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Substrate influence on the emergence of the TMA systems of the Surinamese creoles*

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Although the Surinamese Creoles have figured prominently in discussions about Creole genesis, little is still known about the origin of their TMA system, a central area of grammar that has received much attention in this debate. In this paper we assess the relative contribution of the primary substrate input, varieties of Gbe, to the TMA system. Drawing on both contemporary data from several Surinamese Creoles and varieties of Gbe, and historical data from Sranan Tongo, we show that the substrate was clearly responsible for the emergence of some aspect and tense categories. However, in itself, substrate influence cannot explain the emergence of the entire Creole tense and aspect system. Other processes such as internal change, superstrate influence etc. also played an important role.

Keywords: Suriname Creoles, Gbe, substrate influence, TMA

1. Introduction

A variety of different explanations have been offered for the origins of Creole TMA systems, and for those of the Surinamese Creoles in particular. On the one hand, Bickerton (1981, 1984) used Sranan Tongo to illustrate his claim that the core categories shared among Atlantic Creoles, an "Anterior" Tense, an "Irrealis"

mood and a "Non-punctual Aspect", were *ab ovo* creations by children appealing to innate linguistic knowledge. More recently, Bally (2004) claimed that the relexification hypothesis of Creole origins, which Lefebvre (1996) used to explain the emergence of the Haitian Creole (HC) TMA system, could also be extended to Sa(r)amaka, a sister language of Sranan Tongo. This view is diametrically opposed to that of the so-called "superstratist" view of French-lexicon creole formation, which maintains that most of creole grammar can be traced to the lexifier language, which was available as a target in the earlier stages of contact (Chaudenson 1992, 2001). To add to the disagreement, McWhorter (1999:8, 2004) apparently claims that internal factors played the primary role in the emergence of the TMA system of Sranan Tongo. He specifically rejects any significant role for the substrate languages.

The present paper is, in part, an attempt to assess these conflicting views, with particular reference to the Surinamese creoles. Most of our focus here will be on Sranan Tongo and the Eastern Maroon Creoles, particularly Pamaka and Ndyuka, with some reference to Saamaka where appropriate.

Our approach here, like that of superstratists and substratists alike, is based on the assumption that Creole formation involved a process of second language acquisition. This process was shaped by three complementary factors: the nature and extent of superstrate input, the type and degree of substrate influence, and internally-motivated developments. We assume that the roles played by these factors were guided by universals of language learning and restructuring. Differences among Creoles depend crucially on the extent to which one or the other of these factors prevailed in the contact situation. This in turn depends on a range of socio-demographic factors that have been discussed in great detail in the literature (Arends 1995, Chaudenson 2001, Mufwene 2001, Singler 1995 etc.).

In 17th century Suriname, the unavailability of English as a continuing input meant that the creators of these Creoles relied far more heavily on their L1 grammars to develop the Creole's resources. This is supported by ample evidence of strong substrate influence on various aspects of their grammar (see the Introduction to this volume). We will argue that the TMA systems of the Surinamese Creoles also provide evidence of such substrate influence. Yet we do not claim that such influence by itself explains the emergence of these TMA systems. There is also evidence of some influence from the European languages, as well as internal developments. Those TMA categories that show similarity to their Gbe counterparts are the main focus of this paper.

2. Establishing substrate influence on Creole TMA systems

A full account of substrate influnce requires that we consider all of those substrate languages that had a primary role to play in Creole formation. In this paper, however, we focus our attention on the influence of the Gbe languages since both sociohistorical and linguistic evidence suggest that speakers of Gbe were most numerous in the formation of the early plantation varieties (1690–1720) from which all modern creoles of Suriname descend. Other languages such as Kikongo and Akan were represented in the contact situation to a lesser extent. We leave the role of these languages for later research.

The approach we take here is summed up as follows. First, our arguments are based on a comparison across several representative Gbe languages and Surinamese creoles.[1] The Gbe languages include Ajagbe, Gengbe, Maxigbe, Wacigbe, Xwelagbe, and Xwlagbe. They are representative of the five major sub-groups identified by Capo (1988). For the Surinamese Creoles we focus on Sranan Tongo and the Eastern Maroon Creoles, Pamaka and Ndyuka. Where appropriate we also include data from Saamaka. Second, our comparison is based on well-known frameworks for the investigation of TMA systems cross-linguistically (see below). Moreover, our analysis of Gbe Tense/Aspect benefits from the intuitions and judgments of linguists who are themselves native speakers of Gbe languages.

3. A framework for comparing tense-aspect systems

The framework we use to investigate the TA system of the Creoles of Suriname and Gbe is modeled after typological studies of TMA systems such as Dahl (1985), Comrie (1976, 1985) and Bybee et al (1994) and has been discussed more fully in other studies (e.g., Winford 2000a, 2000b). The basic assumptions of the framework can be outlined as follows. First, our analysis is based on the actual TMA categories themselves. Second, it is crucial for our purposes to distinguish between the TMA categories which are grammaticized in a language, and the notional or semantic categories that may be expressed in various ways by different TMA categories, as well as by other means such as adverbials. Third, we assume, with Dahl, that every TMA category has a dominant meaning and often has other secondary

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1. We are of course aware that our data from contemporary Gbe languages may not accurately reflect the way these languages looked some four centuries ago, when they were introduced into Suriname. But, as Thomason (1993) suggests, four hundred years is not a very long time in the history of a language. Also, our data were elicited from speakers of more conservative speakers of contemporary Gbe.

meanings as well. In general, the dominant meaning of a category is represented in its primary or prototypical uses, while secondary meanings are contextually determined interpretations that arise from more peripheral uses of the category.

The distinctions outlined here are crucial to our comparison, for the simple reason that a close match between languages with respect to both meaning and uses of a TMA category is a powerful argument for similarity between them. If we can demonstrate such close similarity between Gbe and Surinamese TMA systems, this would be strong evidence of continuity from the former to the latter. We must therefore emphasize the crucial role of the discourse context in deciding the interpretation of TMA categories. For these reasons, we employed methods of data collection designed to capture as much discourse context as possible for the use of each tense/aspect category.

