

THE RESTRUCTURING OF TENSE/ASPECT SYSTEMS IN CREOLE
FORMATION.

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ABSTRACT.

Current controversy over the nature of creole formation revolves around the relative roles of L1 and target language (TL) input, the nature of the target involved, and the processes of language acquisition by which creole grammar emerged. This paper attempts to reconcile conflicting views on these issues by examining the developmental processes that characterize creole formation, with special attention to the emergence of tense/aspect systems in Haitian French Creole and Sranan Tongo.

I describe the creation of creole grammar as involving a process of restructuring, that is, the process by which interlanguage (IL) grammars are created and elaborated in the course of acquisition. This process of restructuring involves three major components: input (intake) from the TL, L1 influence, and internally motivated innovations. These factors operate in varying degrees in different cases of creole formation, yielding differences in the outcomes.

I argue that such differences result primarily from the nature of the superstrate input, and the degree of access that learners had to it, which depended in turn on such aspects of the contact situation as demographics, degree of social interaction among superstrate and substrate speakers. Greater degrees of access to superstrate models led to more input from the latter, while reduced access led to greater degrees of substrate influence. This is reflected in the differences that Haitian Creole and Sranan Tongo display, not only in their inventory of tense/aspect categories, but also in the forms that they use to express them. At the same time, both creoles display similarities due to similar substrate input as well as similar kinds of restructuring involving the grammaticalization and reanalysis of superstrate lexical forms as tense/aspect markers.

Introduction

The nature of creole formation continues to be the subject of sometimes bitter controversy in the field of creole studies. In particular, there has been disagreement about whether creole formation is the outcome of first or second language acquisition – an issue explored in Andersen (1983) and more recently in DeGraff (1999a). Some creolists still adhere to Bickerton’s Language Bioprogram Hypothesis or some version of it that ascribes the primary role in creole creation to children who appeal to innate universal principles to compensate for deficient (pidgin) input to their L1 acquisition process (Bickerton 1984, 1999). Since this theory has been sufficiently and convincingly argued against elsewhere (Arends 1995a; Roberts 2000; Singler 1992), I will not consider it here. Most creolists in fact maintain that creole formation was a type of second language acquisition, though it is clear that there are some significant differences between the two due to disparities in the nature of the two types of learning situation.

Despite this broad consensus, there is continuing disagreement among creolists over several issues. One is the question of the relative roles of superstrate and substrate input in creole formation. Second, there is the problem of what constituted the target for creole formation. Closely related to this is the issue of whether creoles first began as close L2 approximations to the superstrate varieties, or began as community-wide pidgins that were subsequently elaborated. Creolists today are split into two broad camps with respect to these issues.

The so-called “superstratist” view maintains that creoles began as second language varieties of the lexifier or “superstrate” languages and gradually diverged more and more from the latter via a process of “basilectalization” (Mufwene 1996a, b). In this view, then, 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). Superstratists allow for a certain degree of substrate influence (Mufwene 1990), but appear to assign it a secondary role in creole development (DeGraff 2002).

On the other hand, adherents of the “substratist” position claim that the major influence on the grammar of “radical” creoles in fact came from the substrate languages (Lefebvre & Lumsden 1994; Lefebvre 1996; Lumsden 1999, etc.). The strong version of

the substratist position finds expression in the so-called Relexification Hypothesis, which maintains that the creators of creoles were adult speakers of West African languages who attempted unsuccessfully to acquire the European target languages (TLs) to which they had highly restricted access (Lefebvre 1998:36). Under these conditions, they resorted to a “process of vocabulary substitution in which the only information adopted from the TL in the lexical entry is the phonological information” (LeFebvre 1998:9).

The two conflicting positions just outlined have been argued for in relation to the very same creole. Thus, writing about the TMA system of Haitian Creole, DeGraff (to appear, page 7) argues as follows:

The overwhelming majority of HC morphemes, including functional heads, are derived from 17th to 18th century French via relatively successful word segmentation and semantic analysis, with expected grammaticalization-cum-reanalysis affects and substrate influence in various domains.

Lefebvre (1998:111), on the other hand, argues that “the general features of the Haitian TMA system pattern on the model of Fongbe rather than French,” and that

While most of the semantic and syntactic properties of the lexical items involved in the TMA system of Haitian are derived from the corresponding lexical entries in the substratum languages, the phonological representations of these markers appear to be derived from the phonetic representations of French periphrastic and thus, lexical, expressions.

Yet another view of the emergence of creole TMA systems has been expressed by McWhorter (1999:8), who assigns the primary role to internal developments rather than to substrate influence in the creation of the TMA system of Sranan Tongo. He argues that

...there is no West African language or even class of languages, whose TMA system Sranan's could even be seen as a 'reduction' of. The Sranan TMA system dimly reflects W. African patterns but has largely developed according to its own dictates.

The present paper attempts to reconcile these conflicting positions by examining more closely the developmental stages and processes of restructuring that apply to creole formation and how they differ from (other) cases of second language acquisition (SLA). Before we proceed further, it is necessary to clarify precisely what we mean by "restructuring." Creolists have tended to use the term to refer to the gradual modification of earlier superstrate models, that is, the L1 varieties of the lexifier languages that were introduced into the colonies by early settlers. This implies that creole creators began with the lexifier, modifying it over time. It has also been suggested that the L2 varieties acquired by early African arrivals, and the L2 varieties of those varieties acquired by successive new arrivals, represent a continuing process of "basilectalization" of the original superstrate target language. From this macro-level perspective, the eventual result (the creole) is seen as a "restructured" version of the superstrate. However, terms like "basilectalization" may be more appropriately used to refer to the gradual changes we observe in the community language over time, rather than to the psycholinguistic processes that [initiate such changes on the level of individual grammars.

My own approach is concerned with the processes themselves. The restructuring I have in mind involves the ways in which individual interlanguage (IL) grammars are created and elaborated in the course of acquisition. This is the sense in which researchers in the fields of first and second language acquisition have always used the term. With respect to first language acquisition, van Buren (1996:190) defines it as "discarding old grammars for new ones." He adds: "As soon as new relevant data are encountered, the current grammar is restructured to accommodate the new input" (ibid.) Referring to SLA, Lalleman (1996:31) defines restructuring as "the process of imposing organization and structure upon the information that has been acquired" as new input is encountered. Hulstijn (1990:32) defines it as "the establishment of new procedures which reorganize a body of facts and rules previously acquired." In short, restructuring has to do with the

ways in which IL grammatical systems are successively expanded during the course of acquisition.

