

Between contact and internal development

Towards a multi-layered explanation for the development of the TMA system in the creoles of Suriname*

Bettina Migge

University College Dublin & CNRS-CELIA (Paris) and

Laurence Goury

Institut de Recherche pour le Développement & CNRS-CELIA (Paris)

This paper proposes a new analysis of the formation of the tense-mood-aspect (TMA) system of the Surinamese Maroon creoles based on a wide range of both contemporary and historical sources. The paper first provides a brief synopsis of the socio-historical context in which the creoles of Suriname emerged and developed, and a broad overview of the TMA systems of those creoles and of varieties of Gbe. It then discusses four processes that were involved in the emergence of the creole TMA system: substrate influence, internal change from a substrate calque, superstrate influence, and shift of form and category correlated with innovation. The paper then concludes that creole formation is to be considered as a gradual and multi-layered process (Arends 1993; Bruyn 1995), involving processes of language change that also operate in other so-called "normal" contact settings (Thomason & Kaufman 1988).

1. Introduction

The tense, mood and aspect system of creoles has been at the center of much of the debate on creole genesis. Over the years, different kinds of explanations have been

* The research on the contemporary Creole and Gbe varieties was funded by NSF grant # SBR – 930635 and NSF grant BCS-0113826. We would like to thank the numerous informants in Benin and Suriname/French Guiana who generously provided information on their native languages. We also thank two anonymous reviewers and Susanne Michaelis for comments on an earlier version. All remaining errors are the responsibility of the authors.

offered for its origins. Bickerton (1984), for instance, appealed to innate linguistic knowledge, the so-called bioprogram, to explain the structure of creole tense-mood-aspect (TMA) systems. Lefebvre (1996), and Siegel (1999) in somewhat different ways, on the contrary, argue that the structural makeup of these languages, including their TMA categories, emerged due to substrate influence. Superstratists, instead, argue that the grammar of creoles can be, in large part, traced to the European language involved in their formation (Chaudenson 1992) while the first languages of the slaves would have only played a limited role in their emergence (DeGraff 2002). Finally, in recent years evidence has also been brought forward to demonstrate that at least some of the elements in creole TMA systems emerged due to internal change (Detges 2000; van den Berg 2001; Kriegel, Michaelis & Pfänder 2004; Fattier 2003). Together the findings from these different approaches clearly argue against a monocausal explanation for the formation of creole grammars and creole TMA systems in particular. However, little of the current research investigates how the different sources conspired to give rise to specific contemporary creole grammars.

The aim of the present paper is to demonstrate the multi-layered nature of the process of creole formation. Investigating in detail the processes and sources that were involved in the emergence and development of the TMA system of the creoles of Suriname, we show that the contemporary TMA system of the creoles of Suriname emerged due to contact-induced language change, language internal change, and universal processes of second language acquisition.

Our analysis draws on a range of data sources. Natural and elicited data were collected from relatively conservative varieties of four contemporary creoles of Suriname (Sranan Tongo, Ndyuka, Pamaka, Saamaka) and their main substrate, varieties of Gbe.¹ The Gbe data were collected from varieties belonging to the main subclusters of the Gbe continuum (Capo 1988). The elicitations for all these varieties employed a modified version of Dahl's (1985) questionnaire (for details,

1. A range of terms are used to refer to the creoles of Suriname. Terms differ according to various social factors. For instance, in out-group settings the term used depends on interlocutors' (assumed) knowledge about the Surinamese creole linguistic space and/or the social identity that the speaker wants to display. Thus, while people use *Pamaka* or *Nenge* in in-group settings, they employ terms like *Djuka* (Suriname), *Takitaki* or *Businenge* (French Guiana) in out-group settings to display a pan-Maroon identity and/or to mark the fact that their interlocutor is ignorant about the local linguistic situation. Moreover, in out-group settings, term selection is also influenced by the main European language of the speaker (e.g., *Paramaccan* (Dutch) versus *Paramacca/Paramaka* (French/English)) and whether or not s/he wants to display a local (*Pamaka*) versus a non-local (*Paramacca(n)*) identity in the interaction. For more details on naming conventions, see Léglise and Migge 2006. In this paper we use the most widely used (distinctive) in-group terms to refer to the different varieties.

see Migge 2006). The historical data for Sranan Tongo and Saamaka come from the following sources: the Court Records from 1607 until 1667 (in van den Berg 2000); Herlein 1718; van Dyk 1765; Nepveu 1770 (in Arends & Perl 1995); the Saramaccan Peace Treaty in Sranan (1762) (Arends & van den Berg 2004); Schumann's 1783 dictionary of Sranan (Kramp 1983); a Saamaka dictionary and grammatical sketch by Riemer (1779) (in Arends & Perl 1995) which was based on Schumann's (1778) dictionary published in Schuchardt (1914); the translation of the story of the Apostles by Wietz 1805 (in Schuchardt 1914); the *Neger-Engels – Nederlands Woordenboek* from Focke (1855).

The paper is organized as follows: Section 1 presents a brief synopsis of the sociohistorical context in which the creoles of Suriname emerged and developed. Section 2 provides a broad overview of the TMA systems of the creoles of Suriname, their main substrate input, varieties of Gbe, and English. Section 3 discusses the different sources and processes that were involved in the emergence of the TMA system by investigating in detail specific areas of the TMA system. The last section summarizes the findings and discusses their implications for theories of creole genesis.

2. The historical context

2.1 Overview of the contact settings

Analyses of the early history of Suriname (Arends 1995, Migge 2002, 2003) suggest that it can be subdivided into three distinct contact settings. The first contact setting (1651–1679) spans the founding of the English colony in 1651 and its handover to the Dutch in 1667 following the Anglo-Dutch war. This period was characterized by relatively high ratios of Europeans to Africans (1:2 to 1:3) and old slaves to new slaves (less than 1:2). Initially, the Europeans were mainly speakers of English. In 1670s they were replaced by speakers of different European languages such as Dutch, Swedish, German, French. Starting in 1665 Jewish migrants from Cayenne and various Sephardic communities in Europe (Arends 1999) and/or from Brazil (Goodman 1987) introduced varieties of Portuguese and Spanish. The Africans were native speakers of Gbe, Kikongo and Akan (Arends 1995). Some of the early Europeans and slaves would also have been speakers of (non-native) varieties of English and English-lexified creoles current in other British possessions. In this early period, the European indentured labourers, owners of homesteads, and African slaves lived and worked in close contact with each other (Rens 1953).

This situation dramatically changed with the onset of the plantation economy (1680–1695). The massive importation of African slaves led to a change in the

makeup of the population. It now consisted primarily of slaves from Africa speaking Gbe and Kikongo while the Europeans and the early slaves were clearly in the minority. The ratio of Europeans to Africans dropped from 1:2/3 (1679) to 1:12 and during the 1680s the ratio of old to “new” slaves decreased from nearly 1:2 to nearly 1:7 (Arends 1995).

The plantation setting involved a much greater number of manual labourers per agricultural unit, and its population was subdivided into three social groups with different positions in the social hierarchy of the plantation. The European planter family and their European assistants were at the top of that social hierarchy, the new slaves were at the bottom, and the early slaves occupied an intermediate position. The new slaves were the largest group and were responsible for the planting, harvesting, transporting, etc. of the plantation’s main cash crop. The elite slaves made up about 15% of the population and performed more skilled jobs. The Europeans consisted of one or two people and organized and supervised the work.

Due to this stratification, the members of each social group now primarily interacted among themselves and much less with members from other social groups. The latter interactions took on a hierarchical nature and became restricted to relatively non-complex work-related matters, while the former had a less hierarchical character and also involved a wide variety of social functions. Moreover, while the early slaves and the Europeans had and shared common social and linguistic conventions established during the previous period, the new slaves did not. They had to forge them based on their native conventions and those they encountered on the plantations. Access to the latter must have been quite restricted, though, due to absence of close contact with the other two social groups.

Between 1695–1720 the importation of slaves continued at a somewhat lower rate, and the new arrivals were no longer the numerically dominant group. The ratios of Europeans to Africans continued to decrease and the ratios of old to new slaves increased continually. At this time, about 70% of all the slaves brought to Suriname were speakers of Gbe and only less than 20% were speakers of Kikongo varieties. During this period the varieties of Gbe and, more importantly, varieties of the plantation creole that had emerged in the second period must have gained considerable prominence.

This brief discussion suggests that “the creole” was formed around the end of the 17th and the early 18th century during the transition from the homestead to the plantation economy. The linguistic inputs to the initial formation of the plantation creole were (reduced) L2 varieties of English and to a lesser extent of Portuguese, and the L1s spoken by the slaves, mainly varieties of Gbe and Kikongo. The main process of contact was interference through shift. Essentially, speakers of Gbe and Kikongo varieties acquired reduced English structures and partially or completely

reinterpreted them according to linguistic patterns and structures from their linguistic background, including their native languages, other languages they were familiar with and universal strategies of contact. The varieties that emerged during the transition period became the main means of communication and served as targets of acquisition for both new arrivals and children born during the third setting.

Following its initial emergence, the plantation varieties came into contact with a range of other languages that would have been spoken by the slaves brought to Suriname in the period between 1720 and 1863, when the slave trade officially ended. They included Kwa languages spoken in modern-day Ghana, e.g., Gã, Twi, Ashante, but also languages found in the region ranging from modern-day Ivory Coast to Sierra Leone (Arends 1995). After the end of the slave trade and particularly following the abolition of slavery, the impact of the African languages slowly diminished.

