlement in Suriname began in 1651 when an English colony was established along the Suriname river. English control of the area was relatively short-lived and Suriname came under the control of the Dutch in 1667. Despite the relatively short period of English control, the lexicons of the Surinamese creoles show heavy English influence and are generally considered English-lexifier creoles, though the Saramaccan case is quite complex since the language shows a significant Portuguese element in its basic vocabulary (see Smith (1987b:116–125)). While the origins of this Portuguese element are debated, there is consensus that it reflects some unique aspect of Saramaccan's history relative to the other Surinamese creoles.³

Of the Surinamese maroon societies, Saramaccan's is the oldest, with 1690 generally being given as the year of a first mass escape of slaves who would form the group's founding core. Price (1976:30) gives 1712 as the date of the last significant influx of escaped slaves into the group. By 1770, the oldest maroon societies in Suriname had signed treaties with the Dutch, which made them effectively closed to new recruits (Price 1976:29–31, Bakker et al. 1995:168–169). While the precise nature of the language of the early Saramaccans cannot be known with certainty, the Surinamese creoles are, at present, generally assumed to form a genetic unit (see,

for example, Smith (1987b:150–169, 2002:135–136), McWhorter (2000:101–105), and Migge (1998:45)), albeit one with a complex history.⁴

Early stages of Saramaccan are comparatively well-documented, with records going as far back as 1762 (Arends 2002b:201–205). While these records do not seem to be able to tell us anything about the prosody of the language outside of aspects of syllable phonotactics (Aceto 1996), they do indicate that it has changed significantly over the last several hundred years. The changes are substantial enough that Kramer (2002:622) goes so far as to state that modern Saramaccan much more closely resembles Fon Gbe than the eighteenth-century variety of the language did.

Lexical evidence indicates that substrates drawn from two language clusters, Kikongo and Gbe, were especially influential in Saramaccan's development (see, for example, Daeleman (1972) for Kikongo and Smith (1987a) for Gbe, and also the discussion in section 3.2). This evidence is consistent with known demographic facts of the Surinamese slave trade, which show that most slaves which were transported to Suriname were taken from parts of Africa where languages from those two groups are spoken (see Arends (1995:268), based largely on Postma (1990)).

An important historical point which needs to be made in this context regards the demographics of the Surinamese slave population in the seventeenth and eighteenth centuries. As described by Arends (1995:268), "[t]he rate of nativization among Suriname's black population was very slow: more than one hundred years after colonization still more than 70% of the black population was African born." This demographic skewing is connected to the role Suriname had as a sugar plantation colony, since sugar production not only required a large labour force but, at least in the Suriname case, was also associated with an inordinately high mortality rate, meaning that new imports of slaves were not only necessary for the expansion of plantations but also for their maintenance (Arends 2002a:115–116, Price 1976:9).⁵

Therefore, at any given point in time in early Surinamese history, native born Africans would have predominated in the slave population. "Indeed, during the sixty years following the Dutch takeover of 1667, the number of Africans imported *in each ten-year period* amounted to between 110 percent and 220 percent of the total slave population at the beginning of the decade…" (Price

1976:9). As discussed just above, it was during this period that Saramaccan had the vast majority of its demographic input from slaves escaping the plantations. Furthermore, Arends (1989:119) points out that most native-born slaves in Suriname were kept as house slaves in Paramaribo, the capital, where they would not have been in a position to contribute significantly to the Saramaccan population. So, the percentage of maroons of African descent was likely to have been even higher than that of the slave population as a whole.

We can come to an important conclusion from these demographic aspects of the linguistic situation of the early period of Saramaccan: A significant number—indeed probably an overwhelming majority—of the individuals who were present in the Saramaccan community during its formative period had been born in Africa and, therefore, were native speakers of an African language, with speakers of varieties of Gbe and Kikongo being particularly well-represented. Assuming the last major maroon input into the Saramaccan community took place in 1712, as mentioned above, it seems further reasonable to assume that fluent speakers of African languages were present in the community well into the eighteenth century, and perhaps, even beyond, assuming some Surinameborn children also acquired these languages. Regarding this last point, Schwegler (2000), for example, argues that Kikongo must have been spoken in Cuba as late as the twentieth century, and Smith (1987b:111) states that, in Suriname, Gbe elements still survive (in the form of ritual language referred to as *Papá*—see also Price (2007)), attesting to the longevity of an African linguistic presence in the Caribbean region. It would, therefore, be reasonable to suggest that some African languages may have been spoken actively in Saramaccan communities even after the population was completely native to Suriname.

Having given an overview of the historical situation of the early Saramaccan community, in the next section, I will summarize the evidence for the presence of a prosodic split in the Saramaccan lexicon along accentual/tonal lines.

3 The "split" lexicon of Saramaccan

3.1 Introduction and terminological preliminaries

In this section I will give a brief descriptive overview, from both a synchronic and a diachronic perspective, of a prosodic split found in the Saramaccan lexicon wherein most of its words are marked for pitch accent but a noteworthy minority are marked for true tone. More detailed discussion and argumentation of synchronic aspects of the split can be found in Good (2004b), which is the first work to explicitly propose that Saramaccan has a split lexicon. This work represented a revision and extension of earlier insightful work on Saramaccan tone by Voorhoeve (1961) and Rountree (1972), the latter being the first to explicitly recognize the presence of different "tonal" word classes in the language. Some discussion of the phonetics of Saramaccan prosody can be found in Good (2006). Aspects of the analysis of the Saramaccan prosodic system given here are anticipated by Devonish (1989:48–55) and Devonish (2002:120–134). The following discussion will only cover the most essential points, and the reader is referred to these previous works, in particular Good (2004b), for further details.

In 1, I give definitions of the terms *tone*, *accent*, *pitch accent*, and *stress* as understood here. For further discussion of these terms, see Hyman (1978), Beckman (1986), and Remijsen (2001:39–41, 2002:585–7).

- (1) a. **Tone**: The linguistic use of pitch to mark paradigmatic contrasts—that is, one toneme must contrast with other tonemes that can appear within the same domain.
 - b. Accent: An abstract marking of linguistic prominence on a syllable distinguishing that syllable from other syllables within a word—hence, a marking of syntagmatic contrast within the word.
 - c. **Pitch accent**: The realization of accent as a specific pitch contour which is placed with reference to an accented unit. (Comparable to Beckman's (1986) non-stress accent.)
 - d. Stress: The realization of accent by making primary use of acoustic parameters other than

pitch—typically amplitude, duration, and segment quality. (Comparable to Beckman's (1986) stress accent.)

Before introducing the relevant data, a note on the sources used in this paper should be made. While, in most cases, the tonal form of cited words has been verified with consultants, this has not always been possible.⁶ This is potentially problematic since, outside of the descriptive and theoretical literature on Saramaccan tone, no transcriptional distinction is made between what will be described in section 3.3 as "true" low tone vowels and vowels "unspecified" for tone. (This is the case, for example, in the word list produced by Rountree et al. (2000), which was one of the primary sources for the words cited in this work due to its availability in electronic format.)

Where the tone of a word has not been verified with consultants, in some cases, it is still possible to come to reasonable conclusions from the published sources as to whether or not a given orthographic "low" tone represents a true low tone or not. As discussed in section 3.4, all words with vowels unspecified for tone are also associated with at least one high tone. Since high tones are generally transcribed sources employed here, words transcribed with no high tones can be assumed to be completely specified for true low tones (if, of course, their transcription without high tones is correct). A second clue as to whether or not a tone is a true low tone comes from the transcription of compounds. Specifically, if the tone of a vowel is transcribed as high in a compound form but low in its citation form, it can be assumed that the vowel is unspecified for tone (see section 3.3 and Good (2004b:599) for justification).

In the discussion below, if the transcribed tone pattern of a word has not been verified with consultants, this will be indicated. Where relevant, evidence that the transcribed tones in such words are likely to be correct will also be given.

In the transcription system used here for Saramaccan, each written vowel is a *tone bearing unit* (TBU). An acute accent will be used to mark TBU's which always surface with high tones (except if appearing utterance finally when a lowering rule applies) and a grave accent will be used to mark TBU's which always surface with low tones. TBU's lexically unspecified for tone will appear without an accent except where their surface tonal realization is being indicated (see

section 3.3 for discussion of what factors determine the surface tonal realization of such TBU's). "Coda" *n*'s in the transcription indicate vowel nasalization.

3.2 On the origins of the split

Here, I will informally discuss how the prosodic split in the Saramaccan lexicon can be understood as resulting diachronically from the transfer of both European and African prosodic systems into the language. An overview of the synchronic evidence for the split will be given in sections 3.3 and 3.4. The discussion below merely outlines how transfer could have resulted in the lexical split but does not attempt to explain why it occurred specifically (and seemingly only) in Saramaccan. Section 6, however, will propose a historical scenario giving specific sociolinguistic factors that might have triggered such a development.

At a gross level, the origins of the pitch-accent/tone split in the Saramaccan lexicon seem fairly clear: The language is an example of a logically possible (but otherwise unattested) contact phenomenon between European accent languages and African tone languages. The prosodic systems of both groups of languages entered Saramaccan without leveling in favor of one system over another. Importantly one should not infer that this split necessarily arose during creolization per se since it is all but certain that native speakers of African languages played an important role in Saramaccan communities well after the language's initial formation, as was discussed in section 2. Thus, the split lexicon could have arisen after the initial formation of the creole that was to become Saramaccan (and, in fact, this will be argued to have been the case below).

In table 1, I give some Saramaccan words of ultimate European origin. English and Portuguese words generally represent early entries into the Saramaccan lexicon. Dutch elements came relatively later (see section 2). The stressed syllable in the European words is indicated with a "".

A generalization which accounts for the "tone" pattern on most words of European origin is that the stressed syllable in the European word was transferred into Saramaccan with a single surface high tone while other syllables entered the language lexically unspecified for tone. Presumably, the introduction of this high tone was due to a reanalysis of a high F_0 canonically associated

Table 1: Words of European origin in Saramaccan

SARAMACCAN	GLOSS	ORIG	IN
náki	'hit'	< English	'knock
sitónu	'stone'	< English	'stone
síkísi	'six'	< English	'six
tù	'also'	< English	'too
kulé	'run'	< Portuguese	co'rrer
búka	'mouth'	< Portuguese	'boca
àkí	'here'	< Portuguese	aqu'i
wólúku	'cloud'	< Dutch	'wolk
minísíti	'minister'	< Dutch	mi'nister
ameekán	'American'	< Dutch	Ameri'kaan

with stressed syllables in the relevant languages as being part of the phonological structure of the words themselves. As will be discussed in section 3.4, the attested tone patterns observed in these words are indicative of a pitch accent system, not a tone system, indicating that, while aspects of phonetic realization may have changed, words of European origin largely retain accentual structure in Saramaccan.

As can be seen, in some cases words of European origin have been subject to vowel epenthesis breaking up consonant clusters. In such words, the general pattern is for the etymologically stressed vowel to appear with a high tone in Saramaccan regardless of synchronic syllabic structure. An additional, predictable complication is that if the stressed syllable in the European language is antepenultimate in Saramaccan (perhaps due to vowel epenthesis), then a high tone appears on both the antepenultimate and the penultimate syllable (as in, for example, *sikisi* 'six', where the first *i* represents the etymologically stressed syllable and the second two *i*'s are epenthetic). This pattern will be discussed in more detail below in section 3.4.