3.1   Data collection

The data for the Surinamese Creoles were collected from relatively conservative native speakers, e.g. Afro-Surinamese working-class groups in the capital, Paramaribo, and rural groups in Coronie in the case of Sranan Tongo and monolingual subsistence farmers living in the interior villages, or monolinguals and bilinguals from coastal settlements in French Guiana in which maroons are clearly dominant in the case of maroons. The Gbe data were collected in Benin from speakers of each of the five major subgroups of Gbe in Capo's (1988) classification. They are monolingual and bilingual speakers who grew up in the rural villages and have lived there for most of their lives.

The data consist of two types: tape recordings of free conversation among native speakers of the languages in question, and (b) elicitations from selected informants employing a modified version of Dahl's (1985) questionnaire. The questionnaire consisted of a number of sentences and short connected texts in English (for Sranan) and French (for Gbe and Pamaka, Ndjuka), which were offered for translation to informants. They were given clear indications, with additional explanation where necessary, of the contexts in which they were to envisage the sentences being uttered. In addition to providing equivalents of the English and French sample sentences, the informants were also encouraged to supply additional examples of their own, to evaluate differences in meaning between similar constructions, and to assess sample sentences constructed by the fieldworkers/authors. The elicited data were also evaluated and discussed in some detail by linguists who are native speakers of Gbe varieties.

3.2 Substrate influence and SLA

Researchers in second language acquisition (SLA) and creole formation generally agree that learners' L1s exert varying degrees of influence on the acquisition of the target language (TL), or L2. Such influence has been referred to as either "substratum influence" or "transfer" (Siegel 1997, 1999, 2003; DeGraff 1999, etc.). On the other hand, researchers such as Lefebvre (1996, 1998) and Lumsden (1999) argue that the process underlying substratum influence is relexification, a mental process that builds new lexical entries by combining superstrate phonological forms with the syntactic and semantic information of substrate lexical categories (Lumsden 1999: 129). These two approaches in fact share much in common. Lefebvre (1998:376) points out that "the type of data claimed to be associated with the notion of transfer in creole genesis corresponds to the result of the process of relexification." In both scenarios, learners reinterpret lexical items in the available target input as equivalents of L1 forms. There is also general consensus that such reinterpretation is subject to certain constraints. Siegel (1997, 2000, 2003) argues that such constraints fall into two broad categories. One consists of "availability" constraints, among them perceptual salience and congruence, which determine the likelihood that a substrate feature may be transferred to a creole (Siegel 2000:83). Advocates of the relexification hypothesis also recognize these constraints (Lumsden (1999:140).

Siegel further suggests that "reinforcement principles", including frequency, operate to determine "which of the transferred features will actually be retained in the creole" (2000:83). Thus, features or structures that are common to the substrates are particularly likely to be retained, and that the greater the typological similarity among the substrates, the more likely it is that similar kinds of substrate influence will occur in learners' various interlanguages.

Following on the assumptions of the two approaches just discussed, we would hypothesize, first, that superstrate-derived forms whose semantics (partly) match those of substrate functional heads would be selected to express the functional categories of the Creole. We would also expect that grammatical categories and their means of expression (preverbal, periphrastic) that are shared across the (dominant) substrates are also most likely to be retained in the Creole.

4. Tense and aspect in the Surinamese creoles

Table 1 provides an overview of the tense and aspect categories in four comtemporary Surinamese creoles. Sources include Winford (2000a) for Sranan, Huttar & Huttar (1994) for Ndyuka and Rountree (1992) for Saamaka, but Table 1 is based primarily on our own analysis.

Table 1. Tense/aspect in contemporary Sranan, Pamaka and Saamaka. (All forms are preverbal, except for Perfect *kaba*, which is VP-final.)

Forms				Category	Meanings
SN	PM	ND	SM		
Tense					
ben	*be*	*be*	*bi*	<u>Relative Past</u>	Past events 'distanced' from S. Background past or 'framepast' especially in narratives. Past in relation to another reference point in the past.
o	*o*	*o*	*o*	<u>Future</u>	Later time reference; Intention or prediction. Predictability.
Aspect					
ø	ø	ø	ø	<u>Perfective</u>	States or events seen as unanalyzed wholes.
e	*e*	*e*	*ta*	<u>Imperfective</u>	Situations (both states and occurrences) seen as 'unbounded' and ongoing at reference time, which encompasses situations that are repeated, habitual, in progress or continuous.
k(a)ba	*kaba*	*kaba*	*kaa*	<u>Completive</u>[a]	Situations seen as completed. Conveys the meaning 'already.' Expresses the sense of a 'perfect of result' with non-statives, and the sense of a state beginning in the past and continuing to the reference point with statives.

[a] The category we have labeled 'Completive" might just as well be labeled "Perfect." In any case, we regard it as a subtype of the cross-linguistic category PERFECT (Dahl 1985).

Table 2. The tense and aspect categories in the early Sranan texts

Category	Tense		Aspect		
	Past	Future	Imperfective	Completive	Perfective
Early Sranan	ben	sa, go (?), de go	de	kaba	Ø

The expression of tense and aspect in the early texts (van Dyk 1765, Schumann 1783 and others) has been studied in some detail by van den Berg (to appear), who provides a summary of the forms and their primary meanings, reproduced here in amended form as Table 2.

The categories and forms used in early Saamaka as described by Riemer (1779) and Schumann (1778) are identical, except that imperfective is marked by (< *tan* 'stand, stay') and the future form is consequently realized as *tan go*.

A comparison of the two tables reveals that all of the tense/aspect categories of the modern creoles, with the exception of Future *(g)o*, are already well established in the early texts. Moreover, the forms expressing these categories are the same (with some phonological variation), and their positioning and interpretation match. In the case of future time reference, however, there are some differences between the early texts and the modern creoles, which will be discussed further

below (cf. Section 5.5.2). It should also be obvious that none of the forms used to express tense/aspect categories in the Surinamese creoles has any counterpart with similar function morphemes in English, and hence could not have been modeled on the latter. We will now provide an overview of the tense/aspect categories of Gbe.

