# Re-evaluating Relexification: The Case of Jamaican Creole

Kyle Davin Parsard

Advisor: Claire Bowern

Submitted to the faculty of the Department of Linguistics in partial fulfillment of the requirements for the degree of Bachelor of Arts

## Contents

Abstract 1 Out of Many, One Language	3 4
1.1 Substrate Influence 1.2 The Creole Continuum 1.3 Current Study	4 6 7
2 Thirty-Five Years of Creole Genesis Models	8
<ul><li>2.1 Universalist Accounts</li><li>2.2 Substratist Accounts</li><li>2.3 Superstratist Accounts</li></ul>	8 8 8
3 The Relexification Hypothesis	8
3.1 Predictions of Relexification 3.2 DeGraff's (2002) Objections to Relexification	11 12
4 Relexification in Jamaican Creole	13
4.1 The Noun Phrase	14
4.1.1 Articles 4.1.2 Demonstratives 4.1.3 Plural Marking 4.1.4 Possessive Marking	14 15 17 20
4.2 Tense and Aspect	22
4.2.1 Past Tense Marking 4.2.2 Frequentative Reduplication 4.2.3 Bare Verbs 4.2.4 Summary	22 23 24 25
4.3 The Verb Phrase	25
4.3.1 Copular Constructions 4.3.2 Serial Verb <i>Se</i> 4.3.3 Summary	25 28 30
4.4 Focalization	30
5 Discussion	33
5.1 Issues 5.2 Evaluation of the Hypothesis 5.3 Contributions of Different Substrates	33 34 34
References	35

## Abstract

The traditional view of creole genesis holds that a creole begins as a pidgin, a makeshift language that forms when two or more groups without a native language come into contact. When the next generation of speakers then acquires the pidgin, it is transformed into a natural language known as a creole through the use of an innate faculty (see Bickerton 1981). While still finding some degree of support among modern creolists, this account of creolization has largely fallen out of favor in the last few decades. During this time, many competing hypotheses have emerged; however, as of yet no consensus within the field exists.

One model known as the relexification hypothesis (see Muysken 1981) holds that a creole forms when speakers replace phonetic strings within their lexicons with strings from the superstrate language. A creole's syntax, morphology, and lexical semantics are, therefore, derived from its substrate language(s). Lefebvre (1998) proposes a strict variant of the relexification hypothesis, which she supports through a comparison of Haitian Creole, French, and Fongbè.

The goal of this work is to evaluate the model of creole genesis found in Lefebvre 1998, using Jamaican Creole as a case study. To this end, data on Jamaican Creole syntax has been obtained from Bailey 1966, Durrleman 2008, and Patrick 2004 and 2007 with substrate data coming from various sources.

## 1 Out of Many, One Language

The creation of Jamaican Creole by enslaved Africans took place during some period after British settlement in 1655. However, Africans had been living in Jamaica well before this time; Spanish settlers brought them to the island as early as 1515 after their failure to enslave the indigenous Arawaks, whom they would eventually annihilate. Upon the British invasion, the Spanish fled, with the majority of their slaves becoming free and escaping into the mountains as the first Maroons (Cassidy 1961:15). Thus the role of the Spanish and Arawak languages in the development of JC is minimal (Patrick 2007:1).

Scholars disagree over the latest point by which Jamaican Creole would have formed. Some authors, especially those whose theories of creolization involve nativization by a new generation, have posited dates well into the eighteenth or even the nineteenth century (Singler 1986, Mufwene 2002, Patrick 2007). Alternatively, Kouwenberg (2008:7), argues that a stable contact variety in Jamaica would likely have developed as early as the late seventeenth century, when the geographical spread of plantations was restricted and slaves were able to move somewhat freely.

### 1.1 Substrate Influence

Jamaican Creole is the result of mixture of various African languages, English, and other European tongues. Because of the relative social prestige of the British settlers' language, English is said to be the *superstrate* in this contact situation. As with many other creoles, superstrate influence is especially apparent in the lexicon; over 90 percent of JC words are derived from English (Cassidy 1966:212). Some languages, such as Spanish, French, and Dutch have existed in Jamaica with no significant positive or negative social prestige, and are therefore referred to as *adstrates*. The influence of these languages on JC is limited to a small number of lexical items such as place names (Patrick 2007:1, Cassidy 1961:11). Of course, the languages spoken by slaves carried great negative social prestige throughout the creole's early history. These *substrates* consist of various West and Central African tongues belonging to different subgroups of the Niger-Congo language family: Fon and Ewe (of the Gbe subgroup), Akan and Ga (Kwa), Igbo (Igboid), Yoruba (Yoruboid) and Kongo (Bantu), among others.

It is not clear which, if any, of the substrate languages was dominant in the first few decades of Jamaican Creole. Authors such as Alleyne (1971, 1988) have argued for Akan dominance based on the presence of strong Akan influence on Maroon culture and language. However, Kouwenberg (2008) holds that the Jamaican plantation society developed independently of Maroon culture, citing a lack of historical records of the language of Jamaican Maroons being used outside their society. Even more, she notes that historical sources from the first decades of British colonization of Jamaica do not support the claim that the majority of late seventeenth-century slaves spoke Akan. In fact, the origins of one-third of slaves coming directly from Africa between 1656 and 1700 are currently unknown. Of those slaves whose origins are recorded, most arrived from Bight of Benin (bordering present-day Togo, Benin, and Nigeria), and probably spoke Gbe languages. The second-most came from "West-Central Africa," and the third-most came from Bight of Biafra (bordering present-day Nigeria, Cameroon, Equatorial Guinea and Gabon) and likely spoke Igboid languages (Kouwenberg 2008:8,23).

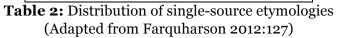
Origin	Count	Percentage	Languages
Bight of Benin	18,928	23.4	Gbe
West-Central Africa	14,463	17.9	
Bight of Biafra	10,933	13.5	Igboid (Lower) Cross River
Gold Coast	5,893	7.3	Akan, Ga
Senegambia	2,895	3.6	
Sierra Leone	606	0.7	
South-Eastern Africa	185	0.2	
Africa Unspecified	27,111	33.5	

**Table 1:** Estimates of gross slave imports from Africa and their linguistic origins, 1656 to 1700. (Adapted from Kouwenberg 2008:8,23)

Given the substantial portion of slaves who were transported from unknown ports, no definitive claim about the dominance of any particular substrate can be made from this data. The issue of assessing Jamaican slave demographics is further complicated by the fact that African slaves were not only imported directly from Africa, but also from ports on other islands in the Caribbean. Lefebvre (1998:52) also notes the importance of distinguishing between the African ports associated with a group of slaves and their actual origins in the African continent.

The issue of dominance may alternatively be investigated through the analysis of substrate presence in creole lexicon and grammar. Whether the grammar of one particular substrate is especially present in Jamaican Creole is not clear, since, as Kouwenberg (2008:22-3) notes, "no substantial research has been done which considers aspects of JC grammar in comparison with [that of African substrates]." Regarding substrate presence in lexicon, Farquharson (2012:127) finds the largest portion of African words with single-source etymologies to be Akan in origin, though he acknowledges that many of these words could be post-formative. His data has been reproduced in Table 2.

Language	Count	Percentage
Akan	61	36
Kongo	33	19
Gbe	16	9
Igbo	9	5
Yoruba	8	5
Guang	6	4
15 languages	23	13 (<2 each)
Mende	5	5
Ga	5	5
Hausa	5	5
Total	171	



### 1.2 The Creole Continuum

Since the early years of British colonization, JC (locally *Patwa*) and English have coexisted in Jamaica, with the latter's prestige persisting to the present day. Even Patwa speakers themselves consider their language a "bad" or "broken" form of English. Durrleman notes (2008:6) that creolized speech may greatly limit an individual's opportunities for employment.

As a consequence of their longstanding co-existence, Jamaican Creole and Jamaican English have had substantial influence on one another over the last three and a half centuries. This mixing has had the effect of establishing a "continuum" of creole varieties ranging from the *acrolect*, which is most similar to English and has the greatest prestige, to the *basilect*, which has the greatest negative prestige (Durrleman 2008:1-6). Dialects between the acrolect and basilect are called *mesolects*.

These varieties differ significantly with respect to both lexicon and morphosyntax. As Durrleman (2008:4) notes, words in the basilect tend to have a more analytic character than mesolectal and acrolectal ones, which more closely resemble their English counterparts. This difference is illustrated by the JC translations of 'daughter'. Whereas mesolectal varieties use the form *daata*, the basilect has the compound *gyal-pikni* (lit. 'girl-child').

Regarding morphology, the basilect is characterized by a lack of inflection. Examples (1) and (2) illustrate two methods of plural marking in Jamaican Creole. Bobyleva (2011) writes that both forms are found across continuum; however the English-like inflectional affix shown in (1) occurs more frequently in acrolectal varieties, while basilectal speakers more often produce the analytic<sup>1</sup> plural shown in (2).

- (1) Thirty years me deh out a world.
   thirty year.PL 1SG COP PREP PREP world
   'Thirty years I have been traveling around the world.'
   (Thelwell 1980:111)
- (2) Leff' de gun dem yah an' jus' reason wid 'im. leave DET gun PL DEIC and just talk PREP 3SG 'Leave the guns here and just talk to him.' (Thelwell 1980:340)

Differences between these varieties can also be observed in the pronominal system. Although all varieties make a singular/plural distinction and a three-way person distinction, no gender, or case distinctions exist in the basilect. As a result, the basilectal pronoun *im* can be translated as 'she,' 'he,' 'her,' 'him,' or 'his' (Patrick 2007:23).

In order to account for creole continua in Jamaica and elsewhere, a number of authors have referred to the process of *decreolization*, whereby superstrate influence results in a loss of typical creole features (DeCamp 1971, Bickerton 1973, Rickford 1987). However, Mufwene (1994, 1998) and Lalla & D'Costa (1990) have presented theoretical and empirical arguments against decreolization. Certain authors have argued instead that it is *basilectization*, a process by which creole varieties diverge from a standard, which accounts for the observed variation.

