Substratal Influence on the Morphosyntactic Properties of Krio

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The morphosyntactic development of Atlantic creoles, including Krio, an English-based creole in Sierra Leone, is a highly debated issue, with the controversy centering on the extent of the influence of the properties of substrate West African languages, if any, on the development of Krio morphosyntax. Contrary to proposals that creoles (including Krio) tend to exhibit basic, universal, simplistic, and transparent grammar, this paper presents evidence of substratal influence on the morphosyntactic properties of Krio. The properties of three morphosyntactic structures—focused constructions, verb serialization, and complementation—are examined and evidence is provided for an intricate and productive system of morphosyntactic operations that sometimes generate structures of a regional rather than a universal orientation. In addition, these are linguistically marked structures that are extremely difficult to account for under proposed universal unmarked principles of grammar as currently stipulated.

1. Introduction

Krio is an English-derived creole that is used as a lingua franca in Sierra Leone, but is the native language of a small percentage (estimated to be about 10% or less) of the population of the country living primarily in the Western Area peninsula (including Freetown). Factors contributing to the development of the morphosyntactic properties of creoles (including Krio) have been the subject of much debate, with researchers adopting different and often polar views. The Superstratist view proposes that creoles evolved from non-standard varieties of the lexifier superstrate European languages. The Universalist view argues for the development of a prototypical creole grammar primarily through the application of universal unmarked grammar by creole children. At the opposite extreme is the Substratist view, which maintains that West African substrate languages (especially those belonging to the Kwa language subgroup) have predominantly influenced the suprasegmental, grammatical, and lexical properties of creoles (particularly the Atlantic varieties). Creolization is proposed to be a process of relexification in which lexical items from a European superstrate language are configured into syntactic structures of substrate languages. Yet other creolists—a compromise group—propose that the formation and development of creoles may be a combination (in ways still to be determined) of universal, substratal, and superstratal factors.

There is thus no consensus on the extent to which the morphosyntactic properties of Krio have been influenced by universal, substratal, and superstratal properties. There is indeed evidence of a number of universal, simplified, morphosyntactic rules. Krio does exhibit some of the apparent universals evident in early language development including preverbal negation without the use of an auxiliary, multiple negation involving indefinite pronouns, no inversion in Yes/No questions (intonation distinguishes a question from a statement), and a general lack of inflectional morphology. Superstratal features are evident in the basic SVO word order pattern and the pre-posing of a wh-phrase in interrogatives. At the same time, there is evidence of substratal influence in core morphosyntactic operations including focused constructions, verb serialization, and complementation. These structures, I argue, satisfy Singler's (1996) criteria of being nontrivial, linguistically marked, and absent in English, the lexifier language of Krio.

2. Accounting for the origins and development of creole grammar

A majority of proposals (including the superstratist, universalist, and substratist positions) attempting to account for the morphosyntactic properties of creoles often present evidence that partially (and sometimes inadequately) supports their views. Neuman-Holzschuh and Schneider (2000:3) outline crucial questions that researchers need to address in order to provide a comprehensive account of the origins, development, and restructuring of creole grammar. These include the following:

(a)   Which is the most suitable theoretical framework for the description of processes of restructuring?
(b)   Which morphological and syntactic categories are predominantly affected by restructuring in individual creoles, and to what extent?
(c)   Are there any intralinguistic features and typical structural conditions which favor or cause different degrees of restructuring?
(d)   What is the relationship between different degrees of restructuring on the one hand and sociolinguistic conditions, e.g. varying demographic proportions between different population groups, on the other?
(e)   What is the role of bilingualism, first and/or second language acquisition, or the numerical ratio of children to adults in the process of varying degrees of restructuring?

This paper addresses most of these questions by focusing on the significance of adult input as well as the historical, social, demographic, and linguistic factors that may have contributed to the restructuring of Krio grammar.

2.1 The superstratist account of the development of creole grammar

The superstratists propose that creoles evolved from nonstandard varieties of the lexifier superstrate European languages. They argued that most the properties of the grammar of creoles developed primarily through foreigner talk (a simplification of the grammar of the lexifier superstrate European language) as a result of difficulty in communication among adult speakers of mutually incomprehensible languages, with minimal borrowing, if any, from the grammar of substratal languages. Characteristics of foreigner talk are indeed evident in creoles, but this approach nevertheless fails to account for grammatical properties of creoles that cannot be traced back to the superstrate languages. This resulted in the emergence of two extreme but widely discussed accounts—Universalist and Substratal—of creolization.

2.2 The Universalist account of the development of creole grammar

The Universalist account of creolization emphasizes the contribution of children to the development of a prototypical creole grammar. Proponents of this view, particularly Bickerton (1975, 1977, 1981, 1986, 1988, 1993, 1999), contend that creoles generally display universal morphological and syntactic properties that are typical of a child's linguistic output during early stages of first language

acquisition. According to Bickerton's Language Bioprogram Hypothesis, pidgins were converted into creoles almost exclusively by children whose primary language—the pidgin—could not be used adequately to satisfy their linguistic needs. As a result, the creole grammar undergoes a process of elaboration and expansion primarily through the invocation of universal principles of language by emerging native creole speakers. Restructuring of the creole is triggered by the innate capacity for language by children, with continued input from the lexifier language and no significant input from the substrate languages of the parents. Creole structures that are attributed to the influence of substrate languages are proposed to be superficially similar to structures present in these languages but are generated by different rules of grammar.