There are exceptions to these generalizations, and two are given in table 1: $t\hat{u}$ 'also' from English too and $\hat{a}k\hat{i}$ 'here' from Portuguese aqui. The word $t\hat{u}$ is exceptional insofar as its one etymologically stressed syllable appears with a low tone, not a high tone. The word $\hat{a}k\hat{i}$ has a high tone on its final syllable, as would be expected, but, unexpectedly, its first syllable is also specified for a low tone. However, despite such exceptions, overall the basic generalization relating stress

in the lexifier languages to a high tone in Saramaccan holds for the vast majority of words of European origin.

Table 2 gives a number of Saramaccan words of likely African origin. (Kikongo lexemes taken from Daeleman (1972); Gbe (i.e., Fon Gbe and Ewe) lexemes taken from Smith (1987a).)⁸

Table 2: Words of African origin in Saramaccan

SARAMACCAN	GLOSS	ORIG	IN
pùkùsù	'bat'	< Kikongo	lu-mpukusu 'bat'
bàndjà	'side'	< Kikongo	mbaansya 'side'
mbàlù	'(wood) chips'	< Kikongo	mbalu '(wood) chips'
màtùtù	'small rat'	< Kikongo	ma-tutu 'small rat (pl.)'
tòòn	'type of rodent'	< Fon Gbe	tồ 'rat'
lògòsò~lògòzò	'turtle'	< Fon Gbe	logozò 'tortoise'
ahún	'grass'	< Ewe	$ax\tilde{z}$ 'sp. grass'
adjindjá	'porcupine'	< Fon Gbe	àdžidžá 'hedgehog'
gogó	'bottom, back'	< Fon Gbe	gogó 'buttock'
agása	'crab'	< Fon Gbe	agàsá 'land crab'

While there are exceptions, for example, the word $ag\acute{a}sa$ 'crab', there is a strong correlation between the tones of African words and the tones of those words when transfered into Saramaccan, indicating that the existence of truly tonal words in the language is due to African influence. However, one cannot simply say that all African words are "tonal" in Saramaccan, since there are cases of words with clear African etymologies which exhibit prosodic patterns patterns that also found in words of European origin and will be analyzed as the manifestation of pitch accent in section 3.4. One such word is $gog\acute{o}$ 'bottom, back' whose first TBU is unspecified for tone, giving it the same tonal pattern as the Portuguese-derived word $kul\acute{e}$ 'run' seen in table 1.9 The issue of why not all words of African origin are truly tonal in Saramaccan will be taken up in section 5.

In the next sections, I will outline the synchronic evidence for the pitch-accent/tone prosodic split in the Saramaccan lexicon. Section 3.3 justifies an important underlying three-way distinction for the tonal specification of Saramaccan TBU's, and section 3.4 shows how the attested surface tone patterns in Saramaccan words point to the presence of a prosodic lexical split.

3.3 An underlying three-way tonal distinction

Underlyingly, there is an apparent three-way tonal contrast in Saramaccan between TBU's which are marked for high tone, low tone, and those which are lexically unspecified for tone and whose tonal realization is predictably high or low depending on their phonosyntactic environment.

In citation forms, TBU's lexically unspecified for tone surface with a low tone, hence the fact that in orthographic representations they are not represented as distinct from true low tones. Evidence for the three-way contrast, as opposed to a two-way one, comes primarily from data involving phonosyntactic high-tone plateauing, a pervasive process in the language which only affects TBU's unspecified for tone. The data in 2 illustrates the alternating surface realization of a TBU lexically unspecified for tone.¹⁰

In 2a, the citation form for the word *taánga* 'strong' is given. As indicated, the second TBU of this word surfaces with a high tone, while the first and last TBU's of the word are lexically unspecified for tone and surface with low tones in their citation form. The surface form of *taánga* in 2a can be contrasted with its form in 2b where the final TBU surfaces as high instead of low due to the application of a rule of high-tone plateauing. This rule causes TBU's lexically unspecified for tone that are immediately flanked by high tones to be realized as high in certain syntactic environments. Specification of the syntactic environments in which this plateauing occurs is somewhat complex, but, roughly speaking, one can say that it is found between a head of a phrase and a word in that phrase directly preceding it. So, for example, plateauing will occur between a noun and a preceding adjective within a noun phrase but not between an adjective and preceding determiner, as can be seen in 2b. For detailed discussion of the syntactic environments in which plateauing occurs, see Good (2004b:597–615).

As can be seen in an example like 2b, high-tone plateauing produces a characteristic (L)H(L) pattern for most phonological phrases in Saramaccan. That is, the middle portion of the phrase consists of a stretch of high-tone TBU's and any unspecified TBU's at the edges of the phrase receive a default low tone. This characteristic tone contour, as we will see, can be "disrupted" by lexical items fully specified for tone.

In citation forms, TBU's lexically unspecified for tone cannot be distinguished from TBU's specified for low tone. However, they show different behavior with respect to tonal plateauing, since lexically-specified low-tone TBU's are never realized with high tones as a result of the plateauing process. Furthermore, the low tones on these TBU's can prevent the plateauing process from affecting lexically-unspecified TBU's by acting as a "barrier" between those TBU's and nearby high tones. The sentences in 3 illustrate the contrasting behavior of unspecified TBU's and true low-tone TBU's.

- (3) a. Di wómi kulé àlá. \longrightarrow Di wómi k**ú**lé àlá. the man run there "The man runs there."
 - b. Dí káìmà kulé àlá.
 — Dí káìmà kùlé àlá.
 the alligator run there
 "The alligator runs there."

(Rountree 1972:316)

The final TBU of the head of the subject noun phrase in 3a, wómi 'man', is lexically unspecified for tone, as is the first TBU of the verb kulé 'run'. The last word of a subject noun phrase and an immediately following verb meet the syntactic conditions for a plateauing environment in Saramaccan. Thus, both the last TBU of wómi and the first TBU of kulé surface with a high tone in 3a since they are flanked by the high-tone TBU's found in each of those words. This sentence can be contrasted with the one in 3b, which is syntactically essentially identical, but phonologically quite distinct, since the head noun of the subject, káìmà 'alligator', does not contain any unspecified TBU's but, rather, contains one high-tone TBU followed by two low-tone TBU's. As can be

seen, in contrast to the unspecified final TBU of *wómi*, these TBU's do not surface as high when followed by the verb *kulé*, consistent with their lexical specification. Moreover, the first TBU of *kulé* also surfaces as low in this context since the immediately preceding low-tone TBU's of *káìmà* do not provide an appropriate phonological environment for plateauing, even though the syntactic conditions for its application are met.

While the differing behavior of unspecified TBU's and true low-tone TBU's with respect to high-tone plateauing is the primary evidence for a three-way underlying tonal distinction in Saramaccan, this is not the only evidence, as discussed by Good (2004b:581–583).

3.4 The restricted nature of attested tonal patterns

Despite clear evidence for an underlying three-way lexical contrast in the tonal properties of TBU's, the attested tonal patterns in Saramaccan words do not fully exploit the possibilities for lexical distinctions that the contrast provides. For example, the words in table 3 exemplify all the common tonal patterns for words containing TBU's unspecified for tone. As can be seen, these patterns fall far short of exhausting all the logical possibilities. Conspicuously absent are patterns wherein low-tone TBU's are found together with unspecified TBU's in a single word. Words of the types exemplified in table 3 make up a clear majority of the Saramaccan lexicon—though, at present, it is not possible to give a precise figure in this regard since, as discussed in section 3.1, existing word lists of the language do not mark the opposition between TBU's unspecified for tones and true low-tone TBU's.

Table 3: Pitch-accented words in Saramaccan

WORD	TONES	GLOSS
náki	НØ	'hit'
$fol\acute{o}$	ØН	'flower'
hákísi	HHØ	'ask'
sikífi	ØНØ	'write'
məkisá	ØØH	'screen,sift'
minísíti	ØHHØ	'minister'
afokáti	ØØHØ	'lawyer'
alukutú	ØØØH	'soursop'

A noteworthy fact about words containing TBU's unspecified for tone in Saramaccan is that they show surface tonal patterns that are typical of a pitch accent system, not a tone system. That is, they are open to an analysis where one position in a word is lexically marked for accentual prominence and this prominence is realized as a high tone on the accented syllable. The representations in 4 illustrate which syllables in the words in table 3 would be analyzed as being lexically marked for pitch accent under such an analysis of their prosody. An asterisk is placed above the vowel of a syllable treated as accented.

(4) **2-** σ words: naki folo

3- σ words: hakisi sikifi mokisa

4- σ words: minisiti afokati alukutu

Under a pitch accent analysis of words like those given in table 3 along the lines of what is schematized in 4, one can straightforwardly account for the placement of high tones in these words simply by saying that the lexical prominence mark (i.e., accent) is realized on the surface as a high tone. There is a minor complication involving words with the tone pattern (Ø)HHØ, like *háktsi* 'ask' and *minísíti* 'minister', since they surface with two high tones. However, the fact that tonal patterns along the lines (Ø)HØØ are not commonly found in Saramaccan, allows us to say that words with form (Ø)HHØ have antepenultimate accent and that this accent is simply realized as a high-tone spread over both the antepenultimate and penultimate syllable—as opposed to words with final or penultimate accent where no such spreading occurs.¹³

However, as already seen, the Saramaccan lexicon is not solely comprised of words following the patterns given in table 3. One additionally finds words specified only for high tones, only for low tones, and words containing a mix of high and low tones.¹⁴ Illustrative examples are given in table 4. While such words form a minority of the Saramaccan lexicon, they are certainly not marginal in the language.

The tone patterns in words fully-specified for tone like those seen in table 4 are too diverse to be treated as manifestations of pitch accent. Rather, one sees a robust high/low opposition indicative of a true tone system. An examination of Rountree et al.'s (2000) word list further reveals a fair

Table 4: Tonal words in Saramaccan

TONE TYPE	WORD	TONES	GLOSS
High	tú	Н	'two'
	kódó	HH	'continually, forever'
	búúú	HHH	'ideophone for covering'
Low	bà	L	'carry (liquid)'
	bòs $$	LL	'loose'
	lègèdè	LLL	'lie'
	pètèpètè	LLLL	'ideophone for salve-like'
Mixed	àkí	LH	'here'
	káìmà	HLL	'alligator'
	séségùùsé	HHLLH	'type of fish'
	tótómbòtí	HHLH	'woodpecker'

number of true tonal minimal pairs, for example, $k\dot{u}$ 'with' vs. $k\acute{u}$ 'vagina' and $t\dot{u}$ 'too' vs. $t\acute{u}$ 'two', providing strong evidence for a paradigmatic contrast among high and low tonemes—the hallmark of a tone system.¹⁵

It would seem to be the case, then, that words in Saramaccan can be divided into two prosodic strata, a pitch accent stratum and a tonal stratum. Each of these strata is associated with surface "tones". However, the surface tones in words marked for pitch accent can be predicted on the basis of a single abstract lexical accent mark, while the words marked for true tone cannot be described so simply, and their tones appear to be included as part of their lexical form.¹⁶

A final point worth making in this context about the prosodic behavior of the words marked for pitch accent versus those that are truly tonal is that, as discussed in Good (2004b:586–594), the former class of words exhibit effects which can be associated with stress while the latter does not. Furthermore, the realization of stress in the pitch-accented words is predictable based on the location of pitch accent. Given that stress, as understood here (see section 3.1), is taken to be manifestation of accent, the distribution of stress in Saramaccan further substantiates the presence of an accent/tone split. Words with TBU's unspecified for tone show two surface manifestations of accent, pitch accent and stress. Words fully specified for tone show no evidence for being marked for accent at all.