In the evaluation of a creole genesis model, the variety that is considered depends on whether decreolization or basilectization is taken to be the dominant process in producing the

<sup>&</sup>lt;sup>1</sup>While Bobyleva (2011) treats *dem* as an analytic plural, Patrick (2003, 2007) refers to the marker as a suffix. I will take the former position.

creole continuum. If the dominant process is decreolization, then the basilect is the most suitable variety for such an analysis, as it would most closely resemble the early creole. If, on the other hand, the dominant process is basilectization, then a more acrolectal or mesolectal variety may be considered. Here I will take the former position. Therefore, where data is available, this work will make reference to grammatical features of the "pure" Jamaican Creole basilect.

## 1.3 Current Study

One of the major aims of creolistics is to explain the remarkable similarity that is observed between creoles around the world. In terms of structure, creoles are often said to be characterized by a "reduction" or "simplification" of grammar, though it has been argued that this is only the case when viewed from the perspective of European superstrates (Lefebvre 1998). In any case, it is clear that creoles more often lack inflectional morphology than would be expected by chance, or by virtue of their parent languages (McWhorter 2002, 2005). Furthermore, creoles are almost always isolating languages, even when their parent languages are not (Lefebvre 1998:2-3). Regarding phonology, creoles do not make use of contrastive tone, including those whose parent languages have rich tonal systems. The pidgin and creole languages formed under European colonization during the last 500 years are so typologically similar that they were once thought to originate from a common ancestor. This theory, known as the *monogenetic theory of pidgins*, claimed creoles and pidgins to be the descendants of a sole Mediterranean "proto-pidgin," and was popular during the 1960s before being ultimately discredited.

Since that time, creolists have put forth numerous other hypotheses of creole genesis, most of which fall into one of three camps: *universalism, substratism,* or *superstratism*. Universalist accounts, such as those which hold that creoles are formed form pidgins, claim that early creole speakers draw on innate strategies to form a common tongue in complex contact situations. On the other hand, substratist models attribute creole features to the structures of their substrate languages. Finally, superstratist accounts of creolization hold that creole structure comes from the superstrate.

A number of models of creolization argue for a list of grammatical features which should exist in every creole (or should be absent from every creole). Others make predictions regarding the relationship between a creole's structure and the structure of its substrate(s) and/or superstrate. This work evaluates the predictions of the models of creolization found in Lefebvre 1998 through a comparison of the grammars of Jamaican Creole, English, and the creole's substrates. Furthermore, this work hopes to assess the contributions of different substrates to the syntax of the creole, and determine whether the influence one substrate was dominant.

This paper proceeds as follows. In Section 2, I will discuss a few models of creole genesis that have been proposed within the last four decades, beginning with Bickerton's (1981) bioprogram. In Section 3, I will give a summary of Lefebvre's (1998) model. In Section 4, I will test the predictions of this model using Jamaican Creole as a case study. In Section 5, I will discuss my results.

## 2 Models of Creole Genesis

## 2.1 Universalist Accounts

Bickerton's (1981) influential *language bioprogram* hypothesizes that the structure of creoles is the result of the nativization and regularization of pidgins by child speakers, which is aided by innate and universal strategies. As Mufwene (2006:320) notes, universalist accounts such as Bickerton's were most popular in the 1980s and 1990s. However, support for pidgin-to-creole hypotheses is still found in the 21<sup>st</sup> century. McWhorter (2000) argues that a pidgin stage is necessary for a model of creole genesis in order to account for the reduction of grammar that is observed.

### 2.2 Substratist Accounts

Mufwene (1990) divides the substrate hypothesis into three major schools. The first school contains authors such as Alleyne (1980, 1996) and Holm (1988), and is, according to Mufwene (2006:318), characterized by "invocation of influence from diverse African languages without explaining what kinds of selection principles account for this seemingly random invocation of sources." The second school is the *relexification hypothesis*, whose proponents argue that creole languages form when substrate grammars obtain the phonetics of the superstrate. Relexification was first formally defined by Muysken (1981) before finding support from authors such as Lefebvre (1998) and Lumsden (1999). Mufwene (2006:319) criticizes this account for, among other things, its failure to sufficiently consider the influence of multiple substrates and non-standard superstrate dialects. The third version of the substrate hypothesis was put forth by Keesing (1988). In this account, creoles are shown to acquire features that are shared by a majority of its substrates (Mufwene 2006:319).

### 2.3 Superstratist Accounts

Superstratists, also known as *dialectologists*, hold that the majority, if not all of a creole's structure derive from (especially nonstandard dialects of) its superstrate. For example, Faine (1937) and Hall (1958) have claimed that Haitian Creole is "essentially Norman French". Notable supertratist works have been written by Chaudenson (1989, 1992), who allows for some substrate influence in the structure of creoles. (Mufwene 2006:319-20).

## 3 The Relexification Hypothesis

Muysken (1981) gives the first formal definition of relexification in his discussion of Media Lengua, a mixed language with Quechua grammar and Spanish influence in lexicon and phonetics. The sentences in example (1) demonstrate the relationship among these languages. The morphosyntactic similarity between ML and Quechua is highlighted in (1a), where each morpheme in the ML sentence corresponds directly to a Quechua morpheme in the same position. On the other hand, the corresponding Spanish sentence is shown in (1b) to be structurally dissimilar.

- (3) a. *ami-mu da-ngi nuka-mu ku-ngi* 1SG-DAT give-2SG 'Give it to me.'
  - b. *lo darás a mí* 3SG give.2SG.FUT PREP 1SG 'Give it to me.' (Muysken 1981:58)

Media Lengua Quechua

Spanish

While the ML suffixes -mu and -ngi are derived directly from Quechua, Spanish influence is apparent in the pronoun *ami*, which comes from the "freezing" of the Spanish preposition *a* and pronoun *mi*, and in *da* 'give' which is related to the Spanish *dar* 'to give.'

Muysken explains the facts of Media Lengua through relexification, an interaction between the lexicons of a *source language*, which provides structural elements, and a *target language*, which lexifies the new grammar. In the context of creolization, the source language refers to one or many substrates. The target language can generally be understood as the superstrate, though it has been argued that "the superstrate is not always the lexifier" (see Selbach 2008).

SOURCE LANGUAGE	E TARGET LANGUAGE
$/\text{phon}/_i$	/phon/ <sub>j</sub>
SYNi	SYNj
SUBi	$SUB_j$
$SEM_i$	$\mathrm{SEM}_j$
SELi	$\mathrm{SEL}_j$

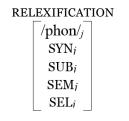


Figure 1: Relexification (Adapted from Muysken 1981:61)

According to Muysken's model, the lexicon is an unordered set of lexical entries. These entries are bundles of information: a phonetic string, syntactic features, subcategorization features, a semantic representation, and selectional features. Relexification occurs when speakers of one or many source languages replace the phonetic strings of their lexical entries with strings from the target language. The resulting language, therefore, superficially resembles the target while retaining the structural and semantic properties of the source. This process is represented in Figure 1.

Lefebvre (1998) uses Haitian Creole as a case study to provide support for and build upon Muysken's model. Lefebvre argues that creolization is the result of three processes, *relexification*, *reanalysis*, and *dialect leveling*, where the first feeds the other two. These processes are argued to be crucial to the formation of contact languages (including mixed languages like Media Lengua and pidgins), but not exclusive to them; Lefebvre emphasizes that they are all general processes of language evolution.

Following Lefebvre and Lumsden (1994), relexification in this model is broken into two subprocesses: *copying* and *relabelling*. Copying is the importation of a lexical entry from the source language into the lexicon of the new language. These new entries then undergo relabeling when they obtain a phonetic string from the target language. When major category items, such as nouns and adjectives, are relabelled, they also receive directionality properties from the superstrate. Directionality properties, as defined by Koopman (1984), determine the position of a syntactic head relative to its specifier, complement, and modifiers. Therefore, a superstrate with adjective-noun order will lexify a creole with the same order.

In creolization, all source entries are copied. However, not every source entry receives a phonetic form through relabelling; functional entries which lack semantic content instead become phonologically null. The version of relexification defined by Lefebvre and Lumsden (1994) is represented in Figure 2.

ORIGINAL LEXICAL ENTRY	LEXIFIER LANGUAGE
$[phonology]_i$	[phonetic string] <sub>i</sub> used in
[semantic feature] $_k$	specific semantic and
[syntactic feature] $_n$	pragmatic contexts

NEW LEXICAL ENTRY [phonology], or  $[\emptyset]$ [semantic feature]<sub>k</sub> [syntactic feature]<sub>n</sub>

Figure 2: Relexification (Adapted from Lefebvre and Lumsden 1994)

For relexification to occur, the semantics of some source lexical entry must partially overlap with that of a target entry. The other properties of the entries, including their syntactic categories, may be very different. Lefebvre gives the example of the Haitian Creole verb *bezwen* 'to need,' which obtains its form from the French noun *besoin* 'need' (Lefebvre 1998:17). In some instances, a source lexical entry may relabeled as a result of phonetic similarity with one in the lexifier. This process is argued by Lefebvre to have produced the Kriol sentential negative marker *ka*, which would be derived from the Portuguese adverb *nunca* 'never' and the Manjaku negative auxiliary *kats* (Lefebvre 1998:37).

Reanalysis occurs when a lexical entry is relabelled with a string from an entry of a different category, as with the *beswen/besoin* example above. According to Lefebvre (1998:37), the creators of a creole do not have enough exposure to the lexifier language to acquire its functional categories. Thus major category items (e.g., nouns, verbs, prepositions, etc.) in the superstrate rather than minor category items (determiners, case markers, etc.) provide the phonetic strings for creole functional items. Even functional items without semantic content, which are initially relabelled with null strings, can later acquire phonetic strings from major category items (have a result of this, every entry in a creole lexicon will also be free, and creoles will invariably be isolating languages (Lefebvre 1998:49).

For a substrate functional item to be relabelled, its distribution must align with that of some major category item in the superstrate. Lefebvre cites the example of the Haitian Creole postnominal determiner la, which supposedly derives from the Fon postnominal determiner  $\dot{a}$  and the French adverb  $l\dot{a}$ , a postnominal emphatic deictic/discourse marker (Lefebvre 1998:83).