Dutch hardly played an important role in 17th and 18th century Suriname (de Kleine 2002). It was only during the 18th century that Dutch started to be more widely diffused in the colony. The main agents in this process were descendants of mixed Afro-Surinamese-European unions who were quite wealthy, well-educated and occupied important social positions. They adopted Dutch as their main language to distinguish themselves from the slave population (de Kleine 2002: 211). However, Dutch existed in close contact with Sranan (Tongo), the coastal creole, and was much influenced by it, see for example the Dutch used in the translations of van Dyk's manual (de Kleine 2002: 211). Sranan was the main interactional language in both Paramaribo and on the plantations and was learned as a first language by most Surinamese. Dutch was rapidly gaining in importance during the nineteenth century. According to de Kleine (2002), well-situated families increasingly sent their children to Holland for their education, and a growing number of non-white intellectuals and members of the middle class adopted Dutch as their main means of expression, teaching it also as a first language to their children.

The vast majority of Afro-Surinamese, however, remained dominant in Sranan and had little opportunity to learn Dutch until 1876 when it was made the obligatory medium of instruction in Surinamese schools. Due to their long term close coexistence in the capital Paramaribo and coastal region of Suriname, a range of L2 varieties of Dutch that show varying degrees of influence from Sranan emerged and Sranan was subject to increasing influence from Dutch. The differences between the Bakra and Nengre varieties of Sranan posited by Schumann (1778) and Riemer (1779) may be largely due to differential Dutch influence. The majority of the Surinamese population, and especially the Maroons and Amerindian populations residing in the interior of Suriname, however, have traditionally had little or no access to Dutch. The Maroon creoles have therefore been little influenced by Dutch. Most of the mainly lexical influence from Dutch seems to

have until very recently been mediated through Sranan; due to its use as a regional lingua franca and its close relationship to the Maroon creoles – it descends from the same early plantation varieties (Figure 1) – all Maroons generally have at least some passive competence in Sranan.

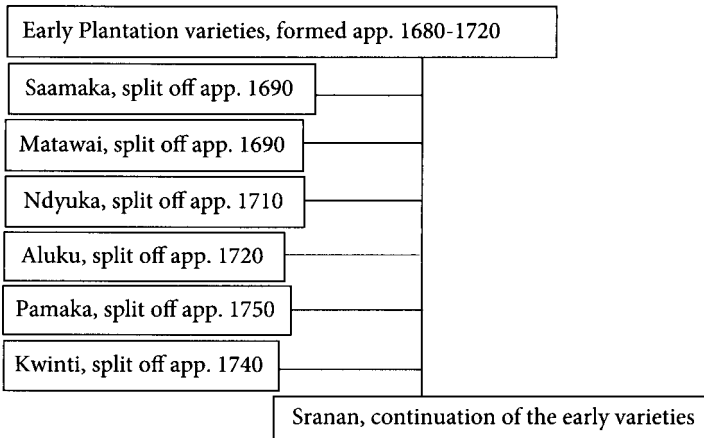


Figure 1. The relationship of the different modern Creoles of Suriname to the early plantation varieties and to each other.

2.2 Marronage

The Surinamese context is unique in that it has given rise to a family of creole languages. To date seven different creoles survive. Sranan Tongo (literally ‘Suriname tongue’) is the direct continuation of the early plantation varieties since “historically [it is] the language of the slaves inhabiting the plantation zone of the coast and the lower reaches of the major rivers” (Smith 1987: 3). Today, it is the mother tongue of the Afro-Surinamese population living in the coastal region and functions as a lingua franca in multiethnic Suriname. The other creoles Aluku, Ndyuka, Pamaka, Kwinti, Saamaka and Matawai split off from the plantation creole at different times during the late 17th and 18th century as a result of marronage by the founders of the communities who speak these languages. However, both linguistic and sociohistorical evidence strongly suggest that they all descend from one common ancestor, the creole varieties that developed on the plantations of Suriname between roughly the 1670s and 1720 (Migge 2003: 59). Figure 1, amended from Migge (2003), presents the relationship of the modern varieties to their ancestor and provides approximate dates when the different Maroon creoles most likely split off from the plantation varieties as the result of their founders’ flight from the plantation area. Note, however, that the actual dates of their flight are difficult to establish, since marronage was typically

hidden from the colonizers, and the emergence of actual groups typically took a relatively long time (cf. Hoogbergen 1983, 1990).

Marronage is a form of resistance to slavery and can be defined as desertion of the plantation with the aim of living out of the reach of the planters and the institution of slavery (Hoogbergen 1983: 75). The most common form was step-by-step marronage. First, individual slaves migrated to the secondary forest around the plantations, established a shelter and tried to make a living off the crops growing on the old fields (*kapuweri*) and from the things they obtained from the slaves from nearby plantations (Hoogbergen 1983: 78). After a while, several such runaways joined forces and formed a small group. They continued to depend on the plantations but also generally established fields and semi-permanent houses further away from the plantations. Once the planting grounds supplied sufficient food for the whole group, the hiders permanently settled close to their fields and established fully-fledged communities. A primary activity consisted of attracting new members, particularly women and children, through either relocating family members or abducting women from the plantations (Hoogbergen 1983: 80).

This scenario suggests that the early slaves spoke the language varieties practiced on the plantations. Their varieties also would not have quickly diverged significantly from the plantation varieties because of continued contact between slaves and Maroons. However, since runaways were generally African rather than locally born (van den Putte 2005), it is quite possible that, at least initially, the African L1s would have had a more significant influence on the Maroon varieties.

Since the end of the 18th century, Maroons have been in contact with the Amerindians living along the Maroni River and in the forest, like the Trio in Suriname, or the Wayana in French Guiana.² They developed exchange partnerships that gave rise to the creation of contact languages such as the Ndyuka-Trio Pidgin (see Huttar & Velanti 1997; Carlin 2002: 25). The Eastern Maroon Creoles (EMC), namely Ndyuka, Pamaka and Aluku, also borrowed much of their vocabulary for fauna, flora and traditional techniques of hunting and fishing from Carib languages.

3. Broad Overview of the TMA system in the creoles of Suriname and in Gbe

Overviews of the TMA systems in the creoles of Suriname (Tables 1 and 2) show that there are significant similarities between these four creoles.

2. The Aluku, for example, made contact with the Wayana in the 1790s, in the Tumuc-Humac mountains (Dupuis 2005).

Table 1. Tense and aspect in the contemporary creoles of Suriname (Winford & Migge 2007: 78)

Forms				Category	Meanings
SN	PM	ND	SM*		
Tense					
<i>ben</i>	<i>be</i>	<i>be</i>	<i>bi</i>	Relative Past	Past events “distanced” from S. Background past or “framepast” especially in narratives. Past in relation to another reference point in the past.
<i>o</i>	<i>o</i>	<i>o</i>	<i>o</i>	Future	Later time reference; Intention or prediction. Predictability.
Aspect					
\emptyset	\emptyset	\emptyset	\emptyset	Perfective	States or events seen as unanalyzed wholes.
<i>e</i>	<i>e</i>	<i>e</i>	<i>ta</i>	Imperfective	Situations (both states and occurrences) seen as “unbounded” and ongoing at reference time, which encompasses situations that are repeated, habitual, in progress or continuous.
<i>k(a)ba</i>	<i>kaba</i>	<i>kaba</i>	<i>kaa</i>	Completive ³	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.

*SN: Sranan Tongo, PM: Pamaka, ND: Ndyuka, SM: Saamaka.

First, TMA distinctions are generally expressed by preverbal forms with the exception of *kaba* (Completive Perfect) which occurs post-VP in all varieties.⁴ Second, for the most part, the creoles share the same TMA categories and generally also employ the same forms to express them. There are three types of differences. First,

3. The category we have labeled *Completive* might just as well be labeled *Perfect*. In any case, we regard it as a subtype of the crosslinguistic category PERFECT (Dahl 1985).

4. One of the reviewers argued that it is not appropriate to include both grammaticalized TMA markers and modal and aspectual verbs in a discussion on TMA systems. Arguing from a traditional syntax-based approach to TMA systems, she maintains that only the former elements are properly part of TMA systems. Our analysis of TMA follows a cross-linguistic pragmatics-based approach (Dahl 1985; Bybee et al. 1994); we investigate the kinds of TMA categories that exist in a language, the forms that express them and the kinds of primary and secondary meanings that they express in discourse. A discussion of the categorial status of the elements under investigation is provided along with the discussion of the uses of each element.

