

Unity in diversity

The homogeneity of the substrate and the grammar of space in the African and Caribbean English-lexifier creoles

Kofi Yakpo

John Singler's principle of the homogeneity of the substrate can account for the shape of locative structures in the Afro-Caribbean English-lexifier Creoles (AECs). These are modelled on typologically highly uniform substrate and adstrate structures across a broad swath of West and Central Africa. Common to the creoles and the African languages are the scarcity of Path-incorporating prepositions, the use of general locative prepositions in static *and* motion events, as well as the use of pre- or postpositional relator nouns. At the same time, the grammars of space of individual AECs like Sranan (Suriname) and Pichi (Equatorial Guinea) have diverged from each other due to differing lengths of contact with the lexifier English, and contact with different European superstrate languages.

Keywords: English creoles, African languages, substrate, adstrate linguistic area

1. Introduction

This chapter looks at locative constructions in two Afro-Caribbean English-lexifier Creoles (henceforth AECs), namely Sranan, the largest of the Surinamese creoles and national vehicular language of Suriname, and Pichi, the English-lexifier creole spoken on the island of Bioko (Equatorial Guinea).

I show how the homogeneity of African substrate and adstrate languages has contributed to the emergence and maintenance of typologically 'African' locative constructions in these two genealogically related creole languages spoken on opposite sides of the Atlantic Ocean (see e.g., Hancock 1987; Smith 2015a). Locative constructions in these two creoles are typologically rather different from corresponding ones in English. The African imprint on locative constructions in Sranan and Pichi is due to the relative homogeneity in the expression of spatial relations in African substrate and adstrate languages. The principle of the homogeneity of the

substrate was first formulated in detail by John Singler (1983, 1988) and has since then become a standard against which linguistic and socio-historical evidence of substrate influence on creoles and pidgins can be measured. At the same time, I show that differing degrees of contact with the lexifier English, as well as with other European superstrates is responsible for differences between the two creoles. Studying superstratal influences in Sranan and Pichi is particularly interesting because both languages have not been in direct contact with their English lexifier for two (Pichi) and three and a half centuries (Sranan) respectively. Instead they have been in contact with non-lexifier superstrates, namely Spanish (Pichi) and Dutch (Sranan). Both languages are therefore less characterized by the structural and lexical entanglement with English characteristic of “decreolization” and the “creole continuum” (e.g., DeCamp 1971; Bickerton 1973; Rickford 1987) typical for creoles for which English is the lexifier-superstrate (e.g., Jamaican Creole or Creolese in Guyana). These two creoles therefore allow us to catch a glimpse of the extent of substratal features in AECs at historically earlier stages, when the AECs had not yet converged so significantly towards English as they have today. I will, however, also show that contact with a non-lexifier superstrate can produce typological rearrangements comparable in nature to ones that have traditionally been seen as instances of “decreolization”.

The findings presented in this chapter are based on a corpus of Pichi primary data consisting of 46,060 words of dialogues, narratives, procedural texts and elicitations that I collected during three field trips to Bioko between 2003 and 2007, and a corpus of Sranan primary data of approximately 20,000 words gathered in Suriname in 2011.¹ Unreferenced linguistic examples in Ewe stem from personal narratives and conversations recorded in Ghana between 2003 and 2011. All examples in this chapter for which a source is not indicated are from my field data and data from secondary sources is referenced.

The structure of this chapter is as follows: In Section 2, I introduce the terms substrate, adstrate, superstrate and lexifier. Section 3 provides a brief typological characterization of locative constructions with respect to the features of interest. In Section 4, I describe and analyse the locative preposition and locative constructions in the two creole languages Pichi and Sranan. In Section 5, I do the same for a range of African languages, showing the typological continuities and discontinuities between them and the African languages. Section 6 places the data discussed so far in the broader context of the development of AECs and diachronic change in languages like Sranan and Pichi. Section 7 concludes this chapter.

1. Field research in Suriname was funded by an ERC-Advanced grant (ERC-2008-AdG, SH5; ‘Traces of Contact: Language contact studies and historical linguistics’) awarded to Pieter Muysken, University of Nijmegen.

2. Towards a definition of strata: Substrate, adstrate, superstrate and lexifier

In the following sections, I will draw on linguistic data from the two AECs Sranan and Pichi. I will also present data from African languages that have made important stratal contributions to the two creoles. This requires working definitions of the sometimes elusive terms ‘substrate’, ‘adstrate’, as well ‘superstrate’ and ‘lexifier’. Kouwenberg and Singler (2008) provide a useful summary of how strata have been defined in creole linguistics and I quote the relevant section at some length:

For creolists, “superstrate” ordinarily refers to the language of the socially and economically dominant group [...]. It typically provides the basis for the lexicon for the emergent pidgin or creole. When it does so, it is also referred to as the “lexifier language”. “Substrate” refers to the first languages of the socially and economically subordinate populations; [...] the term “adstrate” has some relevance in the field, designating languages that have either had a peripheral presence in the contexts where pidgins and creoles emerged or that came on the scene after pidgin and creole genesis. In either case, it is assumed that the pertinent languages were not in a position to make significant contributions to the grammar

(Kouwenberg & Singler 2008: 11)

Table 1 summarizes the discussion on stratal influences that follows below. A distinction is made between the ‘formative phase’ and the ‘post-formative phase’ in identifying the various strata that have influenced and continue to influence Sranan and Pichi.