Lefebvre (1998) acknowledges that speakers of different substrate languages will produce different grammars through relexification, resulting in dialect leveling:

[S]peakers of various substratum languages reproduce idiosyncratic semantic and syntactic properties of their own lexicons in relexification and thus the product of relexification is not uniform across the creole community. The features that are common to all languages (that is, to all substratum languages) will most probably be maintained in the creole. The idiosyncratic features, however, are those that are subject to levelling. (Lefebvre 1998:46)

Although relexification can bring a creole community closer to possession of a lingua franca, significant variation will persist at the end of this process. Further stability can be later achieved through dialect leveling, whereby certain variants are lost while others spread throughout the community. However, as Lefebvre notes later, not all differences are leveled out; in some cases, variation originating among the substrates may give rise to variation in the creole (Lefebvre 1998:47).

## 3.1 Predictions of Relexification

In general, Lefebvre's version of the relexification hypothesis predicts that the structural features of a creole originate as features of its substrate(s). She writes of the hypothesis, "creole entries are predicted to have the same semantic and syntactic properties as the corresponding lexical entries in the substratum languages, but phonological representations derived from the phonetic strings of the superstratum language" (Lefebvre 1998:48). The formalization of relexification given in Lefebvre 1998, which was reproduced in Figure 2, represents the hypothesis in the same way. While this is a mostly accurate characterization of Lefebvre's account, it leaves out certain vital details. Recall that creole lexical entries which are not phonologically null obtain directionality properties from the superstrate items that relabel them. Furthermore, all non-null entries will be free words, following their corresponding superstrate entries. Although the causes of these processes are phonological, the results are clearly morphosyntactic.

The test of relexification that follows will require a clear outline of the predictions of the hypothesis. Therefore, I have produced a revision of Lefebvre 1998's formalization in Figure 3. In this representation, relexification is shown to be an interaction between substrate lexical entries and major category entries in the superstrate. (Remember that major category items are the only lexifier entries that creole speakers will have access to.) Lexical entries are shown with five types of features. The first two features are the entry's phonology and semantics, as in Lefebvre's (1998) representation. Next is the boundedness feature, which determines whether an entry is a free or bound word. In Lefebvre's (1998) relexification hypothesis, this feature will always be valued as [free] in a major category, a property which will be passed on to the new non-null entries that appear in the creole. On the other hand, substrate functional items without semantic content are relabelled with a null string, and therefore are neither free nor bound. The fourth feature is the directionality feature, which, as discussed in Section 3, specifies the position of an entry with respect to its arguments and modifiers. Like the boundedness feature, non-null creole entries will inherit this feature from the lexifier entry. The final feature

represents the remaining syntactic properties of an entry. This feature does not change when a substrate entry is copied to in the creole lexicon or relabelled.

ORIGINAL LEXICAL ENTRY [phonology]<sub>i</sub> [semantic feature]<sub>i</sub> [boundedness feature]<sub>i</sub> [directionality feature]<sub>i</sub> [syntactic feature]<sub>i</sub> (MAJOR CATEGORY) LEXIFIER ENTRY [phonology]<sub>j</sub> [semantic feature]<sub>j</sub> [boundedness feature]<sub>j</sub> [directionality feature]<sub>j</sub> [syntactic feature]<sub>i</sub>

NEW ENTRY [phonology]<sub>j</sub>, [semantic feature]<sub>i</sub> [boundedness feature]<sub>j</sub> [directionality feature]<sub>j</sub> [syntactic feature]<sub>i</sub>

NEW FUNCTIONAL ENTRY WITHOUT SEMANTIC CONTENT  $\begin{bmatrix} \emptyset \end{bmatrix}$  $[semantic feature]_i$ 

[directionality feature]<sub>i</sub> [syntactic feature]<sub>i</sub>

Figure 3: Relexification

## 3.2 DeGraff's (2002) Objections to Relexification

DeGraff (2002) raises a number of theoretical and empirical issues with Lefebvre (1998)'s account of Haitian Creole formation. For one, DeGraff objects to Lefebvre's claim that early speakers of HC generally had little contact with the superstrate. Noting that slaves often worked alongside French indentured servants, or *engagés*, he argues instead that slaves had a large degree of superstrate exposure. DeGraff supports this claim by presenting morphosyntactic correspondences between Haitian Creole and French which are attested in the creole's early history.

Perhaps most crucially, DeGraff argues that relexification could not have been the central process in the creation of Haitian Creole, as Lefebvre (1998) claims, since the process of relexification itself does almost nothing to level structural differences among multiple substrates:

[R]elexifiers in the preleveling period could not have created Haitian Creole, unless the latter is taken to refer to an array of parametrically disparate Niger-Congo grammars ... all with French-derived phonetics ... The typological mix of early relexified creoles would thus be radically different from the relatively uniform grammar that is shared by speakers of contemporary Haitian Creole. (DeGraff 2002:388)

Creolization occurs when a community containing many different grammars quickly acquires a lingua franca. Therefore, as DeGraff argues, a model of creole genesis must first and foremost explain this reduction of typological diversity. The process of relexification cannot do this, since it mainly concerns the phonological changes that lexical entries undergo when they are imported from the substrates to the creole. Lefebvre's (1998) only attempt at such an account is found in her discussion of dialect leveling (Lefebvre 1998:46-7), which is limited to a few paragraphs.

On a related note, DeGraff criticizes Lefebvre's (1998) position that child speakers did not play a major role in the creation of HC. Arguing that children are "known to play an instrumental role" in leveling grammatical variation (DeGraff 2002:389), DeGraff proposes the "L2A-L1A Cascade," a model that considers the adult speakers' L2 acquisition of the superstrate, as well as the next generation's ability to regularize a grammar, where the product of the first process serves as input for the second.

## 4 Relexification in Jamaican Creole

A test of the relexification hypothesis requires a comparison of the lexicons and grammars of a creole, its superstrate, and its substrates. Lefebvre's (1998) test provides a comparison with only one substrate of Haitian Creole, Fon, though multiple others were involved in the formation of the creole. This methodological choice is partly due to Lefebvre's opinion that these substrates, which include Ga, Igbo, Efik, and Malinke, among others (DeGraff 2002:388), make up a "fairly homogeneous group." Furthermore, she notes that this choice makes the hypothesis easier to reject, as it reduces the chance of finding parallels between creole and substrate grammar (Lefebvre 1998:67).

Although the decision to compare Haitian Creole with a single substrate is sensible for Lefebvre's analysis, it does not appear to be suitable for an evaluation of relexification involving Jamaican Creole. As discussed in Section 1.1, neither slave trade data nor lexical data can provide an obvious choice of substrate for such a comparison. In fact, Kouwenberg (2008:23) doubts that a substrate with dominant formative influence on JC ever existed. She goes on to argue for substratist methodology that accounts for the complexity of JC's early history:

[It is] unlikely that substratist research methodologies which have been applied in the Suriname Creole, Haitian, and Berbice Dutch cases are applicable also in the JC case. A situation of multiple substrates calls for a different research methodology. I propose the development of substrate research methodology which capitalizes on the typological diversity found in Niger-Congo. Rather than assume typological uniformity across Niger-Congo, as has been the tendency in traditional substratist research, this methodology exploits the typological range (Kouwenberg 2008:23-4).

Farquharson (2012) shows that, of all African substrates, Akan, Kongo, Gbe<sup>2</sup> (which includes Fon and Ewe), Igbo, and Yoruba have exerted the greatest amount of influence in the lexical

<sup>&</sup>lt;sup>2</sup>Gbe is variably treated in the literature as either a language or a group of many languages, with Fon and Ewe constituting a pair of either dialects or related languages, respectively. When referring to Gbe morphosyntax, I will most often cite grammars of Fon and/or Ewe, though occasionally reference will be made to other Gbe dialects/languages, or to Gbe as a whole.

domain. Therefore, the following analysis will consist of comparisons between Jamaican Creole, its superstrate Early Modern English, and the above substrate languages.

This research methodology comes with a different set of advantages and disadvantages from the methodology employed by Lefebvre (1998). In a test of relexification, support is given when parallelism is found between the grammars of a creole and its substrate(s). Since this work will consider multiple substrates, we may expect to find more instances of such parallelism, i.e., more evidence in favor of the hypothesis. On the other hand, instances where no parallelism is found, or where it is instead found between the creole and the superstrate, will provide stronger evidence against the hypothesis.

### 4.1 The Noun Phrase

#### 4.1.1 Articles

Jamaican Creole has a definite determiner di and an indefinite specific singular wan, both of which occur prenominally. D'Costa & Lalla (1990:74) note that the distribution of di was restricted to a small set of NPs in the early creole. Generic nouns appear without an overt determiner. These uses are demonstrated in examples (4-6).

- (4) Di aki ties swiit, yu si! DET ackee taste sweet 2SG see 'The ackee tastes great, you know!' (Durrleman 2008:127)
- (5) *Di uman sel wan manggo.* DET woman sell DET mango 'The woman sold a mango.' (Patrick 2007:20)
- (6) Manggo swiit. mango sweet 'Mangoes are sweet.' (Bailey 1966:27)

Under the relexification hypothesis, we should expect to find determiners with similar structural and distributional properties in one or more of the substrates. Furthermore, we should find that the phonological forms derive from major category items in English. For the most part, this is not the case.

In Fon, the definite and indefinite determiners are j and de', respectively. Unlike their JC counterparts, both Fon determiners occur postnominally. Furthermore, j may co-occur with a demonstrative (7), whereas di may not (8).

(7) Bàyí sín dìdè Kókú tón éló ó lé
 Bayi OBJ portrait Koku GEN DEM DET PL
 'these/those Koku's portraits of Bayi'
 (Lefebvre & Brousseau 2002:37)

Jamaican Creole

(8) a. \*di dis pikni DET DEM child
b. \*dis di pikni DEM DET child
(Durrleman 2008:145)

The indefinite specific determiner *dé* differs from JC *wan* in its ability to modify both singular and plural nouns.

(9) àsán dé lé crab DET PL 'some (specific) crabs' (Lefebvre & Brousseau 2002:40) Fon

Akan has the definite determiner, *nó*, which also functions as the distal demonstrative, and the indefinite specific *bí*. Like the determiners in Fon, both of these elements follow the noun.