There are some basic similarities in the restructuring processes observed in creole formation and second language acquisition. First, both involve an initial or early stage of learning, in which individual learners create a highly simplified interlanguage (IL) system. This is followed by elaborative stages in which the basic IL system is expanded, drawing on three major sources of input. These include input (intake) from native and non-native varieties of the lexifier language, L1 influence, and internal developments peculiar to the IL system itself. However, significant differences in the nature of the input and the degree of access to it, among other things, lead to pronounced differences between creole formation and other types of second language acquisition. Such differences manifest themselves particularly in the greater extent and perseverance of L1 influence and internal developments characteristic of creole formation.

Tense/aspect systems reveal quite clearly the different degrees of interaction among the three factors that guide the restructuring process in creole formation, resulting in quite diverse outcomes. A closer look at the emergence of this area of creole grammar can also highlight the ways in which the process of restructuring both resembles and differs from the elaboration of tense/aspect in more usual cases of SLA.

The superstrate input to creole formation.

For a long time, particularly among students of English-lexicon creoles, the conventional wisdom has been that creoles are elaborations of pidgins – the so-called “two-stage” view of creole formation. According to this view, the superstrate input to creole formation consisted of reduced pidgin-like varieties, lacking essential components of grammar (Bickerton 1981). This conception of creole formation is expressed in Hymes’ (1971:84) characterization of creolization as “that complex process of sociolinguistic change comprising expansion in inner form, with convergence, in the context of extension in use.” A radically different view has been promoted by Chaudenson (1992, 2001) and others who argue that provincial French dialects and/or relatively close second language approximations of these were the starting point of creole formation, at least in the French colonies. The two perspectives on creole formation are

summed up by Alleyne (2000), who argues that two “opposite processes” were involved in the formation of different creoles. He notes (2000:128):

Whereas the kind of maximum restructuring of English represented by Saramaccan is the beginning of a historical process in the case of Saramaccan, the maximum restructuring of French represented by Haitian is the end of that historical process.

It’s not clear to me what these opposing “historical processes” refer to. I would suggest that this is a false dichotomy, which obscures significant similarities in the emergence of creoles of different lexical affiliation. It is erroneous to think of the restructuring processes that led to the genesis of HC and Saramaccan as mirror-images of each other, as Alleyne seems to suggest. The only real difference seems to lie in the kinds of superstrate input involved in each case. Whether we refer to “basilectalization” of superstrate dialects or “elaboration” of pidgin input, the processes of restructuring involved in the reanalysis of superstrate forms as TMA markers, remain the same.

From the point of view of the restructuring process, both scenarios for creole formation would involve an initial stage in which learners constructed a basic and highly reduced variety of the target language that has pidgin-like characteristics. This would be true whether the input to the first stages of creole formation consisted of close L2 approximations to the superstrate language, or a simplified or pidginized variety of that language. But if such different inputs were in fact the initial stage for different creoles and continued to be available as models, then the outcomes of the restructuring process would differ significantly by virtue of that fact alone. And this would explain the stark differences we find among creoles with different inputs. This seems to be the case with Haitian Creole and Sranan, as we will see.

In typical SLA, learners progress beyond their early IL system by adding more morphological apparatus, grammatical rules, vocabulary etc., the major source of which is the TL. The degree of access learners have to the TL is in inverse proportion to the extent to which they appeal to their L1 and to creative innovation in the expansion of their IL system. The same seems to have applied in certain cases of creole formation

where first and/or second language varieties of the superstrate became consolidated among a significant portion of the population, and continued to be available as targets of acquisition. In such cases, the resulting creoles were closely akin to dialects of the superstrates, as has been described for Barbadian creole (Bajan) (Winford 2000c) and Reunion Creole (Corne 1982).

But this was not the case in other instances of creole formation. For example, with regard to Hawai'i Creole English, there appears to be agreement that the primary input came from Hawai'i Pidgin English, many of the characteristics of which persist in the creole (Roberts 1998, 2000). In this case, expansion of pidgin into creole involved use of L1 strategies by speakers of Chinese, Portuguese and other languages who were learning and using the pidgin as their primary vernacular. Hence there is ample evidence of substrate influence from these languages on HCE (Siegel 2000). Similarly, there is agreement that the main input to the formation of the Melanesian creoles was an extended pidgin that evolved out of an earlier South Seas Pidgin (Clark 1983, Keesing 1988). Siegel (1999) has demonstrated the role of substrate languages in shaping the grammar of these languages. I'll argue that the Sranan case is similar to these with regard to both the nature of the lexifier language input and the lack of full access to native varieties of the superstrate.

Another important distinction between creole formation and more typical SLA has to do with the changing nature of the input over time in the former case. As Arends (1995a), Baker (1990), Singler (1990) and others have argued, it would seem that most workers or slaves who were transported to various colonies, especially at the height of the plantation system, were attempting to learn an already established contact variety quite distinct from the lexifier languages. Indeed, in many if not most cases of creole formation, the nature and types of superstrate input changed over time, as successive waves of new learners created their own L2 versions of existing targets. In such cases, if we were to freeze the contact situation at different points in time, we would find quite different scenarios, with different targets, and hence differences in the superstrate-derived input. This presumably is what led Baker (1990) to argue that, in the formation of many creoles and "expanded" pidgins, the true target was not the superstrate, but the emergent contact variety itself. In

the light of all of this, let us now examine the emergence of the tense/aspect systems of HC and SN.

Acquisition of tense/aspect.

To place our discussion of the creole tense/aspect system in some perspective, let us first consider, very briefly, the general pattern of tense/aspect acquisition in typical SLA. Studies of SLA involving a variety of learners of different L1's attempting to acquire different L2's have demonstrated that the acquisition of L2 tense/aspect systems follows a very similar pattern of development in all cases. According to Bardovi-Harlig (2000:25 ff), the following stages have been observed:

Stage 1: The pragmatic stage. This is characterized by use of bare verbs, reliance on chronological order, and the strategy of "scaffolding" or reliance on the other interlocutor's utterances.