4.1 Tense and Aspect in Gbe

As Table 3 shows, the six Gbe varieties chosen for this paper share the same inventory of Tense and Aspect categories and make use of similar strategies to express them. These findings confirm those of other researchers such as Essegbey (1999, 2004), Fabb (1992), Jondoh (1980), Kinyalolo (1992), and Lefebvre & Brousseau (2002). Table 3 only includes what could be called the core categories of the Gbe tense and aspect system.

Table 3 shows that the main difference among the varieties of Gbe emerge in the expression of the aspectual categories. All Gbe varieties have a Perfect, Progressive and Habitual category and several varieties also have a Prospective category but they employ partially different means to encode them. Habitual and Perfect aspect, for instance, are expressed by a preverbal marker in some varieties and by a postverbal marker in others.

A comparison of Table 3 (Gbe) with Tables 1 and 2 above (Surinamese Creoles) reveals several differences between the two language groups. As far as tense is concerned, the Gbe varieties only have one category (Future) while the Surinamese Creoles have two. In Gbe, the basic temporal opposition is between Future and non-future; in the Creoles, there is an opposition between Future and Past. In the area of aspect, the Gbe varieties have distinct Habitual and Progressive categories while the Creoles of Suriname have only an Imperfective category that covers both habitual and progressive meanings. Finally, most Gbe varieties have a Prospective aspect category but the Creoles of Suriname do not. However, there are still strong similarities between the two language groups in several tense/aspect categories which we discuss in more detail below.

Table 3. Tense and Aspect categories in Gbe languages.

Form	Category	Meanings/Uses.
<u>Tense</u>.		
á V (Aja-, Waci-, Xwlagbe)	<u>Future</u>	Later time reference.
lá V (Gengbe, Xwelagbe)		
ná V (Maxigbe, Fongbe)		
<u>Aspect</u>.		
ø	<u>Perfective</u>	States or events seen as unanalyzed wholes. Simple past with non-statives, present with statives (when reference point is S).
	<u>Completive</u>	Situations seen as completed. Conveys the
kò V (Maxi-, Fongbe)	Pattern (1)	meaning 'already.' Expresses the sense of a per-
mɔ V (Xwelagbe)		fect of result' with non statives, and the sense of
nɔ V (Xwlagbe)		a state beginning in the past and continuing to
VP + *vɔ*	Pattern (2)	the reference point with statives.
(Aja-, Gen-, Wacigbe)		
	<u>Progressive</u>	Events in progress. In cases where the copula
(*lé*) VV (*kɔ*) (Ajagbe)	Pattern A	immediately precedes the verb, eg. intransitives,
là VV *ŋ* (Wacigbe)		or transitive verbs taking a pronominal object
lè VV *nù* (Xwlagbe)		(SVO order).
ɖò VV *wè* (Maxigbe)		
lé XP V (*kɔ*) (Ajagbe)[a]	Pattern B	In other transitive sentences.
là XP V *ŋ* (Wacigbe)		
lè XP V *nù* (Xwlagbe)		
ɖò XP V *wè* (Maxigbe)		
nɔ V (Xwelagbe)	Pattern C	With intransitive and transitive verbs.
leé V (Gengbe)		
	<u>Habitual</u>	Customary or habitual situations.
V *ná* (Gen-, Wacigbe)	Pattern (1)	
V *nɔ* (Ajagbe)		
nɔ V (Maxigbe, Xwlagbe)	Pattern (2)	
H on V (Xwelagbe)	Pattern (3)	
	<u>Prospective</u>	Events about to occur.
ɖò (XP) nà V	Pattern (1)	
(Maxigbe, Fongbe etc.)		
lè (XP) V *gé/gbé*	Pattern (2)	
(Ewe, Gengbe)		
là (XP) *já* V	Pattern (3)	
(Wacigbe)		

[a] Note that the verb is sometimes reduplicated and that the copula is sometimes absent. The exact distribution of both elements is still subject to further investigation.

5.   Gbe influence on tense and aspect in the Creoles of Suriname

In this section we investigate the sources of the tense and aspect categories of the creoles of Suriname with particular reference to Gbe influence.

5.1   Comparing Perfective in Gbe and the Surinamese Creoles

Perfective aspect, expressed by the unmarked verb in both Gbe and Surinamese creoles, presents a situation as an unanalyzed whole, without regard to its internal structure (Comrie 1976:16). Hence, as Winford (2000a:394) points out, the unmarked verb "can lend itself to various interpretations in discourse, depending on the context and the predicate involved."

Table 4 shows that in both Gbe and the Surinamese creoles, the unmarked verb is used in a more or less identical range of meanings and uses.

In both language groups, the unmarked verb generally conveys the sense of 'present' time reference with state-denoting verbs (1) and property items (2) and 'simple past' with non-stative verbs (3) in the default cases, where the point of reference is speech time.

(1) a. Wacigbe   *ɖəvi á   lɔn ətɔ́   á   ku nɔ́   á*
               child DET love father DET with mother DET
               'The child loves his father and his mother.'
     b. Pamaka   *A   boi lobi a   meise.*
               DET boy love DET girl
               'The boy loves the girl.'

(2) a. Wacigbe   *əcì   á   fá.*
               water DET cold
               'The water is cold'

Table 4. Uses of Perfective (the unmarked verb)

	Gbe varieties	Sranan	Pamaka/Ndyuka	Saamaka
Statives etc. with present reference				
Property items (cold, hot)	ø	ø	ø	ø
Stative verbs (know, love)	ø	ø	ø	ø
Non-statives with past reference				
	ø	ø	ø	ø
	ø	ø	ø	ø
Non-statives with 'present perfect' meaning (current relevance).				
	ø	ø	ø	ø

    b.   Saamaka   *Di   wata aki   koto.*
                       DET water here cold
                       'The/this water is cold.'