Table 2. Modality in the modern creoles of Suriname (based on Winford 2000a: 70ff; Migge 2006: 34ff, Migge & Winford to appear)

Forms				Category	Meanings
SN	PM	ND	SM		
Learned Ability					
<i>sabi fu</i>	<i>sabi</i>	<i>sabi</i>	<i>sá</i>		Ability or skills acquired through learning or training
Potential					
<i>man/kan</i>	<i>sa</i>	<i>sa</i>	<i>sa</i>	Positive	physical ability
	<i>man</i>	<i>poy</i>	<i>sa</i>	Negative	(Deontic) Ability subject to physical or natural law.
<i>kan</i>	<i>sa</i>	<i>sa</i>	<i>sa</i>	Positive	deontic (root) possibility
	<i>man</i>	<i>poy</i>	<i>sa</i>	Negative	Ability/possibility subject to moral or social law, involving situations under the agent's control
<i>man/kan</i>	<i>sa</i>	<i>sa</i>	<i>sa</i>	Positive	permission
	<i>man</i>	<i>poy</i>	<i>sa</i>	Negative	Deontic possibility imposed by authority (social, legal, etc.).
<i>kande*</i>	<i>sa</i>	<i>sa</i>	<i>sa</i>	Positive	epistemic possibility
	<i>sa</i>	<i>sa</i>	<i>sa</i>	Negative	Possible situations, or situations to the certainty of which the speaker is not committed.
	<i>kande</i>	<i>kande</i>	<i>kande</i>		
Necessity					
<i>musu/sa</i>	<i>mu</i>	<i>mu</i>	<i>musu</i>		deontic necessity or obligation
<i>musu</i>	<i>musu</i>	<i>musu</i>	<i>musu</i>	(stronger)	"Existence of external, social conditions compelling an agent to complete the predicate action." Bybee et al. (1994: 177)
		<i>fu</i>	<i>u</i>		
<i>sa</i>	<i>musu</i>	<i>musu</i>	<i>musu</i>	<i>musu</i>	epistemic necessity
					Inference based on sound evidence (prior knowledge, experience, etc.). Expresses a high degree of certainty on the speaker's part about some situation.
Desire					
<i>wani</i>	<i>wani</i>	<i>wani</i>	<i>ke</i>		Expresses speaker's desire and need.
Need					
	<i>a(bi) fanoudu (fu)**</i>				Expresses speaker's need
	<i>fanoudu</i>				

*Note: *Kande* is an adverb.

** Note: This construction is found in all four creoles.

in some cases the forms used differ somewhat phonologically. For example, the Past time-marking element is *ben* in Sranan Tongo, *be* in the EMCs and *bi* in Saamaka. Second, in a few cases different forms are used to express the same meanings. For instance, Imperfective aspect is expressed by the element *ta* in Saamaka which is unrelated to *e* in Sranan and the EMCs. Finally, the distribution of the element *sa* (potential modality) differs somewhat in the different creoles.

Table 3. Tense and Aspect categories in Gbe languages (Winford & Migge 2007: 80)

Category	Form	Meanings/uses
Tense		
<i>Future</i>	<i>á V</i> <i>lá V</i> <i>ná V</i>	Later time reference
Aspect		
<i>Perfective</i>	\emptyset	States or events seen as unanalyzed wholes. Simple past with non-statives, present with statives (when reference point is S).
<i>Completive</i>		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 reference point with statives.
Pattern (1)	<i>kò V</i> (Maxi-, Fongbe) <i>mò V</i> (Xwlagbe) <i>nò V</i> (Xwlagbe)	
Pattern (2)	VP + <i>vò</i> (Aja-, Gen-, Wacigbe)	Events in progress
<i>Progressive</i>		
Pattern (1)	<i>(lé) VV (kò)</i> (Ajagbe) <i>(lə) VV ì</i> (Wacigbe) <i>(le) VV nú</i> (Xwlagbe) <i>(mò) VV wè</i> (Maxigbe)	In cases where the prog. element immediately precedes the verb, e.g. intransitives or transitive verbs taking a pronominal object (SVO order).
Pattern (2)	<i>lé XP V (kò)</i> (Ajagbe) <i>lə XP V ì</i> (Wacigbe) <i>le XP V nú</i> (Xwlagbe) <i>mò VV wè</i> (Maxigbe)	In other transitive sentences.
Pattern (3)	<i>nó V</i> (Xwlagbe) <i>leé</i> (Gengbe)	With intransitive and transitive verbs.
Habitual		
Pattern (1)	<i>V ná</i> (Gen- Wacigbe) <i>V nó</i> (Ajagbe)	Customary or habitual situations.
Pattern (2)	<i>nó V</i> (Maxi- Xwlagbe)	
Pattern (3)	High tone on V (Xwlagbe)	
Prospective		
Pattern (1)	<i>mò (XP) ná V</i> (Maxi- Fongbe)	Events about to occur.
Pattern (2)	<i>lè (XP) V gé/gbé</i> (Ewe-, Gengbe)	
Pattern (3)	<i>lə (XP) já V</i> (Wacigbe)	

Studies of TMA in Gbe (Lefebvre 1996, 1998; Lefebvre & Brousseau 2002; Winford & Migge 2007; Migge 2006) also reveal significant similarities among the Gbe varieties in terms of the overall structure, the categories involved and the elements used to express them (Tables 3 and 4).⁵

Table 4. Modality in varieties of Gbe (Migge 2006: 35)

Forms	Category					Meanings
Aja	Gen	Waci	Xwela	Xwla	Maxi	
Learned ability						
<i>nya</i>	<i>nya</i>	<i>nya</i>	<i>nyɔ</i>	<i>nyɔ</i>	<i>nyɔ</i>	
Potential						
<i>teɲu</i>	<i>teɲ</i>	<i>tiɲ</i>	<i>hen teɲ (u)</i>	<i>teɲ</i>	<i>sixu</i> ⁶	Pos. physical ability
<i>senɲu</i>	<i>teɲ</i>	<i>tiɲ</i>	<i>kpego su</i>	<i>kpeji</i>	<i>sixu</i>	Neg.
<i>teɲu</i>	<i>teɲ</i>	<i>tiɲ</i>	<i>hen</i>	<i>teɲ</i>	<i>sixu</i>	Pos. deontic (root)
<i>senɲu</i>	<i>teɲ</i>	<i>tiɲ</i>	<i>kpego su</i>	<i>kpeji</i>	<i>sixu</i>	Neg. possibility
<i>teɲu</i>	<i>teɲ</i>	<i>tiɲ</i>	<i>teɲ(u) hen</i>	<i>teɲ</i>	<i>sixu</i>	Pos. permission
<i>senɲu</i>	<i>teɲ</i>	<i>tiɲ</i>	<i>kpego su</i>	<i>kpeji</i>	<i>sixu</i>	Neg.
<i>teɲu</i>	<i>teɲ</i>	<i>tiɲ</i>	<i>teɲ</i>	<i>teɲ</i>	<i>sixu</i>	epistemic possibility
Necessity						
<i>mo a</i>	<i>mo la</i>	<i>mo la</i>	<i>mo la</i>	<i>mo a</i>	<i>mo na</i>	deontic necessity
<i>mo a</i>	<i>mo la</i>	<i>mo la</i>	<i>mo la</i>	<i>mo a</i>	<i>mo na</i>	epistemic necessity
Subjunctive						
<i>ne</i>	<i>ne</i>	<i>ni</i>	<i>ni</i>	<i>ne</i>	<i>ni</i>	optative, hortative, jussive
Desire						
<i>ji</i>	<i>ji</i>	<i>ji</i>	<i>din</i>	<i>ka</i>	<i>jlo</i>	
			<i>jro</i>		<i>ba</i>	
Need						
<i>mo</i>	<i>hya</i>	<i>hinya</i>	<i>hya</i>	<i>ka</i>	<i>ba</i>	
<i>wudo</i>	<i>ji</i>		<i>din</i>			

5. Although both Gbe and Kikongo slaves were present during the emergence and early development of the Creoles of Suriname, this paper will focus on Gbe for several reasons. First, there is still very little data on Kikongo available. Second, the few comparative analyses of Creole-Gbe-Kikongo structural features (cf. Migge 2002) clearly show that the Creoles of Suriname more closely resemble Gbe. However, this is obviously subject to further investigation. Third, most of the elements with a Kikongo origin in the Creoles are lexical (content) morphemes (cf. Huttar 1985, 1986). Given the strong presence of Kikongo slaves again at the end of the 18th century, it seems likely that they are in fact due to later substrate influence, i.e., they are borrowings.

6. Besides *sixu*, the conversational data from Maxi also contain the element *sika*. It occurs much less frequently than *sixu* in the conversational data. The native informant never employed *sika* in the elicitations.

A comparison of TMA in Gbe and the Surinamese creoles equally reveals important similarities but also some differences. The two systems resemble each other in the following respects: First, they distinguish broadly similar TMA categories. Second, these categories are expressed in similar ways (e.g., Perfective is unmarked, Progressive and Completive Aspect are marked by forms that are semantically similar). Third, the forms have the same positioning within the VP. The Gbe system differs from the Surinamese TMA system in the following respects. First, the Gbe varieties encode a temporal opposition between Future and Non-future while the creoles make a distinction between Future and Past.⁷ Second, in the area of aspect, the Gbe varieties have distinct Habitual and Progressive categories while the creoles of Suriname have one Imperfective category that covers both meanings. Finally, several of the Gbe varieties have a Prospective aspect category but the creoles of Suriname do not. In the area of modality, the most important difference is that the Gbe varieties have a Subjunctive category while the creoles of Suriname, with the possible exception of Saamaka (cf. Lefebvre & Loranger 2006), generally do not. This broad comparison then suggests that the Gbe varieties clearly contributed to the emergence of the Surinamese TMA system. However, other sources and processes must have also played an important role since the Surinamese TMA systems are clearly not exact copies of the Gbe TMA systems.