In the next section, I will relate the Saramaccan split lexicon to comparable phenomena found

in other languages and to tonal phenomena found in other Atlantic languages.

4 Saramaccan in typological, genealogical, and areal context

4.1 Lexical strata

While a lexical split across tone and pitch accent along the lines of what is described here for Saramaccan has not been reported for any other language to the best of my knowledge, lexical strata involving less striking phonological differences are not difficult to find. Such a situation is found, for example, in English (see Kiparsky (1982)) where words of Latin/Romance origin can participate in different stress placement rules from words of Germanic origin. Something similar is also found in the case of borrowing from Chinese into Japanese. Morphemes of Chinese origin, for example, differ from native Japanese items in that they must be underlying monosyllabic and words of Chinese origin permit sequences of a nasal followed by a voiceless stop, unlike the native vocabulary (Itô and Mester 1995:819). Phenomena like these are qualitatively less drastic than the lexical split found in Saramaccan, but, in both cases, they are similar insofar as they involve the partitioning of a language's lexicon into synchronically arbitrary phonological classes.

I am aware of at least two other cases of divisions in the phonological behavior of lexical items which are qualitatively fairly close to what is found in Saramaccan. These are Mednyj Aleut and Michif, two mixed languages. Mednyj Aleut shows a phonological split in its segmental phonology where words transferred from Russian have a different segment inventory than words transferred from Aleut (Thomason 1997c:455–7). In Michif, the phonological split is correlated with morphosyntax—nouns tend to be transferred from French and verbs from Cree, with accompanying phonological differences in each of these word classes corresponding to the different phonologies of these two languages (Bakker 1994:16, 1997:80–86). (See Rosen (2006), however, for arguments based on Michif word-level prosody against interpreting these facts as evidence for lexical strata in the language.)

A conclusion that one can draw from all of these cases is that the partitioning of the lexicon into different phonological strata is associated with language contact. In the case of English and

Japanese, extensive patterns of borrowing are responsible for the presence of such strata. In the case of Mednyj Aleut and Michif, phonologically-based lexical splits are directly tied to the fact that these are mixed languages. And, of course, Saramaccan, as a creole, is itself a contact language. It will be argued below that Saramaccan's split lexicon is the result of contact, though not its initial creolization but, rather, a later event.

4.2 Tonal phenomena in other Atlantic creoles

While Saramaccan has perhaps the most complex tonal system of any English-based Atlantic creole, various kinds of tone-like phenomena are found elsewhere in the group.¹⁷ It may even be reasonable to interpret Saramaccan as occupying one end of a cline of tonality versus accentuality found throughout the Atlantic creoles (see Sutcliffe (2003:149–151) and Devonish (2002)).¹⁸ The description of the stress/tone system of (closely related) Ndyuka in Huttar and Huttar (1994:564–579) (see also Huttar and Huttar (1972)), for example, does not clearly indicate a Saramaccan-like "split" but does describe a system with a fair degree of complexity. Examples of tonal oppositions in Ndyuka words, drawn from Huttar and Huttar (1994:568–571), are given in table 5.

Table 5: Tonal oppositions in Ndyuka

WORD	CITATION TONES	GLOSS
koo	LL	'turtle'
kóo	HL	'cold'
kálú	HH	'corn'
tóko	HL	'war'
kulú	LH	'category, group'
kina	LL	'taboo'
ákisi	HLL	'ask'
akísi	LHL	'axe'

Clearly, in order to come to a full understanding of how Saramaccan split prosody developed, it would be useful to have detailed descriptions of the prosodic systems of many other English-based Atlantic creoles, noting in particular where one finds apparent tonal minimal pairs (along the lines of what is done in James (2003), for example, for Tobagonian) and clearly describing the role of pitch in marking accent. In this context, it is worth noting that the prosodic system

of one other Atlantic creole, Papiamentu, a Portuguese-based creole, has been extensively studied (see, for example, Kouwenberg (2004), Remijsen and van Heuven (2005), and Rivera-Castillo and Pickering (2004)), and it, too, turns out to be typologically quite unusual, being one of the only well-substantiated cases of a language where one finds both contrastive stress and contrastive tonal features which operate independently from stress.¹⁹

It seems clear that the contact situation between European accentual languages and African tonal languages provided fertile ground for the development of otherwise rare prosodic systems. However, due to a lack of detailed descriptions, it would be premature to come to any strong conclusions as to which of the imaginable possibilities arising from this sort of contact may have actually developed.

5 Towards an explanation for the development of the split lexicon

5.1 Rejected scenarios

Without reference to the specific Saramaccan facts, it is possible to imagine various ways in which a prosodic lexical split might develop, though some seem more likely than others. For example, one could surely construct scenarios in which such a split could develop through purely **internal sound change**. However, no set of attested or reconstructed changes in any language that I am aware would result in anything like the pattern seen in Saramaccan. Therefore, it would seem reasonable to pass over such a possibility even if we had no knowledge of the language's history. And, of course, if one does look at the Saramaccan lexicon in light of its known history, such an account becomes even more unreasonable given the clear correspondence between the prosodic systems of Saramaccan's two lexical strata and the prosodic systems of Saramaccan's European superstrates and African substrates. It is clear that the Saramaccan split lexicon is the product of some sort of language contact—the question is what kind.

Two other imaginable scenarios are that the split lexicon is the result of abrupt creolization or that it is a retained archaism which has been lost in related Atlantic creoles, presumably as a result of their more extensive contact with their superstrate languages. I address each of these—and the

reasons why I reject them on the basis of the present evidence—in turn.

Abrupt creolization? A possibility which seems more reasonable than an account invoking purely internal sound changes is that the split lexicon is a product of some kind of abrupt creolization event. Specifically, one might suggest that the first set of maroons who would become the Saramaccans spoke a contact language which could not be classified as a creole but, rather, was some sort of pidgin. Then, shortly following the establishment of maroon settlements, a creole quickly "crystalized", with European and African prosodic subsystems. This sort of scenario would be in line with that espoused by, for example, Byrne (1987:32) or Bickerton (1984:178) for Saramaccan in the context of work on the so-called Language Bioprogram Hypothesis, which suggests that creoles arise suddenly when a generation of children adapts a pidgin in their environment to serve as a "full-fledged" language.

However, such an explanation would ultimately be unsatisfactory for a number of reasons. First, as discussed in section 2, there is good evidence that the Surinamese creoles form a genetic unit. McWhorter (2000:101–105), for example, amply demonstrates a number of idiosyncratic resemblances between Sranan and Saramaccan that would be incredibly difficult to attribute to chance. It is further worth pointing out that there is also evidence that, in fact, the Surinamese creoles are a subbranch of a larger genetic unit comprising all of the Atlantic English-based creoles (Smith 1987b:103–112, McWhorter 2000:41–98). So, even the idea that the Surinamese creoles generally were formed primarily in Suriname is problematic. To the extent that Saramaccan can be reliably shown to be part of such larger genetic units, this is clearly evidence against its having been created de novo in the forest by escaping slaves and the split lexicon having developed from abrupt creolization.

Ignoring such historical evidence, accounting for the Saramaccan split lexicon via an abrupt creolization still runs into another problem: Given that, as also discussed above in section 2, the demographics of Suriname were such that during the formative years of Saramaccan, African-born slaves vastly outnumbered local-born slaves, an outcome wherein a language with an "African"

prosodic system embedded in a larger "European" system would become the language of the Saramaccan community seems unlikely. Split prosody, of any sort, of course, would probably be an unlikely outcome. But, if Saramaccan were primarily formed after the escape from plantations, one would expect, if anything, a small accentual European component, consisting of basic vocabulary acquired on the plantations, embedded in a larger tonal African component, given that the vast majority of the population would have consisted of native speakers of tone languages.²⁰

A final problem with the idea that the Saramaccan split lexicon may be the result of an abrupt creolization event is that it would run counter to the idea that the sociolinguistic settings wherein abrupt creolization takes place would not be conducive to the development of a grammatical feature with such a low functional load (see McWhorter (1998)). To be clear, I am not claiming that surface pitch patterns do not have a noteworthy functional load in Saramaccan—they clearly do. It is only the accent/tone split which would seem to have little functional import. A thorough examination of Rountree et al. (2000) revealed around sixty examples of "tonal" minimal pairs (i.e., minimal pairs based on surface tonal patterns). However, I have not yet encountered an example of a minimal pair which only cuts across the accent/tone distinction. Such an example would require a word with a contour like LH or HL contrasting with a word with a contour like \emptyset H or H \emptyset .

Since true low tones are not distinguished from unspecified tones in most sources, it is difficult to find such pairs without extensive elicitation, and it seems likely that some may exist—all it would require, for example, would be a word with a form like aki contrasting with the existing word aki 'here'. This would seem to be a completely available, if unexploited, contrast. However, even if there are such minimal pairs, it seems unlikely that there are more than a handful since their existence has yet to be reported in any of the fairly extensive literature on Saramaccan tone.

Therefore, for a variety of reasons, one can reject as a possible explanation for Saramaccan's split lexicon that it is a product of abrupt creolization.

Retained archaism? It is also important to address why I reject one other logically possible scenario explaining Saramaccan's split lexicon—this is that it represents a retained archaism once

common to the entire group of Atlantic English-based creoles, surviving only in Saramaccan, perhaps because of its relative isolation.²¹ The primary reason for rejecting such a possibility is comparative in nature. This phenomenon, so far, has been found only in Saramaccan—a branch of a branch of the family. Basic comparative methodology would require finding it in at least one other major branch before reconstructing it for the proto-language. Such evidence, of course, can not positively rule out the presence of such a split in the proto-language, but it does mean that, at present, there is no evidence for this. Furthermore, given the particular demographic setting of the early Saramaccan community, with very few native speakers of a creole variety, it would seem problematic, in general, to treat any grammatical feature uniquely found in the language as retention of an archaic feature of some ancestor of the Atlantic English-based creoles.

However, as will be discussed in section 6.2, one of the primary linguistic mechanisms—codeswitching—which I will argue played a role in the development of the split lexicon, certainly would represent, in a sense, an archaism of the early stages of the Caribbean English-based Atlantic creoles. During the transition from communities wherein most speakers had an African language as their native language to ones wherein most speakers had a creole as their native language, we can presume that some degree of codeswitching between African languages and creole languages was taking place. What will be argued to be unique to Saramaccan is that this feature of the sociolinguistic environment became entrenched in the grammar. Thus, while the split lexicon is assumed here to be an innovation in Saramaccan, this will not prevent us from tracing its sources to a feature (i.e., codeswitching) reasonably assumed to be present at some point in all Caribbean Atlantic-English based creoles during the slave trade.

Assuming that the Surinamese creoles form a genetic unit for the reasons discussed above, we need to seek out explanations that can explain not only why Saramaccan shows a split lexicon but also why Sranan does not.²² In section 6, I will elaborate on one scenario which would explain these facts, which I believe is most likely to be the correct one on the basis of presently available evidence. This is that the Saramaccan lexicon is the result of a type of language *mixture* of an early Surinamese creole, which I will refer to here as pre-Saramaccan, with African substrate languages.