Igbo has neither definite or indefinite articles. As a result, bare nouns may be interpreted as definite, indefinite, or generic (Obiamalu 2013).

Yoruba has a pair of morphemes, *náà* and *kan*, which are often glossed as articles; however, Ajíbóyè (2005b:201,216), argues that these elements are not determiners, but markers of salience and specificity, respectively. In any case, these morphemes, unlike JC determiners, are postnominal.

Only Kongo has a prenominal element with a similar function the JC determiners. This prefix, referred to as *the augment*, takes one of three forms (a, e, or o) depending on the class of the following noun. Though early grammars of Bantu languages compared the augment to the articles of European languages, Katamba (2006:107) writes, "[the Bantu augment] cannot be simply equated with a determiner," since its distribution can be influenced both by pragmatic factors such as definiteness, specificity, or focus, and by syntactic factors. Additionally, the Kongo augment differs from JC di and wan in that it may co-occur with a demonstrative (10).

Kongo

(10) *Teka* **e** *nkombo* **eyo** sell AUGMENT goat DEM 'Sell that goat.' (Bentley 1887:586)

4.1.2 Demonstratives

Jamaican Creole has three demonstratives: the singular proximal *dis* (11), the singular distal *dat* (12), and the plural *dem* (13), which is homophonous with the plural marker and third-person plural pronoun. These demonstratives often co-occur with the proximal and distal deictics *ya* and *de*. As shown in (13), the deictic may appear either before or after the noun. This is true for both singular and plural demonstrative constructions.

(11) **dis** pikni**(-ya)** DEM child(-DEIC) 'this child'

- (12) **dat** pikni(-de) DEM child(-DEIC) 'that child' (Durrleman 2008:145)
- (13) a. **Dem** pikni-**de** no iizi DEM child-DEIC NEG easy
  - b. **Dem-de** pikni no iizi DEM-DEIC child NEG easy 'Those children are not easy (to deal with)' (Durrleman 2008:146)

Adams (1932:30) gives Igbo's inventory of demonstratives, which contains  $\dot{a}$  'this, these,'  $\dot{a}h\dot{\theta}$  'that, those,'  $\dot{n}d\dot{a}$  'these,'  $\dot{n}k\dot{\epsilon}$   $\dot{a}h\dot{\theta}$  'that,'  $\dot{n}d\dot{i}$   $\dot{a}h\dot{\theta}$  'those,'  $\dot{n}k\dot{\epsilon}\dot{a}$  'this,'  $\dot{o}t\dot{u}$   $\dot{a}h\dot{\theta}$  'that one, that very one.' All of these elements except for the last occurs postnominally, unlike the JC demonstratives. The last element,  $\dot{o}t\dot{u}$   $\dot{a}h\dot{\theta}$  'that one, that very one' surrounds the noun, with  $\dot{o}t\dot{u}$  'one' preceding the noun and the demonstrative  $\dot{a}h\dot{\theta}$  following.

Akan has two demonstratives which both occur postnominally: proximal yi and distal nó, which serves a variety of other functions. Amfo (2007:136) writes that nó also "functions as a definite article and a dependent clause marker in relative clauses, temporal clauses and substitutive clauses."

Yoruba contains two basic demonstratives, proximal yii and distal yen. Unlike JC, which has a separate plural demonstrative, Yoruba forms plural demonstratives through the prefixation of the morpheme won- (e.g. yen 'that' + won- = wonyen 'those') (Ajiboye 2005b:14).

Kongo's system of demonstratives features a three-way distinction between the proximal, distal, and super distal. The form of the demonstrative varies with the class of the noun it modifies. Demonstratives may either precede or follow the noun.

Kongo

- (14) *nuní* **zo:** bird DEM 'those birds'
- (15) *nuni* **zi:na** bird DEM 'those birds (way over there)'
- (16) bó: bantu
  DEM man
  'those men'
  (Lumwamu 1973:75)

Fon contains two postnominal demonstrative determiners,  $(\acute{e})$ lう and  $(\acute{e})$ n $\acute{e}$ , which are sometimes glossed as 'this' and 'that,' respectively. However, Lefebvre & Brousseau (2002:41) note the existence of three patterns of interepretation. In the first,  $(\acute{e})$ lう and  $(\acute{e})$ n $\acute{e}$  serve as the proximal and distal determiners, respectively. In the second,  $(\acute{e})$ lう is used as a general demonstrative which be either proximal or distal, and  $(\acute{e})$ n $\acute{e}$  functions as the distal demonstrative. In third pattern, there is no distinction between  $(\acute{e})$ lう and  $(\acute{e})$ n $\acute{e}$ , with each of these elements used as both proximal and distal demonstratives.

As shown above, none of the substrates under consideration have demonstratives that function similar to those in Jamaican Creole. In fact, it appears that parallel demonstrative constructions may only be found in English, with the Jamaican Creole structure in (13a) occurring in nonstandard varieties (17) and the JC structure in (13b) occurring in English more generally (18).

(17)	a.	this here guy	Nonstandard English
	b.	that there car	
		(Bernstein 1997:90-1)	

4.1.3 Plural Marking

a. b.

(18)

As discussed in Section 1.2, plurality may be marked in Jamaican Creole with either the third person plural pronoun *dem* (< English *them*) or the English-like affix -s. Although both markers are found across the continuum, *dem* is more characteristic of basilectal speech and will therefore be the focus of this section.

The distribution of *dem* is somewhat complicated in comparison with that of its English (or acrolectal) counterpart, leading Stewart (2006) to argue that *dem* does not mark pluralilty, but inclusiveness. Whereas -s occurs obligatorily on nouns encoding plurality, the use of *dem* may be required, optional or even ungrammatical in a given construction depending on the grammatical context. For the most part, *dem* is required after definite nouns, as demonstrated in (19), where it co-occurs with the determiner *di*. However, in the presence of a numeral, *dem* may be either pronounced or omitted (20). *Dem* may never follow non-definite plural nouns, even those preceded by a numeral (21).

- (19) di dopi dem DET ghost PL
  'the ghosts'
  (Durrleman 2008:154)
- (20) Di tuu bwai (dem) dong a road.
  DET two boy PL down PREP road
  'The two boys are down the road.'
  (Stewart 2006:241)

this guy here

that car there

(21) a. \*bwai dem boy PL
b. tuu bwai (\*dem) two boy PL
(Durrleman 2008:154-5)

Patrick (2004:40) claims that *dem* more easily follows animate nouns than inanimate ones. However, Durrleman (2008:157) finds no such preference among her consultants, also noting that examples of this marker following inanimate nouns are not uncommon in the literature.

It is observed by Patrick (2004:33) that *dem* may only follow third person nominals (22), who notes that this property may be result of its origin as the third person plural pronoun.

(22) \**aal* **yaa** *bwai* **dem** all 2PL boy PL (Patrick 2004:33)

When following a proper name, *dem* forms the associative plural (23), which denotes a group consisting of a particular person and their known associates (Bailey 1966:26, Durrleman 2008:154-5). Durrleman (2008) mentions the existence of similar structures in English vernaculars such as African American English (24), noting however that these associative plurals, unlike the JC construction, are coordinate structures.

(23)	Miss Waaka dem laaf afta im. Miss Walker PL laugh after 3SG 'Miss Walker and the others laughed at him.' (Roberts 1973:18)	Jamaican Creole
(24)	<i>John an dem</i> 'John and his associates'	AAE

Interestingly, the JC associative plural can only be formed with proper names. Consequently, the sentence in (25) may only give a plural reading, and not an associative plural reading.

(25) di kwiin dem DET queen PL 'the queens' \*'the queen and her associates' (Durrleman 2008:155)

(Durrleman 2008:154)

As we've seen, the properties of *dem* differ greatly from those of normal plural markers, leading Stewart (2006) to argue the *dem* is not in fact a plural marker, but a marker of inclusiveness.

The substrate plural marker most similar to *dem* is Ewe  $=w \acute{o}$ , which, like its JC counterpart, also functions as the third person plural pronoun (Duthie 1996:44, Lefebvre & Brousseau 2002:39). Even more,  $=w \acute{o}$ , like *dem*, forms the associative plural without an intervening conjunction (Ameka 2006:126-7).

(26) Kofi=wó
 Kofi dem
 Kofi PL
 'Kofi and his associates'

Still, *w*ó differs from *dem* in that it may form the associative plural with non-proper names. Compare example (27) with the earlier JC example in (25).

(27) fiahá=wo chief=PL
'the chief and his attenue'
(Vassilieva 2005:10)

Furthermore, Ewe *wó* does not share JC *dem*'s restriction against co-occurrence with non-third person nominals. Compare the Ewe sentence (28) with the ungrammatical JC sentence in (22).

(28) *mí* Evea**wó** 1PL.SUBJ Ewe.PL 'we Ewes' (Duthie 1996:47)

Yoruba is another substrate in which the plural may be marked with the third person plural pronoun. This marker, awon, occurs prenominally:

(29) Âwọn obìnrin wá tún pín sí òwo méjì. Yoruba PL woman come again divide PREP group two
'The women again divide into two groups.' (Ajíbóyè 2010:148)

The Yoruba plural marker does not appear to form the associative plural, like JC *dem*, or Ewe  $=w \acute{o}$ .

Other African substrates have less similar methods of number marking. Fante Akan employs a number of different plural formation strategies. Nouns which denote familial or other types of relationship are suffixed with -nom (or the contracted from -m) in the plural. Certain nouns form their plural through reduplication. A third plural marker, which takes the form -mba, is somewhat similar to Jamaican Creole *dem* in that it refers to "things often taken collectively" (Balmer & Grant 1929:45-6).

Adams (1932:20) writes that, in general, speakers of Igbo "may be said to avoid any distinction between singular and plural." Nevertheless, he observes that certain words may occasionally occur before nouns to indicate number: nwa 'child,'  $\delta tu$  'one', and  $\delta ny \epsilon$  'person' to denote the singular, and  $\dot{n}di$  'persons' and  $\delta m \partial$  'children' for the singular. Furthermore, nouns formed derivationally with  $\delta ny \epsilon$  'person' and nwa 'child' must always substitute  $\dot{n}di$  'persons' and  $\delta m \partial$  'children' in order to mark the plural, respectively.