(3) a.   Ajagbe   *ε   cúcú   èyi   xɔ́mε.*
                       he clean his room
                       'He cleaned his room.'
    b.   Pamaka   *A kiin/seeka   en kamba.*
                       he clean/arrange his room
                       'He cleaned his room.'

These uses of the unmarked verb are identical in the early Sranan (SN) texts.

(4) Early SN   A: *Joe zaba da Mastra.*
                     you know the gentleman
                     'Do you know that gentleman?'
              B: *Mi zi hem wan plessi. Mino zabi   hoe plessi.*
                     I   see him one place I-no know Q   place
                     'I have seen him somewhere. I don't know where.'
                     (van Dyk 1765:31 cited in van den Berg to appear)

In Gbe, the unmarked state-denoting verb may also have past time reference (5a). In the Surinamese Creoles, they may have past time reference in the appropriate discourse context, but normally require the past time marker to express this meaning (5b).

(5) a.   Xwlagbe   *έé, ùn nyɔ́èn.*
                       yes I   know-him
                       'Yes, I knew him.'
    b.   Pamaka   *Iya, mi be   sabi en, mi be   si en wan leisi.*
                       Yes I   PAST know him I   PAST see him one time
                       'Yes, I knew him, I saw him once.'

The unmarked verb is also used in all the languages to convey the sense of current relevance, in much the same way as the English Perfect does. The following examples illustrate:

(6) a.   Ajagbe.   *wò   wu   àxɔ̀su lɔ.*
                       they kill king   DET
                       'They've killed the king.'
    b.   Sranan   *Den kiri a   kownu.*
                       they kill DET king
                       'They've killed the king.'

The close similarities in meaning and use of the unmarked verb strongly suggest that Gbe influence played a primary role in the emergence of the Perfective category in the Surinamese creoles.

5.2 Comparing the Completive in Gbe and the Surinamese creoles

The category of completive aspect is conveyed by a marker that is formally similar to a main verb meaning 'finish' *kaba* (< Portuguese *acabar* 'finish') in the Surinamese creoles. It is often shortened to *kba* and *kaa* in modern Sranan and Saamaka respectively. Unlike other TMA markers, it occurs in VP-final position, and indicates that a situation is completed, yielding the sense of a perfect of result with non-statives, including activities, accomplishments and achievements (7a,b) and the sense of a state beginning in the past and continuing to the reference point with statives (7c). In all these cases, *kaba* etc. can be interpreted as a relational adverb conveying the sense of "already."

(7) Sranan   a. yu ben pai en kaba?
                   'Have you already paid him?'
              b. Oom N. firgiti a boi kaba.
                   'Uncle N. has already forgotten the boy.'
              c. A famiri fu mi disi, a abi achttien jaar kaba?
                   'This relative of mine, is she already eighteen years old?'

Uses of the completive marker with both non-statives and statives are well established in the early Sranan texts:

(8) Early SN   a. Mastra we doore kaba.
                   master we arrive COMPL
                   (van Dyk 1765, in Arends and Perl 1995:127)
              b. Mi memree wie abi piekienwan kaba
                   1SG remember 2PL have little-one   COMPL
                   'I remember we have a little bit already.'
                   (Weygandt 1798, in Arends & Perl 1995:118)

There are differences among the Gbe languages in the ways they express the sense of completive aspect. Fongbe varieties use preverbal *kò*, which Aboh (2004:174) analyzes as an Anterior marker (9a), while the Phla-Phera varieties Xwelagbe and Xwlagbe use preverbal *mɔ́* and *nɔ́* respectively (9b).

Western Gbe varieties such as Ajagbe, Wacigbe and some varieties of Gengbe use VP-final *vɔ́*, which also derives from a main verb meaning 'finish', to convey the sense of the completion of the situation expressed by the main verb (10).

(9) a. Fongbe.   Kòfí kó sà àsɔ́n
                Kofi ANT sell crab
                'Kofi has already sold the crab.'

      b. Xwlagbe   ɔ, é nɔ̀ kú.
                no he COM die
                'No, he is already dead.'

(10) Ajagbe   *àxɔ̀su lɔ à,   e vá   ɖó   vɔ̀.*
                king the TOP he come arrive COM
                'As for the king, he has already come.'

Fongbe varieties also have a construction with a VP-final verb, *fó or vɔ̀* both meaning 'finish" (See (12), from Da Cruz (1995:361).

(11) Fongbe   kɔ̀kú ù mɔ̀lìnkún ɔ́   vɔ̀
                Koku eat rice   DET finish
                Koku finished eating the rice.

The Fongbe construction is a serial verb construction in which *fó or vɔ̀* retain their full verbal status. In Aja and Waci, however, *vɔ̀* seems to have been grammaticized to a more adverbial marker of aspect (see Da Cruz 1995 for further discussion).[2]

     It would appear, then, that the Completive in the Surinamese creoles patterns after these two constructions where the form used to express the completive meaning also appears in VP-final position and is derived from a verb meaning 'finish' (12).

(12) a. Gengbe   *gàlí-á   vɔ*   (Jondoh 1980:50)
                gali-DET finish
                'There's no more gali.'

      b. Pamaka   *Moni   kaba.*
                money finish
                'There is no more money.'

We argue therefore that Completive *kaba* in the Surinamese creoles is modeled after the VP-final marker of completion common to both Eastern and Western Gbe languages. This is not to say that *kaba* and its Gbe counterpart are identical in status or function. For instance, *kaba* is compatible with both stative (13a) and non-stative situations, including all types of achievement (13b).

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2. Essegby (pc 2006) informs us that the sense of "already" is conveyed by the adverb (*xó)xó* in certain Ewegbe varieties such as Anlogbe. This suggests that *vɔ̀* in these varieties has not been fully grammaticized into an adverbial, as *kaba* has in the Surinamese creoles.

(13) Sranan   a. A famiri fu mi disi, a   abi achttien yaar kaba?
                      DET family of 1SG DET 3SG have eighteen year COM
                      "This relative of mine, is she already eighteen years old?'
            b. Oom N. firgiti a   boi kaba
                      uncle N. forget DET boy COM
                      "Uncle N. has already forgotten the boy.'