In order to situate these arguments within relevant other work, I will briefly review work on mixed languages in the next section.

5.2 Mixed languages

In addition to pidgins and creoles, it has become standard to admit a third class of contact languages typically referred to as *mixed languages*. There is no general agreement on how best to define this class, but, qualitatively, a prototypical mixed language differs from a pidgin or creole in that well-defined parts of its grammar seem *directly* traceable to one language and others to another language, as opposed to a prototypical pidgin and creole where one finds elements from different source languages "scattered", in different degrees, throughout the grammar (see Bakker (1994:25–28) for some discussion). Reflecting such a prototype, Matras and Bakker (2003:1) give "a bilingual mixture, with split ancestry" as the most common definition of mixed languages. Similarly, Myers-Scotton (2003) suggests they are better labeled as "split languages" instead of "mixed" in order to clearly signal that such a category is employed precisely when one observes systematic partitions in the way different languages contributed to the mixed language's grammar.

It should be emphasized, however, that researchers on mixed languages have found it quite difficult to devise a definition for this group that neatly circumscribes all languages referred to as "mixed" in the literature. Indeed, while we might consider Matras and Bakker's definition to offer a prototype for mixed languages, Thomason (1997a:3–4, 2003:21–23) quite explicitly adopts the view that the category of mixed languages should be considered to be fuzzy in nature. Thomason (2003:21) further gives her own definition of a mixed language as "a language whose grammatical and lexical subsystems cannot all be traced back primarily to a single source language." This is a quite broad definition—which would certainly encompass not only Saramaccan but also, as Thomason (2003:22) points out, pidgins and creoles more generally.

However one defines the term, there appears to be an interesting distinction in the kinds of language "mixing" one finds under different sociolinguistic circumstances. The prototypical sociolinguistic situation associated with pidgins and creoles is one where there is not bilingualism

but, rather, a mix of different languages spoken with varying degrees of fluency by the members of the nascent creole community. The outcome of such a sociolinguistic setting can be described as "a cross-linguistic compromise among the languages whose speakers created the pidgin or creole" (Thomason 2003:22). The precise nature of that compromise, of course, may be a matter of debate. Nevertheless, it seems clear that this is a reasonable characterization on a descriptive level.

The prototypical sociolinguistic situation in which creoles develop is quite different from that of the most prototypical class of mixed languages—so-called bilingual mixed languages. The example par excellence of such a language is Michif (Matras and Bakker 2003:2, Bakker 1994). Michif combines Cree verbs with French noun phrases. Its grammatical structure is not well characterized as a compromise between two different languages—rather grammatical subsystems are apparently "adopted intact from each source language" (Thomason 2003:22). Bakker (1994:23) concludes that the context in which Michif arose must have been one where there were speakers fluent in both Cree and French—a situation quite distinct from that prototypically invoked for the development of pidgins and creoles.

In addition to the presence of bilingualism, another factor cited in the rise of mixed languages is the need to assert or establish group identity. In the case of Michif the speakers of the language are descendants of French-Canadian fur traders and American Indian women. They consider themselves, and are considered by others, to be a distinct ethnic group, neither French Canadian nor American Indian. The rise of a new mixed language was almost certainly deeply connected to the rise of the ethnic group itself (Bakker 1997:13).

A less prototypical mixed language, Ma'á (Mous 1994, 2003a, 2003b; Thomason 1997b) is also instructive here because its "mixed" features are qualitatively much more similar to Saramaccan's split lexicon than the somewhat extreme noun-phrase/verb-phrase split found in Michif. Ma'á grammar is "more or less identical to that of Mbugu" a Bantu language closely related to Pare (Mous 2003a:209–210). The difference between Ma'á and Mbugu is in the lexicon. Ma'á makes use of a "parallel lexicon" containing morphological forms with generally the same syntax and semantics as corresponding forms in Mbugu but differing in phonological form. This parallel

lexicon consists of a number of words of Cushitic origin, assumed to be elements retained from an earlier East Cushitic language spoken by the ancestors of the Ma'á speakers, as well as words from non-Bantu languages of the area, like Maasai (Nilotic) and Gorwa (South Cushitic). In addition, one finds in the lexicon words of Mbugu origin which have been phonologically manipulated to produce distinct Ma'á lexical items (Mous 2003a:213). One type of such manipulation, for example, involves replacement of a consonant in a Mbugu word with a lateral fricative 4, a characteristic "Ma'á" sound described by speakers of neighboring languages as making Ma'á "weird and difficult" (Mous 2003a:216).

While there is disagreement as to the linguistic nature of the genesis of Ma'á (see Thomason (1997b:477–484)), there is agreement that the primary motivating social factor in its development was the need to express a social identity distinct from dominant Bantu groups in the Ma'á area (Mous 2003a:213). The Ma'á case is especially relevant in the present context because, as will be discussed below, it is quite parallel to what will be argued to have occurred in Saramaccan in the development of its split lexicon.

6 The split lexicon in Saramaccan as language mixture

6.1 A basic scenario

In this section, I will argue that the most likely explanation for the presence of the split lexicon in Saramaccan is that it developed from a limited form of language mixing—specifically, vocabulary from African substrates was brought into pre-Saramaccan with its tonal prosody largely intact during the development of Saramaccan. The scenario outlined here should be clearly distinguished from another proposal regarding the possibility of language mixing in Saramaccan, involving contact between proto-Sranan (i.e., the earliest English-based Surinamese creole) and either Portuguese or some Portuguese-based creole (Smith 2002:146), though I will briefly return to this topic in section 7. This scenario necessarily assumes at least two distinct stages in the development of Saramaccan. The first would correspond to what is typically called "creolization" during which proto-Sranan (or possibly an earlier creole from which proto-Sranan developed) was

formed. The second affected pre-Saramaccan alone, after it had broken off from the other Surinamese creoles.

As discussed in section 5.2, two important factors necessary (but, of course, not sufficient) for the development of a mixed language are (i) social pressure to maintain or assert a distinct community identity and (ii) the existence of a bilingual speech community. It seems clear that the latter condition would be met for Saramaccan, though the former is problematic. I will discuss how each applies to the Saramaccan case in turn.

We have no explicit record, of course, as to how the escaped slaves who would come to form the Saramaccan community wanted to be identified socially. However, it seems more than reasonable to assume that there would have been a strong motivation for them to develop an identity distinct from any groups, black or otherwise, associated with the plantation economy.²³ Furthermore, as discussed by Price (1983:102), maroons had continual contact with slaves on plantations. Therefore, one language variety which any new language variety would need to be clearly distinguished from was the creole variety dominant on the plantations. So, not only would there have been a general social pressure to form a new Saramaccan language, there would have been a particular need for this language to evolve in ways distinct from the creole varieties spoken on the plantations.²⁴ So, whatever the precise details, it is clear that one condition conducive to the formation of a mixed language was present in the Saramaccan case.²⁵

As for the second condition, extensive bilingualism, clearly this was not true, in a canonical sense, of the Saramaccan sociolinguistic situation. There was no specific language which *all* maroons could have been expected to know in addition to whatever creole variety they might have learned. Furthermore, it was likely the case that, at least during the earliest stages of the Saramaccan community, some maroons had only minimal competence in a creole variety as well, given the high ratio of recent African arrivals to those who had been in Suriname for longer periods during the formative period of the Saramaccan communities. As Arends (1995:263) notes, "for one particular decade this ratio is especially high, indeed astronomical, namely the 1680's: by the end of that decade every pre-1680 arrival was surrounded by five or more post-1680 imports." This

period, of course, was just before the beginning of the marronage which would form the basis of the early Saramaccan community.

But, if there would not have been canonical bilingualism, there would have been an extended period when most Saramaccans either had or were gaining competence in a creole variety and were also native speakers of some African language. In addition, for speakers of Gbe and Kikongo origin, there would have been a number of maroons who either shared their native language or spoke a language variety which was at least partially intelligible with their variety. As discussed in section 2, it further seems reasonable to suggest that a portion of the first generation children of the Saramaccan community would have had at least passive competence in an African language spoken by one or the other of their parents. Therefore, there would have been, for a fairly long period of time during the formative period of the Saramaccan community—when the desire to form a unique identity would be especially strong—a situation of "polylingualism". That is, a number of different languages would be spoken within the community, with one, a creole variety, understood, to varying degrees of proficiency, by all members.

While this sort of sociolinguistic environment would clearly not be conducive to the creation of a Michif-style mixed language, which would require true bilingualism, it would seem to be conducive to the formation of less striking types of mixture, like the case of the parallel lexicon of Ma'á, discussed in section 5.2. Specifically, one mechanism which the Saramaccan community could have employed to develop a distinct linguistic variety would have been to simply use lexical items from the African languages spoken by community members, either as replacements for lexical items already existing in pre-Saramaccan or to form words for things and concepts not present on the plantations. Like Ma'á, where the parallel lexicon consists of elements drawn from a number of distinct languages, it would not have been necessary for all such lexical items to be drawn into Saramaccan from a single African language, since the primary social goal would not have been to make Saramaccan more "Gbe" or more "Kikongo" but, rather, to make Saramaccan distinct from the plantation creole varieties.

Under such a view, comparable to the emblematic lateral fricative of Ma'á, the adoption of

African words into Saramaccan as "tonal", instead of adapting them to the prosodic system of pre-Saramaccan, would have served to further distinguish Saramaccan from the speech varieties of plantation communities. In other words, the African element in Saramaccan would have been utilized not only to give Saramaccan distinct lexical items but also a distinct "sound". While the inclusion of a tonal subsystem in an accentual lexicon would be very difficult to imagine in a situation where, say, native speakers of an accentual European language initiated such lexical manipulation processes, given that almost all early Saramaccans were already native speakers of tone languages, it is clearly reasonable to assume that they would have been capable of altering the pre-Saramaccan lexicon in such a manner. Furthermore, whatever level of processing complexity such a development would entail, the example of the mixture of French and Cree phonology in Michif is clearly just as complex, if not even more so. Therefore, we would not need to view the application of such a process as something unique to Saramaccan.

Importantly, the general semantic composition of the African lexical element in Saramaccan appears to be consistent with such a language mixing scenario. While no exhaustive study has been specifically done on the *tonal* African element, Bakker et al. (1995:169–170) state that most words of African origin in general come from "cultural" domains, e.g. food and cooking, religion, utensils and tools. In addition, many African-derived words are for flora and fauna terms. These domains relate to the development of a non-plantation society in the Surinamese forest, on the one hand, while largely applying to activities which would have been undertaken in Africa before slavery, on the other, some of which would have been expected to be transferred to the developing Saramaccan society. This lexical distribution is clearly consistent with a scenario wherein a significant African lexicon element—associated here with tonal stratum of the Saramaccan lexicon—would have become entrenched in the language after marronage.