Stage 2: The lexical stage. In this stage, the use of bare verbs continues, and there is strong reliance on temporal and locative adverbs to convey time reference. Other strategies include the use of connectives (e.g, "and, then"), the use of dates or days of the week, and the use of temporal verbs like "start" and "finish."

Stage 3: The morphological stage. Again, use of bare verbs continues, but then verbal morphology begins to appear, usually in a fixed order, depending on the target involved. For instance, the (perfective) Past tense emerges first in all cases, followed by the Imperfective Past in L2 varieties of Romance languages and the Perfect in L2 varieties of Germanic languages. This general pattern of acquisition is based on studies by Klein (1993, 1995), and summarized in Bardovi-Harlig (2000:119).

This order of acquisition seems typical of learners who have both access to, and frequent opportunity to use, the target language. Clearly, it differs significantly from that found in creole formation, particularly at the morphological stage. As Bickerton (1988:278) noted, the elimination of inflectional morphology in the early stages of creole formation results in, among other things, a loss of TMA markers. Hence these have to be reconstituted in the elaboration of creole grammar. Let us now consider the specific sources of these TMA markers, and the nature of the processes involved in their emergence in HC and SN.

The emergence of Haitian Creole.

The French presence in Haiti dates from 1630, when freebooters established residence on Ile de la Tortue, an island off the north coast. But it wasn't until 1665 that the colony, then known as Saint Domingue, received its first French governor. The population then consisted of about 400 French planters, some slaves, plus the freebooters. By 1681, the population consisted of 4,336 whites and 2,312 slaves (Patterson 1982:481). Soon after that, sugar plantations were established on the island, leading to rapid and massive growth of the African population until 1791, when the rebellion ended the slave trade. It seems likely that Haitian Creole emerged as a distinct language during the period 1680 to 1739 or so, and was well established by 1750 (Baker 1993:132). As Singler (1993:243) notes, the available records indicate that the majority of Africans brought to Saint Domingue between the 1650's and 1710 were speakers of Kwa languages, especially Ewe-Fon. The dominance of these speakers continued and perhaps grew stronger during the period from 1710 to 1739 (Singler 1993:245). Scholars generally accept that the primary substrate input to HC formation came from Gbe languages such as Ewe and Fon.

The details of the demographic and social variables that played a role in HC genesis have been well documented elsewhere (e.g., Singler 1993, 1995, 1996), so they will not be repeated here. Two of these are especially important to our concerns here. First, the earlier period of settlement, up to 1680 or so, was characterized by small-scale farming in which there was close contact between Africans and speakers of French regional dialects. This gave many Africans, as well as children of mixed race, the opportunity to learn these dialects. Second, there continued to be a significant and increasing number of French speakers, both white and of mixed race, throughout the colonial period. Such factors help to account for the fact that early Haitian Creole was in many ways closer to the superstrate dialects than the modern language is. The creole diverged significantly from its earlier form in the course of the early plantation period, when changes were introduced primarily by Africans acquiring the creole as a second language.

The emergence of the Haitian Creole TMA system.

The evidence from Haitian Creole suggests that many of its features are modeled on regional French dialects, though various kinds of simplification and reanalysis have occurred. At the same time, the gradual loss of access to such regional dialects, and the continuing process of SLA by succeeding generations of Africans in Haiti, created the conditions for significant substratum influence to affect the evolution of HC.

The major functional categories of the Haitian Creole TMA system are shown in Table 1, which is based on DeGraff (to appear) and Spears (1990). I have amended their labels somewhat.

Table 1. Haitian Creole TMA categories.

Tense/aspect.

Perfective aspect	Unmarked
(Relative) Past	<i>te</i>
Prospective Future	<i>(a)pral(e)</i>
Progressive/Immediate Future	<i>ap</i>
Completive (Perfect)	<i>fin(i)</i>

Modal categories

Possible Future	<i>va (a/av/va)</i>
Expectation/likelihood	<i>pu</i>

DeGraff (to appear) offers various comparisons of HC and (earlier) regional French verb structures, which demonstrate close correspondences between HC TMA markers and elements used in periphrastic strategies for marking TMA meanings in the French dialects. A few examples of this will suffice. Note first of all the clear similarities between Past *te* and French *était* ‘was’ in sentences like the following (from DeGraff to appear: 39)

- (1) a. HC. *Li te (deja) ale.*
 3sg PAST (already) go
 ‘He had (already) gone.’
- b. FR. *Il était (déjà) alle.*
 3sg masc was (already) go (PP)
 ‘He had (already) gone.’

A similar correspondence is found between *te* and the French past participle *été* as seen in the following (DeGraff to appear, 39-40).

- (2) a. HC *Li te malad.*
 3sg PAST sick
 ‘S/he was/has been sick.’
- b. FR. *Il a été malade.*
 He has been sick
 ‘He has been sick.’

Detgers (2000:150), following Chaudenson (1981:206f) suggests that *était* in French periphrastic constructions such as *il était à écrire* ‘he was writing’ was the source of Past *te* in French creoles. It seems clear that *te* has its source in the French past imperfect *était/étais*, with possible reinforcement from past participial *été*.

Similar correspondences can be found between HC modal *pu* and its French cognate, the preposition *pour* ‘for’ and between Future *va* and French *va(s)*, the present singular forms of *aller* ‘to go’ used in the Future construction *aller* + V ‘be going to V.’ The following examples from DeGraff (to appear, 40) illustrate.

- (3) a. *Mwen pou marye semen pwochè.* (HC)
 1sg. for marry week next
- b. *Je suis pour me marier la semaine prochaine.* (Canadian French)
 1sg am for me marry the week next
 “I am to get married next week”

- (4) a. *Ou (a)va ale demen.* (HC)
 You FUT go tomorrow
 ‘You will go tomorrow.’
- b. *Tu vas aller demain.* (French)
 ‘You will go tomorrow.’