By contrast, the Gbe completive marker is compatible only with non-static situations and "punctual occurrences" (eg. *arrive*) (Ameka to appear; Da Cruz 1995). It seems that the use of *kaba* with all types of situation represent a further stage of grammaticalization, most likely due to internal developments (see Detgers 2000, Stolz 1987 on the grammaticalization of completive markers in various creoles). There seems to be a cline of grammaticalization from the more verbal status of *vɔ* in Eastern Gbe, to its somewhat more adverbial character in Western Gbe, to the fully adverbial status of *kaba* "already" in the Surinamese creoles. We conclude then that the use of VP-final *kaba* to convey Completive aspect in the creoles of Suriname was due in part to influence from a similar structure in the Gbe languages.

5.3 The expression of 'imperfective' meaning in Gbe and the Surinamese creoles

Imperfective aspect in the Surinamese creoles
Imperfective aspect covers notions such as 'progressive,' 'continuous', and 'habitual.' All of these meanings are conveyed by the marker *e* (< *de*) in contemporary Sranan and the Eastern Maroon Creoles, and by *ta* (< *tan*) in Saamaka. In all the Creoles *tan* also means 'to stay, to wait' and *de* functions primarily as a locational copula (Migge 2002). In the early texts, *de* in Sranan and *tan* in Saamaka function primarily as markers of progressive aspect (14) and only rarely as habitual markers (15).[3]

(14) a. Early SN   *da vool   de   slibi na eksi tappo.*
                        the chicken PROG sleep LOC egg top
                        'The chicken is sitting on the egg.'
                        (Schumann 1783:39 cited in van den Berg to appear.)
          b. Early SM   *mi tan   wroko.*
                        I   PROG work
                        'I am working.'
                        (Riemer 1779, in Arends & Perl 1995:371)

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3. It is not clear whether *de* and *tan* in these early progressive constructions are primarily verbal or have been fully grammaticalized as markers of progressive aspect. The latter seems more likely, from the examples in the early texts.

(15) Early SN *Gado de sabi alla membre va wi bevo   we*
god   HAB know all   thought for us before we
pulu muffe na   tongo.
pull word LOC tongue
'God knows all our thoughts before we utter them.'
(Schumann 1783:116 cited in van den Berg to appear)

In the modern creoles, *e* (< *de*) and *ta* (< *tan*) are fully grammaticized markers of progressive aspect.

[Q: What is your brother doing right now?]
(16) a. Sranan *a e   krin en kamra.*
he IMPFV clean his room
   b. Saamaka *a ta   seekɛ   hɛn kamba.*
he IMPFV arrange his room
'He is cleaning his room.'

In addition, the modern Creoles also employ *e* and *ta* to express habitual aspect, a function which is rare in the early Sranan texts.

[Q: What kind of job does your brother do?]
(17) a. Sranan *a e   krin kambra.*
he IMPFV clean room
'He cleans rooms.'
   b. Saamaka *A ta   bai   kantoo.*
he IMPFV sweep office
'He cleans offices.'

In short, the Progressive uses of *e* and *ta* in the modern creoles seem to date from the time of Creole formation while the habitual function may have emerged later.

By contrast, the Gbe languages have no Imperfective category. Rather, they distinguish between a Habitual and a Progressive. Our task here is to explain why the Surinamese creoles do not follow Gbe in distinguishing between 'habitual' and 'progressive,' but subsume these meanings under a single category.

5.4.1   *The Progressive in Gbe*
The progressive construction in Gbe follows three general patterns, as shown in (18) (cf. Fabb 1992).

(18) A: 'Be-at' VV PART
   B: 'Be-at' (NP/XP)V PART
   C: 'Be-at' V (XP)

Pattern A is generally used with intransitive verbs (19a) and pattern B with transitive verbs (19b).[4]

(19) Gengbe   a. *kòfí lè   yìyì   m̄*
                         Kofi be-at RED-go-PART
                         'Kofi is leaving.' (Jondoh 1980: 39)
             b. *ə là   xɔ́mɔ̀ tutu-ŋ.*
                         he be-at room clean-PART
                         'He is cleaning the room.'

There seems to be agreement that the verb 'be-at' in these constructions selects a following nominalized clause (VV or XP V), and also requires the presence of the sentence-final morpheme, much as auxiliary *be* requires the verbal suffix *-ing* in English progressive constructions (Aboh 2004:208; Fabb 1992:11).

    The form of the final particle varies across the Gbe languages. It has been argued, for instance, that at least some of the final particles (e.g, *wὲ, wɔ̀, ὴ*, in Fongbe, Gengbe, and Wacigbe respectively) are either locational nouns or may have derived historically from locational nouns meaning 'in(side)' (see Fabb 1992:5,13 for discussion). In Gungbe, according to Aboh (2004:208), "the sentence-final morpheme undergoes partial deletion, leaving only a low tone that attaches to the preceding syllable."

    In addition to Patterns A and B, Gengbe also employs a third pattern (C) in which the copula directly precedes an unredublicated verb (20).[5] Our informant clearly preferred this construction, which is similar to the one found in the Surinamese creoles.

(20) Gengbe   *mè lě   ɖù nú.*
                       I   be-at eat thing
                       'I'm eating.' Fabb (1992 :5)

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4. As Aboh (2004:196) and Fabb (1992:3) have noted, pattern A, involving reduplication of the verb is not limited to intransitive verbs. Rather, the verb reduplicates when there is nothing between it and the preceding verb meaning 'be-at'. For example, reduplication is found with transitive verbs that have a clitic pronoun as object (except in sentences with prospective *nà*). Pattern B applies in all other transitive sentences.

Gungbe Àsíbá tò   díndín   wè   (Aboh 2004:196)
          Asiba be-at RED-search 2SG-NR
          'Asiba is looking for you.'

5. Essegbey (p.c. 2006) points out that, in the case of Gen, the high-tone morpheme that occurs in the post-verbal position in other languages (e.g. Ewegbe) is adjoined to *le* and, therefore, causes the vowel to be lengthened and the tone to be rising. This tone is dropped when the complement is preposed.