If we did assume that the tonal lexical stratum in Saramaccan is due to some sort of language mixing, we would, in fact, not need to assume that this basic sort of lexical shift was unique to Saramaccan even among Atlantic creoles. Lorenzino (1998) and Parkvall (2000) (see also Baxter (2004:386)) suggest something similar for Angolar, a Portuguese-based creole closely related to

Sãotomense spoken on the island São Tomé in the Gulf of Guinea. Specifically, the presence of an extensive Kimbundu component in Angolar vocabulary is attributed to "partial relexification of an already established Creole, i.e., an earlier form of Sãotomense" (Parkvall 2000:149). Angolar speakers, like the Saramaccans, are believed to be descendants of maroons. And, Lorenzino (1998:69) argues, in a manner similar to arguments made here for Saramaccan, that the development of a distinct Angolar speech variety was closely tied to the need for Angolars to assert and maintain an identity separate from the plantation society.²⁷

One final possible piece of evidence for this proposed language mixing scenario comes from an intriguing text fragment recounting an incident found in Saramaccan oral history of the early years of the community which was published in Price (1983:102). This text fragment relates a situation where one slave was told to summon another slave from the master's house on a plantation. The slave being sent on the errand was specifically told to use *akooptna*, a type of play language (see Price and Price (1976)), so as not to be understood by the whites. We should not, of course, equate such a play language with a mixed language variety. However, its presence points to the existence of multiple speech varieties in use by the black Surinamese community, some of which would have been specifically employed to be less intelligible to whites than the standard plantation variety. Clearly, in addition to the creation of play languages, another way for blacks to have made their speech more difficult for whites to understand would have been to use elements from their native languages. Therefore, in addition to registers of play speech, we can speculate there may also have been "Africanized" speech registers familiar to slaves both on and off the plantations (but not familiar to whites) at some point in early Saramaccan history.²⁸

If this were the case, we could, in fact, view the process through which Saramaccan diverged from its sister creoles as one in which early Surinamese slave communities shared multiple creole speech varieties before marronage and, over time, one community (the Saramaccans) adopted speech varieties that were more "African" as the community language, while others (e.g., Sranan speakers) ultimately adopted a more "European" variety. If the language did follow a path like this, it means that, rather than seeing the language mixing proposed here as a post-marronage

phenomenon, we should instead view it as a linguistic pattern that had already emerged on the plantations which became entrenched as part of the grammar of one maroon community.

In fact, conceiving of the early Surinamese linguistic situation in this way gives us a fairly straightforward explanation as to why Sranan shows few traces of tone. It would simply represent a continuation of the less tonal varieties of proto-Sranan. However, even if we did not adopt this particular conception, it is clear that the language mixing scenario developed here could still help explain why Sranan is not a tonal language—unlike Saramaccan, its sociolinguistic setting would have inhibited mixing of African languages with the creole rather than facilitating it. This same setting also would have inhibited the development or maintenance of even a pitch accent system in Sranan, presumably also at least partially explaining why contemporary Sranan is a stress language (Smith and Adamson 2006:211). However, exploring this latter issue in more detail is outside the scope of the present paper.

While this section has outlined a basic scenario allowing us to explain the Saramaccan split lexicon as an instance of language mixture, there are a several issues it raises which should be addressed. These will be taken up in the next section.

6.2 Open issues

The scenario sketched in the preceding section gives a possible pathway through which the Saramaccan split lexicon could have developed. However, it raises a number of issues, some of which I would like to address here in order to strengthen the arguments for it. These are: (i) Given that the vast majority of early Saramaccans were native speakers of African languages, why did they choose to use a creole at all for the language of their nascent community? (ii) What specific linguistic mechanisms can be identified through which words of African origin would be transfered into Saramaccan with their tonal prosody? (iii) How do we account for the fact that not all words of African origin are truly tonal and not all words of European origin are truly accentual? I will address each of these in turn.

Why a creole? I have no definitive answer to the question as to why a creole was chosen as the language of the Saramaccan community given that other options were clearly available. Of course, the problem raised by this question is not a problem merely for my account of the rise of the split lexicon in Saramaccan, but it is a fundamental historical question about the language raised by the known demographic situation of early Suriname. Before it was clear (i) how slow the rate of nativization was in the colony and (ii) that the substrate was relatively homogenous, it was easy to imagine that an African language did not become the common language of the Saramaccan community simply because the linguistic backgrounds of the maroons would not have been conducive to any one African language "winning out". But, if it was the case that, in fact, a substantial percentage Saramaccan speakers had immediate Gbe or Kikongo origins, one must immediately wonder why a variety of the local creole became the lingua franca, especially given that, as mentioned in section 6.1, it is all but certain that some early Saramaccans had not had time to acquire fluency in the creole before escaping the plantations.

Of course, since the use of a creole in the Saramaccan community is a historical fact, we do not have the burden, in this case, of trying to predict what would happen in a hypothetical Saramaccan-like situation. Rather, we need to try, after the fact, to locate factors which would have favored this outcome. Clearly, the most prominent of these is that, while the substrate was relatively homogenous, it was not completely so. Furthermore, its two main constituents, Gbe and Kikongo, while distantly related, are typologically quite distinct with one group (Gbe) having an analytic profile and the other (Kikongo) having an agglutinative profile, with no mutual intelligibility holding between the two. Both are considered to be tone languages, but their tone systems are not particularly similar in nature. In addition, not only would there have been at least some speakers representing other language groups present in the early community, even the Gbe and Kikongo speakers would not have all spoken the same dialects from their respective groups. We can, therefore, speculate that the relative homogeneity of the Saramaccan substrate was still not sufficiently homogenous to favor the adoption of one African language as the common language of the new community.²⁹

A further factor which would have favored the adoption of a creole variety would be that it

would have facilitated communication with slaves on the plantations. While Saramaccan society operated largely independent of the plantation society, there was a strong motivation for some communicative channels to be open with plantation slaves since, among other things, they served as a source of new members for the community, and, in particular, of new female members (Price 1983:144)—something which would have been especially important in the early years of the community's founding due to demographic skewing of the imported slave populations in favor of males (Price 1983:128, Arends 1995:256–257). Given competing pressures of establishing a social identity distinct from that of the plantation slaves and a desire to be able to communicate with them, an obvious compromise would have been to adopt a speech variety clearly distinct from, but otherwise quite close to, the speech variety commonly employed on the plantations—i.e., some "deep" creole variety. Choosing an African language as the community language would have rendered even basic communication between the Saramaccans and plantation slaves quite difficult, if not nearly impossible without acquired bilingualism.

Finally, it is worth noting here the recent work of Price (2007) which suggests that the linguistic situation among African-born slaves in Suriname may have been less homogenous, in two distinct ways, than was previously believed (see, especially, the chapter of Price (2007) entitled "Reflections from the verandah"). First, while much of the demographic input to Suriname in its early history was limited to slaves brought in from only a few coastal areas of Africa, there is evidence that slaves exported from those areas may have originated from a larger geographic "catchment" area than had been previously assumed, thus increasing their linguistic diversity. Second, it appears to have been a general policy in Suriname to disperse slaves arriving on the same ship to different plantations in order to, among other things, separate slaves who spoke the same language. Thus, not only was the linguistic diversity across the colony possibly greater than has been previously appreciated, there was also likely great diversity within plantations themselves. Such factors would have contributed to the development of a creole within Suriname generally and also within the Saramaccan community specifically, especially given that it was founded by slaves who had passed through the plantations before escaping into the forest.

Linguistic mechanisms. With respect to the second question—what the specific linguistic mechanisms would have been that allowed the split lexicon to develop—Thomason (2003:26–34) suggests that two important mechanisms for the development of mixed languages in general are codeswitching and deliberate decision. While I have no evidence, outside of obvious inferences one could make from the sociolinguistic context, of deliberate decision being involved in the creation of the Saramaccan split lexicon, it seems quite clear that codeswitching could have played an important role. Given that at least some community members would have been able to converse with other community members in their native language, the sociolinguistic environment of the Saramaccan community would have been conducive to the presence of codeswitching, at least to some degree.

In fact, one would expect that such codeswitching would have been found throughout Suriname in the eighteenth century. However, in Saramaccan varieties, sociolinguistic pressure to create a distinct speech variety, as discussed above, clearly could have triggered processes through which such codeswitching would have become "grammaticalized" in the form of the split lexicon. Given this, one might, of course, also expect some sort of comparable lexical effect in the other maroon creoles of Suriname. Ndyuka, discussed in section 4.2, is one obvious candidate. Available descriptions of the language, however, do not clearly indicate whether or not such effects are found. So, no conclusions can be made in this regard at present.

Comparative evidence suggesting that codeswitching was an important mechanism in the development of the split lexicon in Saramaccan can be found in a comment about Nigerian Pidgin English made by Elugbe (2004:839–840). He suggests that Nigerian Pidgin English is essentially a pitch accent language but that exceptions to the basic pitch accent patterns can be found in "words taken directly from local languages and not adapted to the [Nigerian Pidgin English] sound system" (Elugbe 2004:840). The linguistic situation of Nigerian Pidgin English is parallel to the early linguistic situation of Saramaccan insofar as they both involve a creole "surrounded" by tonal African languages. Elugbe's characterization of the words from local Nigerian languages being used in Nigerian Pidgin English without being adapted to the pitch accent system is essentially

the same as what is described here for a hypothetical stage of Saramaccan history predating the emergence of the split lexicon.

Unlike Nigerian Pidgin English, the African languages that influenced Saramaccan's development are no longer spoken in Suriname—so, we cannot say that the tonal words are "taken" from those languages in any synchronic sense. Outside of this (quite important) distinction, the Nigerian Pidgin English case appears sufficiently parallel to the Saramaccan case that it seems clear that a useful place to look for other instances of languages showing phenomena similar to the Saramaccan split lexicon would be West African Atlantic creoles—a fact which was already apparent from the discussion of Angolar in section 6.1.

Etymological inconsistencies. The final issue I would like to address in this section is the fact that, as discussed in section 3.2, not all Saramaccan words of African origin are "tonal" and not all words of European origin are "accentual". Fully addressing this issue would require a detailed enumeration of the etymologies of all tonal words and all accentual words, with an accompanying account of all observed etymological "exceptions". Such a study has yet to be done. So, at this stage all that is possible is to provide some general discussion of how etymologically aberrant words may have entered the Saramaccan lexicon.

First and foremost, it is important to point out that some African elements are found in all English-based Atlantic creoles, and, almost certainly, a number of these would have been present in pre-Saramaccan before marronage. Given the scenario developed here, there is no reason to expect that any such pre-Saramaccan African element would have been truly tonal, as opposed to having been adapted to an accentual system of some kind (one which presumably would have used pitch as a major acoustic cue of accent in one way or another).³⁰ Some "exceptions", therefore, may simply represent regular inheritance from the proto-language.