Support for this view is drawn from a number of theories of language acquisition. Chomsky (1981, 1982) proposes that children are innately equipped with a Universal Grammar (UG), which restricts the range of acceptable grammar that children would hypothesize during the course of acquisition. Another learning principle—The Subset Principle (Berwick 1985; Wexler and Manzini 1987) —stipulates that during the course of language acquisition, children initially select the most restricted grammar (a subset of the possible grammatical properties) that is consistent with available input in spite of evidence of the presence of a more inclusive grammar exhibited by the language to which they are exposed. Creoles are proposed to develop along similar lines. Though input is received from a variety of linguistic sources, creole children's innate capacity for language predisposes them to adopt simple universal grammatical rules that generate a narrow and restricted grammar, which forms the basis of a creole grammar. Bickerton proposes that creole children, unlike child speakers of other languages, do not have a consistent adult grammatical model against which to check their hypotheses and are therefore compelled to adopt universal simplified rules. Redundant grammatical rules are thus eliminated, resulting in a creole grammar that exhibits very little or no inflection, very little use of tense, modal, and aspectual markers, use of unmarked forms of verbs to indicate past tense, and a highly regular derivational morphology.

McWhorter (1998, 2000) echoes similar views in his proposal of a prototypical creole. He proposes that creoles share similar characteristics that distinguish them from other natural languages. Specifically, there are three prominent features that are prototypically creole: Lack of the use of tone, particularly to contrast monosyllables; very little or no inflectional morphology; and a semantically transparent (highly regular and predictable) derivational morphology.

This proposal, however, is not without criticism. Baker (2000:42) identifies three criticisms against Bickerton's proposals:

  (a) Cross-creole studies have tended to find less similarity among creoles with regard to the "bioprogram-derived" features identified by Bickerton;

  (b) Work on old texts has suggested that these languages developed some of their "bioprogram-derived" features over a far longer period of time than claimed by Bickerton;

  (c) More rigorous comparisons with relevant non-European languages have produced more compelling evidence of their influence on particular creoles.

The last criticism, in particular, has been cited as support for the substratal account of the development of creoles.

2.3 The substratal account of the development of creole grammar

Proponents of the substratal position (including Corne 1987; DeGraff 2001; Lefebvre 1993, 1996; Lumsden 1999) maintain that the development and restructuring of creole grammar (particularly the Atlantic varieties) were significantly influenced by African substrate languages, especially those belonging to the Kwa language subgroup. They argue that the apparent universal features of creoles are superficial and that the underlying creole grammar (Atlantic varieties) exhibits structural properties resembling those of West African substrate languages. Adult native speakers of substrate languages, because of minimal grammatical competence in superstrate European languages, were compelled to borrow grammatical structures from their primary (substrate) languages into which they superimposed lexical items derived from superstrate languages, in their attempts to communicate with speakers of superstrate languages.

The Relexification Hypothesis proposed by substratists argues for creolization as a mental process in which a pidgin is relexified by adult native speakers of substratal languages with the superimposition of lexical items obtained primarily from lexifier European languages on the syntactic and semantic properties of their native languages, effectively transforming the pidgin into a creole with substratal grammatical properties. Lefebvre (1993, 1996) identifies Haitian Creole as an example of a creole that underwent relexification; that its lexicon is primarily derived from French—the lexifier language but its grammar is typical of substratal Kwa languages. According to Lefebvre (1993:254), relexification resulted in the reanalysis of "all levels of the grammar [of creoles] within the limits imposed by the theory of parametric variation." Lefebvre further proposes that relexification is a radical rather than a gradual process.

According to Lumsden (1999), creolization is a process of second language acquisition by adults, and relexification is one of three mental processes that influence the development of creole grammar. He defines relexification as a common adult learning strategy in which the learner "builds new lexical entries by combining new phonological forms with the syntactic and semantic information of lexical entries that are already established" (Lumsden 1999:129). The second process is functional category ellipsis, which is common in foreigner talk as well as in creoles. The third is reanalysis which Lumsden 1999:150) defines as " a process that associates the phonological label of a lexical category with the lexical entry of a functional category in the same language. That is, the phonological representations of lexical categories are transferred to functional categories (e.g. case markers, tense-aspect markers, complementizers, suffixes, etc.). These processes are applied by substrate speakers whose attempts to communicate in the superstrate language are severely hampered by the lack of social interaction with native speakers of the superstrate language and the lack of direct assess to texts or instructional materials written in the superstrate language.

There are weaknesses associated with this approach as well. Pidgins, from which creoles are generally derived, do exhibit a simplified grammar reminiscent of baby talk and foreigner talk, some of which are still evident in present day creoles. There is evidence of substratal influence on the grammar of some creoles, but some of the apparent substratal features are also found in other non-substratal languages, including some dialects of the superstratal languages. In addition, there is no conclusive evidence that this influence has transformed creole grammars into substratal grammar, in effect categorizing the creoles affected as members of the substratal language family.

2.4 The compromise account of the development of creole grammar

There is evidence supporting the universalist, superstratal, and substratal positions depending on which aspects of creole grammar one considers. As a result, a number of creolists acknowledge that together they provide a comprehensive account of the development and restructuring of creole languages though each proposal independently fails to provide an adequate account of the development and restructuring of creoles (Alleyne 1986, 1993; Mufwene 1986, 1999, 2000, 2001; Singler 1992, 1993, 1996). Proponents of the compromise position acknowledge that influence from substratal and superstratal languages combine with universal features in a gradual and constant process of the restructuring and reorganization of creoles.

Mufwene's Complementary Hypothesis attempts to accommodate the superstratist, universalist, and substratist positions on creolization. He proposes that these different positions are not mutually exclusive, but that they rather complement one another. Mufwene (2001:128) stipulates:

> Our position should not be based on the typically simplistic hypotheses which pervade the literature, in particular: baby talk, foreigner talk, exclusive or dominant substrate influence, language bioprogram, imperfect second-language learning, or exclusive or dominant superstrate influence.