In Xwelagbe, the progressive is expressed by a form homophonous with the verb 'to stay,' directly preceding an unreduplicated verb in both transitive (21a) and intransitive (21b) sentences.

(21)   Xwelagbe   a.   *ívī   lɔ́   nɔ́   ɖū nú   lehlɛn tɛn*
                         child DET PROG eat thing   now
                         'The child is eating something now.'
              b.   *é   gó   nɔ̀   wà.*
                         he NEG PROG come
                         'He was not coming.'

This construction is clearly parallel to the one found in Saamaka.

    In Western Gbe varieties, including Ajagbe, Gengbe, Wacigbe and other Ewe varieties, when a tense marker is present, *nɔ* (< 'stay') replaces the copula 'be-at' in both copular and progressive constructions.

(22)   Gengbe   a.   *àwù   dʒɛ̄   á   lè   drɔ́   mè*
                       dress   red   DET be-at closet in
                       'The red dress is in the closet.' (Jondoh 1980: 132)
            b.   *àfí   nɔ̀   nà   gàlí   plè   wɔ́*
                       Afi PROG HAB gari buy make
                       'Afi is generally buying gali.' (Jondoh 1980: 40)

Xwelagbe employs *nɔ* in all tense/aspect specifications.

5.4.2   *Comparing progressive constructions in Gbe and Suriname*
In their progressive use, Imperfective *e* and *ta* convey the sense of an event or activity in progress (17). In this, they mirror the Gbe Progressive. In addition, *e* and *ta* in the Surinamese Creoles also express secondary meanings similar to those expressed by the progressive construction in Gbe. For instance, when they precede property items and certain psychological state-denoting verbs such as 'know', they convey an inchoative or 'in-process' meaning.

(23)   a.   Gungbe   *sin   lɔ́   tò   fĩfà.*   (Aboh, pc 2004)
                       water DET be-at RED-cold
                       'The water is getting cold/hot.'
         b.   Pamaka   *Den dei ya   den manjan e   lepi.*
                       DET day here DET mango   IMPFV ripe.
                       'These days the mangos are ripening.'

(24)   a.   Wacigbe   *mè le   nu   nyá-ŋ   le   súkúlu fifia*
                       I   be-at thing know-PART LOC school now
                       'I am now understanding lessons at school.'

    b.   Sranan   *Hertoch e   sabi   a   pasi.*
                             Hertoch IMPFV know DET way
                             'Hertoch is getting to know the way.'

Essegbey (1999) has argued that the progressive construction yields an inchoative meaning with property-denoting predicates and verbs like 'know' because they are, in fact, process items in the Gbe languages (but see Aboh (2004:227) for a different view). Winford (1997) and Migge (2000) make a similar case for the processual nature of these verbs in Sranan and other Surinamese creoles.

    Finally, in both Gbe and Surinamese creoles the progressive construction may also convey an imminent future meaning when the main verb expresses motion.

(25) a. Ewe   *égbe   ya   la   me-le   asime yi-ḿ*
                       today as-for TOP 1SG-be.at market go-PROG
                       'As for today, I'm going to the market'
      b. Pamaka   *A   tamaa   a   e   gwe kaba.*
                       FOC tomorrow she IMPFV leave already
                     'It's tomorrow she will/is going to leave.'
                     (lit. '..she is leaving already..)'

Perhaps the most striking thing about the progressive construction in the Surinamese Creoles is that their progressive marker is derived from a copula meaning 'to be at', which also functions as a main verb. In the Gbe languages, the copula used in the progressive construction also functions as a main verb in its own right.

(26) a. Sranan   *A pikin de a   oso.*
                       DET child COP LOC house
                       'The child's at home.'
      b. Gengbe   *é lé   èkplɔ̀à   dʒí*   (Jondoh 1980:46)
                       it be-at table-the on
                     'It's on the table.'

Further important evidence in favor of Gbe influence on the progressive category of the Surinamese creoles is the fact, noted earlier, that in several Gbe varieties, 'be-at' in both copular and progressive constructions is replaced by *nɔ* 'to stay' when combined with a tense/aspect or negative marker (21b, 22b). This may also have contributed to the fact that Saamaka chose *ta(n)* 'stay' to express progressive meaning. This choice may have been also influenced by the use of *ta* (< Portuguese *estar* 'to be') functioning as an Imperfective marker in the Portuguese-lexicon contact variety that was part of the input to Saamaka.

    Based on this evidence, we argue that the emergence of *de* as a locational copula in the early plantation creole (cf. Migge 2002) was the trigger for its extension to the marking of progressive meaning. The model for this extension was the fact

that the locative copula is also used in progressive constructions in a number of Gbe languages. This may have been a gradual development. The early texts include many cases where a progressive meaning is attributed to an unmarked verb form, as in the following examples.

    (27)   Early Sranan   a.   *Mastra bille   hatti mi kwetti.*
                                    master belly hurt me quite
                                    'My stomach hurts very bad, master.'
                                    (van Dyk 1765, in Arends & Perl 1995:167).
                           b.   *joe jam te   moesi.*
                                    you eat   too much
                                    'You're eating too much.'
                                    (vanDyk 1765, in Arends & Perl 1995:135).

This suggests that *de* may have still been in process of becoming the required marker of progressive meaning during the early 18th century.

5.4.3   *Habitual meanings*
As we noted earlier, an important difference between the Gbe languages and the Surinamese Creoles is the fact that *e* and *ta* in the latter are regularly used to express habitual and generic meanings (see 16).

    By contrast, in the Gbe languages, habitual and generic meanings are typically conveyed by a separate habitual marker that either occurs preverbally (28a) or postverbally (28b). In Xwelagbe habitual aspect is marked by a high tone on the verb.

            [Q: What does you brother do after dinner?]
  (28) a.   Maxigbe   *ɛ́ nɔ́ wlàn xwémà.*
                           he HAB write letter
                            'He (habitually) writes letters.'
        b.   Gengbe   *ɛ́ hlὲn nà   wómá*
                             he read HAB book
                             'He (habitually) reads books.'