As a second general source of explanation for etymological deviations in whether words are tonal or accentual, we can simply invoke the possibility of analogical shift of words from one category into another. One would predict, for example, that an accentual word with a contour like

ØH could be moved into tonal class LH (as may have been the case for aki 'here', discussed in section 3.2). Similarly, a tonal word with an LH contour could have been analogically shifted into the accentual class of words with an ØH contour, either after it had entered Saramaccan or even as part of the transfer process. Given the nature of surface tonal patterns in the language, a general (untested) prediction would be that low-tone words or words with multiple high tones not in antepenultimate and penultimate position would be less likely to be transfered into the accentual class since their surface tonal patterns in isolation would not have accidentally resembled the surface tonal pattern of words in the accentual class.³¹

A final possible source of explanation for tonal etymological deviations relates to the fact that, as discussed in Good (2003) and Kramer (2002:586–600, 2004) (see also Ham (1999)), there are parallels between Saramaccan high-tone plateauing and tonal processes in Fon Gbe which suggest that the presence of plateauing in Saramaccan may be at least partially attributable to substrate influence. Of particular interest is the fact that Fon Gbe low tones can be realized as high in certain phonosyntactic environments—much like unspecified TBU's in Saramaccan. If the presence of plateauing in Saramaccan can be considered to be, at least partially, the result of substrate influence involving such a tone raising process, then perhaps some words of African origin were shifted into the pitch accent stratum of the lexicon by virtue of the fact that, in the speech of certain speakers of Gbe origin, their low tones would have showed the same or similar alternations to the unspecified tones in other words.³²

Of course, such general classes of explanation are no substitute for a thorough study of all deviant lexical items, but they at least suggest that the tonal etymological deviations need not be taken a priori as strong evidence against the general account for the development split lexicon developed here. If a detailed study of the lexicon were pursued, one would hope that it would be possible to devise criteria for phonological word classes going beyond their tonal behavior in order to discover different historical "layers" of vocabulary (see Parkvall (2000:111)) which could be used to corroborate tonal evidence for the time of entry of a given word into the language. Finding such non-tonal criteria seems promising for Saramaccan. Smith and Haabo (2007), for

example, suggest that a distinction between implosive and plain stops can be used to detect early English elements of the Saramaccan lexicon, as opposed to later English borrowings entering the language through the intermediary of Sranan. Similarly, Daeleman (1972:24) observes that some Kikongo elements retained their long vowels when transfered into Saramaccan and others did not—suggesting another possible non-tonal criterion which could be used to establish different diachronic layers of vocabulary.

6.3 Two other phonological clues

There are two final phenomena in Saramaccan which can be adduced as evidence for the language mixing account of the development of the split lexicon developed here. The first comes from arguments made in Good (2004b:604–607) that the phrasal phonology of Saramaccan resembles that of an accent language much more than that of a tone language. Specifically, the plateauing process described in section 3.3, the most pervasive and prominent phonological process in the language, is the sort of "tone-filling" process one would expect to find in an intonational language where tone is assigned phrasally.³³ Furthermore, if we were to ignore the tonal stratum in Saramaccan, the phonological aspects of the plateauing process could be described solely in terms of the position of accent—i.e., high tones would be assigned between accented syllables in a phonological phrase and boundary low tones would appear on both edges of the phrase attaching to any unspecified TBU's not between the accented syllables, giving the phrase its characteristic (L)H(L) contour. The ability to describe phrasal tonal patterns with respect to accent, and not tones, is a typical feature of an intonational language.

Of course, such an intonational analysis is not sufficient for Saramaccan because words fully specified for tone can "disrupt" the typical (L)H(L) tonal pattern. But the fact that we can characterize the general behavior of Saramaccan phrasal phonology in such terms, while citing tonal words as causing exceptions to this pattern, suggests that, historically, the tonal stratum was imposed on an accentual system. This conclusion is, of course, consistent with, and would, therefore, seem to support, the mixed language scenario developed here. However, see Kramer (2002:586–

600, 2004) for a different interpretation of some of facts of Saramaccan phrasal prosody which treats it as more directly related to Fon Gbe prosody than what is assumed here. (While Kramer's analyses would seem to challenge the idea that the nature of Saramaccan tonal plateauing supports the general proposal being made here, they otherwise would seem to have no impact on it.)

Another feature of Saramaccan grammar which can be viewed as providing evidence in support of the present proposal relates to the presence of labiovelar consonants kp and gb in the language (which in some dialects alternate freely with kw and gw). These consonants are also found as allophonic variants in Ndyuka, another maroon creole of Suriname (Smith and Haabo 2004:529–520). As discussed by Güldemann (forthcoming), based largely on Maddieson (2005), labiovelars are cross-linguistically quite rare outside of a belt of unrelated languages in the African Sahel region, which includes the Gbe languages. Like the case of the Ma'á lateral fricative, the appearance of these consonants in the Surinamese maroon creoles can be attributed to their ability to serve as emblems of group identity, given their perceptual salience and the complete lack of such consonants in European languages. Their presence in Saramaccan, of course, cannot be directly linked to the presence of the split lexicon. However, it is consistent with the arguments made here that there were sociolinguistic forces active in the early Saramaccan community pushing their speech to be saliently distinct from the dominant speech varieties of the plantations.

7 Conclusion

I have argued that the presence of the split lexicon in Saramaccan can be attributed to a limited type of language mixing which resulted in a tonal subsystem being incorporated into an otherwise accentual lexicon. The arguments given here differ from those given in Good (2004b:615–617) and Good (2004a) by attributing this special feature of the language not to some general process of "creolization" but, rather, to a sociolinguistically motivated process that affected the language after the escape of the maroons who would form the basis of the Saramaccan community. Specifically, the rise of the split lexicon would have been one of many processes contributing to the development of a new Saramaccan linguistic identity, different from that of slaves on the plantations. The

imposition of a stratum of tonal vocabulary into the language would have served as a linguistic emblem of distinctness from plantation societies. The presence of a high proportion of nativeborn Africans in the Saramaccan population during its formative period would have facilitated the introduction of such tonal vocabulary—much of it African-derived and pertaining to facets of the nascent culture—into the language since they would have already been native speakers of languages employing tone.

The conclusions here must be considered somewhat tentative. If they are to be verified, a crucial step would be a complete cataloging of the etymology and phonological behavior of as many contemporary Saramaccan words as possible, accounting for the prosodic behavior of each word. While a good deal of work has been done to discover African elements in Saramaccan (see, for example, Daeleman (1972), Smith (1987a), Smith (1987b)), such work needs to be supplemented by a detailed examination of the synchronic tonal properties of these words (and, of course, others) since, as discussed in section 3.1, the tonal properties of a word cannot always be reliably determined from published sources.

I would like to conclude this paper by making two final observations about the history of Saramaccan. The first relates to the interesting claims of Kramer (2002) with respect to a number of attested changes in Saramaccan that took place since the late eighteenth century that he considers to be the effect of substrate transfer: "These changes may be attributed to the presence of Kwa speakers... These changes are not considered to be part of creole genesis in this study, since when they occurred the creole was a native language for a substantial portion of the maroon population..." (Kramer 2002:622). If Kramer's characterization is accurate, it indicates that, after marronage, in addition to the process of mixing for Saramaccan proposed here, the language was being significantly influenced by another contact-induced process, interference through shift (Thomason and Kaufman 1988). Contemporary Saramaccan would, therefore, seem to be showing the effects of two distinct post-marronage contact features: bilingualism and language shift. We can imagine that, in some cases at least, the same speakers were the agents of both kinds of change, creating a mixed language in their role as bilinguals while inducing substrate effects as they began to use the

emerging Saramaccan creole as their primary language.

Finally, this paper would not be complete without pointing out that the proposals here for language mixing are not the first to be made for Saramaccan. The language has also been described as an example of an uncommon type of creole—a mixed lexifier creole, with significant portions of its basic vocabulary coming from both English and Portuguese (Bakker et al. 1995:165). Despite this mixture, as well as the mixture proposed here, Saramaccan still appears to be best assigned to the group of Atlantic English-based creoles on the basis of its overall grammar (Bakker et al. 1995:168). Nevertheless, it seems clear that this young language has had a surprisingly full history.

Notes

- * I would like to thank Bernard Comrie, Tom Güldemann, Marvin Kramer, John McWhorter, Richard Price, two anonymous reviewers, and audiences at the 2006 Meeting of the Linguistic Society of America in Albuquerque for their comments on earlier versions of this paper.
- 1. Similar work in this vein on creole phonology includes Plag (1999) and Plag and Schramm (2006) on English-based Atlantic creoles and Rougé and Schang (2006) on Sãotomense Creole.
- 2. The discussion here draws heavily on Arends (2002a) and Smith (2002).
- **3.** As pointed out by Smith (2002:146), while some have suggested that the Portuguese lexical element in Saramaccan is significant enough to classify it as a Portuguese-based creole (see Perl (1995:244)), this can only be done at the expense of ignoring a wealth of grammatical parallels between Saramaccan and Sranan and Ndyuka indicating that they form a genetic unit (see section 5.1), both of which are uncontroversially considered English-based creoles.
- **4.** While some scholars have assumed that Saramaccan was essentially formed de novo outside of the plantations by the descendants of the first generation of maroons (see, for example, Bickerton (1984:178) and Byrne (1987:32)), "[t]his view has been increasingly discredited of late" (Winford 2002:290). See Arends (1989:115–130) for a critique against the idea of a de novo formation for Sranan and Siegel (2006) for a recent summary of the reasons why the so-called Language Bioprogram Hypothesis (Bickerton 1984),

which is closely connected to the assumption that creoles generally arose independently in this way, is not considered valid by most creolists at present.

- **5.** An additional noteworthy demographic fact about the population of Surinam in the eighteenth century of some relevance here is that the ratio of Africans to Europeans was also comparatively high (Arends 1995:257–262).
- **6.** Consultant work on Saramaccan was done between 1998 and 2002 with multiple consultants living in the San Francisco Bay Area. Some of the data collection was done solely by the author, and some was done with the assistance of other linguists including John McWhorter and Marvin Kramer.
- 7. However, the transcription conventions of surface tones of compounds in sources like Rountree et al. (2000) are not always consistent. In some cases, citation forms of the components of the compound are given and in others the tone pattern of the compound itself is given. It is assumed here that, in such sources, nothing about the tonal patterns of compounds can be determined when citation forms of its components are transcribed but that, if those components are specifically transcribed as tonally distinct from their citation forms, this reflects the surface tonal patterns of the compound itself.
- **8.** The tones of the last four words in table 2 have not been verified with consultants, though see discussion of gogo' 'bottom' below for strong evidence that its first vowel is unspecified for tone.
- 9. The tone of this word was not verified with a consultant. However, the compound form $mam\acute{a}-g\acute{o}g\acute{o}-t\acute{a}nda$ 'mother-back-tooth' (which means "molar"), where the first TBU of $gog\acute{o}$ is transcribed as high in Rountree et al. (2000), provides good evidence that this TBU is unspecified for tone since appearing with a high tone would be the normal behavior of a TBU unspecified for tone in this context. This is because compounds are subject to the process of high-tone plateauing discussed in section 3.3 (see also Good (2004b:599)), and the first TBU of $gog\acute{o}$ in this compound is flanked by high-tone TBU's, providing the requisite phonological environment for such plateauing.
- **10.** Voorhoeve (1961) is the seminal work on Saramaccan tonal phrasal phonology, and Rountree (1972) was the first published work to recognize a three-way tonal distinction in Saramaccan. Ham (1999), Good (2003), and Kramer (2004) discuss possible substrate influences on Saramaccan phrasal tone patterns. Sentences and phrases not cited as coming from a specific source were collected during consultant work.