Similar (regional) French cognates can be found for other HC TMA markers. For example, Progressive marker *ap(e)* has its source in the preposition *après*, employed in the earlier French construction *être après à +V* ‘to be V-ing.’ HC Prospective *(a)pral(e)* can be traced to the progressive construction *après (de/à) aller + V* ‘to be going to V’. Terminative Perfect *fin(i)* similarly derives from the lexical verb *finir*.

Table 2 summarizes the correspondences between the TMA markers of HC and their regional French cognates.

Table 2. Sources of main HC TMA markers.

HC category	HC marker	Regional French sources
Perfective	Unmarked	Infinitival/3 rd sing/particle
(Relative) Past	<i>te</i>	Imperf. <i>était</i> / PP <i>été</i>
Prospective Future	<i>(a)pral(e)</i>	<i>après (de/à) aller</i>
Progressive/Immediate Future	<i>ap</i>	<i>être après à +V</i>
Completive (Perfect)	<i>fin(i)</i>	<i>finir</i> ‘finish’
Possible Future	<i>va (a/av/va)</i>	<i>va(s) + V</i>
Expectation	<i>pu</i>	<i>être pour + V</i>

While researchers agree that the phonetic shapes of these TMA markers derive from French cognates, there is strong disagreement concerning the relative roles of superstrate and substrate input in shaping the semantics and syntax of the markers. Let us therefore consider each of these influences, as well as the contribution of internal developments in the emergence of HC tense/aspect.

The superstrate input to HC

Chaudenson (1995), Fattier (1998), DeGraff (to appear), and others have argued that most of the HC TMA markers derive their semantic and distributional properties from those of their French cognates. This would apply especially to markers such as past *te*, future *a/av/va*, prospective (*a*)*prale* and modal *pou*. The correspondences outlined earlier suggest that this claim is at least partly true, which is in keeping with the fact that the superstrate input to HC came from first and second language varieties of regional French that remained available as models, at least during the first stages of HC formation. But the French input alone cannot explain various characteristics of the HC tense/aspect system, which have to do with internal developments and substrate influence.

Internal developments.

The internal developments we are concerned with here are those that contributed to the earlier stages of HC creation, up to the point in the early 18th century when the language crystallized as a medium of communication quite distinct from its French superstrate. All of the markers we have discussed so far were established by this time, though it appears that they did not all emerge simultaneously (Baker 1995). Some of the developments that characterized these early stages included processes of simplification and reduction leading to the loss of inflectional and other non-salient elements of the French verb complex. Such processes are, of course, typical of both first and second language acquisition, and of contact-induced change; they constitute what Chaudenson (1992:152) refers to as “natural developments.”

In addition to such developments, Creole formation also involved a learning strategy in which lexical content items such as *finir* and *après*, and other salient, quasi-grammatical forms such as *était/été* and *pour*, are chosen to express grammatical notions associated with tense, mood, and aspect categories. DeGraff (to appear), Mufwene (2001:54) and others refer to this process as “grammaticalization.” Detgers (2000:145) questions the general application of this term to the emergence of HC TMA markers, arguing that only some of them were due to grammaticalization in the strict sense (i.e., the reinterpretation of lexical items as grammatical elements), while others were due to

“reanalysis.” An example of the former is the perfect marker *fin(i)*, whose French cognate, *finir* ‘to finish,’ had no grammatical function. Cases of reanalysis, by contrast, involve markers that are etymological continuations of forms that already had grammatical or quasi-grammatical functions in the superstrate. Examples include future *a/va/ava*, past *te*, and prospective *(a)pral(e)*. Modal *pu*, on the other hand, seems to have involved elements of both processes.

Detger’s distinction is useful because it distinguishes continuities from the superstrate that are due to reanalysis from cases of grammaticalization, which tend to proceed over time under internal motivation. But it is clear that some cases of the latter process, such as perfect *fin(i)*, occurred early in creole formation, and were very likely accelerated due to substrate influence (Bruyn 1996). It should however be noted that several later developments in the verb complexes of HC and other creoles are due to gradual grammaticalization of the more usual type, as Alleyne (2000) has pointed out. This reinforces the need for caution in using the contemporary structure of creole TMA systems as the basis for discussion of their genesis.

A final example of internal developments in HC is the gradual emergence of combinations of markers to express more complex tense/aspect notions. As Baker (1995) has shown, most of the combinations attested in earlier HC texts are found much later than the single markers. They include combinations like past + future, past + future + progressive, etc, which might have been due, at least in part, to substrate influence from Gbe, which employs similar combinations. Such sequences are also found in Sranan, and I will reserve further discussion of them for later.

It is clear that the processes of change by which French items were reinterpreted as TMA items were peculiar to the sociohistorical circumstances in which HC and other French-lexicon creoles emerged. Such developments are in stark contrast with the usual pattern of tense/aspect acquisition in typical L2 French. Schlyter (1990) provides the following picture of the former pattern:

Pattern of acquisition of tense/aspect in L2 French.

Stage 1; One or two basic forms of verbs with variable use.

Stage 2: The “Passé composé” emerges, though not entirely productive.

Stage 3: Use of *veux* + infinitive or *va* + infinitive to express future meaning.

Stage 4: Clear cases of the Imparfait emerge.

Stage 5: The Pluperfect, Conditional and Subjunctive categories emerge.

Stages 1 – 3 (corresponding roughly to the lexical stage) bear much resemblance to what we would expect in the early stages of acquisition in the Haitian context. But traditional SLA parts company with creole formation in the morphological stages, which correspond roughly to the stage of restructuring. The categories in stages 4 and 5 above have no morphological expression in HC, by contrast with advanced L2 French. Moreover, as Mather (1995) and others have noted, L2 varieties of French (and other European languages) manifest few, if any, instances of preverbal marking, of the sort found in HC. This can be explained, in part, as the result of Gbe influence on HC. As Mather (1995:259) points out:

“Once the French periphrastic constructions were stripped of their inflectional endings by the first generation of creole speakers, they could be reinterpreted as preverbal TMA markers by adult and children speakers of Kwa languages, who identified them with their own L1 TMA markers.”

By contrast, the Klein/Purdue studies of SLA in Europe found a striking lack of L1 influence on L2 TMA where one might expect it (see Klein 1993, 1995, and Klein & Purdue 1997 for more details). Thus, Klein, Dietrich et al (1995:278) conclude that there is no significant L1 influence on the acquisition of temporality. The strong L1 influence on HC tense/aspect is a result mainly of the continuing acquisition of the then available contact variety by successive groups of newly arrived Africans.