Based on the sociohistorical context, English and to a much lesser extent Dutch would have been the most likely sources for such an influence. However, even a brief comparison of TMA categories and the means to express them in English and in the creoles of Suriname reveals important differences. English distinguishes between three temporal categories, Present, Past and Future while the Surinamese creoles distinguish only two, Future and Past. In English, later time reference and intention and prediction are expressed by different preverbal forms (*will*, *going to*), the Past is obligatorily expressed on the verb by means of a suffix or other vocalic changes in verb form, and the Present is mostly unmarked. The preverbal tense forms in the Surinamese creoles (*o* 'Future', *be(n)/bi* 'Past') are not related to the English tense-marking elements and they also differ in their overall semantics (e.g., *o* expresses both later time reference and intention and prediction, and *be(n)/bi* conveys relative past). In the area of aspect, English distinguishes between progressive and continuous aspect conveyed by *to be + V-ing* construction and a Present Perfect Aspect expressed by an auxiliary *have + past participle* form that

7. Note, however, that Lefebvre (1996) and Lefebvre & Brousseau (2002) argue that Fongbe has a past time marker (*ko*). My own research on a closely related variety, Maxigbe, did not confirm this analysis. In Maxigbe *ko* seems to function as a Completive aspect marker (Winford & Migge 2007).

denotes an event or state begun in the past with relevance for the present while the Surinamese creoles have an Imperfective, a Completive Perfect and Perfective category. In relation to modality, English does not have a potential category like most of the creoles; Ability and Root Possibility are expressed by the element *can* while permission and epistemic possibility are expressed by *may*. Moreover, unlike the Surinamese creoles, English does not distinguish between learned ability and physical ability. Similarities between the creoles and English are of two sorts. First, modality categories are all expressed by preverbal forms. Second, some of the elements used to express TMA categories in the creoles are most likely derived from equivalent English elements but their meanings only overlap in part. For instance, *mu(su)* and *must* both express strong obligation but *mu(su)* also expresses weak obligation, unfulfilled past obligation, admonition etc.

4. The origin of the TMA system of the creoles of Suriname: A multi-causal approach

When comparing the contemporary TMA systems of the creoles of Suriname with those of their input varieties (Gbe and English), and with available data on earlier stages of Sranan and Saamaka, it is possible to draw conclusions about the sources and social and linguistic processes that played a role in the formation and development of the TMA system of the Surinamese creoles.⁸ Below we discuss four such processes: (1) substrate influence, (2) internal change from a substrate calque, (3) superstrate influence and (4) leveling. The discussion suggests that creolization was a gradual rather than an abrupt process (Arends 1993). However, it was clearly not a homogeneous or linear process but seems to have been multi-layered; different kinds of changes took place at different moments in the history of these creoles.

4.1 Substrate influence: The perfective aspect category

Previous research on the creoles of Suriname strongly suggests that substrate influence played an important role in their emergence (cf. Migge 2000, 2002, 2003, 2006). Substrate influence (in the context of creole formation) is here defined as a process whereby the creators of a creole fully or partially functionally reinterpreted

8. Elicited and natural data on the Gbe varieties was drawn from representatives of the five main subclusters (Aja (Dogbo), Ewe/Vhe (Wacigbe), Fon (Maxigbe), Gen (Anexo), Phla-Phera (Xwelagbe & Xwlagbe) identified by Capo (1988). Since it is common to refer to *Anexo* as *Gengbe* or *Mina* and to *Dogbo* as *Ajagbe*, we also use these names in this article.

constructions they encountered from the European superstrate language(s) in the setting (and the elements that make them up) according to the principles and patterns of their first language (cf. Migge 2003).⁹ A good example of this in the area of TMA is the Perfective Aspect category (Winford & Migge 2007).

Semantically, the Perfective Aspect category presents a situation as an unanalyzed whole without regard to its internal structure (Comrie 1976: 16). Its exact meanings differ depending on the context and the predicates involved (Winford 2000b). In both the Surinamese creoles and in Gbe varieties, it is realized by the unmarked verb form and expresses a similar range of meanings. When the discourse context establishes speech time as the point of reference, the default interpretation of the unmarked verb conveys “present” time reference with stative verbs (1) and property items (2).¹⁰ Property items in the creoles of Suriname and Gbe are process-denoting verbs. When they are unmarked by TMA-marking elements, their interpretation is ambiguous between a current state and a completed process reading (for details, see Winford 1997; Migge 2000).

- (1) Ajagbe a. *Nsuvi* *ɔ* *jeʃi* *nyɔnuvi* *ɔ*.
 boy DET know girl DET
- Pamaka b. *A* *boy* *sabi* *a* *meyse*.
 DET boy know DET girl
 ‘The boy knows the girl.’

9. There are no hard and fast criteria for exhaustively determining whether some property emerged due to either substrate influence (i.e., external) or language-internal change because the two often work in tandem. According to Thomason & Kaufman (1988: 57), it is clear “that historical linguists [and typologists] have traditionally been strongly prejudiced in favor of internal explanations for linguistic change. In particular, the methodological inclination has been to consider the possibility of external causation only when all efforts to find an internal motivation for some change have failed [...]. Aside from the fact that a weak internal motivation is less convincing as a cause than a strong external motivation, the possibility of multiple causation should be kept in mind.” They further maintain that “some scholars have argued that a claim of external causation should be made primarily (or only) for changes that are demonstrably not “natural,” or common. [...] However, though adopting this criterion is useful as a methodological strategy for convincing sceptics, it is not promising as a general theoretical approach to the analysis of linguistic change, because [...] there is every reason to suppose that external causation is responsible for common and natural changes as well as for uncommon changes.” (ibid 59–60). They propose that one possible criterion could be to consider a whole language rather than isolated features. “If a language has undergone structural interference in one subsystem, then it will have undergone structural interference in others as well, from the same source.” (ibid 60)

10. *Stative verb* is used here to refer to a verb that may denote a “state (...) characterized by absence of change, of discontinuity; all phases of the static situation are the same” (Desclés 1989: 172). It is a semantic property that does not correspond to any morphological class of verbs in the Surinamese creoles.

- (2) Gengbe a. *Esi a fa.*
 water DET cold
 Saamaka b. *Di wata aki koto.*
 DET water here cold
 'The/this water is cold.'

With activity verbs, it generally has a "simple past" time reference (cf. 3).

- (3) Xwelagbe a. *E kplɔ eyi xɔmɛ.*
 he clean his room
 Pamaka b. *A kiin/seeka en kamba.*
 he clean/arrange his room
 'He cleaned his room.'

Gbe differs from the creoles in that the unmarked stative verb may also have past time reference. In the creoles the verb is generally preceded by the past time-marking element. The unmarked verb is also used to convey the sense of current relevance and successiveness of actions in the past in both languages.

The Perfective Aspect category has also been remarkably stable over time in the creoles. In the early texts it is also expressed by the unmarked verb and presents a situation as an unanalyzed whole (cf. 4).

- (4) Early Sranan *Mi kom fo takki joe gran odi van wan zomma.*
 I come to talk you big regards of one people
 'I came to give you someone's regards.'
 (van Dyk (1765), in Arends & Perl 1995: 147)

State-denoting verbs and property items (cf. 5) usually have a present time reference while activity verbs receive a past-time reference (cf. 6).

- (5) Early Sranan *Mi membre hem.*
 I think him
 'I think of him.'
 (Schumann (1783) in Kramp 1983: 189)
- (6) Early Sranan *A poti alle dissi santi deja na inni gi dem.*
 he put all these thing here LOC inside give them
 'He wrote all these things down for them.'
 (Peace Treaty (1762) in Arends & van den Berg 2004: 1)

Stative verbs with past time reference are preceded by *ben* (cf. 7):

- (7) Early Sranan *Mino ben zabi.*
 I.NEG PST know
 'I didn't know that.'
 (van Dyk (1765), in Arends & Perl 1995: 136)

Moreover, in the early texts, the unmarked verb form is also already used to express successiveness (cf. 8).

- (8) Early Sranan *Mastra Aurora de go na koekeroe kaba voete missi,
 master Aurora IPFV go LOC kitchen and foot miss
 a brokke da pletti metti fadom na dotted.
 she break DET plate meat fall_down LOC floor
 'Overseer, Aurora was going to the kitchen, but she stumbled,
 broke the plate and the meat fell down on the floor.'
 (van Dyk (1765), in Arends & Perl 1995: 181)*

Together, these data strongly suggest that the Perfective Aspect category emerged at the time of creole formation and that it arose as the result of substrate influence.

4.2 Internal change: The imperfective aspect category

Language-internal change is a cover term for linguistic changes that were not motivated by an external linguistic model. There are two main mechanisms of language internal change, reanalysis and extension (Harris & Campbell 1995: 50–51). A third mechanism that has received much attention in the literature is grammaticalisation. Its status as an independent mechanism of change is still subject to discussion (cf. Joseph 2001). An example of internal change in the area of TMA in the creoles of Suriname is the emergence of the imperfective-marking element *e*.

Imperfective is conveyed by *e* in Sranan and the Eastern Maroon Creoles (Aluku, Ndyuka, Pamaka), and by *ta* in Saamaka (cf. 9). *E* derives from the locational copula *de* and *ta* derives from the verb *tan* 'to stay' and/or the Portuguese form *esta* 'to be'.

[A: What is your brother doing right now?]

- (9) Pamaka a. B: A *e* *seeka en osu*.
 he IPFV clear his room
 Saamaka b. B: A *ta* *seeka hen kamba*.
 he IPFV arrange his room
 'He is cleaning his room.'