In Kongo, both singular and plural marking is achieved obligatorily through prefixation. The form these prefixes will take is dependent on the class of noun. In some cases, internal vowel mutation will also take place (Bentley 1887:541).

Ewe Jamaican Creole

Ewe

Ewe

(30) a. *di-nkindo* SG-plantain 'plantain'

> b. *ma-nkondo* PL-plantain 'plantains' (Bentley 1887:541)

#### 4.1.4 Possessive Marking

Basilectal varieties of Jamaican Creole lack most case distinctions. However, the possessive may be optionally marked with fi, as shown in (4). D'Costa and Lalla (1990:73) write that fi is absent from early texts of JC. Assuming that fi was also lacking from the early spoken creole, it is possible under the relexification hypothesis that possession originally took a null form before later being relabelled a second time. According to Durrleman (2008) fi has mostly likely obtained its form from the English preposition for.

(31) (Fi) Jan pikni a di swiitis likl ting.
POSS John child COP DET sweetest little thing
'John's child is the sweetest little thing.'
(Durrleman 2008:129)

The choice of *for* for the label of JC's possessive marker is strange given that this preposition has never been used for the English possessive. Still, no other possible English root exists. In Old English, many case distinctions including the possessive genitive were suffixed. By Early Modern English the possessive, which took the form -s, was the last case to remain marked. EModE also had the *of*-genitive, as in *the shirt of the man*. Neither of these constructions resemble the *fi* construction.

Remember that relabelling may result from phonetic similarity between two entries in addition to partial semantic overlap. Therefore, the choice of *for* may likely be in part due to the existence of a substrate possessive marker with a similar form. A good candidate is the Ewe possessive marker *fé*, which is given in example (32).

(32) Kofi **fé** agbalẽ Kofi POSS book 'Kofi's book' (Duthie 1996:46)

Notice that the distributional properties of *fé* are different from those of *fi*. The Ewe construction has the order possessor-*fé*-possessee, while in Jamaican Creole the order is *fi*-possessor-possessee. According to Lefebvre (1998), this is to be expected. Since prepositions are major category items, they obtain their directionality properties from the superstrate entries which relabel them—in this case, English *for*.

Although *for* has never been a marker of possession in English, it does appear in benefactive/recipient constructions where possession is entailed. It seems that these

Kongo

Ewe

constructions would have provided a sufficient semantic overlap for relabelling, as well as the directionality of *for* with respect to the benefactor/recipients (which have become possessors in *fi* constructions). Consider the uses of *for* in example (33).

- (33) a. My sister bought a syntax book **for** me.
  - b. That teapot is **for** my mother.

In this sentence *for* precedes the recipient, *me*, who is understood to be in possession of a book (either in this moment or in the near future). Similarly, *fi* precedes the possessor in the corresponding JC construction, as relexification predicts.

Aside from the directionality and boundedness features, Ewe fe is predicted by the hypothesis to be structurally identical to JC fi. However, this not what we find. Ewe fe does not co-occur with kinship nouns (34) or with first or second person pronouns (35a) (Duthie 1996:46). On the other hand, JC fi has no such restrictions. As demonstrated earlier in example (31), fi has no trouble co-occurring with nouns denoting kinship such as *pikni* 'child.' Additionally, fi may occur before first or second person pronouns (35b).

Kofi POSS brother Kofi's brother'	
a. <i>nye</i> (* <i>fé) xɔ</i> 1SG.POSS POSS house 'my house' (Duthie 1996:46)	Ewe
o. <b>(fi)</b> mi haus <sup>3</sup> POSS 1SG house 'my house'	Jamaican Creole
	Kofi's brother' a. <i>nye</i> (* <i>fé) xɔ</i> 1SG.POSS POSS house 'my house' (Duthie 1996:46) b. ( <i>fi) mi haus³</i> POSS 1SG house

#### 4.1.5 Summary

The noun phrase in Jamaican Creole has shown the relexification hypothesis to make a number of innaccurate predictions. In general, the relexification hypothesis predicts that, in areas of the grammar where the superstrate and substrate differ, the creole should pattern more the substrate. Despite the large number of substrates considered, we have seen in Sections 4.1.1 an 4.1.2, that Jamaican Creole patterns much more like English than its substrates with respect to definite/indefinite determiners and demonstratives. Furthermore, in Section 4.1.3, we have seen that, although the JC "plural" marker *dem* may have been influenced by a similar marker in Ewe, it does not appear to be a relexification of it, since the two markers have significant syntactic differences.

<sup>&</sup>lt;sup>3</sup> I have elicited this phrase from native speakers of Jamaican Creole.

On the other hand, relexification has performed well in Section 4.1.4 in accounting for the emergence of the Jamaican Creole possessive marker fi. Through relexification, I have been able to propose a multiple etymology<sup>4</sup> for JC fi in English *for* and Ewe fé.

## 4.2 Tense and Aspect

Marking of tense, modality, and aspect in Jamaican Creole differs significantly from the English system. Whereas tense and aspect are sometimes conveyed through suffixation in English, all tense/aspect markers in JC are preverbal and analytic.

- (36) *Im did nuo dat aredi.* 3SG PST know that already 'He knew that already.' (Durrleman 2008:38)
- (37) Jan a riid buk.
  John PROG read book
  'John is reading some books.'
  (Durrleman 2008:128)

#### 4.2.1 Past Tense Marking

The Jamaican Creole basilect may express past tense with the preverbal analytic marker *en* (Durrleman 2008:28). Given the description of past marking in Durrleman (2008), it seems that *en* gives relative, rather than absolute tense readings. That is, this tense marker does not indicate that the predicate has occurred at some time before the utterance time; instead, it refers to a time that precedes some reference time. Since JC lacks perfect constructions corresponding to English constructions involving the auxiliary *have*, it is not surprising that JC would use its past tense markers in this way.

As demonstrated in (38a), verbs lacking tense and aspectual marking may be give either past or present readings. In example (39b), the addition of *en* has shifted each reading to a previous time.

- (38) a. *Mi ron.* 1SG run 'I run.' / 'I ran.'
  - b. *Mi en ron.* 1SG PST run 'I have run.' / 'I had run.' (Durrleman 2008:28)

<sup>&</sup>lt;sup>4</sup> Cassidy 1966 uses the term *multiple etymology* to refer to words which have a "joint origin." On English place names, Cassidy (1966:211) writes "we might find that one of these names was first used by a speaker of Old English or Old Norse, as the case might be; but if it could equally well have been the other, and if it is equally understood by both when first used by either, the fact of literal priority would be trivial."

As will discussed be further in Section 4.2.3, bare sentences in Fon, like in Jamaican Creole, may give either past or present tense readings (39a). Fon also has an anteriority marker,  $k\dot{o}$ , which functions similarly to Jamaican Creole *en* in shifting the available readings into previous times (Lefebvre & Brousseau 2002:88). In example (39b), the readings given in (ya) have been each shifted back in time by  $k\dot{o}$ .

(39)	a.	<ul> <li>Àsíbá mò àjótó ó.</li> <li>Asiba catch.sight.of thief DET</li> <li>'Asiba catches sight of the thief.' / 'Asiba caught sight of the thief.'</li> <li>(Lefebvre &amp; Brousseau 2002:87)</li> </ul>
	b.	<ul> <li>Bàyí kò mò àjótó ó.</li> <li>Bayi ANT catch.sight.of thief DET</li> <li>'Bayi caught sight of the thief.' / 'Bayi had caught sight of the thief.'</li> <li>(Lefebvre &amp; Brousseau 2002:91)</li> </ul>

4.2.2 Frequentative Reduplication

Frequentative aspect is used to describe events which occur repetitively over an extended period of time. Jamaican Creole marks frequentative aspect through verbal reduplication, which is demonstrated in (40). English, on the other hand, does not mark this distinction grammatically; instead, frequentive aspect may be expressed periphrastically or with adverbs.

(40) Im a di siem wan we chat-chat wi bizniz!
1SG COP DET same one REL ASP-chat 1PL business
'S/he's the very one who's incessantly spreading our personal affairs!'
(Durrleman 2008:39)

A similar process can be observed in Akan. In this substrate, verbal reduplication can mark frequentative aspect (41), give an idiosyncratic meaning (42), or turn a transitive verb into an intransitive one (43), among other functions (Balmer & Grant 1929:135-6).

(41)	a.	<i>bɔ</i> 'to strike'
	b.	<i>bobɔ</i> 'to strike often'
(42)	a.	<i>hwε</i> 'to look'
	b.	<i>hwehwε</i> 'to search for'
(43)	a.	<i>ɔ-dzi panu</i> 3SG.eat bread 'he eats bread'

b. *ɔ-dzidzi* 3SG-eat.INTR 'he eats' (Balmer & Grant 1929:135-6)

#### 4.2.3 Bare Verbs

A verb in Jamaican Creole can occur without any accompanying tense marking in the clause. In such a case, the interpretation of tense that emerges will be a result of discourse context, the properties of the main verb, and the properties of the verb's object. Durrleman (2008:163) writes that stative verbs give a default present tense reading in bare contexts.

(44) Jan nuo dat. John know that
'John knows that.'
(Durrleman 2008:33)

On the other hand, default interpretations of non-stative verbs depend on the syntax of their objects. As demonstrated in (45), a non-stative verb with a bare object yields a present tense reading by default.

(45) Jan nyam aki. John eat ackee 'John eats ackee.' (Durrleman 2008:164)

A non-stative verb whose object contains a determiner (46) or a numeral (47) yields a default past tense reading.

- (46) Jan nyam **di** aki. John eat DET ackee 'John ate the ackee.'
- (47) *Mieri nyam* **chrii** *bredfruut!* Mary eat three breadfruit 'Mary ate three breadfruit!' (Durrleman 2008:164)

English does not generally have ambiguity between present and past tense readings; however, many of Jamaican Creole substrates have similar systems of bare verb interpretation.