Substrate influence on HC.

We saw earlier that Kwa, and in particular, the Gbe sub-family, were the primary substrate input to HC formation. Almost all of the controversy surrounding the emergence of the tense/aspect system of this creole revolves around the nature and extent of that substrate influence. So-called superstratists acknowledge very little input from African learners' L1's. DeGraff (to appear) allows that substrate influence did play some

role in two aspects of the HC tense/aspect system. On the one hand, the SLA-related strategy of employing infinitival-like verb forms would have been encouraged by the fact that Kwa does not employ tense and agreement affixes (De Graff, to appear:34). On the other hand, the preference for preverbal marking based on French periphrastic constructions would have been favored by the fact that Gbe also has non-affixed preverbal TMA markers.

These acknowledgements of (limited) Gbe influence are in stark contrast to the view of Lefebvre (1996, 1998), who claims that most of the semantic and syntactic properties of HC TMA markers derive from those of corresponding substrate (Fongbe) markers. Space does not permit a critique of Lefebvre's position here. It has been argued elsewhere, e.g., by Winford (2000b) and Migge & Winford (2003) that many of her claims concerning (especially) semantic correspondences between Fongbe and HC markers are questionable. Moreover, as DeGraff (to appear) and McWhorter (1999) have both noted, there are also significant differences between Gbe and HC in the inventory and distribution of TMA markers. Hence the HC TMA system can hardly be regarded as a replica of the Gbe system. Further research is needed to clarify the issue.

The general conclusion to be drawn from our overview of HC tense/aspect is that both the superstratist and substratist accounts of its emergence have merit. Clearly some compromise between the two positions is necessary to account for the developments we have discussed.

We would expect that, in cases where superstrate input is even more limited, creole creators would compensate for this by drawing more heavily on L1 knowledge as well as the internal resources of their developing IL system. A case in point is Sranan Tongo.

The emergence of tense/aspect in Sranan Tongo.

Like Haitian, Sranan Tongo employs preverbal free forms to express temporal, aspectual and modal meanings. One exception is the perfect marker *kaba*, which always occurs in VP-final position. The inventory of the major tense/aspect categories and the forms that express them in SN are shown in Table 3. Note that Potential *sa* is more of a

modal than a marker of just future time reference in contemporary Sranan, but appears to have had future marking as its primary function in earlier SN.

Table 3. Major Tense/Aspect categories in Sranan (Winford 2000a)

<u>Aspect:</u>	Perfective	∅ (the unmarked verb).
	Imperfective	<i>e</i>
	Perfect	VP-final <i>kaba</i> .
<u>Tense:</u>	Relative Past.	<i>ben</i>
	Predictive Future	<i>o</i>
	Potential Future (modal)	<i>sa</i>

Sentences (10 - 15) illustrate the use of each of the respective tense-aspect categories. The relevant forms are in boldface.

- (5) *A **djuku** wan man **boro** en here bere.*
 3sg. stab Art. man cut.open 3sgposs. whole belly.
 ‘He stabbed a man and cut open his entire belly.’
- (6) *Wan tu fu den pikin fu owma **e** wroko gron now ooktu?*
 One two of the-PL child of granny IMP work ground now too
 ‘Are some of granny’s children also cultivating the land now too?’
- (7) *A alen disi kan stop now. Yongu, a kon tumsi furu **kaba**, yere.*
 The rain this can stop now. Man it come too full already, hear
 ‘This rain can stop now. Man, it has already rained more than enough.’
- (8) *A **ben** taigi mi a o kon na fesisey baka. Mi no sabi efu a go ete.*
 he PAST tell me he FUT come LOC front.side back. I NEG know if he go yet

‘He told me he would come to the front again. I don’t know if he’s gone yet.’

- (9) *Efu yu no wroko, dan yu no o nyan, tog.*
 If you NEG work, then you NEG FUT eat, TAG
 ‘If you don’t work, then you won’t eat, right?’

- (10) *Dan te mi miti en mi sa aksi en.*
 Then when I meet him I POT ask him
 ‘Then when I meet him I will ask him.’

It is clear from the above examples that, unlike the preverbal markers of Haitian Creole, those in Sranan Tongo have no cognates in any English tense aspect markers. One possible exception to this is the potential marker *sa*, which some have claimed to be a form of English *shall*. However, it is much more probable that it derives from Dutch *zal*. In fact, in early SN texts such as Van Dyk (1765), the future marker is written variously as *zal*, *sal*, *za*, etc. Table 4 provides an overview of the actual sources of the Sranan tense/aspect markers.

Table 4. Tense/Aspect categories in Sranan and their sources.

Sranan category	Marker	Source
Perfective	Unmarked	Bare verb
Imperfective	<i>e < de</i>	English <i>there</i>
Completive Perfect	<i>kaba</i> (VP-final)	Portuguese <i>acabar</i> “finish”
Relative Past.	<i>ben</i>	Eng. <i>been</i>
Predictive Future	<i>o</i>	Eng. <i>go</i>
Potential Future	<i>sa</i>	Dutch <i>zal</i>

This presents a very different picture from that we saw earlier for Haitian creole. In the first place, there are few, if any distributional or semantic similarities between the SN

markers and their English cognates. Second, two markers, *sa* and *kaba*, have been adopted, not from English, but from Dutch and Portuguese respectively. This can only be explained in terms of the limited access to and input from, varieties of English among the Africans who created Sranan Tongo. Needless to say, the Sranan situation is in stark contrast with more typical cases of L2 acquisition of English tense/aspect. An illustration of the latter is shown in Table 5.

Table 5. Order of acquisition of English verbal morphology.

Based on Klein's (1993, 1995) study of Lavinia (L1 = Italian)

<u>Period in UK.</u>	<u>Features acquired.</u>
6 months.	Emergent use of 3pers. –s and present copula.
7 months.	3 irregular pasts (<i>said, went, was</i>).
8 months.	4 tokens of Present Perfect (no contrast with Past). 1 token of Future. Increased use of V- <i>ing</i> .
11 months.	Past expressed mostly by irregular pasts.
13 months.	First use of regular past.
16 months.	Increased use of regular past. Use of Past Progressive and Present Perfect.
17 months.	Several correct uses of Progressive.
21 months.	First clear use of Pluperfect.