In the Gbe varieties different strategies exist to mark Progressive Aspect (cf. Table 3). In most varieties of Gbe the verb 'be-at' selects a nominalized VP, either a reduplicated verb (cf. 11) or XP-V construction (cf. 10a) marked by a particle (Fabb 1992). In Gengbe and Xwelagbe, as in the creoles (cf. 9), the verbs 'be-at' (10a, b) and 'stay' (10c) respectively, precede the unreduplicated/inverted verb.

- (10) Wacigbe a. *á lə wòmá hlən (ŋ)*.
 he be-at book read PART
 'He is reading a book.'
 Gengbe b. *É lé wlən nú*.
 he be-at write thing
 'He is writing something.'

Xwelagbe c. *E nɔ xle wema.*
 he stay read book
 'He is reading a book.'

In Gbe, the progressive construction expresses a sense of an event or activity in progress. However, with property items and certain psychological state verbs, an inchoative or "in-process" meaning is conveyed (cf. 11–12; also Migge 2002). In combination with motion verbs, the progressive construction expresses a future sense.

(11) Gungbe a. *Sin lɔ̀ tò fifà.* (Aboh, p.c. 2004)
 water DET PROG red-cold
 'The water is getting cold/hot.'

Pamaka b. *Den dey ya den manyan e lepi.*
 DET day here DET mango IPFV ripe.
 'These days the mangos are ripening.'

(12) Wacigbe a. *Me le nu nyá-ŋ le sukulu fifia.*
 I PROG thing know-PARTLOC school now
 'I am now understanding lessons at school.'

Pamaka b. A: *En seefi e go?*
 he self IPFV go
 B: *Den e tya en go, a e sabi a pasi.*
 they IPFV carry him go he IPFVknow DET path
 'A: Does he go [to the toilet] himself? B: They bring him,
 he is getting to know the way.' (PM 11)

There is also another similarity: *e* in the creoles is derived from the locational verb *de* (Arends 1986) and the initial element in the progressive construction in Gbe is also a locational verb (Jondoh 1980; Fabb 1992).

The evidence suggests that the emergence of *de* as a locational and existential verb in the early plantation varieties on the model of the Gbe locational and existential verb also gave rise to *de*'s use as a Progressive aspect-marking element since in a number of Gbe languages this verb is also involved in the progressive construction, see Table 3 (Winford & Migge 2007). Essentially, when the slaves established an interlingual identification between *de* and *le*, *lé*, *mo* etc. in Gbe in existential contexts, all the semantic and syntactic information of the Gbe elements was automatically projected onto *de*.¹¹ As a result, *de* came to function in the same

11. This is of course unless these properties clashed with properties that it already expressed such as certain properties that are inferable from the (existential) construction in which *de* was initially reinterpreted

contexts and expressing the same meanings (i.e., existential, locational and progressive) as the Gbe elements with which it had been identified (Migge 2002).

However, *e* and *ta* differ from their Gbe counterparts in that they are also used to express habitual and generic meanings (cf. 13) besides Progressive Aspect (and general existence and existence in a location). Habitual refers to events that take place frequently or regularly and generic refers to properties or activities that are naturally associated with a particular class of entities. In Gbe, habitual and generic meanings are conveyed by a separate habitual element (cf. 14).

- (13) Ndyuka a. [What does your brother do after dinner?]
A e leysi wan buku.
 he IPFV read one book
 'He (usually) reads a book.'

- b. [What do dogs do?]
Den e bali.
 they IPFV bark
 'They bark.'

- (14) Maxigbe a. *E nɔ xa wema.*
 he HAB read letter
 'He usually reads books.'

- b. *Afun/cuku ɔ ee nɔ hu.*
 dog DET PL HAB bark
 'Dogs bark.'

The progressive elements, though, may appear in contexts that have a habitual reading, usually due to the presence of adverbs that convey habituality (cf. 15).

- (15) Gengbe *Kòfi nɔ xèví lé mí yèsíáyí.*
 Kofi stay bird catch PART all the time
 'Kofi is always catching birds.' (Jondoh 1980: 39)

In the early texts *de/tan* have mostly a progressive meaning (cf. 16) and a continuous meaning (cf. 17), while the habitual meaning is not widely represented (cf. 18).¹²

12. Continuous refers to an on-going event or activity that stretches over an extended period of time.

- (16) Early Sranan *O goedoe gado masra, koudemaas de foen mi misjie*
 o good God master, Koudemaas IPFV rape my woman
 'O my God, Koudemas is raping my woman.'
 (Court Records (1607–1667), in van den Berg 2000: 94)
- (17) Early Sranan *Mi blibi no wan zomma de go lange da boote.*
 I think NEG one someone IPFV go with DET boat
 'I don't think anybody's going with that boat.'
 (van Dyk (1765), in Arends & Perl 1995: 214)
- [the manager is talking about "the good life" of the housemaids]:
- (18) Early Sranan *Den kiesi zwiti jamjam kaba den de slibi lange mi*
 they catch sweet food and they IPFV sleep with me
 'They get nice food and (then) they sleep with me.'
 (van Dyk (1765), in Arends & Perl 1995: 186)

De/tan are also used to convey a generic meaning in the early texts but they do not appear to be obligatory in all the contexts where a generic meaning is expressed. Van Dyk presents generic constructions without *de* (cf. 19), whereas Focke's dictionary includes many proverbs that employ *de* (cf. 20). The data do not really allow us to conclude that the meaning of *de* (gradually) broadened during this period to include the sense of 'generic'.

- (19) Early Sranan *Mastra da worke wawan no myki pranasie.*
 master DET work alone NEG make plantation
 'It's not just the work that makes a good plantation, master.'
 (van Dyk (1765), in Arends & Perl 1995: 208)
- (20) Early Sranan *Bérgi-nánga bérgi no de míti makándra,*
 mountain-with mountain NEG IPFV meet together
ma sóema nánga sóema sa míti.
 but people with people FUT meet
 'Mountains do not meet, but people can meet each other.'
 (Focke (1855), see at ,Bergi')

Overall the evidence suggests that *de* first emerged as a locational and existential verb and Progressive aspect-marking element in the early plantation varieties due to substrate influence (Migge 2002). Although it is conceivable that its use as a Progressive-marking element was reinforced by universal tendencies since grammaticalization from a locative verb to Progressive aspect-marking element is a well-attested process cross-linguistically (see Bybee et al. 1994; Heine & Kuteva 2002). Once thus emerged, *de*'s specific meaning, progressive, extended to a more general value of unbounded or general situations that nowadays allows a generic and habitual interpretation due to a language-internal process of extension. The

phonological reduction from early *de* to present day *e* completed this process of internal language change that originated with a calque on a substrate structure.

4.3 Superstrate influence: The relative past time category

Superstrate influence (in the context of creole genesis) generally refers to the full or partial adoption of elements and structures including some or all of their pragmatic functions that come from the European language(s) in the setting. In the case of TMA in the creoles of Suriname, the past time-marking element is a good instance of this.

The relative past time-marking element in all the creoles derives from the English past participle *been*: *ben* in Sranan, *be* in the EM varieties and *bi* in Saamaka (cf. 21). In its prototypical function, it “locate[s] some situation as occurring prior to the time reference point under focus in the discourse” (Winford 2000b: 400), which is either the moment of speaking (21) or another event (22).

- (21) Saamaka *A bi wasi wosu eside.*
 he PST wash house yesterday
 ‘He cleaned his house.’

- (22) Pamaka [regarding a window that is now closed:
 You OPEN the window (and closed it again?)]
 Iya, mi be opo en.
 yes I PST open it
 ‘Yes, I opened it.’

Ben/be/bi is optional when past time reference is indicated by other means. In such contexts it usually indicates a past before past (cf. 23) or backgrounded information (see for example Winford 2000b: 401).

- (23) Pamaka [Q: Did you know my father, who died last year?]
 Iya, mi be sabi en, mi be si en wan leisi.
 Yes I PST know him I PST see him one time
 ‘Yes, I knew him, I met him once.’

When *ben/be/bi* precedes verbs expressing requests and invitations, it may also convey hypothetical meaning (cf. 24) to mitigate the effect of a face threat.

- (24) Pamaka *Mi be wani kon luku i moo lati.*
 I PST want come look you more late
 ‘I wanted to come visit you later on.’

In conditional clauses it also expresses counterfactuality in the if-clause, and, in combination with *sa* or *o*, an unrealized event in the consequent clause (cf. 25).

- (25) Pamaka *Efu mi án be luku bun, mi be o naki a pikin.*
 if I NEG PST look good I PST FUT hit DET child
 'If I had not been careful, I would have hit the child.'

Gbe does not have a relative past time marker. Verbs that have past time reference usually appear in the unmarked verb form and the past time reference is established through the discourse context or by an adverbial form. All varieties of Gbe, however, employ a post-verbally occurring adverbial form meaning "before" to indicate a past before past state or activity (26a) or simply a state that no longer exists (26b). This form is still subject to further investigation.

- (26) Ajagbe [regarding a window that is now closed: You OPEN the window
 (and closed it again?)]
 A: *E hún sêfle lɔ sá à?*
 you open window DET before Q
 B: *Òò, n-hw-in sa gò.*
 no I-open-it before NEG
 'No, I did not open it.'

Sa(n) in Gbe also regularly occurs in conditional clauses to express counter-factuality in the if-clause (cf. 27).