Mufwene considers Bickerton's proposal of the development of creoles exclusively as a process of nativization a myth. The similarities between creole grammar and the grammar of young children does not necessarily lead to the conclusion that creole grammar was developed primarily by input from children. Foreigner talk, used by native and non-native speaking adults, shares similar features. He acknowledges that some creole structures do exhibit universal developmental features; other features certainly do not and are similar to features present in substrate languages. The presence of universal unmarked features is evident in lack of inflections, tense-aspect markers, and some syntactic structures. Mufwene further proposes that the incorporation of features from superstrate and substrate languages into creoles could have been triggered by the unmarked status of these features. This view sounds intuitive except that Mufwene does not articulate the mechanisms for determining the marked/unmarked status of some the features in question, especially those borrowed from substrate languages. Such languages have received little or no attention in the literature with regards to markedness within generative grammar.

Singler (1992, 1993, 1996) disputes Bickerton's proposal of creolization primarily as a process of nativization, maintaining that stabilization, not nativization, of the pidgin/creole is critical. Singler (1996:217) presents information for what he argues to be evidence of "a relatively prolonged period of creole genesis and for adults rather than children as the primary architects of creolization." He further provides some historical information that arguably provides some support for the relexification hypothesis. He nevertheless maintains that similarities between features of creoles and substratal languages do not necessarily constitute evidence for substratal influence. Creole structures that could be accounted for by universal principles, in spite of similarities to substratal structures, should not be used as conclusive evidence of substratal influence. To enhance the validity of such influence, Singler (1996:218) proposes three criteria that the features in question have to satisfy:

(a) They are not shared with the lexifier language.
(b) They are nontrivial.
(c) They are linguistically marked.

In the next sections I examine three Krio structures—focused constructions, verb serialization and complementation—which are consistent with these criteria and support the existence of substratal influence. However, it is first necessary to examine the socio-historical context of Krio.

3. The origin of Krio and the sources of substratal influence

Krio has a rich history of contact with other West African languages. The traditions of their speakers have had an influence on the social life and customs of Krio speakers in Freetown, and their languages have also played a role the development and restructuring of present day Krio. A number of creolists and linguists have acknowledged the linguistic influences of substrate languages on Krio though there is no agreement as to the source and extent of the influence. The origin of the language itself is still a hotly debated issue. One school of thought (Alleyne 1986; Devonish 2002; Huber 1999, 2000; Winford 2000) maintains that present day Krio emerged from varieties of creoles imported to Sierra Leone from the Americas. Another group, spearheaded by Hancock (1986, 1987, 1993), contends that present day Krio is an offshoot of a West African creole that pre-dates the Trans-Atlantic Slave Trade.

3.1. The emergence of Krio from creoles of the Americas

According to the first view, Krio emerged from a variety or varieties of creoles used by settlers (mostly freed slaves) from the Americas, who were resettled in the Sierra Leone peninsula, including Freetown, between 1787 and 1850. The influence of Krio later spread to other areas in West Africa and influenced the pidgins used Cameroon, Ghana, Gambia, Liberia, and Nigeria (Huber 1999, 2000).

Freed slaves resettled in Sierra Leone were primarily from four areas (Huber 1999, 2000). The Original Settlers (Black Poor) from England, numbering about 328 people, arrived in 1787. There is no evidence of any significant contribution of the Black Poor to the development of present day Krio. 1,025 freed slaves from Nova Scotia arrived in 1792, followed by 556 Maroons from Jamaica, who were deported to Nova Scotia in 1796 after an unsuccessful revolt and transferred to the Sierra Leone peninsula in 1800. Other settlers continued to arrive from the Americas, particularly the West Indies, during the first two decades of the 19th century. After the British declared slavery illegal for their subjects, the British fleet patrolled the West African coast, intercepted slave ships and recaptured slaves, who were then released and resettled in the Sierra Leone peninsula as the Liberated Africans (or Recaptives). These were by far the largest group and were resettled in the Sierra Leone peninsula over a period that stretches from 1808 (when Sierra Leone was declared a crown colony by the British) to 1863. Huber estimates the number of Liberated Africans resettled in the Sierra Leone peninsula during this period at about 60,000, though only about 37,000 were alive in 1840. In 1860, the Liberated Africans and their descendants totaled 38,375.

Huber estimates the number of settlers from the Americas at over 20% of the population in the Sierra Leone peninsula and at about 33% in Freetown in 1820. These settlers were native speakers of

creoles of the Americas or had had extensive exposure to them, and these creoles formed the basis of the creole—Krio—that emerged in Freetown. Creoles from the West Indies, particularly the variety brought by the Jamaican Maroon settlers, are proposed by Huber to have had significant input into what has now evolved into present day Krio. There was additional influence from other languages brought along by other settlers, including the Nova Scotians, who were originally from the American South. This is evident in some similarities that Krio shares with Gullah—a creole that originated from and is still used in the American South. This new creole that emerged in Freetown was later spread to other parts of West Africa.

The African-like features in present day Krio, evident in focused constructions, verb serialization, and the use of the verb 'say' as a complementizer, are proposed to have been introduced into Krio via the creoles brought by the settlers to the Sierra Leone peninsula. Though the slaves transported to the Americas were from areas covering West and Southern Africa, the majority of them are proposed to have originated from regions in West Africa dominated by substratal (Kwa) languages, with Yoruba, Akan, and Gbe being among the most prominent (Alleyne 1986; Huber 1999, 2000; Winford 2000). Winford (2000: 226) states that "the major West African linguistic inputs [into creoles emerging in the Americas] appear to have come from Kwa languages (with Akan predominating in Jamaica and Gbe dialects in Suriname)."

Huber (1999: 115) however maintains that in spite of this African influence, the grammar of Krio "is essentially that of a New World Creole."

The influence of the Liberated Africans on the linguistic evolution of Krio is a debated issue. Huber acknowledges possible influence of this group when he states that (Huber 2000: 278):

> Finally another major group to be considered in the development of Krio is that of the Liberated Africans, who by about 1812 outnumbered the Nova Scotians and Maroons. Judging from their enormous numerical increase over the following decades, the Recaptives could very well have dominated the linguistic scene in 19th century Sierra Leone by swamping any other variety that may have developed in the years prior to their arrival.