- 11. I have identified at least one monomorphemic word which is exceptional in this regard this: anákìtá 'biting ant' which has the tonal form ØHLH. Voorhoeve (1961:154) identifies about ten words (out of a sample of 1500 words) which seem to follow this same pattern. All but one of the words he gives begin with a like anákìtá, and the one exception to this, obílògbén 'a type of snake', also begins with a vowel.
- **12.** There are numerous examples of minimal pairs involving surface high-tone placement in words containing TBU's unspecified for tone, clearly indicating that the location of their surface tones involves some sort of lexical specification (here understood as lexically contrastive pitch accent). Examples of such minimal pairs include *bígi* 'big' vs. *bigí* 'begin', *kánda* 'candle' vs. *kandá* 'sing', and *óto* 'story' vs. *otó* 'auto'. (The tone on these latter two words has not been verified with consultants.)
- 13. An examination of the word list found in Rountree et al. (2000) reveals numerous apparent exceptions to this generalization involving antepenultimate accent. Many of these exceptions are morphologically complex (e.g., compounds or reduplications), accounting for their deviation from this pattern. Some of the other exceptions may very well involve mistranscriptions of the tone of the penultimate vowel which, in many words, can be quite reduced and whose tone bears a negligible functional load, making such a mistranscription of minor import outside of linguistic studies of Saramaccan prosody. However, I have corroborated the transcription of several of the exceptional words with my consultants, including the words *akúsuwe* 'small rodent type' and *adjáansi* 'spider'. The behavior of clearly recent loans into Saramaccan, for example, *fékísi* 'salve or oil with menthol' from the brand name *Vick's* clearly indicates the (Ø)HHØ pattern is the productive one. It is not clear what significance the exceptions might have to an understanding of the historical development of the Saramaccan lexicon, though it seems worth mentioning that, impressionistically, the majority of these words appear to be of non-European provenance.
- 14. It should be noted that, in a language with a prosodic split like what is being described here for Saramaccan, it does not appear to be possible to make a distinction between accented monomoraic words surfacing with a high tone as a reflex of pitch accent and words with their one TBU lexically specified with a high tone. In the present description such words are treated as tonal. While this choice has consequences for matters of phonological analysis, it has little impact on the historical questions of primary interest here. In principle, such words could either be regular reflexes of monosyllabic high-tone words of African origin or monosyllabic stressed words of European origin, and in fact cases of both are attested. The word $t\hat{u}$ 'two'

is an example of a monosyllabic stressed word European origin appearing with a high tone on its one TBU in Saramaccan, and the word $m\dot{\varepsilon}$ 'thresh' from Gbe $m\dot{e}/m\dot{\tilde{e}}$ 'grind fine' (Smith 1987a) is an example of a monosyllabic high-tone word of African origin appearing as such in the language.

- **15.** There are also cases of words fully-specified for tone entering into minimal pairs with words containing unspecified TBU's taken here to be marked for pitch accent. Examples include, $j \dot{a} \dot{a}$ 'sow' vs. $j \dot{a} \dot{a}$ 'year' and $b \dot{b} \dot{s} \dot{a}$ 'loosen' vs. $b \dot{s} \dot{s} \dot{a}$ 'brush'.
- **16.** By saying that the surface tones in words marked for pitch accent *can* be predicted via an abstract lexical accent mark, I do not mean to imply they must necessarily be analyzed as such. Clearly the Saramaccan data is open to a range of different phonological analyses. The crucial point is that the nature of the prosodic system in one set of words in Saramaccan is quite distinct in terms of allowable pitch contrasts from the prosodic system in the other in a way that can be descriptively characterized as an opposition between pitch accented words and tonal words.
- 17. It might be the case that some of the English-based Atlantic creoles spoken in Africa have similarly complex tone systems, though this is hard to determine from published descriptions. Faraclas (1996:270–275), for example, describes a fairly complex tone system for Nigerian Pidgin, though the description is too abbreviated to ascertain exactly how the patterns he describes fit into an overall prosodic system. Elugbe (2004:838–840), by contrast, explicitly rejects an analysis of Nigerian Pidgin as a tone language.
- **18.** If Saramaccan were to be placed at or near the tonal extreme of such a cline, Jamaican, following the detailed analysis presented in Gooden (2003), would seem to be a good example of a creole at or near the accentual extreme, insofar as its prosodic system seems best classified as a stress system.
- 19. The exact nature of these tonal features is a matter of debate. Remijsen and van Heuven (2005) interpret at least some of them as manifestations of word accent, of the sort described for Scandinavian languages. Kouwenberg (2004) treats them as tones.
- **20.** Of course, this is not to say that such a creole would have as complex a tonal system as the African lexifiers. As McWhorter (1998:793–796) points out, tone systems appear to simplify in creolization. It is simply that the system we see in Saramaccan would seem unexpected if formed almost completely by native speakers of African languages and their descendants, especially given that pitch accent words also show

properties associated with stress as discussed in section 3.4, making the majority of the Saramaccan lexicon look distinctly "European".

- 21. Smith and Adamson (2006:217) suggest that earlier varieties of Sranan may have once had a tonal system like that of contemporary Saramaccan. While reconstructing Sranan as being more "tonal" in the past than it is at present does not seem unreasonable, reconstructing it as having a split lexicon must be considered speculative. Nevertheless, it can not be ruled out entirely that proto-Sranan may have exhibited something like Saramaccan's prosodic split. And, in fact, the account of the development of Saramaccan to be developed in section 6 would be consistent with the presence of early Sranan varieties with prosodic features closer to contemporary Saramaccan than what is found today. I, therefore, do not mean to exclude the possibility that the Saramaccan split lexicon may be reflective of an archaic situation specific to the Suriname creoles.
- **22.** Unlike Ndyuka, tonal phenomena in contemporary Sranan are quite marginal in nature (Smith and Adamson 2006), though it has been suggested earlier varieties of Sranan were more "tonal" (see, e.g., Devonish (1989:28) and Smith and Adamson (2006:217)).
- 23. While there are dangers in extrapolating past attitudes from contemporary ones, it is worth mentioning in this context that, in the present day, Saramaccans retain an identity quite distinct from that of the coastal blacks and non-blacks of Suriname (Price 1983:12).
- **24.** It is not completely clear what these creole varieties would have been. Some would certainly have been closely associated with what is now called Sranan. But there is also a possibility that Saramaccan speakers would have been in contact with speakers of a plantation variety containing the same Portuguese element as that found in contemporary Saramaccan (Smith 2002:139–141).
- **25.** I have also encountered some indication of another possible motivating factor to create a unique linguistic identity—the ability to speak without being understood by whites on plantations. I will return to this below in this section.
- **26.** While it does not pertain specifically to the split lexicon, under such a scenario, we could also possibly account for the development of a pitch accent system in Saramaccan, as opposed to a stress system like that found in Sranan, to the desire to create a distinct Saramaccan "accent".

- 27. Lorenzino (1998:94–95) also notes certain phonological similarities between Saramaccan and Angolar suggesting that comparative work on the two may be valuable in coming to a better understanding of Angolar phonology. The present work would also suggest that comparative work on the two languages may be valuable—specifically, in analyzing the development of each language's lexicon.
- 28. While I am not aware of any direct evidence for the presence of such speech varieties used for general purposes, Price's (2007) discussion of esoteric languages of the Saramaccan's—highly specialized speech registers (used, for example, in rituals) which can be strikingly divergent from contemporary Saramaccan—shows that they exhibit extensive African lexical influence, to a degree far beyond what is found in the standard language. Thus, there is direct evidence of unambiguously Africanized registers in Saramaccan, even if there is not direct evidence of any particular register which could be singled out as the source of the split lexicon.
- 29. Examples of adoption of colonial languages as official languages in certain countries (e.g., many countries of Subsaharan Africa or India) may also offer a relevant parallel in this context. Despite possible historical taint associated with colonial languages, after independence, the fact that they were not the language of any specific ethnic group in many countries made them desirable choices for official languages since their use would not have been seen as favoring one indigenous group over another. Perhaps similar factors rendered a creole variety as the most "neutral" linguistic choice as a lingua franca in the early Saramaccan community.
- **30.** An open question here is what the phonetic correlates of accent may have been in proto-Sranan or even pre-Saramaccan. It is not clear to me how far back in Saramaccan one should reconstruct *pitch* accent specifically, as opposed to some other type of accent (though see the work of Devonish (1989, 2002) for relevant proposals). It may even have been the case, following some of the discussion in 6.1, that there was variation in the phonetic expression of accent at the earliest stages of proto-Sranan wherein some varieties trended towards a pitch accent type, like what is found in the majority of the vocabulary in contemporary Saramaccan, and some trended towards realization of accent as stress, like what is found in contemporary Sranan.
- **31.** It should also be pointed out, in this context, that monomoraic high-tone words of European provenance may be best analyzed as tonal from a synchronic perspective, but, since their shape simply would not al-

low them to have TBU's unspecified for tone, such "tonal" classification would not mean they should be considered etymologically exceptional.

- **32.** If these ideas are correct, they would seem to predict that words of Gbe origin would be more likely to show etymological deviations in their tones than words of Kikongo origin since, presumably, Gbe speakers would have been more likely to target tones in native Gbe words in a substrate-influenced phrasal tonal process than words of African provenance not from their native language. The relevant research needed to test this prediction has not been undertaken.
- **33.** While this process does bear some similarities to tonal processes found in Gbe, as discussed in section 6.2, suggesting substrate influence, its overall character is more typical of what would be expected to be found in an intonational language rather than a tone language suggesting that Gbe influence on the rule, to the extent that there may have been any, primarily influenced aspects of its surface realization rather than its underlying character. See Good (2003:120) for discussion of some of the similarities and differences between Saramaccan tonal plateauing and the relevant processes attested in Fon Gbe.

References

- Aceto, Michael. 1996. "Early Saramaccan syllable structure: An analysis of complex onsets from Schumann's 1778 manuscript". *Journal of Pidgin and Creole Languages* 11:23–44.
- Arends, Jacques. 1989. Syntactic developments in Sranan: Creolization as a gradual process. Catholic University of Nijmegen, Ph.D. dissertation.
- Arends, Jacques. 1995. "Demographic factors in the formation of Sranan". In J. Arends (ed.), *The early stages of creolization*, 233–277. Amsterdam: Benjamins.
- Arends, Jacques. 2002a. "The history of the Surinamese creoles I: A sociohistorical survey". In E. B. Carlin and J. Arends (eds.), *Atlas of the languages of Suriname*, 115–130. Leiden: KITLV Press.
- Arends, Jacques. 2002b. "Young languages, old texts: Early documents in the Surinamese creoles". In E. B. Carlin and J. Arends (eds.), *Atlas of the languages of Suriname*, 183–205. Leiden: KITLV Press.
- Bakker, Peter. 1994. "Michif". In P. Bakker and M. Mous (eds.), *Mixed languages: 15 case studies in language intertwining*, 13–33. Amsterdam: IFOTT.