The Fon dialect of Gbe has a system that is fairly similar to Jamaican Creole's. According to the description of bare verb interpretations given by Lefebvre & Brousseau (2002), bare verbs which describe a state are interpreted as present (48). Those which denote achievement are given assigned present or present perfect readings (49). (Lefebvre & Brousseau do not discuss whether the properties of the object effect the interpretation of tense.) Bare accomplishment verbs give present perfect readings (50), and bare activity verbs give simple past interpretations (51).

- (48) Àsíbá tùn Kôkú.
  Asiba know Koku
  'Asiba knows Koku.'
  (Lefebvre & Brousseau 2002:86)
- (49) Àsíbá mò àjótó ó.
  Asiba catch.sight.of thief DET
  'Asiba catches sight of the thief.' / 'Asiba caught sight of the thief.'
- (50) Àsíbá dà wó ó.
  Asiba prepare dough DET
  'Asiba has prepared the dough.'
- (51) Àsíbá dà wó.
  Asiba prepare dough
  'Asiba prepared dough.'
  (Lefebvre & Brousseau 2002:87)

As with Jamaican Creole, it appears that statives in Fon give present readings, while nonstatives generally gives some type of past reading.

Most of the other substrates also appear to have very similar For one, Adams (1932:52) describes a "past" tense in Igbo that can be used to express both present and past time. Despite its name, this time require modification by temporal words or expressions to bring out the past readings. Without any qualification, this tense conveys present time. In Akan, the present and past tense are distinguished only by tone. For instance, Balmer & Grant (1929:106) give *mébèn* as 'I approach' and *mebén as* 'I approached.' Bamgbose (2000:106) writes that many tenses in Yoruba can be interpreted on past or non-past, depending on context.

On the other hand, the Kongo system of present and past marking has little in common with the one found in modern JC. In Kongo, both present and past tense are marked obligatorily through prefixation (Bentley 1887:653).

#### 4.2.4 Summary

Unlike the noun phrase, the verb phrase in Jamaican Creole shows a lot structural similarity to its substrates. In Section 4.2.1, I have demonstrated the JC past tense marker *en* to have an analogue in Fon  $k\delta$ . In Section 4.2.2, it has been shown that Jamaican Creole and Akan both convey frequentative aspect through verbal reduplication, although in Akan reduplication is used for a number of other functions. In Section 4.2.3, we have seen that the interpretation of bare verbs has many analogues in its substrates.

### 4.3 The Verb Phrase

#### 4.3.1 Copular Constructions

Jamaican Creole has three types of copula which are given in examples (52-54). The predicative copula (52) occurs as a null morpheme and is generally used before adjectives. The

equative copula, a (53), connects nominal elements (Patrick 2007:16). Finally, JC has a locative copula, de (54).

- (52) *Im did tayad.* 3SG PST COP tired '(S)he was tired.' (Durrleman 2008:81)
- (53) *Di saiyans man a mi kozin.* DET science man COP 1SG cousin 'The science man is my cousin.' (Patrick 2007:16)
- (54) Im **de** a yaad. 3SG COP PREP home '(S)he's at home.' (Patrick 2007:16)

It may appear from the above examples that JC has only the distinction between predicative (52 and 54) and equative constructions (53), where sentences like (54) contain the null predicative copula followed by the deictic *de* 'there'. Though the locative copula and the distal deictic are homophonous, the fact they can co-occur shows them to be distinct elements:

(55) Dem de de.
3PL COP DEIC
'They are there.'
(Durrleman 2008:71).

Although English lacks the distinctions between equative, predicative, and locative copulas—in English the verb *to be* is used in each of these contexts—similar systems exist in various JC substrates. The Fante dialect of Akan, for example, has a predicative copula,  $y\varepsilon$  (56), an equative copula, nye (57), and a locative copula,  $w\sigma$  (58).

- (56) dadze yε dur
   iron COP heavy
   'Iron is heavy.'
- (57) nyimpa yi nye m'=egya man DEM COP 1SG.OBJ=father
   'This man is my father.'
- (58) *2-w2 fie* 3SG-COP home '(S)he is at home.' (Balmer & Grant 1929:136)

Akan

However, the Fante Akan and Jamaican Creole systems are not identical. In Akan only, a fourth type of copula, which takes the form *dzi*, is used to express an individual's profession (Balmer & Grant 1929:136-7). Furthermore, the locative copula in Akan takes a noun phrase as its object, while the JC locative takes a prepositional or adverbial phrase.

Another copular system that closely resembles the JC system can be found in Igbo, which distinguishes between predicative, equative and locative contexts using *de* (59), *b* $\theta$  (60), and *n* $\dot{\beta}$  (61), respectively (Adams 1932, Uchechukwu 2011). As in JC, the Igbo locative copula takes a prepositional phrase as its object.

- (59) ńwá ńwányè áhè dè íké kà nwokε mgbè ś dé ńdè Igbo child woman DEM COP strength as man when 3SG COP alive 'That girl was as strong as a man, when she was alive.' (Adams 1932:77)
- (60) ńnà úkú yá bờ ézè master big 3SG.OBJ COP chief 'His master is a chief.'
  (Adams 1932:77)
- (61) mgbárá ájá nké nó nà ótú òsìmirì
  earth sand REL COP PREP bank river
  'sand on the bank of a river' (lit. 'sand which is on a river bank')
  (Adams 1932:78)

Of the remaining substrates under consideration in this paper, none has a copular system that matches JC's system as closely as Igbo. Still, most substrates do in some way distinguish between predicative, equative, and locative contexts.

Gbe languages, for instance, use the form nyi, or a form similar to it, for nominal predicates, like JC's equative copula, a. In these languages, a second copula, which takes a number of mostly similar forms (e.g. de in Xwela, do in Fon) appear before adpositional phrases and locative adverbs (Migge 2002, Lefebvre & Brousseau 2002). These forms are thus very similar to JC de with respect to both phonology and distribution. Gbe languages do not have a copula that corresponds closely to JC's null predicative copula. However, a similar syntactic distinction is made. As Migge (2002:113) writes, "[p]redicative ascriptive constructions in ... Gbe generally do not involve copulas since property-denoting elements in these languages are typically verbs."

In Yoruba, two different copulas are used in nominal predicates:  $j \notin$  for permanent attributes, and  $s \notin$  for temporary properties. A second copula w a, which has with the stylistic variant *mbe* and negative version si, is used to convey existence or location. Like Gbe, most property-denoting items in Yoruba are syntactically verbs; however, certain "phonaesthetic" adjustives must easy with the copula ri (on u a) if the following word refers to a time of person

adjectives must occur with the copula ri (or ya, if the following word refers to a type of person whom the Yoruba disapprove) (Holm 1984:297).

Kongo has only two copulas. The first, -ena, occurs in locative and existential contexts and before property-denoting elements, which are generally nouns. The second, *i*, connects other nominal elements (Migge 2002).

#### 4.3.2 Serial Verb Se

Serial verb constructions (SVCs) involving multiple finite verbs in single clause which all contribute to the reading of a single event. Jamaican Creole has a marker *se* which is homophonous with the verb meaning 'to say' and introduces finite clauses. Authors have disagreed over whether this marker is syntactically a complementizer or the final verb in serial verb constructions. However, Durrleman (2008) provides a convincing argument for the latter position which will be briefly reviewed in this section. In any case, Patrick (2007:18) finds it "likely that use of se as a complementizer is the result of reanalysis and grammaticalization, deriving from its use as a full verb in serial constructions."

Jamaican Creole *se* may be used to introduce reported speech (62). However, it is not restricted to this usage, as might be expected from a verb meaning 'to say.'

- (62) Ruoz dem tel im se a Klaris mash di pat Rose PL tell 3SG say FOC Klaris mash DET pot 'Rose and the others told her that it was Clairs who broke the pot.' (Bailey 1966:111)
- (63) Mi nuo se di pikni dash i' we.
  1SG know say DET child throw it away 'I know that the children threw it away.' (Durrleman 2008:94)
- (64) **Fieba se** Jaaj naa kom. seem say George NEG+PROG come '(It) seems as if George is not coming.' (Bailey 1966:112)

Durrleman goes on to list other properties of *se* that cast doubt on an analysis of it as complementizer. For one, JC *se* cannot co-occur with the lexical verb *se* 'to say' (65), suggesting that it has not yet fully grammaticalized (Patrick 2004:20).

(65) Im se (\*se) im dash i' we
3SG say say 3SG throw it away
'He said that he threw it away.'
(Durrleman 2008:93)

JC *se* also does not exhibit *that*-trace effects, whereby a complementizer is deleted in the presence of following trace (Durrleman 2008). Consider the sentences in example (66). If *se* were a complementizer, we would expect the gap left by *Jan* after fronting (66b) to trigger the deletion of *se*. Instead, we find that *se* remains pronounced. Compare the behavior of *se* with that of the English complementizer *that* in example (67).

(66) a. *Mi tel yu* **se Jan** *tiif di manggo dem*. 1SG tell 2SG say John steal DET mango PL 'I told you that John stole the mangoes.'

- b. *A* **Jan** *mi tel yu* **se** <u>tiif</u> *di manggo dem*. FOC John 1SG tell 2SG say TRACE steal DET mango PL 'I told you that JOHN stole that mangoes.' (Durrleman 2008:92)
- (67) a. I told you **that John** stole the mangoes.
  - b. It was **John** who I told you **(\*that)** \_\_\_\_\_ stole the mangoes.

English has a construction with only a slight similarity to the Jamaican Creole ones involving *se*. In these constructions, the verb *say* introduces conditional clauses, rather than declarative clauses, like Jamaican Creole *se*. Furthermore, *say* in English cannot be used to embed finite (or infinitive) clauses (69).

- (68) Say we go to Kingston today, where should we have dinner?
- (69) \*I think say we should go to Kingston.

On the other hand, various JC substrates have elements which are very similar in function to *se*. Complementizer-like elements also meaning 'say' appear in Ewe, Yoruba and Akan, taking the forms *bé*, *kpé*, and *se*, respectively. Like JC *se*, these markers are used to embed finite clauses.