The Liberated Africans were comprised mainly of speakers of the substratal Kwa languages of Yoruba (the most prominent), Igbos, Akan, and Gbe. According to Huber, the Liberated Africans were resettled in villages outside of Freetown in the Sierra Leone peninsula, and there was little interaction between them and the rest of the settlers in Freetown between 1812 and 1830 as the communities were segregated. There was increased contact, however, in the 1830s as the Liberated Africans were increasingly employed as domestic servants in Freetown. They originally spoke only African languages, but with improved economic status and more interaction with the Maroons and Nova Scotians, a new variety of creole emerged that was described in transcripts written by British colonists as a 'barbarous', 'defective', 'gibberish' and 'jargon' form of English (Huber 2000). This variety incorporated features of the creoles used by the Maroons and Nova Scotians, and it is reasonable to assume that the cross-linguistic influence was bi-directional: that is, the creoles used in Freetown were influenced by the variety developed by the Liberated Africans.

The language and traditions of settlers of Yoruba origins have had a strong influence on the language, social life and customs of Krio speakers in Freetown. A large number of lexical borrowings in Krio from West African languages, particularly Yoruba, are well documented

(Bradshaw 1966, Fyle and Jones 1980, Jones 1971). Yoruba is second only to English as the largest contributor to the Krio lexicon (Bradshaw 1966, Fyle 1994). These borrowings have generally retained the morphophonemic properties they had in Yoruba.

The influence of the languages (including Yoruba) of the Liberated Africans on the grammatical development of Krio should therefore not be underestimated and should be considered at least a contributing factor in the development of the morphosyntactic properties of Krio, including focused constructions, verb serialization, and complementation, all of which bear remarkable similarities in form and function with similar properties of Yoruba and other Kwa languages introduced to the Sierra Leone peninsula by the Liberated Africans.

3.2 Krio as an offshoot of an original West African Creole

Hancock (1986, 1987) proposes that the original "core" creole emerged along the Upper Guinea Coast of West Africa in the 1600s, long before the Trans-Atlantic Slave Trade. There is evidence of British settlement on the Upper Guinea Coast and written reports of interaction, including intermarriages, between Europeans and Africans during this period. Products of the intermarriages—referred to as Mulattos—became the first creole speakers. Creoles in the Americas partly originated from this protocreole—Guinea Coast Creole English (GCCE), which was transmitted to the Americas by slaves transported by English and Dutch traders.

Hancock suggests that expansion of the grammar of GCCE was possibly through Bickerton's Bioprogram Hypothesis though modification of its grammar continued as a result of its extensive use by second language speakers in the region. According to Hancock, present day Krio is an offshoot of GCCE. Eyewitness recorded transcripts of GCCE in the 17th and 18th centuries illustrate similar grammatical features and lexical items between modern Krio and GCCE. The presence of these features and items in present day Krio, Hancock maintains, is evidence that the emergence of Krio pre-dates the resettlement of freed slaves in Sierra Leone. GCCE was later exported to other regions in West Africa during the era of colonization in the 19th century, where it influenced varieties such as Cameroonian and Nigerian pidgin.

Singler (1992) also mentions the existence of an English-lexifier pidgin along the West African coast long before the advent of the settlers from the Americas, and that Nigerian Pidgin English possibly developed from this pidgin and was later influenced by Krio. Singler, however, does not give any indication as to whether this pidgin was the same as or different from the GCCE proposed by Hancock, nor does he mention any possible influence of Krio by this pidgin.

Hancock further acknowledges that some Krio grammatical features may have been the influence of the creoles introduced in Sierra Leone by settlers from the Americas. He supports the assertion that the grammatical development of creoles of the Americas, during their formative periods, had a significant influence from Kwa languages (including Akan, Gbe, Igbo, and Yoruba)—the primary linguistic backgrounds of a majority of the slaves transported to the Americas. That is, the slaves exported African-like features of their substrate languages into the creoles used in the Americas. Examples of such features include focus constructions (e.g. clefting) and the use of the verb meaning 'give' in serial constructions to express the benefactive. Hancock further acknowledges the possible influence of other indigenous languages of Sierra Leone. For example, the use of the verb meaning 'say' as a complementizer is present in Krio as well as in Temne, Mandinka, Mende, and Kru, all languages still used in Sierra Leone.

3.3 Substratal influence on Krio

Though there are two conflicting accounts on the origins of Krio, they both agree on one thing: during the process of the development and restructuring of Krio, the language was influenced by properties of substrate languages, either indirectly through the creoles from the Americas, or directly through the linguistic input of the Liberated Africans. Evidence of substratal influence is also acknowledged by a number of researchers though the degree of influence may be extremely difficult to assess. The purpose of this paper is to highlight some of the substratal features evident in the grammar of Krio, with additional arguments that these features—focused constructions, verb serialization, and complementation—all satisfy the three criteria outlined by Singler (1996) as prerequisites for them to be deemed substratal influence.

4. Krio data sources

As a native Krio speaker, who was born and raised until adulthood in Freetown, I provided the Krio examples used in this paper based on my intuitions and those of other native Krio speakers. These examples, in my opinion, are reflective of standard usage by native Krio speakers residing in Freetown. Examples in other languages are obtained from other sources with appropriate acknowledgements.