Although the Gbe progressive construction does not typically express habitual meanings, it can nevertheless do so in certain contexts in combination with adverbs that convey habituality. Consider the examples in (29):

    (29) a.   Gungbe   *kofi tò   ajò-jɛ kaka bɔ̀ yé   wlé é*
                              Kofi be-at steal   until and they catch him
                                'Kofi kept/keeps stealing until they caught/catch him.'
                                (Aboh p.c. 2004)

b.   Gengbe   *kòfí nɔ̀ xèví lé   ḿ   yè síá yī*
Kofi HAB bird catch PART all the time
'Kofi is always catching birds.' (Jondoh 1980:39)

The extension of a progressive marker to an imperfective is well-attested cross-linguistically, so that universal tendencies to change may also have played a role. Another possible contributing factor may have been the fact that the creators of the creole did not find a suitable English form in the English constructions available to them, which could have been reinterpreted as a habitual aspect marker on the model of the Gbe habitual marker.

5.5   Comparing Tense in Gbe and Suriname

5.5.1   *Past time reference*
As we noted earlier, Gbe languages have no Past tense category, hence we cannot claim any influence from that source on the Relative Past category of the Surinamese creoles. We will therefore say nothing further about it here. However, we do find some similarities between the two language groups as far as future time reference is concerned.

5.5.2   *Future time reference*
The modern maroon creoles employ two markers of futurity: *o*, which expresses a predictive or relatively certain future, and *sa* (< Dutch *zal*), which has more modal overtones, and expresses a more uncertain or potential future.

(30)   Saamaka   *Te   mi ko   gaandi, nou mi o   mbei*
when I   come old   now I   FUT make
wan gaan wosu u   mi.
one big   house for me.
'When I've become old, I will build myself a big house.'

(31)   Ndyuka   *J. sa   go a   Faansi taa   wiki.*
J. may go LOC France other week
'J. may go to France next week/it is possible that J. will go to France next week.'

This situation contrasts with that in the early Sranan texts, where *sa* (also spelt *zal*, *sal*, etc.) appears to be the usual means of expressing both predictive and potential future.

(32)   Early SN   *teh   ju   sa   oure,   ju   skin   sa   hebbi tu.*
                     when you FUT old   you body FUT heavy too
                     'when you grow old, your body will also be burdensome.'
                     (Schumann 1783: 128 cited in van den Berg to appear.)

In the early texts, future time reference is also conveyed by a combination of the progressive marker and the movement verb *go*, *de+go* (Sranan) and *tan+go* (Saamaka). The construction expresses the sense of a prospective future or an intention.[6]

(33)   a.   Early SN   *mi de   go gi   ju tetei,   va nai   mi klossi.*
                        I   PROG go give you thread for seam my clothing
                        'I am going to give you thread to seam my clothing.'
                        (Schuman 1783: 50 cited in van den Berg to appear)
       b.   Early SM   *mi tann go worko.*
                        I   PROG go work
                        'I will work.'
                        (Riemer 1779, in Arends & Perl 1995: 374)

Constructions in which *go* appears to function as a future marker in its own right only emerge towards the end of the 18th century.[7]

(34)   Early SN   *mi go   selli da-sanni   bakka.*
                     I   FUT? sell   that-thing again
                     'I am going to sell that again.'
                     (Schuman 1783: 50 cited in van den Berg to appear)

In short, the reanalysis of *go* appears to have been a purely language internal development in the Surinamese creoles. Unlike *(g)o*, however, *sa* does show evidence of substrate influence.

5.5.3   *Comparing **sa** with the Gbe future marker*

In contemporary Sranan, *sa* expresses primarily modal meanings related to epistemic necessity or probability. In the maroon creoles, however, it can express a wider range of meanings associated with potentiality of various types (Winford & Migge 2003; Migge 2006). While *sa* in Sranan clearly owes much of its meaning to Dutch *zal*, we suggest that its functions in the maroon creoles are also modelled on the potential future marker in Western Gbe languages.

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6. This use of progressive + *go* is common in modern Sranan (Winford 2000a:418).

7. It still isn't clear from examples like (34) that *go* has been fully grammaticized as a future marker, rather than retaining its status as a verb. In the latter case, examples like these may be better interpreted as serial verb structures (Aboh, pc 2005).

In Gbe future time reference is expressed by the preverbal marker *lá*, *ná* or *á*. In Eastern Gbe varieties such as Fongbe (Maxigbe, Gungbe) as well as Phla-Phera (Xwlagbe and Xwelagbe) these markers represent a future tense category, expressing meanings such as later time reference (35a), intention (35b) and prediction (35c).

(35)   a.   Ajagbe   *a   vá   esɔ*
                        he-FUT come tomorrow
                        'He'll come tomorrow.'

       b.   Xwlagbe   *né ùn kpò ɔ̀   má   xɔ̀   ɔ̀xwé gbó lókpo*
                        if   I   old   PART I-FUT buy house big one
                        'When I am old, I'll buy a big house.'

       c.   Wacigbe   *ŋɔ̀ yɔ́ cɔ   ɔ̀kpɔ́ lɔ́   akpò yá mɛ̀*
                        if you put stone LOC bag   this in
                        á   yá   vun.
                        FUT come tear
                        'If you put a stone in this bad, it'll tear.'

In other Gbe varieties, e.g. Gengbe, Ajagbe and Ewegbe varieties such as Wacigbe and Anlogbe, *lá*, *á* seem to express a wider range of future meanings, and has strong overtones of potentiality. In fact, Essegbey (to appear, 14) argues that *à* in Anlogbe (Ewe variety) is a potential rather than a future marker, which expresses hypothetical meanings that include epistemic and deontic-type (root) possibility, and can refer to situations that are not in the future. Thus, *à* can be used with stative predicates to refer to a possible state of affairs in the present (36a), and to refer to a possible state of affairs that is past (36b):

(36)   Anlogbe   a.   *john â-nɔ   aʃéme fífíá*
                       John POT-be.located home now
                       'John may be at home now.'
                       (= It's possible that John is at home now).

                  b.   *kofi â-yi   gɛ   xóxó.*
                       Kofi POT-go Accra already
                       'Kofi may have gone to Accra already.'