- (70) é-gbl> ná é bé yé dyi ye gaké ye kpe dyí Ewe 3SG-tell give 3SG say 3SG-emph bear SRP but SRP be-worthier 'He told him that he begot him, but he was worthier.'
  (Lord 1993:186)
- (71) ó sɔ **kpé** adé lɔ Yoruba 3SG say say Ade come 'He said that Ade came.' (Manessy 1989:22)
- (72) na ama nim sε kofi yεε adwuma no
  PST Ama know say Kofi do.PST work DET
  'Ama knew that Kofi had done the work.'
  (Lord 1993:159)

However, it does not seem that any of these markers is syntactically identical to (and therefore, a relexification of) Jamaican Creole *se*. Akan *se*, for one, has a number of functions lacking in its JC counterpart. Lord (1993:166) observes uses of Akan *se* to introduce factitive conditional clauses (73) and clauses of result and purpose (74), among other types of phrases.

(73)  $s_{\mathcal{E}} kofi y_{\mathcal{E}} adwuma no \hat{a} metua no ka$  Akan say Kofi do work DET COND 1SG-FUT-pay 3sg salary 'If/when Kofi does the work, I will pay him.' (Lord 1993:164) (74) kofi yεε adwuma no sε yaw bερε n'asεm
Kofi do.PST work DET say Yaw FUT-like 3SG.M.POSS-manner
'I gave him money to go and buy some.'
(Lord 1993:162)

If JC *se* were a relexification of  $s\varepsilon$ , we would expect *se* to exhibit these functions as well. In fact, *se* does not share these features.

According to Manessy (1989:23), Yoruba *kpé* is not used as a main verb introducing reported speech. As demonstrated earlier in (62), there is no such restriction on JC *se*.

Ewe *bé* has the property of obligatorily occurring before reported speech as a quotative marker (75a). As demonstrated in (75b), *se* is actually ungrammatical in some of these contexts.

(75)	a.	meyś vinyéa*(bé)adzóEI-call child-1SG.POSS sayAdzo'I called my child "Adzo".'(Lord 1993:185)	Ewe
	b.	Mikaalmipikni(*se)Adzo.5Jamaican Creation1SGcall1SGchildsayAdzo'I called my child "Adzo".'	ole

#### 4.3.3 Summary

As we've seen in 4.3.1, Jamaican Creole's substrates, while exhibiting some degree of diversity in their copular constructions, by and large distinguish between predicative, equative, and locative contexts. This is in stark contrast to the English system, which uses a single copula in all contexts. It therefore seems extremely likely that the properties of the JC copulas are the result of leveling among a number of similar copular systems in the substrates, with perhaps Igbo and Akan exhibiting a more substantial influence in this area of grammar.

Regarding serial verb *se*, Yoruba, Igbo, and Akan have structures that are very similar. However, they exhibit enough lexical differences from Jamaican Creole that they cannot be considered exact relexifications.

### 4.4 Focalization

Focalization is the grammatical marking of elements which refer to new information in the discourse. English has two methods of highlighting focus elements. The first is prosdic emphasis, which is represented in (76b) with capital letters. The second method is fronting, as demonstrated in (76c).

- (76) a. I love Port Royal.
  - b. I love PORT ROYAL.
  - c. Port Royal, I love \_\_\_\_.

<sup>&</sup>lt;sup>5</sup> I have confirmed these judgements with native speakers of Jamaican Creole.

Jamaican Creole marks focus through fronting and with the focalizer a, which is homophonous (and possibly polysemic) with the equative copula  $a.^6$ 

(77)	a.	Peter	r eat	m <b>di b</b> DET b he bamm	ammy			
	b.					U	( <i>nutn</i>	-
	FOC DET bammy Peter eat (nothing mo 'What Peter ate was the bammy (nothing else).'							

(Durrleman 2008:74)

Focalization can be applied to categories other than determiner phrases; verbal heads (78) and adjectival heads (79) may also be focalized through fronting. Note that the focusing of verbal/adjectival heads, unlike the focusing of DPs, leaves no gap, with the original element remaining in place.

(78)	A	wok	mi	а	wok
	FOC	work	1SG	prog	work
	ʻWha	ıt I'm d	loing	is wo	rking.'

(79) A sik mi did sik mek mi gwaan so 1SG PST sick make 1SG go+on FOC sick so 'It is because I was SICK that I behaved that way.' (Durrleman 2008:78)

Fairly similar strategies of focus marking can be found in each of the five substrates under consideration in this paper. I will focus on the focus constructions of Ewe and Yoruba in this section.

In Ewe, focalization of nominal elements involves fronting and the suffixation of the focus marker -e/-ue (80). Focalized verbs, on the other hand, appear in situ after the focus marker dè (81).

(80)	a.	Ga-é	Papa	ná	Kofí	etsə.		
		money-FOC	Papa	give	Kofi	yesterday		
		'It was money Papa gave Kofi.'						

Ewe

–Pitta tel Jan Peter tell John 'Peter told John.' tel JAN!? –Im 3SG tell John 'He told John!?' (Durrleman 2008:84-5)

<sup>&</sup>lt;sup>6</sup> Focus may also be highlighted through prosodic emphasis in Jamaican Creole; however, this strategy is restricted to echo questions (Durrleman 2008:84):

b. Papa dè wò-ná ga Kofi etsɔ.
Papa FOC 3SG-give money Kofi yesterday 'Papa did give Kofi money yesterday.' (Duthie 1996:39)

As demonstrated above, verbal focalization is very different from the corresponding JC construction. Whereas focused verbs in JC are reduplicated and fronted, in Ewe a single copy of the verb remains in situ. Even the nominal focus construction, which is much more similar to its JC counterpart, shows a significant difference. Ewe's nominal focus marker occurs as a suffix, while the corresponding JC marker is analytic and prenominal. Although the relexification xpects and accounts for suffixes to become free morphemes in the creole, the hypothesis also claims that the distribution of relexified functional items should align with the superstrate entry that relabels it. Therefore we should find, according to relexification, the focus markers in the creole and substrate to take the same position with respect to the focused noun, which is not the case.

The strategy of focus marking most similar to Jamaican Creole's is Yoruba. In this substrate, focalization of both nominal elements (81b) and verbal ones (81c) involve fronting and the appearance of the complementizer ni. Note that, as in Jamaican Creole, it is reduplicated copy of the verb that moves to the beginning of the clause. Furthermore, in Yoruba, this copy is overtly nominalized with the prefix ri, which has no analog in Jamaican Creole. According to relexification, this is expected. As a functional element with no semantic content, ri would have been relabelled with a null phonetic string in the creole.

Yoruba

- (81) a. *Ajé ra ìwé*. Aje buy paper 'Aje is buying a book.'<sup>7</sup>
  - b. **Ìwé ni** Ajé ra. paper COMP Aje buy 'It is a book that Aje is buying.' (Manfredi 1993:19)
  - c. **Rí-rà ni** Ajé ra ìwé. NOM-buy COMPAje buy paper 'Aje is BUYING a book.' (Manfredi 1993:20)

Unlike speakers of Jamaican Creole (Durrleman 2008:79), Yoruba speakers may front both the main verb and its nominal object simultaneously (82). Furthermore, the fronting of subjects results in the appearance of resumptive pronouns (83), which do not appear in Jamaican Creole (Durrleman 2008:75).

<sup>&</sup>lt;sup>7</sup> I have adjusted certain translations given by Manfredi (1993) in order to make them more acceptable sentences of English.

(82) *Rí-rà-iwé ni Ajé ra ìwé.* NOM-buy-paper COMP Aje buy paper 'It is book-buying that Aje is doing.' (Manfredi 1993:20)

(83) *Ajé* ni **ó** ra ìwé Aje COMP 3SG buy paper 'It is Aje who is buying a book.'

As I have explored in this section, somewhat similar systems of focus marking exist Yoruba and Ewe.<sup>8</sup> Generally speaking, Jamaican Creole's substrates, like the creole itself, tend to have strategies of marking focus on both nominal and verbs (although perhaps not adjectives) that do not involve prosodic emphasis. However, these constructions are not similar enough that they can be said to be the result of relexification.

## 5 Discussion

### 5.1 Issues

The "problem of multiple substrates," as discussed by Kouwenberg (2008) and at the start of Section 4, complicates the testing of any substratist account of creole genesis. This is especially true in the case of relexification, since the leveling of differences obscured. Nonetheless, if relexification is indeed the "dominant" process in creole genesis, as Lefebvre (1998) claims, it should be possible to find some amount of support for it, even in the case of a creole like JC. Furthermore, as many creoles that are spoken today were formed from multiple substrates, any useful account of creole genesis should be able to make predictions for these cases.

In general, the testing of any creole genesis model is complicated by any changes that have taken place in the relevant languages since the creole's formation. With Jamaican Creole having formed over 300 years ago, it is reasonable to assume that some significant structural changes have taken place in English, Jamaican Creole, and African substrates. In the case of English, it is, for the most part, not too difficult to know what these changes would have been. On the other hand, data from Jamaican Creole and many of its substrates are relatively rare before the twentieth century. For this reason, I have consulted, in addition to modern sources, D'Costa & Lalla (2009), which gives morphosyntactic descriptions of Jamaican Creole based on early texts. For African substrates, I also have tried to balance my collection of syntactic data between contemporary sources, which give more precise descriptions of linguistic phenomena, and older (generally early twentieth century) ones, whose descriptions reflect a stage of the languages that are closer to how they were spoken during the early history of Jamaican Creole, if only slightly.

<sup>&</sup>lt;sup>8</sup> Similar systems also exist in Akan and Kongo. However, due to time time constraints and lack of accessible data, I have not discussed them here.

## 5.2 Evaluation of the Hypothesis

In most of the areas of Jamaican Creole's syntax that I have explored, it seems likely that the creole's substrates have had significant influence. In a small number of cases, it appears that English has contributed structural features to creole. Still, very little support has been given for Lefebvre's (1998) notion that the underlying syntactic features of creole lexical entries should be identical to those in a substrate. Given the large number of influences in JC's early history, this result is not particularly surprising.