We can now consider the circumstances that contributed to the radical divergence from superstrate dialects that is manifested in Sranan tense/aspect.

The superstrate input to Sranan formation.

Since the precise details of the English input to Sranan are not well known, some consideration of the historical background to this creole's genesis is in order. Sranan in fact shares much with Haitian Creole with regard to the circumstances of its origin, but there are some significant differences between the two in the demographics and nature of

the contact between Europeans and Africans. Such differences may help to explain the different degrees to which each diverged from its lexifier language.

Historical background.

The English colonized Suriname in 1651, but ceded it to the Dutch in 1667. During this initial period, English planters introduced the plantation system, bringing with them slaves most of whom had already lived in other colonies such as Barbados. By 1667, the numbers of Europeans and Africans in the colony numbered roughly 1500, while Africans numbered two to three thousand. In the 1660's, a group of roughly 200 Portuguese-speaking Sephardic Jews came to Suriname and established plantations up river from Paramaribo, the coastal capital. The Portuguese-based contact variety used on these plantations provided part of the lexical input to Saramaccan, a creole developed by maroons in the interior. After the Dutch took control, the number of English settlers declined from approximately 1500 in 1666 to only about 38 in 1680 (Voorhoeve & Lichtfeld 1975:2-3). Planters of various other nationalities came to replace them, including persons of English, Dutch, German and Jewish origin. Though many English planters remained after the Dutch assumed control, most of them had left by 1695, taking with them only those slaves acquired before the colony was ceded to the Dutch. According to Postma (1990:185), there were roughly 379 Europeans and 4.618 Africans in the colony in 1695.

Since the earliest Sranan texts date back to the 1710's (Van den Berg 2000), we can assume that the creole emerged in its first form sometime during the period 1651 to 1700, and was most probably well established by the time most of the English left. The early superstrate input to Sranan must have come from southern and southwestern English dialects of English spoken by planters and indentured servants, as well as the second language or pidgin varieties of these spoken by the slaves they had brought with them. After the English left, Dutch planters became even more involved in plantation management, though their slaves spoke some version of early Sranan. Exposure to Dutch, however, must have played some role in the development of Sranan after 1680.

From 1675 on, there was increasing importation of African slaves, leading to a situation where the population consisted primarily of new slaves and a much smaller

minority of Europeans, including English, Dutch and Portuguese, among others. The ratio of Africans to Europeans increased from 2/3:1 in 1679 to 12:1 by 1680 and during the 1680s the ratio of old to new slaves decreased from nearly 7:1 to nearly 2:1. By 1720, according to Postma (1990:185), there were roughly 935 Europeans and 13,604 Africans in the colony. As was the case in Haiti, the latter were clearly dominated by speakers of Gbe varieties in this period. They made up about 70% of all the slaves brought to Suriname during the early 18th century. Less than 20% were speakers of Kikongo varieties.

The Sranan situation differed in two fundamental ways from that in 17th to early 18th century Haiti. First, the plantation system was introduced very early after British colonization, so that there was no protracted period of small farming in which Africans were in close contact with Europeans. Second, perhaps the most crucial factor in the emergence of Sranan was the very early withdrawal of the vast majority of English-speaking planters and the slaves who originally came with them, within roughly thirty years of the colony's inception in 1651. This meant that the major input to new arrivals from Africa after 1680 came from pidginized or highly changed second language varieties of English (Migge 1998). It seems likely that these contact varieties did not have a developed TMA system that could serve as a model for learners. This meant that the TMA system of early Sranan had to be built up practically from scratch, via reanalysis of available English lexical items under the influence of the substrate languages. In addition, the creole adopted its future marker *sa* from Dutch and its completive perfect marker *kaba* from a Portuguese-lexicon pidgin/creole. This in part explains why the Surinamese creoles diverge so radically from their original English sources. In short, what most distinguishes Suriname from Haiti is the almost complete withdrawal of lexifier language models (including close approximations acquired by many Africans) in the former colony.

Substrate influence on Sranan tense/aspect.

The role that substrate influence played in the emergence of Surinamese creole TMA has been discussed in some detail by Migge & Winford (2003). They demonstrate that tense/aspect categories like the Perfective (the unmarked verb), the VP-final Perfect

marker *kaba*, and the Imperfective marker *(d)e* all have clear models in the TMA systems of Gbe languages. There are also strong parallels between the creoles and their Gbe substrates in the syntax of TMA, for instance in the combinatory possibilities among the markers themselves, and the ordering of the markers. There is also the obvious similarity between the two groups of languages in their use of periphrastic rather than morphological means of conveying TMA notions.

With regard to the choice of forms to express the categories, we can note the following:

- The perfective category is expressed by the unmarked verb, and represents situations viewed as unanalyzed wholes, yielding a present interpretation with statives and a past interpretation with non-statives when the reference point is S.
- Imperfective (progressive and habitual) meanings are expressed by a form *(d)e*, which is homophonous with a locative copula.
- Completive/Perfect aspect is conveyed by a form *kaba* (< *acabar* ‘finish’), which is homophonous with a verb meaning ‘finish.’

All of these categories have similar uses and expression in Gbe languages, suggesting that substrate influence played a role in their emergence. To demonstrate this, I present a brief overview of Gbe tense/aspect categories in Table 6. As can be seen, all of the languages share more or less the same inventory of categories, though there are some differences. For convenience, only general patterns are represented, and the various forms used to express the categories are not all listed in cases where their phonological shapes vary significantly.

Table 3. Tense/Aspect categories in Gbe languages.