- (27) Ajagbe *Nɔ̀ mì da èkɔ̀n lɔ sa ɔ, n teɲu xwĩ.*
 If we throw fist DET before PART I can beat-him
 'If we'd hit each other, I could have beaten him.'

These data then suggest that although there appears to be some overlap between the creole relative past category and past marking strategies in Gbe, i.e., the fact that it expresses overlapping meanings, the creole category does not seem to have been directly modeled on Gbe strategies.

In the early texts, past time reference was from the beginning marked by *ben/bin* in Early Sranan and by *bi* in Early Saamaka. It conveyed two principal meanings:

(1) a situation occurring prior to the moment of speech:

- (28) Early Sranan *Tide da jarri den ben myki mi Mama.*
 today COP year they PST make my mother
 'Today's my mother's birthday.'
 (van Dyk 1765, in Arends & Perl 1995: 160)

(2) a situation occurring prior to a past event:

- (29) Early Sranan *Hoe tem joe kom Disi mino ben de.*
 Q. time you come REL I.NEG PST be
 'What time did you come ... when I wasn't home?'
 (van Dyk 1765, in Arends & Perl 1995: 136)

Ben is generally used to indicate past time reference with state-denoting verbs (see 7). In hypothetical clauses, *ben* can appear in the protasis (if-clause) or in the main clause, and when it is combined with *sa*, the construction conveys a meaning of counterfactuality:

- (30) Early Sranan *Effi mi no ben takki gi ju, ju no ben sa sabi.*
 if I NEG PST talk to you you NEG PST FUT know
 'If I had not told you, you wouldn't have known.'
 (Schumann (1783), in Kramp 1983: 60)

Schumann attested the hypothetical meaning of *bi* in Saamaka even in clauses not introduced by *if* and explains that *bi* is a "conjunctivi et optativi" (cf. 31):

- (31) Early Saamaka *A bi bun, effi a bi wakka.*
 it PST good if he PST walk
 'It would have been good if he had gone.'
 (Schumann (1778), in Schuchardt 1914: 53)

Another function of *ben/bin* in Early Sranan is to mitigate a demand:

- (32) Early Sranan *Mi ben hangeri fo takke lange joe.*
 I PST hungry for talk with you
 'I would have liked to talk to you.'
 (van Dyk (1765), in Arends & Perl 1995: 132)

The early texts show that the past category and its secondary meanings were already well established at the end of the 18th century.

These data suggest that both etymologically and functionally, *ben/be/bi* derive from the English past participle *been*. The slaves most likely encountered the form in English (regular) present perfect (*I've been here before.*), polite (*I've been wanting to see you.*), past perfect (*I'd been there ...*) and counterfactual (*If I'd been there ...*) constructions in which the auxiliary (*have/had*) was contracted and thus not perceptible to them. They therefore identified *been* rather than *Aux + been* with past time reference, past before past, polite and counterfactual meanings.¹³ Its distribution in past contexts, i.e., the fact that it usually does not occur when past time reference has been contextually established, is probably due to substrate influence; the Gbe past time adverbs generally only occur in constructions where the temporal reference has not been clearly established otherwise.

13. Since, unlike English, the Gbe languages do not have a Present Perfect category and the slaves' contact with English was relatively minor, they would have only inferred the past temporal references of English Present Perfect constructions and not the durational aspect of it.

4.4 Leveling: The case of *o* and *sa*

Dialect leveling refers to a process whereby in a situation of competition between pragmatically overlapping elements characteristic of different varieties of the same language one of the elements disappears from the language due to the selection and generalisation of the other feature (Siegel 1997). In the area of TMA, an instance of leveling took place in the expression of future time reference.

In the contemporary Surinamese creoles, later time reference (33), intention (34) and prediction (35) is conveyed by *o*, while uncertain future is generally expressed using the Potential mood-marking element *sa* (cf. 36) in the Maroon creoles or the Future element in combination with an adverb expressing uncertainty (cf. 37).

- (33) Ndyuka *A o kon ya tamaa.*
 he FUT come here tomorrow
 'He'll come tomorrow.'
- (34) Ndyuka *Tè mi (o) kon gaandi, mi o bay wan gaan osu.*
 when I FUT come old I FUT buy a big house
 'When I am old, I'll buy a big house.'
- (35) Ndyuka *Ef(u) i poti wan siton a ini a pikin tasi, a o*
 if you put a stone LOC in DET little bag it FUT
piiti en.
 rip it
 'If you put a stone in this bag, it'll rip.'
- (36) 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.'
- (37) Ndyuka *Kande, J. o/sa go a Faansi taa wiki.*
 maybe J. FUT go LOC France other week
 'J. may go to France next week/ it is possible that J. will go to France next week.'

The same distribution is also found in several of the Gbe varieties (Fon varieties, Aja, Phla-Phera) where *lá*, *ná* or *á* is used to mark predictive future and the potential modality elements such as *sixu* (Maxi) and *tɛn* (Xwla) convey uncertain future (Migge 2006). In other varieties, such as Gen and Ewegbe varieties, *lá*, *á* seem to have strong overtones of potentiality. Essegbey (2004) argues that *á* in Anlo is a potential rather than a future-marking element because it conveys epistemic possibility by itself (cf. 38a) and contributes an uncertainty or potential meaning when it is combined with the ability-expressing element (cf. 38b).

- (38) Anlogbe a. (*ewohĩ*) *John á-nɔ afeme fifia.*
 maybe John POT-be_located home now
 'John may be at home now (= It's possible that John is at home now).'
- b. *Tsi á-teɲu á-dza le zã siã me.*
 water POT-be_able POT-fall LOC night this in
 'It may rain tonight (= It's possible it will rain tonight).'

In the early texts, by contrast, future tense is marked by several markers: *zal/za/sa, de go* in van Dyk, and *go, de go* in Schumann. *Za/zal*, which seems to have a Dutch origin, generally conveys a sense of 'later time reference'.¹⁴

- (39) Early Sranan *mi za myki da merki morre bikki*
 I FUT make DET mark more big
 'I'll make (the mark) bigger.'
 (van Dyk 1765, in Arends & Perl 1995: 176)
- (40) Early Sranan *na abra dina mi sa kom.*
 LOC over diner I FUT come
 'I will come in the afternoon.'
 (Schumann 1783 in Kramp 1983: 84)

Uncertain future is expressed by the meaning of the adverb *zomtem*¹⁵ 'perhaps' combined with the marker *sa* (cf. 41).

- (41) Early Sranan *Zomtem mi no za zi joe wan trom more.*
 perhaps I NEG FUT see you one time more
 'I may never see you again.'
 (van Dyk 1765, in Arends & Perl 1995: 144)

The contemporary future marker of the creoles of Suriname, *o*, however, seems to have developed from the construction *de go*V. There is no progressive future (*de go*) construction in Dutch as attested in Early Sranan, and the *be going to* construction in English emerged only at the end of the 17th century. However, there is a possible model in the Gbe varieties, namely the Prospective Future construction (see Table 3). In the latter construction, the verb is juxtaposed with the locational copula and a particle expressing progressive aspect (see Table 3). It seems quite

14. *zal/za/sa* are different orthographic forms of the same element. In modern writings, the form is always presented as *sa*.

15. *Zomtem* disappeared in the Maroon creoles and Sranan. It was replaced by *kande* 'perhaps' which conveys a meaning of 'epistemic possibility' when combined with *o* or *sa*. This form is not attested until the second half of the 19th century (see Focke 1855).

likely that when the slaves reinterpreted the adverb *de* as a locational and existential verb on the basis of the locational and existential verb in their native Gbe (Migge 2002), *de* also came to be extended to both progressive environments (see §3.2) and constructions expressing prospective future. The model for this would have been the Gbe locational and existential verbs that also appeared in these contexts. Since unlike the Gbe varieties, the creole construction did not involve a postposed Progressive or Prospective aspect-expressing particle, the locational and existential verb *de* came to function as the sole marker of Progressive and Prospective Aspect in the creoles.

The development of *de go* expressing Prospective future to modern *o* conveying general future time reference was due to gradual language-internal change. The following pieces of evidence support this analysis. First, grammaticalization of a “movement towards a goal” construction (*I’m going to...*) to a future construction is a well-attested path of development (Bybee et al. 1994; Heine & Kuteva 2002). Second, the early texts suggest that the use of *de go/go* gradually increased throughout the 18th century. While van Dyk (1765) includes only one example of the *go V* future construction and four of the *de go* future construction, they are already much more frequently attested in Schumann (1783). In the entry for *go* he also notes: “Auch wird *go* sehr häufig als nota futuri anstatt *sa* gebracht” (Kramp 1983: 110).

- (42) Early Sranan *a de go passa abra*
 he 1PFV go pass over
 ‘It will overflow.’
 (Schumann (1783), in Kramp 1983: 45)

Third, in Schumann the *go – de go* constructions also already appear with a greater range of subjects. The fact that they occur with inanimate, non-controlling subjects, in particular, suggests that *go/de go* were fully grammaticalized as future markers at the end of the 18th century and had already lost their specific meaning of ‘movement towards a goal’ and ‘prediction’.