5. The properties of focused constructions in Krio

Focused constructions refer to structures in which a constituent is fronted for emphasis. These include the different forms of clefting in which the fronted constituent is introduced by a cleft marker. Clefting traditionally refers to a syntactic process whereby a nominal is realized as a clause-initial constituent primarily for emphasis. Though clefted constructions are present in English, their forms and functions in Krio bear remarkable similarities to those found in substrate Kwa languages. Clefting is further a very productive syntactic operation in Krio and is used to emphasize not only nominals but also wh-interrogatives as well as verbal and adjectival predicates. These functions arguably originated from substrate languages in which these different forms of clefted constructions allowed as well. English does allow clefting that emphasizes nominals but not wh-interrogatives or verbal and adjectival predicates. The focus marker in Krio (/na/) is further identical or similar in form and function to those used in a number of substratal languages (/na/ or /ni/). The focus marker however follows the clefted constituent in some substratal languages.

5.1 Nominal clefting

A syntactic account traditionally assigns nominal clefting the following structure:

(1) [It be NP [$_{CP}$COMP [$_{IP}$...]]]

That is, the focused constituent is fronted and is followed by a complement clause. In English—the lexifier language of Krio—this process may involve an NP or PP with an optional wh-element or

complementizer in COMP:

(2a) It was John (whom/that) we saw
(2b) It was to John (that) I spoke

Nominal clefting is very productive in Krio, and though, like English, it involves the fronting of nominals, its operation in the two languages differs in fundamental ways. In English, NP's or PP's could be fronted in nominal clefting, as the examples in (2) illustrate. In Krio, NP's but not PP's are allowed in clefted constructions. In addition, the use of a wh-element or complementizer, which is optional in English, is prohibited in Krio. Nominal clefting is a productive process in putative substrate languages as well, and the restrictions in Krio also apply to clefted constructions in its substrate languages:

(3a) <u>Krio</u>

na   plaba   dɛn   de   mek
It-is quarrel they   PROG   make
'They are having a quarrel.'

(3b) <u>Krio</u>

*na plaba   we   dɛn   de   mek
It-is quarrel COMP   they   PROG make
'They are having a quarrel.'

(4a) <u>Krio</u>

na   ǰɔn   wi   bin   si
It-is John   we   PAST   see
'It was John (whom/that) we saw.'

(4b) <u>Krio</u>

*na ǰɔn   we   wi   bin   si
It-is John   COMP   we   PAST   see
'It was John (whom/that) we saw.'

(5a) <u>Krio</u>

na   ǰɔn a bin   tɔk   to
It-is John I PAST speak to
'It was John that I spoke to.'

(5b) <u>Krio</u>

*na to   ǰɔn   we   a   bin   tɔk
It-is to   John   COMP   I   PAST speak
'It was to John that I spoke.'

(6) <u>Twi</u> (Alleyne 1980)
     *kwadwo na   ɔ   baa   ha
     Kwadwo   it was who came here
     'It was Kwadwo who came here'

(7) <u>Yoruba</u> (Holm 1988)
     aso   ni   mo   ra
     cloth it was I   bought
     'It was cloth that I bought'

(8) <u>Wolof</u> (Allsopp 1976)
     ragal la   ragal rek
     fear it is fear   only
     'He is/they are really frightened'

The Krio examples in (3a) and (4a) are grammatical while (3b) and (4b), which contain overt complementizers, are ungrammatical. In (5b), the PP is fronted and this results in an ungrammatical output. The focused constituents in the examples from the substrate languages—(6) to (8)—are also nominals, and an overt complementizer is prohibited in these constructions as evident in the ungrammaticality of examples (3b) and (9b) (in Krio) and (6) (in Twi). It is worth noting that the form and functions of nominal clefting in Krio and substrate languages are also present in a number of creoles of the Americas (Alleyne 1980; Allsopp 1976; Corne 1987), which were also influenced by substratal input through slaves who were transported to the Americas during the Trans-Atlantic Slave Trade.

    The prohibition of an overt complementizer in clefted constructions is an indicator that such constructions lack a complementizer position in creoles (including Krio) and substrate languages, and that they are likely base-generated. This claim is reinforced by the prohibition of a PP as the focused constituent since a pre-posed PP is also the product of syntactic movement. This makes the process fundamentally different from nominal clefting in English, which involves syntactic movement, evident in the optional use of an overt complementizer and the use of a PP as a focused constituent.

5.2. Wh-interrogative clefting

In wh-interrogative clefting, a focused wh-interrogative phrase is introduced by the focus marker /na/, and, like in nominal clefting, the use of an overt complementizer is prohibited:

(9a) <u>Krio</u>
     na   udat bin   kam
     it-is who PAST   come
     'Who was here?'

(9b) <u>Krio</u>
    *na udat we   bin   kam
    it-is who COMP PAST come
    'Who was here?'

(10a) <u>Krio</u>
    na   wetin dɛn de du
    It-is what   they PROG do
    'What are they really doing?'

(10b) <u>Krio</u>
    *na wetin we   dɛn de   du
    It-is what COMP they PROG do
    'What are they really doing?'

(11) <u>Twi</u> (Alleyne 1980)
    hae   na o huu o
    whom it-is he saw him
    'Whom did he see?

(12) <u>Yoruba</u> (Alleyne 1980)
    ti   taa ni
    for who it-is
    'Whose…?

Wh-interrogative clefting is productive in Krio and substrate languages, as well as in some creoles of the Americas but is not allowed in English—the lexifier language of Krio. Like nominal clefting, wh-interrogative clefting is likely base-generated as evident in the ungrammaticality that results when an overt complementizer (in 9b and 10b) is used.

5.3 Predicate clefting

In predicate clefting, the focused constituent is a verbal or adjectival predicate, which is also introduced by the focus marker /na/. Similar to other clefted constructions, the use of an overt complementizer is also prohibited. This type of clefting is productive in Krio and a number of substrate languages but is not allowed in English. It is also the type of clefting that provides the strongest evidence for a base-generated account of clefted constructions in creole and substrate languages. Predicate clefting results not only in the fronting of the focused constituent but also in a copying of this constituent in its original position in the sentence. This is the case in both Krio and substrate languages:

(13a) <u>Krio</u>
    na bai dɛm bin   bai   di   bia
    it-is buy they PAST   buy   the   beer
    'They actually bought the beer.'