<u>Form</u>	<u>Category</u>	<u>Meanings/Uses.</u>
<u>Tense.</u>		
<i>lá/ná/á</i>	<u>Future</u>	Later time reference.
<u>Aspect.</u>		

∅	<u>Perfective</u>	States or events seen as unanalyzed wholes. Simple past with non-statives, present with statives (when reference point is S).
Perfect + V (Maxi, Xwela, Xwla)	<u>Perfect</u> Pattern (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.
VP + Perfect (Aja, Gen, Waci)	Pattern (b)	
‘Be’ VV Part.	<u>Progressive</u> Pattern (a)	Events in progress. In cases where the Prog. Marker immediately precedes the verb, eg. Intransitives or transitive verbs taking a pronominal object (SVO order).
‘Be’ XP V part.	Pattern (b)	In other transitive sentences.
V + na/nɔ nɔ + V High tone on V	<u>Habitual</u> Pattern (a) Pattern (b)	Customary or habitual situations. (Aja, Gen, Waci) (Maxi, Xwla) (Xwela)
‘Be’ (XP) nà V (Fongbe, Gungbe etc.)	<u>Prospective</u> Pattern (a)	Events about to occur.
‘Be’ (XP) V gé/gbé (Ewe)	Pattern (b)	
‘Be’ (XP) já V (Waci)	Pattern (c)	

Comparing Perfective in Gbe and Sranan

The Perfective category, expressed by the unmarked verb, is used in a more or less identical range of meanings and uses in Gbe and Sranan. The following example sentences were elicited with the help of native speakers in Benin and Suriname (Migge & Winford 2003). The numbers in parentheses refer to the sentences on the questionnaires used for the elicitations. In each case, the sentences compared are the same – a strategy that ensures accuracy in our discussion of the categories involved.

In all these languages, the unmarked verb conveys the sense of ‘present’ with statives (1) and ‘simple past’ with non-stative verbs (2) in the default cases, where the point of reference is speech time (S).

E 47

- (11) Aja. *Nsuvi ló jefi nyɔnuvi lɔ.*
 boy DET know girl DET
 ‘The boy knows the girl.’
 SN *A boi sabi a umapikin.*
 DET boi know DET girl
 ‘The boy knows the girl.’

E 50

- (12) Aja. *E cúcú èyi xóme.*
 he clean his room
 ‘He cleaned his room.’
 SN *A krin en kamra.*
 He clean/arrange his room

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. This is illustrated in the following examples:

E 99.

- (13) Aja. *Wò wu àxòsu lɔ.*
 they kill king DET
 ‘They killed the king.’
 PM *Den kii a kownu.*
 They kill DET king
 SN *Den kiri a kownu.*
 ‘They killed the king.’

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

Comparing the Perfect in Gbe and Sranan

A very similar picture emerges when we compare uses of the Perfect across these languages. All of them employ the Perfect to express the sense of completion or ‘already.’

E 106.

- (14) Aja. *àxòsu lɔ à, e vá ẽ vò.*
king the TOP he come arrive already
'As for the king, he has already come.'

SN *A kownu doro kaba.*
'The king has already come.'

The Perfect is also used more or less uniformly in interrogative sentences in which the sense of "already" is expressed, as the following illustrate:

E 103.

- (15) Gen *O kpó fofó nyɛ vɔ a?*
you see brother my PERF Q
'Have you already seen my brother?'
- SN *yu miti mi brada kaba?*
You meet my brother already

The close similarities in these cases are reinforced by the fact that the forms used to instantiate the category Perfect in the Surinamese Creoles and in several of the Gbe varieties (Aja, Gen, Waci) are also used as main verbs that mean "finish." The following examples illustrate.

- (16) Gen *gàlí-á vɔ.* (Gengbe. Jondoh 1980:50)
gali-the finish
'There's no more gali.'
- SN *Moni kaba.*
money finish
'There is no more money.'

The strong similarities in the use of *kaba* "finish" as a main verb and a marker of Completive/Perfect aspect in the Surinamese creoles are striking, and would therefore seem to be the result of substrate influence.

The expression of 'imperfective' meaning in Gbe and Sranan.

In Sranan, aspectual marker *e* expresses a range of meanings, including 'durative, iterative and continuous' (Voorhoeve 1957:376; Seuren 1981:1052). Bickerton (1981) analyzed it as instantiating an aspectual category that he labeled "non-punctual." Winford (2000a) provides clear evidence that it represents an Imperfective aspectual category, whose primary use is to express both 'habitual' and 'progressive' meanings, and which can express other secondary meanings as well.

The Gbe languages have no Imperfective category, distinguishing between a Habitual and a Progressive. It is the latter category that first provided the model for SN *de*, which is used in the early SN texts primarily as a progressive marker. The progressive in Gbe languages is generally expressed by a copula that takes what appears to be a nominalized VP followed (in most cases) by an adverbial particle of some kind.

E 24

- (17) Gen Mú leé wlɔn nu o, e leé dɔn alɔn.
 NEG PROG write thing NEG he PROG sleep sleep
 'He is not writing a letter, he is sleeping.'

E 25

- (18) Aja E lé anyi nɔnɔ yi lé enu hɛn.
 he PROG ground sit-sit and PROG thing read
 'He is sitting and reading something.'

In Sranan, the Imperfective marker *e* is used in all progressives, as the following example illustrates.

E 24.

- (19) SN A no e skrifì brifi, a e sribi.
 he NEG PROG write letter he PROG sleep
 ‘No, he’s not writing letters, he’s sleeping.’

The important thing for our purposes is the fact that the first element in all these constructions (*lé, ô*, etc. in Gbe, *(d)e* in Suriname) is identical to the locative copula (Jondoh 1980:37; Lefebvre 1996:269).

- (20) Gen *é lè ekplâ-a ji.* (Gengbe. Jondoh 1980:46)
 it be table-the on.
 ‘It’s on the table.’
- SN A pikin de a oso
 DET child COP LOC house
 ‘The child’s at home’

It appears that the emergence of *de* as a locative copula in the early plantation creole was the trigger for its extension to the marking of progressive meaning. The model for this was the fact that the locative copula of the Gbe languages had the same function. Later, this Progressive marker evolved into a marker of Imperfective aspect (see below). Hence this category can be traced ultimately to Gbe influence.

The Potential Future *sa* almost certainly derived from Dutch *zal*, and appears to be a case of borrowing from that language. Even so, however, there are striking parallels between the use of *sa* and the use of the (Western) Gbe Potential Future markers *lá, ná, á*, which express the sense of future possibility or potential (Essegby 2003, Migge & Winford 2003). There is also evidence of significant Gbe influence on the semantics and uses of several modal auxiliaries, including those that convey learned ability, positive and negative physical ability, need, obligation and others (Migge 2004, Van den Berg 2004).