Fourth, Riemer in his 1779 Saamaka dictionary, inspired by Schumann’s 1778 Saamaka dictionary, writes that *sa* is a possible future marker in Saamaka but is not the most common one which is *tann/tan go*. This is the exact replica of the *de go* construction in Early Sranan. He adds that *sa* has a modal meaning of ‘obligation’, which is also sometimes found in the other texts (van Dyk, for example):

- (43) Early Sranan *da bassia takki mi za go na mastra*
 DET overseer talk I FUT go LOC master
fo locke koekeroe worke.
 to look cook work
 ‘The overseer said I should come to you to work in the kitchen.’
 (van Dyk (1765), in Arends & Perl 1995: 185)

Together, these facts suggest that modern *o* emerged along the developmental path discussed by Bybee et al. (1994: 266ff) for other languages. Essentially, *de go* first emerged as an “immediate future” (*I’m on my way doing it right now*) due to substrate patterns and later gradually became a general future reducing to a simple form *go V*. It then underwent phonological reduction to present-day *o V*.

However, the question is why Early Sranan, which already had the future marker *sa*, developed the *de go V/go V* construction. Two hypotheses suggest themselves. According to Hypothesis One, the *de go V/go V* construction emerged because *sa* was acquiring modal meanings. Initially, the *sa V* future construction, which was modeled on the substrate construction (Winford & Migge 2007) and had been in existence since creole formation, was used to express a predictive future by itself and uncertain future when combined with the adverb *zomtem*. However, later, during the later 18th century, *sa* started to take on mainly modal meanings. To fill this gap left behind by the semantic change/extension of *sa*, the *de go V/go V* construction developed at the end of the 18th. Initially, it was a “movement towards a goal” construction combined with the progressive form and expressed immediate future. It then reduced to a simple future construction (*go + V*) and extended its meaning to conveying predictive future.

Although it is well-attested in the literature that future markers can gradually become epistemic modality markers (see Bybee et al. 1994; Heine & Kuteva 2002), this analysis does not explain how *sa* spread to all the meanings in the “potential” category such as root possibility and physical and mental ability in the Maroon creoles (Migge 2006). According to Bybee et al. (1994: 205ff), the attested developmental path goes from ability to root possibility and then epistemic possibility, and not the other way round. Moreover, it does not help us to explain why *sa* disappeared from several potential categories in Sranan, but was kept in the Maroon creoles.

Hypothesis Two maintains that the *sa V* and the *de/tan go V* future constructions each belong to different creole varieties. The variation in the early texts is then due to contact between these two varieties. Since the beginning, at least two varieties of creole existed: *Nengre Tongo* (Black’s speech) and *Bakra Tongo* (European’s speech). The latter was spoken by Europeans (and possibly as a stylistic variant by some of the slaves that were close to the Europeans) and much influenced by Dutch while the former was the language of the plantation slaves. According to Schumann and Riemer, the *Nengre Tongo* variety employed the *tann go* (Saamaka) and *de go – go* (Sranan Tongo) construction to mark future and *sa* had a modal value. In *Bakra Tongo*, however, *sa* was the main future marker. The variation found in the future domain between *sa/de go* and *go* in some of the early texts, which most likely mainly reflect mostly *Bakra Tongo* usage, then occurred because the *Nengre Tongo* forms (*de go, go*) were beginning to spread

to *Bakra Tongo*. The *go V* construction – the *Nengre* variants – finally generalizes (at the expenses of the *Bakra Tongo* construction involving *sa* as a future marker) probably due to the overwhelming numerical strength of the slave population as opposed to the Europeans. At the time, the number of slaves was growing rapidly clearly outnumbering the existing slaves – in 1783 the black-to-white ratio in Suriname was 24: 1 (Arends 1995: 260). Following that period, *go* phonologically reduced to *o* and came to show a high degree of cliticization in the contemporary creoles (Goury 2003: 225ff). Unlike the Maroon creoles, Sranan Tongo retained the two future constructions (Winford 2000b). The *de go V* construction conveys an aspectual value of “prospective” while the *o V* construction conveys a temporal value of future time reference and prediction. *Sa* is retained as a modality marker though with only partially similar values in Sranan and the Maroon creoles (Migge 2006; Winford 2000a).¹⁶

5. Conclusion

Our sociohistorical analysis showed that several linguistic inputs played a role in both the initial emergence and development of the creoles of Suriname. L2 varieties of English and to a lesser extent L2 varieties of Portuguese, and varieties of Kikongo and Gbe were crucially involved in the initial formation of the early creole varieties. Once the creole varieties had emerged, they were influenced by other West African languages, Cariban languages and by Dutch because of changes in the social makeup of the setting. Our comparative linguistic analysis largely supports these findings. First, the overall makeup of the creole TMA system resembles that of Gbe in many respects. Second, some categories that have been in existence since the beginning such as the Perfective category are either clearly modeled on Gbe counterparts or the emergence of categories and the elements that express them were at least in part triggered by substrate models (progressive). Third, other areas that also date from the initial formation of the creole varieties were largely based on English models (Past marker), Dutch models (Future *sa* in *Bakra Tongo*), or Portuguese models (Completive marker *kaba* (Winford & Migge 2007: 83ff)).

Comparison of modern and early textual data also revealed that some aspects such as the use of the progressive marker to express habitual and generic meanings only emerged later, possibly due to a process of semantic extension. Other categories such as the predictive future that, based on an analysis of just synchronic

16. For more details on the origin and development of *sa*, see Migge & Winford (to appear).

data, appeared to be substrate calques were found to have emerged due to internal development.

The variation apparent in the early written sources (and differences between the modern and diachronic data) in the area of future tense marking was found not to be due to gradual language-internal change. Instead, it appears to have emerged due to contact between different varieties of creole, namely *Nengre Tongo* and *Bakra Tongo*, that had been in existence since the beginning. Towards the end of the 18th century the latter variety spoken by the Europeans and their associates was increasingly merging with the dominant variety, *Nengre Tongo*, giving rise to linguistic variation and change.

Our investigation then challenges views that see creolization or creole formation as a separate, unitary and abrupt process of language creation (cf. Thomason & Kaufman 1988) and supports views that conceptualize creole formation as a gradual and multi-layered process (Arends 1993; Bruyn 1995) involving processes of language change that also operate in other so-called “normal” contact settings (Thomason & Kaufman 1988). Our discussion suggests that the present-day TMA system emerged in several stages involving first, interference through shift – speakers of African language reinterpreted strings and elements from L2 English according to L1 models – and retention of superstrate models. Second, other elements, categories and functions emerged later either as a result of processes of gradual language-internal change (and contact) affecting elements that had previously emerged due to interference through shift or retention, or due to processes of contact between partially different creole varieties that coexisted in the same context.

Special abbreviations

HAB	habitual
PART	particle
POT	potential

References

- Arends, Jacques. 1986. Genesis and development of the equative copula in Sranan. In Muysken, Pieter & Smith, Norval (Eds), *Substrata versus universals in creole genesis*. Amsterdam: John Benjamins. 103–28.
- Arends, Jacques. 1993. Towards a gradualist model of creolization. In Byrne, Francis & Holm, John (Eds), *Atlantic meets Pacific*. Amsterdam: John Benjamins. 371–80.

- Arends, Jacques. 1995. Demographic factors in the formation of Sranan. In Arends, Jacques (Ed.), *The early stages of creolization*. Amsterdam: John Benjamins. 233–85.
- Arends, Jacques. 1999. The origin of the Portuguese element in Surinam Creoles. In Huber, Magnus & Parkvall, Mikael (Eds), *Spreading the word. The issue of diffusion among the Atlantic Creoles*. London: University of Westminster Press. 195–208.
- Arends, Jacques & van den Berg, Margot. 2004. The Saramaka Peace Treaty in Sranan: An edition of the 1762 text (including a copy of the original text). *Creolica* 2004–03–16 (www.creolica.net)
- Arends, Jacques & Perl, Matthias. 1995. *Early Surinamese Creole texts: A collection of 18th-century Sranan and Saramaccan documents*. Frankfurt: Vervuert; Madrid: Iberoamericana.
- Bickerton, Derek. 1984. The language bioprogram hypothesis. *Behavioral and Brain Sciences* 7. 173–221.
- Bruyn, Adrienne. 1995. *Grammaticalization in creoles: The development of determiners and relative clauses in Sranan* [Studies in language and language use 21]. Amsterdam: IFOT.
- Bybee, Joan, Perkins, Revere & Pagliuca, William. 1994. *The evolution of grammar: Tense, aspect, and modality in the languages of the world*. Chicago IL: University of Chicago Press.
- Capo, Hounkpati B.C. 1988. *Renaissance du Gbe: Réflexions critiques et constructives sur l'Eve, le Fon, le gen, l'Aja, le Gun, etc.* Hamburg: Helmut Buske.
- Carlin, Eithne & Boven, Karin. 2002. The native population: Migrations and identities. In Carlin, Eithne & Arends, Jacques (Eds), *The atlas of the languages of Suriname*. Leiden: KITLV Press. 11–45.
- Chaudenson, Robert. 1992. *Des îles des hommes, des langues*. Paris: L'Harmattan.
- Comrie, Bernard. 1976. *Aspect: An introduction to the study of verbal aspect and related problems*. Cambridge: CUP.
- Dahl, Östen. 1985. *Tense and aspect systems*. Oxford: Blackwell.
- DeGraff, Michel. 2002. Relexification: A reevaluation. *Anthropological Linguistics* 44: 321–414.
- de Kleine, Christa. 2002. Surinamese Dutch. In Carlin, Eithne and Arends, Jacques (Eds). *The atlas of the languages of Suriname*. Leiden: KITLV Press. 209–30.
- Desclés, Jean Pierre. 1989. State, event, process and topology. *General linguistics* 29. 159–200.
- Detges, Ulrich. 2000. Two types of restructuring in French creoles: A cognitive approach to the genesis of tense markers. In Neumann-Holzschuh, Ingrid and Schneider, Edgar (Eds), *Degrees of restructuring in creole languages*. Amsterdam: John Benjamins. 135–62.
- Dupuis, Francis. 2005. Enjeux territoriaux dans le Haut Maroni. In *Guyane: Le renouveau amérindien* [Ethnies 31–32]. 62–71.
- Essegbey, James. 2004. The potential morpheme in Ewe. Ms.
- Fabb, Nigel. 1992. Reduplication and object movement in Ewe and Fon. *Journal of African languages and linguistics* 13: 1–40.
- Fattier, Dominique. 2003. Grammaticalisation en créole haïtien: Morceaux choisis. *Creolica* 2003–04–23 (www.creolica.net)
- Focke, Hendrik C. 1855. *Neger-Engels Nederlands woordenboek*. <<http://www.sil.org/americas/suriname/Focke/National/FockeNLDict.html>>
- Goodman, Morris. 1987. The Portuguese element in the American creoles. In Gilbert, Glenn G. (Ed.), *Pidgin and creole languages: Essays in memory of E. Reinecke*. Honolulu HI: University of Hawaii Press. 361–405.
- Goury, Laurence. 2003. *Le ndyuka : Une langue créole du Surinam et de Guyane française*. Paris: L'Harmattan.