(13b) <u>Krio</u>
    *na bai we   dɛm bin   bai di   bia
    it-is buy COMP they PAST buy the beer
    'They actually bought the beer.'

(14a) <u>Krio</u>
    na waka nɔmɔ wi   bin   de   waka
    it-is walk only we PAST PROG waka
    'We were only walking around.'

(14b) <u>Krio</u>
    *na waka nɔmɔ we   wi bin   de   waka
    it-is walk   only COMP we PAST PROG waka
    'We were only walking around.'

(15a) <u>Krio</u>
    na gladi dɛn gladi
    it-is happy they happy
    'They are really happy.'

(15b) <u>Krio</u>
    *na gladi we   dɛn gladi
    it-is happy COMP they happy
    'They are really happy'

(16) <u>Yoruba</u> (Alleyne 1980)
    mi mu ni   won mu mi
    me take it-is they took me
    'They actually arrested me'

(17) <u>Twi</u> (Alleyne 1980)
    hwe na   kwasi hwe ase
    fall   it-is Kwasi fell   down
    'Kwasi actually fell'

(18) <u>Yoruba</u> (Williams 1976)

     akɔwe ni   nwɔn kpa a

     killing it is they   kill   him

     'They actually killed him'

(19) <u>Nupe</u> (Allsopp 1976)

     wuwu   a   wu wun o

     kill-kill they kill + emphatic terminal

     'He was definitely killed'

A traditional syntactic analysis of movement requires a properly governed trace (or empty category) of the moved constituent to be left behind in the vacated position, which is obviously not the case in predicate clefting. In such constructions, in place of a trace, a copy of the moved constituent is phonetically realized in the vacated position, creating problems for a syntactic analysis and providing further support for a base-generated account of clefting. In some instances of predicate clefting in Krio, the copy of the moved constituent is realized as a different syntactic category. In the following examples, a verbal predicate is nominalized in the process of clefting. That is, VP/V $\rightarrow$ NP:

(20) <u>Krio</u>

     na   lili   fɛt (N) dɛn   fɛt (V)

     it-is small fight   they   fight

     'They only had a small fight.'

(21) <u>Krio</u>

     noto   kɔmɔn vɛks i   bin   vex

     isn't-it a-lot-of angry he PAST angry

     'Boy, was he really angry!'

A number of proposals, sometimes conflicting, have been advanced to account for the generation of predicate clefting. Manfredi (1993) proposes that languages that allow predicate clefting may differ in whether the clefting involves movement of a VP or a V^0. Others (Bickerton 1981, 1993; Koopman 1984) maintain that it involves V^0 movement since predicate clefting in a predominance of languages generally involves just the bare verb. Neither auxiliaries nor arguments of the verb co-occur with the fronted verb. Koopman argues for a focus-V-movement to a V-bar position, similar to wh-movement with no convincing explanation of why the arguments of the verb are not preposed as well. Bickerton proposes that V-fronting is allowed only in languages that lack a VP constituent, for example Guyanese Creole. A problem with this proposal is that V-fronting does occur in languages containing VP's such as Krio, Japanese and Yoruba (Corne 1987). Wh-like movement of the verb without its complements is in apparent violation of the theta criterion as is currently formulated.

5.4 A case for substratal influence in fronted constructions

Clefting is a much more productive and versatile process in Krio than in English, the lexifier language of Krio. The forms and functions of clefting are arguably fundamentally different between Krio and English. It is realized in three different forms (nominal, wh-interrogative, and predicate) in Krio compared to only one (nominal) in English. It is a syntactic process in English but base-generated in Krio. The difficulty in accounting for the derivation of clefting is further attestation to the complexity or linguistic markedness of these constructions in Krio and substrate languages. These properties satisfy the conditions proposed by Singler (1996) for a feature to be conclusively determined to be a substratal influence.

6. Verb serialization

One feature of Krio morphosyntax that differentiates it from English is verb serialization. Such constructions generally contain one syntactic subject and a series of lexical verbs that are not linked by an overt conjunction (subordinate or coordinate) or complementizer. A lexical subject is prohibited from appearing in front of subsequent verbs in the series. In addition, one verb does not serve as an auxiliary or infinitival complement to other verbs in the series. These verbs on occasion share and assign case and thematic roles to the same object; that is, an object is not realized phonetically (or as a trace) or the verbs in the series share an internal argument. This phenomenon is very productive in a number of creoles (including Krio) as well as in substrate languages from which it was likely borrowed:

(22) <u>Krio</u>
  di uman kuk rɛs sɛl
  The woman cook rice sell
  'The woman cooked some rice which she sold.'

(23) <u>Krio</u>
  i bai klos gi im pikin
  he buy clothes give his child
  'He bought some clothes which he gave to his child.'

(24) <u>Krio</u>
  di bɔbɔ tek di sus trowe
  the boy take the shoes throw-away
  'The boy took the shoes and threw them away!'

(25) <u>Krio</u>
  a tek nɛf kɔt di bred
  I take knife cut the bread
  'I cut the bread with a knife.'

(26) <u>Krio</u>
      i   kam   gi mi   trɔbul
      he   come give me   trouble
      'He got me in trouble.'