- Bakker, Peter. 1997. A language of our own. Oxford: Oxford University.
- Bakker, Peter, Norval Smith and Tonjes Veenstra. 1995. "Saramaccan". In J. Arends, P. Muysken, and N. Smith (eds.), *Pidins and creoles: An introduction*, 165–178. Amsterdam: Benjamins.
- Baxter, Alan N. 2004. "Review of *The Angolar Creole Portuguese of São Tomé: Its grammar and sociolin-*guistic history". Journal of Pidgin and Creole Languages 19:383–388.
- Beckman, Mary E. 1986. Stress and non-stress accent. Dordrecht: Foris.
- Bickerton, Derek. 1984. "The language bioprogam hypothesis". *The Behavioral and Brain Sciences* 7:173–221.
- Byrne, Francis. 1987. Grammatical relations in a radical creole. Amsterdam: Benjamins.
- Daeleman, Jan. 1972. "Kongo elements in Saramacca Tongo". Journal of African Linguistics 11:1-44.
- Devonish, Hubert. 1989. Talking in tones. London: Karia.
- Devonish, Hubert. 2002. Talking rhythm stressing tone. Kingston, Jamaica: Arawak.
- Elugbe, Ben. 2004. "Nigerian Pidgin English: Phonology". In E. W. Schneider, K. Burridge, B. Kortmann, R. Mesthrie, and C. Upton (eds.), *Handbook of varieties of English: Volume I: Phonology*, 831–841. Berlin and New York: Mouton.
- Faraclas, Nicholas G. 1996. Nigerian Pidgin. London and New York: Routledge.
- Good, Jeff. 2003. "Tonal morphology in a creole: High-tone raising in Saramaccan serial verb constructions". In G. Booij and J. van Marle (eds.), *Yearbook of Morphology* 2002, 105–134. Dordrecht: Kluwer.
- Good, Jeff. 2004a. "Split prosody and creole simplicity: The case of Saramaccan". *Journal of Portuguese Linguistics* 3:11–30.
- Good, Jeff. 2004b. "Tone and accent in Saramaccan: Charting a deep split in the phonology of a language". Lingua 114:575–619.
- Good, Jeff. 2006. "The phonetics of tone in Saramaccan". In A. Deumert and S. Durrleman (eds.), *Structure* and variation in language contact, 9–28. Amsterdam and Philadelphia: Benjamins.
- Gooden, Shelome A. 2003. *The phonology and phonetics of Jamaican Creole reduplication*. Columbus, Ohio: The Ohio State University, Ph.D. Dissertation.

- Güldemann, Tom. forthcoming. "The Macro-Sudan belt: Towards identifying a linguistic area in northern Sub-Saharan Africa". In B. Heine and D. Nurse (eds.), *A linguistic geography of Africa*. Cambridge: Cambridge University.
- Ham, William. 1999. "Tone sandhi in Saramaccan: A case of substrate transfer?". *Journal of Pidgin and Creole Languages* 14:45–92.
- Huttar, George L. and Mary L. Huttar. 1972. "Notes on Djuka phonology". In J. E. Grimes (ed.), *Languages of the Guianas*, 1–11. Norman, Oklahoma: SIL.
- Huttar, George L. and Mary L. Huttar. 1994. Ndyuka. London: Routledge.
- Hyman, Larry M. 1978. "Tone and/or accent". In D. J. Napoli (ed.), *Elements of tone, stress and intonation*, 1–20. Washington: Georgetown University Press.
- Itô, Junko and Armin Mester. 1995. "Japanese phonology". In J. A. Goldsmith (ed.), *The handbook of phonological theory*, 817–838. Oxford: Blackwell.
- James, Winford. 2003. "The role of tone and rhyme structure in the organisation of grammatical morphemes in Tobagonian". In I. Plag (ed.), *Phonology and morphology of creole languages*, 165–192. Tübingen: Niemeyer.
- Kiparsky, Paul. 1982. "Lexical morphology and phonology". In I. Yang (ed.), *Linguistics in the morning calm*, 3–91. Seoul: Hanshin.
- Kouwenberg, Silvia. 2004. "The grammatical function of Papiamentu tone". *Journal of Portuguese Linguistics* 3:55–69.
- Kramer, Marvin. 2002. *Substrate transfer in Saramaccan Creole*. Berkeley: University of California, Berkeley, Ph.D. Dissertation.
- Kramer, Marvin. 2004. "High tone spread in Saramaccan serial verb constructions". *Journal of Portuguese Linguistics* 3:2.
- Lorenzino, Gerardo A. 1998. The Angolar Creole: Portuguese and São Tomé. Munich: Lincom.
- Maddieson, Ian M. 2005. "Presence of uncommon consonants". In M. Haspelmath, M. S. Dryer, D. Gil, and B. Comrie (eds.), *World atlas of language structures*, 82–85. Oxford: Oxford University.

- Matras, Yaron and Peter Bakker. 2003. "The study of mixed languages". In Y. Matras and P. Bakker (eds.), *The mixed language debate: Theoretical and empirical advances*, 1–20. Berlin: Mouton.
- McWhorter, John H. 1998. "Identifying the creole prototype: Vindicating a typological class". *Language* 74:788–818.
- McWhorter, John H. 2000. The missing Spanish creoles. Berkeley: University of California.
- Migge, Bettina M. 1998. Substrate influence in the formation of the Surinamese Plantation Creole: A consideration of sociohistorical and linguistic data from Ndyuka and Gbe. Columbus, Ohio: The Ohio State University, Ph.D. Dissertation.
- Mous, Maarten. 1994. "Ma'a or Mbugu". In P. Bakker and M. Mous (eds.), *Mixed languages: 15 case studies in language intertwining*, 175–200. Amsterdam: IFOTT.
- Mous, Maarten. 2003a. "The linguistic properties of lexical manipulation and its relevance for Ma'a". In Y. Matras and P. Bakker (eds.), *The mixed language debate: Theoretical and empirical advances*, 209–235. Berlin: Mouton.
- Mous, Maarten. 2003b. *The Making of a Mixed Language: The case of Ma'a/Mbugu*. Amsterdam: Benjamins.
- Myers-Scotton, Carol. 2003. "What lies beneath: Split (mixed) languages as contact phenomena". In Y. Matras and P. Bakker (eds.), *The mixed language debate: Theoretical and empirical advances*, 73–106. Berlin: Mouton.
- Parkvall, Mikael. 2000. Out of Africa: African influences in Atlantic Creoles. London: Battlebridge.
- Perl, Matthias. 1995. "Part II: Saramaccan". In J. Arends and M. Perl (eds.), *Early Suriname creole texts*, 243–250. Frankfurt: Ibero-American.
- Plag, Ingo. 1999. "Where does the English element of Sranan come from? Some phonological evidence from early St. Kitts and Barbados texts". In P. Baker and A. Bruyn (eds.), *The late 18th century texts of Samuel Augustus Mathews in perspective*, 173–191. London: University of Westminster.
- Plag, Ingo and Mareile Schramm. 2006. "Early creole syllable structure: A cross-linguistic survey of the earliest attested varieties of Saramaccan, Sranan, St. Kitts and Jamaican,". In P. Bhatt and I. Plag (eds.), *The structure of creole words*, 130–150. Tuebingen: Niemeyer.

- Postma, Johannes. 1990. *The Dutch in the Atlantic slave trade, 1600–1815*. Cambridge: Cambridge University.
- Price, Richard. 1976. The Guiana Maroons. Baltimore: Johns Hopkins.
- Price, Richard. 1983. *The first time: The historical vision of an Afro-American people*. Baltimore: Johns Hopkins.
- Price, Richard. 2007. *Travels with Tooy: History, memory, and the African American imagination*. Chicago: University of Chicago.
- Price, Richard and Sally Price. 1976. "Secret play languages in Saramaka: Linguistic disguise in a Caribbean creole". In B. Kirshenblatt-Gimblett (ed.), *Speech play*, 37–50. Philadelphia: University of Pennsylvania.
- Remijsen, Bert. 2001. Word-prosodic systems of Raja Ampat Languages. Utrecht: LOT.
- Remijsen, Bert. 2002. "Lexically contrastive stress accent and lexical tone in Ma'ya". In C. Gussenhoven and N. Warner (eds.), *Laboratory phonology VII*, 585–614. Berlin: Mouton de Gruyter.
- Remijsen, Bert and Vincent J. van Heuven. 2005. "Stress, tone, and discourse prominence in Curação Papiamentu". *Phonology* 22:205–235.
- Rivera-Castillo, Yolanda and Lucy Pickering. 2004. "Phonetic correlates of stress and tone in a mixed system". *Journal of Pigin and Creole Languages* 19:261–284.
- Rosen, Nicole. 2006. "Stress assignment in Michif". Sprachtypologie und Universalienforschung 59:170–190.
- Rougé, Jean-Louis and Emmanuel Schang. 2006. "The origin of the liquid consonant in Saotomense Creole". In P. Bhatt and I. Plag (eds.), *The structure of creole words*, 23–37. Tuebingen: Niemeyer.
- Rountree, S. Catherine. 1972. "Saramaccan tone in relation to intonation and grammar". *Lingua* 29:308–325.
- Rountree, S. Catherine, J. Asodanoe and Naomi Glock. 2000. *Saramaccan word list (with idioms)*. Paramaribo: Instituut voor Taalwetenschap (SIL).
- Schwegler, Armin. 2000. "On the (sensational) survival of Kikongo in 20th-century Cuba". *Journal of Pidgin and Creole Languages* 15:159–164.

- Siegel, Jeff. 2006. "On the language bioprogram hypothesis". Language 82:2–4.
- Smith, Norval. 1987a. Comparative word list of Gbe and Saramaccan. Ms. University of Amsterdam.
- Smith, Norval. 1987b. *The genesis of the creole languages of Surinam*. Amsterdam: University of Amsterdam, Ph.D. dissertation.
- Smith, Norval. 2002. "The history of the Surinamese creoles II: Origin and differentiation". In E. B. Carlin and J. Arends (eds.), *Atlas of the languages of Suriname*, 131–151. Leiden: KITLV Press.
- Smith, Norval and Lilian Adamson. 2006. "Tonal phenomena in Sranan". *Sprachtypologie und Universalienforschung* 59:211–218.
- Smith, Norval and Vinije Haabo. 2004. "Suriname creoles: Phonology". In E. W. Schneider, K. Burridge,
 B. Kortmann, R. Mesthrie, and C. Upton (eds.), *Handbook of varieties of English: Volume I: Phonology*, 525–564. Berlin and New York: Mouton.
- Smith, Norval and Vinije Haabo. 2007. "The Saramaccan implosives: Tools for linguistic archaeology?". *Journal of Pidgin and Creole Linguistics* 22:101–122.
- Sutcliffe, David. 2003. "African American English suprasegmentals: A study of pitch patterns in the Black English of the United States". In I. Plag (ed.), *Phonology and morphology of creole languages*, 147–162. Tübingen: Niemeyer.
- Thomason, Sarah G. 1997a. "Introduction". In S. G. Thomason (ed.), *Contact languages: A wider perspective*, 1–7. Amsterdam: Benjamins.
- Thomason, Sarah G. 1997b. "Ma'a (Mbugu)". In S. G. Thomason (ed.), *Contact languages: A wider perspective*, 469–487. Amsterdam: Benjamins.
- Thomason, Sarah G. 1997c. "Mednyj Aleut". In S. G. Thomason (ed.), *Contact languages: A wider perspective*, 449–68. Amsterdam: Benjamins.
- Thomason, Sarah G. 2003. "Social factors and linguistics processes in the emergence of stable mixed languages". In Y. Matras and P. Bakker (eds.), *The mixed language debate: Theoretical and empirical advances*, 21–39. Berlin: Mouton.
- Thomason, Sarah G. and Terrence Kaufman. 1988. *Language contact, creolization, and genetic linguistics*.

 Berkeley: University of California.

Voorhoeve, Jan. 1961. "Le ton et la grammaire dans le Saramaccan". Word 17:146–163.

Winford, Donald. 2002. "Creoles in the context of contact linguistics". In G. Gilbert (ed.), *Pidgin and creole linguistics in the twenty-first century*, 287–354. New York: Peter Lang.

Author's Address

Jeff Good

Department of Linguistics

University at Buffalo

609 Baldy Hall

Buffalo, NY 14260

jcgood@buffalo.edu