- Harris, Alice C. & Campbell, Lyle. 1995. *Historical syntax in cross-linguistic perspective* [Cambridge Studies in Linguistics 74]. Cambridge: CUP.
- Heine, Berndt & Kuteva, Tania. 2002. *World lexicon of grammaticalization*. Cambridge: CUP.
- Hoogbergen, Wim. 1983. Marronage en marrons, 1760–1863: De niet-gepacificeerde marrons van Suriname. In Willemsen, Glenn (Ed.), *Suriname, de schele onafhankelijkheid*. Amsterdam: De Arbeiderspers. 75–110.
- Hoogbergen, Wim. 1990. The history of the Suriname maroons. In Barna-Shute, Gary (Ed.), *Resistance and rebellion in Suriname: Old and new* [Studies in Third World Societies 43]. Williamsburg VA: The College of William and Mary. 65–102.
- Huttar, Georges. 1985. Sources of Ndjuka African vocabulary? *New West Indian Guide* 59: 45–71.
- Huttar, Georges. 1986. Kikongo, Saramaccan, and Ndjuka. In Elson, Benjamin F. (Ed.), *Language in Global Perspective: Papers in Honor of the 50th Anniversary of the Summer Institute of Linguistics, 1935–1985*. Dallas TX: Summer Institute of Linguistics. 563–86.
- Huttar, Georges & Velanti, Frank. 1997. Ndyuka-Trio Pidgin. In Thomason, Sarah G. (Ed.), *Contact languages: A wider perspective*. Amsterdam: John Benjamins. 99–124.
- Jondoh, Edina. 1980. Some aspects of the predicate phrase in Gengbe. Ph.D. Dissertation, Indiana University, Bloomington IN.
- Joseph, Brian. 2001. Is there such a thing as 'grammaticalization'? *Language Sciences* 23: 163–86.
- Kramp, André. 1983. Early creole lexicography: A study of C.L. Schumann's manuscript dictionary of Sranan. Ph.D. Dissertation, University of Leiden.
- Kriegel, Sybille, Michaelis, Susanne & Pfänder, Stephan. 2004. Modalité et grammaticalisation: Le cas des créoles français. In Kriegel, Sybille (Ed.), *Grammaticalisation et réanalyse: Approche de la variation créole et française*. Paris: CNRS Editions. 165–91.
- Lefebvre, Claire. 1996. The tense, mood and aspect system of Haitian Creole and the problem of transmission of grammar in creole genesis. *Journal of Pidgin and Creole Languages* 11: 231–313.
- Lefebvre, Claire. 1998. *Creole genesis and the acquisition of grammar: The case of Haitian creole*. Cambridge: CUP.
- Lefebvre, Claire & Brousseau, Anne-Marie. 2002. *A grammar of Frongbe*. Berlin: Mouton de Gruyter.
- Lefebvre, Claire & Loranger, Virgine. 2006. On the properties of Saramaccan FU: Synchronic and diachronic perspectives. *Journal of Pidgin and Creole Languages* 21: 275–336.
- Léglise, Isabelle & Migge, Bettina. 2006. Language naming practices, ideologies and linguistic practices: Toward a comprehensive description of language varieties. *Language in Society* 35: 313–39.
- Migge, Bettina. 2000. The origin of property items in the Surinamese Plantation Creole. In McWhorter, John H. (Ed.), *Language change and language contact in pidgins and creoles*. Amsterdam: John Benjamins. 201–34.
- Migge, Bettina. 2002. The origin of the copulas (*d/n*)a and *de* in the Eastern Maroon Creole. *Diachronica* 19: 83–136.
- Migge, Bettina. 2003. *Creole formation as language contact: The case of the Suriname Creoles*. Amsterdam: John Benjamins.
- Migge, Bettina. 2006. Tracing the origin of modality in the creoles of Suriname. In Deumert, Ana & Durrleman-Tame, Stephanie (Eds.), *Structure and variation in contact languages*. Amsterdam: John Benjamins. 29–59.

- Migge, Bettina & Winford, Donald. To appear. The origin of possibility in the Creoles of Suriname. In van den Berg, Margot et al. (Eds), *Gradualist approaches to Creole genesis*. Amsterdam: John Benjamins.
- Rens, Lucien. 1953. *The historical and social background of Surinam's Negro English*. Amsterdam: North-Holland.
- Riemer, Johann A. 1779. Wörterbuch zur Erlernung der Saramakka-Neger-Sprache. In Arends, Jacques & Perl, Matthias. 1995, *Early Surinamese Creole texts: A collection of 18th-century Sranan and Saramaccan documents*. Frankfurt: Vervuert; Madrid: Iberoamericana. 251–374.
- Schumann, Christian L. 1778. Saramaccanisch Deutsches Wörter-Buch. In Schuchardt, Hugo. 1914. *Die Sprache der Saramakkaneger in Surinam*. Amsterdam: Johannes Müller. 44–120.
- Siegel, Jeff. 1997. Mixing, leveling, and pidgin/creole development. In Spears, Arthur K. & Winford, Donald (Eds), *The structure and status of pidgins and creoles*. Amsterdam: John Benjamins. 111–149.
- Siegel, Jeff. 1999. Transfer constraints and substrate influence in Melanesian Pidgin. *Journal of Pidgin and Creole Languages* 14: 1–44.
- Smith, Norval. 1987. The genesis of the creole languages of Surinam. Ph.D. Dissertation, University of Amsterdam.
- Thomason, Sarah G. & Kaufman, Terrence. 1988. *Language contact, creolization, and genetic linguistics*. Berkeley CA: University of California Press.
- van den Berg, Margot. 2000. *Mi no sal tron tongo: Early Sranan in court records 1667–1767*. MA Thesis, University of Nijmegen.
- van den Berg, Margot. 2001. *Mingo, jòu no man: Oud-Sranan in verhoren en verslagen van rechtszaken*. *Oso* 20: 241–53.
- Winford, Donald. 1997. Property items and predication in Sranan. *Journal of Pidgin and Creole Languages* 12: 237–301.
- Winford, Donald. 2000a. Irrealis in Sranan: Mood and modality in a radical creole. *Journal of Pidgin and Creole Languages* 15: 63–125.
- Winford, Donald. 2000b. Tense and aspect in Sranan and the creole prototype. In McWhorter, John H. (Ed.), *Language change and language contact in pidgins and creoles*. Amsterdam: John Benjamins. 383–442.
- Winford, Donald & Migge, Bettina. 2007. Substrate influence on the emergence of the TMA systems of the Surinamese Creoles. *Journal of Pidgin and Creole Languages* 22(1): 73–99.

Roots of Creole Structures

Weighing the contribution
of substrates and superstrates

Edited by

Susanne Michaelis

Max Planck Institute for Evolutionary Anthropology /
Justus-Liebig University, Giessen

John Benjamins Publishing Company

Amsterdam / Philadelphia



The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences – Permanence of Paper for Printed Library Materials, ANSI Z39.48-1984.

Library of Congress Cataloging-in-Publication Data

Roots of Creole structures : weighing the contribution of substrates and superstrates /
edited by Susanne Michaelis.

p. cm. (Creole Language Library, ISSN 0920-9026 ; v. 33)

Includes bibliographical references and index.

1. Creole dialects--Grammar. 2. Substratum (Linguistics) 3. Languages in contact. I.
Michaelis, Suzanne.

PM76831.R66 2008

417'.2--dc22

2008019875

ISBN 978 90 272 5255 5 (Hb; alk. paper)

© 2008 – John Benjamins B.V.

No part of this book may be reproduced in any form, by print, photoprint, microfilm, or any other means, without written permission from the publisher.

John Benjamins Publishing Co. · P.O. Box 36224 · 1020 ME Amsterdam · The Netherlands
John Benjamins North America · P.O. Box 27519 · Philadelphia PA 19118-0519 · USA