(27) <u>Yoruba</u> (George 1975)
      ajao ra   epa   je
      Ajao bought peanuts ate
      'Ajao bought some peanuts and ate them'

(28) <u>Twi</u> (Lord 1993)
      y   adwuma   ma   me
      he does-work give me
      'He works for me'

(29) <u>Nupe</u> (George 1976)
      tsoda gi je   afunin
      Tsoda ate food   full
      'Tsoda ate and he is full'

(30) <u>Akan</u> (Schachter 1974)
      kofi   yɛɛ adwuma wiee
      Kofi   did work   finished
      'Kofi finished working'

(31) <u>Yoruba</u> (Awobuluyi 1973)
      olu rin   ti
      Olu   walked fail
      'Olu was unable to walk'

(32) <u>Ewe</u> (Lord 1973)
      e   no   tsi   ku
      he drank water died
      'He drowned'

All of the above examples contain only one syntactic subject and two verbs without any conjoining marker or complementizer. In examples (22), (24), (27), and (30), the two verbs in the constructions are lexically transitive but only one internal argument is phonetically realized, which is shared by both verbs. In examples (23) and (28), the second verb meaning 'give'—a dyadic verb—has one argument phonetically realized but shares its other argument with the first verb. These constructions are not present in Standard English and may be used marginally in some non-standard English dialects, especially with the verbs 'come' and 'go'. They are however much more productive in Krio and in a number of substrate languages. In these languages, there is also a wide range of semantic

and syntactic properties associated with verbs used in verb serialization.

Verb serialization is arguably a linguistically marked phenomenon since is extremely difficult to account for it under traditional syntactic theories. The Projection Principle (Chomsky 1986) requires the subcategorization properties of lexical items to be represented at every syntactic level. An element should be phonetically realized or represented by an empty category at a particular position at all levels of syntax. The Theta Criterion further requires every argument to be uniquely assigned its thematic role and each available thematic role to be uniquely assigned to an argument. Verbs in serial verb constructions on occasion share and assign case and thematic roles to the same object, in apparent violation of the projection principle and the theta criterion. In such constructions, either an object is not realized phonetically (or as a trace) or the verbs in the series share an internal argument. The resulting implication is that the object is either theta marked twice or, alternatively, one theta role remains unassigned. Such constructions may be considered counterexamples to Theta Theory, or the interpretation of the Theta Criterion may be modified to account for such constructions.

Adopting Baker's (1989) notion of a single underlying clause with verbs in the series sharing an argument, I argue for obligatory argument sharing only when verbs in the construction assign identical theta roles. In constructions in which an argument is shared, such arguments are all assigned the same thematic role—theme, in the above examples. The arguments are thus assigned only one theta role in only one argument position. When verbs in the series are intransitive or do not assign the same thematic role, there is no argument sharing, as in examples (25), (26), (29), (31), and (32). In (25), the verb /tek/ "take" is used in an instrumental sense while the verb /kɔt/ "cut" assigns the role of theme. When /tek/ is not used instrumentally, as in (24), where it assigns theme, there is argument sharing since the second verb also assigns theme. In (26) the first verb /kam/ "come" is unaccusative while the second verb /gi/ "give" has two arguments (goal and theme) realized after it. Such a rule may be the marked application of the theta criterion, applying to creoles (including Krio) and substrate languages but not to English.

7. Complementation involving the sentential complementizer /se/

Four complementizers, all obligatorily overt, could be identified in Krio, with the sentential complementizer /se/ being the most controversial. Its operation (including its lexical properties) has been the subject of much debate. One aspect of the controversy revolves around whether it functions as a verb or a complementizer. It is homophonous with the lexical verb meaning 'say' in Krio, as is the case in a number of creoles and substrate languages:

(33) Krio

      a   mɛmba se   dɛm bin   win loto
      I   think   say/that they PAST win lottery
      'I thought that they won the lottery.'

(34) Twi (Lord 1993)

      ɛyɛ nokware sɛ   wɔ yare
      it-be fact   that they be-ill
      'It is a fact that they are ill'

(35) <u>Ewe</u> (Lord 1973)
       me-di be   maple awua   dewo
       I-want say I-buy dress   some
       'I want to buy some dresses'

(36) <u>Efik</u> (Lord 1973)
       enye ete ke etie   imɔ nte imokut
       he   say say it-seemed-to him like he-see-it
       'He said that it seemed to him that he say it'

(37) <u>Yoruba</u> (Lord 1973)
       o   sɔ   kpe ade lɔ
       he say say   Ade go
       'He said that Ade went'

(38) <u>Ga</u> (Lord 1993)
       tɛtɛ le   akɛ ayi tsu   nii lɛ
       Tete know say Ayi work thing the
       'Tete knows that Ayi did the work'

This complementizer is also used in Krio to introduce the clausal complements of nouns and adjectives:

(39) <u>Krio</u>
       di rumɔ se   abu win loto   na tru
       the rumor that Abu win lottery is correct
       'The rumor that Abu won the lottery is correct.'

(40) <u>Krio</u>
       i   laikli se abu win loto
       It-is likely that Abu win lottery
       'It's likely that Abu won the lottery'

Some Superstratists, including Bickerton (1981), maintain that this form still functions as a verb and that it was probably a borrowing of the English verb *say* with which it bears some phonological resemblance. As support for this view, it has been observed that French-based creoles do not generally use the phonological form of the verb meaning 'say' as a complementizer. Though the form of this feature and its functions as a verb in Krio (and likely other creoles) are very similar phonologically and semantically to its equivalent in English, from which it was likely borrowed, its functions and semantic and syntactic properties as a complementizer are very different between the two languages. Its use as a complementizer is now a very productive feature in Krio (in which it is used to introduce a variety of clause types) and at best currently marginally used in a

complementizer position in restricted contexts in a few non-standard dialects of English. In addition the use of the verb meaning 'say' is also very common and productive in a number of substrate languages, and it is possible that though the form and function of the verb meaning 'say' were originally borrowed from English, its current functions, including its semantic and syntactic properties as a complementizer in Krio (and other creoles), are arguably the result of the influence from speakers of substrate languages.