Finally, the ordering of preverbal auxiliaries in SN also matches that of its Gbe substrate to a significant degree. For instance, it is well known that SN, like other radical creoles, displays a Tense-Mood-Aspect order of auxiliaries (among others), as in the following examples from my data:

- (21) Wel, dan granpapa ben sa e gi den [owru tori – DW]
 well, then granpa T M A give them [old story]
 "Well, then granddad would have (habitually) told them."
- (22) En dan a man ben musu e breiti
 And then the man T M A glad
 "So the man must have been happy."

Bickerton (1984) ascribed this TMA ordering to the workings of a bioprogram. But it has a more obvious model in the Gbe substrates. Jondoh (1980:52) informs us that, in Gengbe, "the order of constituents in AUX is generally, Tense, Modality, Aspect." She provides the following examples:

- (23) é lá téü nɔ du gálí (Gengbe: Jondoh, p. 52)
 he FUT can PROG eat gali.
 "He will be able to eat gali"
- (24) é lá téü nɔ plè adī (p. 29)
 he FUT can PROG buy soap.
 "He will be able to buy soap"

Other auxiliary orderings which are found both in SN and Gengbe include the combination of Modal + Progressive (Jondoh 1980:33) and Future + Progressive (p.30). In both languages too, the negative auxiliary precedes all other auxiliaries in the verb phrase (Jondoh, p. 65).

This is not to say that the structure of AUX in SN is identical to that of Gengbe or other Gbe dialects. There are several significant differences, but space does not permit full discussion of them here. Suffice it to say that much of the syntax of auxiliary ordering in SN can be explained in terms of influence from the Gbe substrate. It is possible that Akan and Kikongo played some role as well, since they manifest some similarities to Gbe in their auxiliary combinations. It is also quite likely that many aspects of the syntax of the verb in SN are due to innovations and internal developments in the course of the language's development. Future research will no doubt clarify this.

The facts outlined here support the claim that the overall structure of the Sranan verb complex - the preference for periphrastic expression, the patterns of ordering and other

syntactic properties of the auxiliaries - are patterned primarily after the dominant Gbe substrates.

Internal developments in Sranan tense/aspect.

Internal developments also played a role in the emergence of certain TMA categories, and in the further evolution of others. For example, Relative Past *ben* clearly derives from grammaticalization of *been*, a process that has also been attested in various English-lexicon creoles, including most Caribbean creoles, and Pacific creoles such as Hawai'i Creole English and varieties of Melanesian Pidgin. The Relative Past emerged quite early in Sranan, and is attested in one of the earliest SN texts, the Herlein fragment of 1718. There is clearly no substrate influence involved here, since Gbe languages have no past category.

A similar case of grammaticalization is the emergence of Predictive Future *o* from *go*, another development that is widely attested in other English-lexicon creoles, and parallels the emergence of *a/va/ava* as a future marker in French creoles. There is evidence, however, that Future *o* emerged much later than past *ben*, and was not part of the early (late 17th century) Sranan TMA system. In earlier 18th century texts such as Van Dyk's manual (1765), *go* is used mainly as a main verb of motion, while future meanings are expressed by *sa*. But later texts such as Schumann (1783:50) contain some instances of the use of *go* as a future auxiliary – a function in which it is now well established (Van den Berg 2004). Again, this seems to be a purely internal development in which substrate influence played no role.

Finally, the emergence of earlier Progressive (*d)e* as an Imperfective marker seems to have been due to internal processes of grammaticalization over time. This involved extension of the meaning *de* to cover habitual and generic meanings as well. This kind of development has parallels in the development of progressives into imperfectives cross-linguistically (Bybee et al. 1994:141).

Contemporary Sranan also has other TMA markers that evolved via gradual grammaticalization (e.g. modal *man* 'be able to') or were borrowed from Dutch (e.g., modal *mag* 'may'). Fuller details of these and other developments in the restructuring of Sranan TMA can be found in Migge (2004) and Migge and Winford (2003).

The creation of Sranan grammar was clearly a gradual process, in which successive generations of learners contributed in different ways to the elaboration and systematization of the grammar. The evidence suggests that several TMA markers emerged after the initial stages of creole formation in the late 17th to early 18th centuries. This seems to be true also of combinations of TMA markers, few of which are attested in early texts such as van Dyk.

5. Conclusion.

The foregoing comparison of the emergence and development of TMA systems in Haitian Creole and Sranan Tongo demonstrates that no single formula can be found to explain creole formation. There are some respects in which the process is similar to that found in cases of second language acquisition in ‘natural’ settings, but there are significant differences as well, some of which adherents of the ‘superstratist’ position have pointed to. For instance, there are differences in the nature of the target language and the kinds of input from that source. Another major difference lies in the perseverance of L1-based strategies and other internal innovations in creole formation, by contrast with SLA, which, as it progresses, typically involves replacement of such strategies (and other compensatory ones) by those adopted from the TL. Creoles whose creators have had more access to superstrate sources exploit those resources more fully, and as a result, approximate superstrate grammars more closely than others. Some, like Sranan Tongo, depart more radically from the lexifier language because of the need to rely more on L1 knowledge and internal innovations, due to restricted availability of native superstrate models. In general, however, it seems reasonable to claim that creole formation was essentially a process of SLA with (usually) restricted TL input under unusual social circumstances.

With regard to the processes of acquisition, the initial stages of creole formation involve processes of reduction and simplification found in early SLA. But the restructuring of the initial IL system takes a very different path in creole formation because of the nature of the (changing) input, and lack of access, especially by later African arrivals, to native varieties of the superstrate. We’ve seen that the restructuring of tense/aspect systems involves processes of reanalysis due to “transfer” or substrate

influence, and processes of internal change, which sometimes act in concert with the former.

From this perspective, the substratist and superstratist views of creole formation both have some validity. In fact, they complement each other, and there is no need to convert them into matters of opposing dogma. The disagreement between these camps diminishes in importance once we recognize the competing and complementary roles of substrate influence, superstrate input and internal innovation in the processes of restructuring that gave rise to creoles.

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