This epistemic use of the Gbe Potential marker has parallels in the similar use of *sa* in all of the Surinamese creoles, as in the following examples:

(37)   a.   Sranan   *Jan sa de   na oso   nownow.*
                        John MOD be-there LOC house now
                        'John should be at home now.'

       b.   Pamaka   *Jan sa go a   faansi taa   wiki.*
                        John POT go LOC France other week
                        'John may go to France next week.'

The Gbe Potential marker can also be used to indicate that it is possible for some-one to do something:

(38) Anlogbe   *à-xlē*   *agbalē má bɔbɔe*   (Essegby to appear p. 10)
                you.POT-read book   that easily
                'You can read that book easily.'

In this case, Essegbey (to appear, p. 11) comments: "this sentence does not make pre-dictions about a state of affairs to come. Instead, it suggests that the addressee is in a position to read the book without difficulty". This more deontic-type use of the Gbe Potential has counterparts in the maroon creoles, but apparently not in Sranan.

(39) PM   *A sama de   abi dobu bon,*
           DET person there have double bone,
           a sa   opo 100 kilo.
           he MOD lift   100 kilo
           'That guy is really strong. He can lift a hundred kilos.'

Finally, in western Gbe varieties, the Potential marker (in conjunction with an ap-propriate adverbial) can be used to express notions such as permissibility.

(40) Ajagbe   *nɔ́ e sésè   tò nu, a   yi*
               if   you hear-PROG ear thing FUT go
               mumu le   etɔ tu drú.
               play   LOC river side possibility
               'If you listen to me, you'll be able to go to the river to play.'

The maroon creoles also use *sa* in this function.

(41) PM   *Efu i   teki mi taki, i   sa go pee a   liba.*
           if   you take my talk you POT go play LOC river
           'If you obey me, you will be able to go and play by the river.'

In all these cases, both in western Gbe and the maroon creoles, what seems to be expressed by the modal auxiliary is the sense of something that is possible, or a po-tential situation — a sense which may be interpreted in the various ways described above. These similarities suggest that *sa* in the maroon creoles might have been modelled, in part, after the Potential future marker of Western Gbe varieties.

6.   Conclusion

Our comparison of tense/aspect in Gbe and the creoles of Suriname shows that substrate influence must have played an important role in the emergence of the

creole tense/aspect systems. Several of the tense/aspect categories and strategies/ lexical forms used to express them in the creoles have close counterparts in varieties of Gbe. Our analysis, however, also revealed several differences between the creoles and the varieties of Gbe suggesting that other linguistic sources and mechanisms must have also contributed to the formation of the creoles of Suriname. It seems clear that, in addition to English varieties, European languages such as Portuguese and Dutch also had an impact on the early plantation creole during the formative process and on its descendants in later periods. Language-internal change also played a role in the emergence of the plantation creole and particularly in the development of certain TMA categories found in the modern varieties.

We hypothesized that categories that were shared across the (dominant) substrates were most likely to be retained in the Creole. Our findings show that this is true of Perfective, Completive, Progressive/Imperfective and Potential Future. However, shared substrate categories such as Habitual and Prospective have no counterparts in the creoles — perhaps due to the fact that there were no forms in the superstrate input that they could 'transfer to'. It should also follow from this hypothesis that categories not found in the substrates would not be found in the creoles. But this is belied by the fact that the creoles developed two tense categories, Predictive Future and Relative Past, which had no models in the substrates. It would appear that these were purely internal developments.

We also hypothesized that surface structures or means of expression (preverbal, periphrastic, etc.) shared among the substrates would be retained in the creoles. The Gbe languages generally employ pre-verbal markers of tense and aspect as well as modality. Given the relatively unmarked character of analytic as opposed to synthetic expression of morphological categories, it is not surprising that the Surinamese (and other New World) creoles should have adopted the same pattern of periphrastic preverbal expression of TMA categories. The only exception to the use of pre-verbal markers in the creoles is the choice of a VP-final marker of Completive/Perfect, but again this has a model in the dominant Gbe substrates.

Finally, following Siegel's "availability" constraints and the assumptions of the relexification hypothesis, we hypothesized that superstrate-derived lexical items

Table 5. Tense/Aspect categories in Sranan and their sources.

Sranan category	Marker	Source
Perfective	Unmarked	Bare verb
Imperfective	*e < de*	locational copula < English *there*
Terminative Perfect	*kaba* (VP-final)	Portuguese *acabar* "finish"
Relative Past.	*ben*	Eng. *been*
Predictive Future	*o*	Eng. *go*
Potential Future	*sa*	Dutch *zal*

whose semantics (partly) matched those of substrate functional heads would be selected to express the functional categories of the Creole. This process of selection would be guided by interlingual identifications between forms in the L2 varieties of English that slaves were targeting, and forms in their L1s which matched the former in meaning and position, and thus lent themselves to transfer.

Table 5 provides an overview of the actual sources of the Sranan tense/aspect markers. All of these forms, except for the Relative Past and Predictive Future markers, were a close match in function and/or meaning to the respective Gbe tense/aspect markers that provided models for them. Thus, the creoles chose the unmarked verb to convey perfective aspect; a form homophonous with a locative copula to express progressive or imperfective meanings; a form homophonous with a verb meaning 'finish' to mark Completive aspect; and a form *sa*, probably derived from Dutch *zal*, as a marker of Potential Mood. Note also that the selection of the superstrate forms conforms to the "availability" constraints proposed by Siegel, in particular, perceptual salience and congruence. The forms chosen are generally invariant in form, are isolatable, and have a single function or meaning. All of these factors strongly favor transfer, as Siegel has argued.

Finally, as we noted earlier, Gbe influence by itself cannot fully explain the emergence of the tense/aspect categories of the Surinamese creoles. The roles of other substrate languages, internal developments, and influence from Dutch, are matters for future research.

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