A number of researchers (Holm 1988; Lord 1973,1976, 1993; Plag 1995; Sebba 1983) have argued that the verb meaning 'say' underwent a diachronic process during which it evolved from a verb to a sentential complementizer in substrate (predominantly Kwa) languages and generally used in serial verb constructions. Lord proposes that this verb underwent a historical change—a syntactic reanalysis from verb to complementizer—in substrate languages during which it lost its semantic, syntactic, and morphologic properties, and became reanalysed as a grammatical function marker. Substratists argue for the use of /se/ (or a variation of it) in creoles to have been the result of influence from substrate languages.

In spite of the phonological resemblance between English 'say' and its equivalents in creoles, the concept of using the phonological form of this verb as a sentential complementizer in creoles was likely borrowed from substratal languages. This resulted in the development of two homophonous forms with different functional properties. The verbal form maintained its functional similarities with its English counterpart while the complementizer form assumed functional properties that closely paralleled those of the sentential complementizer in substrate languages. Jamaican creole now makes a phonetic distinction between the verb—pronounced as [se]—and the complementizer—pronounced as [sɛ] (Cassidy 1961).

Nonetheless, the syntactic properties of /se/ as a complementizer are problematic to account for under current universal grammatical theories. It is obligatorily overt in constructions involving an extracted embedded subject. The overt use of the English sentential complementizer on the other hand is optional. In addition, current syntactic theory prohibits the use of an overt sentential complementizer when it introduces a sentence from which a subject has been extracted. Pro-drop languages are proposed to be exceptions to this requirement. The problem in Krio is that there is no that-trace effect in the use of the sentential complementizer even though the language does not exhibit properties of a Pro-drop language. For example:

(41) Krio

    [uda$_i$ yu [$_{VP}$ tɛl am [$_{CP}$ se [$_{IP}$ t$_i$ dɔn go na os]]]]

    *[uda$_i$ yu [$_{VP}$ tɛl am [$_{CP}$ ø [$_{IP}$ t$_i$ dɔn go na os]]]]

    Who you tell him   (that) PERF go LOC house

    'Who did you tell him has gone home?'

(42) Krio

    [wetin$_i$ yu [$_{VP}$ mɛmba [$_{CP}$ se   [$_{IP}$ t$_i$ apin]]]]

    *[wetin$_i$ yu [$_{VP}$ mɛmba [$_{CP}$ ø   [$_{IP}$ t$_i$ apin]]]]

      what you   think   (that)   happen

    'What did you think happened?'

 This could either be interpreted as a violation of the that-trace filter and the Empty Category Principle, or conversely, the sentential complementizer in Krio and substratal languages could be argued to have developed properties similar to those of the complementizer in Pro-drop languages but different from the properties of the complementizer in English.

   Another problem associated with the syntactic properties of the sentential complementizer in Krio is that it could be stranded when a verbal or adjective complement is questioned even though complementizer-stranding is generally not allowed in a number of languages including English. For example, /se/ could be stranded, though complementizer-stranding is not allowed in Krio when its sentential complement is questioned:

(43a) <u>Krio</u>
      a mɛmba se   ren go   kam
      I   think   that rain FUT come
      'I thought that it would rain.'

(43a) <u>Krio</u>
      wetin yu   mɛmba se
      what you think   that
      'What did you think?'

(44a) <u>Krio</u>
      i   laikli se   ren   go   kam
      It-is   likely that rain FUT come
      'It's likely that it's going to rain.'

(44b) <u>Krio</u>
      wetin i   laikli se
      what it-is likely that
      'What is likely?'

Apparently, the complementizer /se/ has properties in Krio that makes it possible for it to be used in syntactic contexts different from those in which complementizers are used in English—the lexifier language of Krio.

   Thus, the Krio lexical item /se/, though similar in form and function with English 'say' when used as a verb, has different functions as a complementizer in Krio compared to the functions of the English complementizer. It is further very productive, and could be considered linguistically marked since its syntactic properties, atypical of other languages (including English), makes it possible for it to be used in a number of positions not allowed in many other languages.

8. Concluding remarks

The three features discussed in this paper—focused constructions, verb serialization, and complementation—bear remarkable similarities to parallel features in substratal languages and, to a

large extent, satisfy the three criteria proposed by Singler (1996) for such features to be categorized as substratal influence. They are all non-trivial, as they are used productively and extensively in Krio. They are features that are arguably not shared with English—the lexifier language of Krio—in their functions if not in their forms. In addition, the derivations of these features are problematic for universal grammatical theories and could be considered linguistically marked.

The claim by universalists that restructuring of creoles through linguistic universals is primarily influenced by the lexifier language with no significant input from substratal languages is not justified. There is further no support for the superstratist proposal that input of adult speakers of creoles was mainly through foreigner talk, influenced by nonstandard varieties of the lexifier superstrate European languages with very minimal, if any, influence of substratal languages. The constructions discussed in this paper are core properties of Krio morphosyntax; they are used extensively in the language in versatile ways; and their derivation illustrates the complex nature of such constructions. The grammatical properties of these features provide some support for the substratist argument that some of the structural properties of Atlantic creoles resemble those of West African substrate languages. However, this should not be interpreted as conclusive evidence that the underlying grammar of Krio is substratal-based as claimed by some substratists. This should rather be interpreted as evidence of substratal influence on creole languages. The extent of the influence of substratal grammar on Krio (and other creoles) is still undetermined; nevertheless, the features discussed in this paper do show remarkable similarities in both form and function, in some cases, with similar features present in substrate languages.

There is no unified account of how these features were transmitted from substrate languages into Krio. A more popular account maintains that the features were transmitted into creoles in the Americas by slaves speaking substrate languages and were later incorporated into Krio by their descendents, who were resettled in the Sierra Leone peninsula. Nevertheless, the input of the Liberated Africans, who were dominated by Yoruba speakers referred to then as 'Akus—a name their descendants still carry in Freetown—should not be overlooked.

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