## 5.3 Contributions of Different Substrates

The comparison of Jamaican Creole and substrate grammar that has been presented in this work suggests that Gbe, Akan, Yoruba, and Igbo have all made some significant contribution to the structure of the creole. On the other hand, it seems that Kongo, despite its large presence in the lexicon of JC, would have had little influence in the syntax. As for the question of whether one substrate has exerted a dominant influence on the creole, the only potential candidate appears to be Gbe. However, further comparative work is needed.

## References

Adams, R.F.G. 1932. A modern Ibo grammar. Oxford University Press.

- Alleyne, Mervyn C. 1971. Acculturation and the cultural matrix of creolization. In Dell Hymes (ed.), *Pidginization and creolization of languages*. Cambridge CUP. 169–186.
- Ajíbóyè, Oládiíò. 2005a. Interpreting Yorùbá Bare Nouns as Generic. *Annual Meeting of the Berkeley Linguistics Society* 31(2).
- Ameka, Felix K. 2006. Grammars in contact in the Volta Basin (West Africa): On contactinduced grammatical change in Likpe. In Alexandra Aikenvald and R.M.W. Dixon (eds.), *Grammars in contact: A cross-linguistic typology*.
- Alleyne, Mervyn C. 1971. Acculturation and the cultrual matrix and creolization. In Dell Hymes (ed.), *Pidgnization and creolization of languages*. Cambridge: CUP. 169-186.
- Alleyne, Mervyn C. 1980. Comparative Afro-American: An Historical-Comparative Study of English-Based Afro-American Dialects. Ann Harbor: Karome.
- Alleyne, Mervyn C. 1988. Roots of Jamaican culture. London: Pluto Press.
- Alleyne, Mervyn C. 1996. Syntaxe Historique Créole. Paris: Karthala.

Ajíbóyè, Oládiíò. 2005b. Topics on Yorùbá Nominal Expressions. University of Ìlorin thesis.

- Amfo, Nana A. A. 2007. Akan demonstratives. In Doris L. Payne & Jamie Peña (ed.), *Selected Proceedings of the 37th Annual Conference on African Linguistics*. 134-148.
- Awobuluyi, Oladele. 1978. Essentials of Yoruba grammar. Oxford University Press.

Bailey, Beryl. 1966. Jamaican Creole syntax. Cambridge University Press.

- Bamgbose, Ayo. 2000. A Grammar of Yoruba. Cambridge University Press.
- Balmer, W.T. and F.C.F. Grant. 1929. *Grammar of the Fante-Akan language*. The Atlantis Press.
- Bernstein, Judy. 1997. Demonstratives and reinforcers in Romance and Germanic languages. *Lingua* 102. 87-113.
- Bentley, W. Holman. 1887. *Dictionary and grammar of the Kongo language*. The Baptist Missionary Society.
- Bickerton, Derek. 1973. The nature of creole continuum. *Language* 49(3). 640-669. Linguistic Society of America.
- Bickerton, Derek. 1981. Roots of language. Karoma Publishers.

Bobyleva, Ekaterina. 2011. Variable plural marking in Jamaican Patwa and Tok Pisin: A linguistic perspective. *The Canadian Journal of Linguistics* 56(1). 37-60. University of Toronto Press.

- Cassidy, Frederic. 1961. *Jamaica talk: Three hundred years of the English in America*. University of the West Indies Press.
- Cassidy, Frederic. 1966. Multiple etymologies in Jamaican Creole. *American speech* 41(3). Duke University Press. 211-215.
- Chaudenson, Robert. 1989. Créoles et enseignement de Français. Paris: L'Harmattan.

Chaudenson, Robert. 1992. *Des îles, des hommes, des langues: Essais sur la créolisation linguistique et culturelle*. Paris: L'Hartmann.

DeCamp, David. 1971. Toward a generative analysis of a post-creole speech continuum. In Dell Hymes (ed.), *Pidginization and creolization of languages*. Cambridge University Press.

DeGraff, Michel. 2002. Relexification: a reevaluation. *Anthropological linguistics* 44(4). 321-414. Trustees of Indiana University.

- DeGraff, Michel. 2003. Against creole exceptionalism. *Language* 79(2). 391-410. Linguistic Society of America.
- Durrleman, Stephanie. 2008. *The syntax of Jamaican Creole. A cartographic Perspective* 127. John Benjamins Publishing.

Duthie, A.S. 1996. Introducing Ewe linguistic patterns. Ghana University Press.

- D'Costa, Jean and Barbara Lalla. 1990. *Language in exile: Three hundred years of Jamaican Creole*. The University of Alabama Press.
- Faine, Jules. 1937. *Philologie creole: Études historique et étymologiques sur la langue creoles d'Haïti*. Port-au-Prince: Imprimerie de l'Etat.
- Farquharson, Joseph. 2012. The African lexis in Jamaican: Its linguistic and sociohistoircal significance. Ph.D. thesis, University of the West Indies.
- Hall, Robert. 1958. Creole languages and genetic relationships. Word 14. 367-73.
- Holm, John. 1984. Variability of the copula in Black English and its creole kin. *American Speech* 59(4). Duke University Press. 291-309.
- Koopman, Hilda. 1984. The syntax of verbs: From verb movement rules in Kru languages to universal grammar. Foris.
- Kouwenberg, Silvia. 2008. The problem of multiple substrates: The case of Jamaican Creole. In Susanne Michaelis (ed.), *Roots of creole structures: Weighing the contribution of substrates and superstrates.* 1-27. John Benjamins Publishing.
- Lefebvre, Claire. 1998. *Creole genesis and the acquisition of grammar: The case of Haitian Creole*. Cambridge University Press.
- Lefebvre, Claire and John S. Lumsden. 1994. *Relexification in creole genesis*. In Claire Lefebvre and John S. Lumsden, *The central role of relexification in creole genesis: The case of Haitian Creole*.
- Lefebvre, Claire and Anne-Marie Brousseau. 2002. A grammar of Fongbe. Mouton de Gruyter.
- Lord, Carol. 1993. Historical Change in Serial Verb Constructions. John Benjamins Publishing. Lumsden, John S. 1999. Language acquisition and creolization. In Michel DeGraff (ed.),
  - Language creation and language change: Creolization, diachrony, and development. 129-57. Cambridge, MA: MIT Press.
- Lumwamu, François. 1973. *Essai de morphosyntaxe systématique des parlers kongo*. Éditions Klincksieck.
- Manessy, Gabriel. 1989. Dire que... (De l'origine des créoles Atlantiques). *La linguistique* 25(2). Press Universitaires de France.
- McWhorter, John. 2002. The rest of the story: Restoring pidginization to creole genesis theory. *Journal of Pidgin and Creole Languages* 17(1). 1-48. John Benjamins B.V., Amsterdam
- McWhorter, John. 2005. Defining "creole" as a synchronic term. *Defining creole*. 9-37. Oxford University Press.
- Migge, Bettine. The origin of the copulas (d/n)a and de in the Eastern Maroon Creole. *Diachronica* 19(1). 81-133.
- Mufwene, Salikoko. 1990. Transfer and the substrate hypothesis in creolistics. *Studies in second language acquisition*.
- Mufwene, Salikoko. 1994. On decreolization: The case of Gullah. In Marcyliena Morgan (ed.), *Language, loyalty, and identity in creole situations*. 63-99. Center for Afro-American Studies.
- Mufwene, Salikoko. 2000. Creolization is a social, not a structural process. In Ingrid Neumann-Holzschuh and Edgar W. Schneider (eds.), *Degrees of restructuring in creole languages*.
- Mufwene, Salikoko. 2002. Socio-economic historical arguments for a gradual and heterogeneous development of patois in Jamaica. *Biennial Meeting of Society for Caribbean Linguistics*.
- Mufwene, Salikoko. 2006. Pidgins and creoles. In Braj B. Kachru, Yamuna Kachru, & Cecil L. Nelson (eds.), *The handbook of world Englishes*. 313-327. Blackwell Publishing.
- Mühlhäuser, Peter. 1986. Pidgin and creole linguistics. Routledge.
- Muysken, Pieter. 1981. Half-way between Quechua and Spanish: The case for relexification. In Arnold Highfield & Albert Valdman (ed.), *Historicity and variation in creole studies*. 52-78. Karoma.

- Obiamalu, Greg. 2013. The functional category D in a language without determiners: The case of Igbo. *Journal of Theoretical Linguistics* 10(2).
- Osem, E. Kweku. 2004. The Trondheim lectures: An introduction to the structure of Akan: Its verbal and multiverbal systems.
- Patrick, Peter. 2004. Jamaican creole: Morphology and syntax. In Bernd Kortmann and Edgar W. Schneider (eds.), *A handbook of varieties of English*. 407-438. Mouton de Gruyter.
- Patrick, Peter L. 2007. Jamaican Patwa (creole English). In John A. Holm, and Peter L. Patrick (eds.), *Comparative creole syntax: Parallel outlines of 18 creole grammars*. 127-152. Battlebridge Publications.
- Roberts, P.A. 1973. Speech of 6-year old Jamaican children. *Society for Caribbean Linguistics*. Mona, Jamaica: University of the West Indies (Caribbean Language Research Programme).
- Rickford, John R. 1987. *Dimensions of a creole continuum: History, texts, and linguistic analysis of Guyanese creole*. Stanford University Press.
- Selbach, Rachel. 2008. The superstrate is not always the lexifier: Lingua Franca in the Barbary Coast 1530-1830. In Susanne Michaelis (ed.), *Roots of creole structures: Weighing the contribution of substrates and superstrates*. 29-58. John Benjamins Publishing.
- Singler, John V. 1986. Short note. *Journal of pidgin and creole languages*. 1. 141-145 Stewart, Michelle. 2006. Quantification in Jamaican Creole: The syntax and semantics of *EVRY* ('Every') in interaction with indefinites. Ph.D. dissertation, University of the West Indes, Mona.
- Thomason, Sarah G. and Terrence Kaufman. 1988. *Language Contact, Creolization, and Genetic Linguistics*. University of California Press.
- Thelwell, Michael. 1980. *The harder they come*. New York: Grove Press.
- Tinuoye, Mary O. 1991. A contrastive analysis of English and Yoruba morphology. Tafak Publications.
- Vassilieva, Maria. 2005. Associative and pronominal plurality. Ph.D. thesis, SUNY Stony Brook.