Table 1. Stratal influences in the development of Sranan and Krio/Pichi

	Sranan		Krio (1) and Pichi (2)	
	Formative phase	Post-formative phase	Formative phase	Post-formative phase
Lexifier	English	–	English	–
Superstrate	English	Dutch	English	(1) English (2) Spanish
Substrates	Gbe, Kikongo	–	Gbe, Kikongo (Same as Sranan?)	–
Adstrates	e.g., Akan, other African languages	e.g., Sarnami, Javanese	e.g., Temne, Mende, Limba	(1) Yoruba, Gbe, Akan (2) Bubi, other AECs

Table 1 contains two distinctions not explicitly made by Kouwenberg and Singler. It discriminates along a temporal dimension between the ‘formative’ phase (usually referred to as the ‘creolization’ period in the literature) and a more stable ‘post-form-ative’ phase (cf. Corum 2015: 6–16) possibly characterized by more gradual change. This distinction is relevant with respect to the notions of ‘adstrate’ and ‘substrate’.

I distinguish between the two strata in a diachronic sense. The term ‘substrate’ is reserved for the obsolete African languages spoken by the creators of the Caribbean AECs during their formative period. ‘Adstrate’ denotes languages other than the superstrate that are synchronically exerting influence on the creoles in a situation of language maintenance. For example, while Akan was a historical adstrate spoken during the formative phase of Sranan (e.g., Huttar 1981; Borges, Muysken, Villerius & Yakpo 2013:63–66; van den Berg 2015), typologically very different languages spoken on Surinamese soil function as contemporary adstrates (e.g., Sarnami and Surinamese Javanese; see Borges et al. 2013; Yakpo 2015; Yakpo, van den Berg & Borges 2015).

A second distinction is the one between ‘superstrate’ and ‘lexifier’ (e.g., Selbach 2008). In much of the creolist literature the language that provided the creole with the bulk of its lexicon (the lexifier) during the formative phase is also by default assumed to continue exerting influence on the creole as a superstrate, a socially superordinate variety after the ‘formative phase’. However, in a significant number of cases, British colonies changed hands and were ‘transferred’ to other European colonizing nations. After an initial period of British colonization of about thirty years during which Early Sranan crystallized, Suriname became a Dutch colony in 1667, with Dutch being imposed as the superstrate. Likewise, after three decades of British control, the island of Bioko formally became a Spanish colony and Spanish has since then fulfilled the role of a superstrate. Both Sranan and Pichi have undergone post-formative structural and lexical influence from Dutch (in Suriname) and Spanish (in Bioko), rather than English. The distinction between lexifier and superstrate therefore has linguistic ramifications.

The stratal forces that have shaped Pichi are equally complex as those of Sranan. There is evidence for a historical link between Sranan and Krio, even if the exact nature of the relationship is disputed (see Smith 2015a, complementary to earlier work by Hancock (1969, 1971, 1987) and Huber (1996, 1999, 2000)). Pichi is a direct offshoot of Krio (Sierra Leone) (see e.g., Lynn 1984; Martín del Molino 1993; Yakpo 2009a: Chapter 1; Morgades Bessari 2011). We can therefore assume that Sranan and Pichi share their substrates via the proto-language from which they (at least partially) descend. During a second phase in Freetown, the capital of Sierra Leone, in the final decade of the 18th and the first half of the 19th century, various coastal West African languages including Yoruba, Gbe and Akan had an adstratal influence on the Krio language during the ethnogenesis of the Krio people (Hancock 1971; Fyle 1998; Finney 2008; for the historical background, see Wyse 1989). Additional adstratal influence was exerted on Early Krio by Sierra Leonean languages, e.g., Temne, Mende, and Limba (Dixon-Fyle & Cole 2006: 2–3). Krio was exported to Bioko in 1827 and since its implantation on Bioko its descendant Pichi has been in continuous adstratal contact with the Bantu language Bubi next

to superstratal contact with Spanish. Additionally, Pichi was in intense adstratal contact with other West African AECs (chiefly Nigerian Pidgin and Cameroon Pidgin) during the 19th and 20th centuries (Yakpo 2013). I now turn to defining relevant typological aspects of locative constructions in the creoles, African, and European languages.

3. Typology of locative constructions

There are marked typological differences in the way spatial relations are expressed between the African substrates and adstrates of the AECs (chiefly languages from the Volta-Congo linguistic phylum of Africa), and the lexifier language English. The following points summarize these differences (see e.g., Heine, Claudi & Hünnemeyer 1991: 140 ff.; Creissels 2006):

- The use of general locative prepositions in static (Place) *and* dynamic (Goal, Source and Path) spatial descriptions in the African substrates and adstrates. I show later that general locative prepositions are characterized by vague spatial semantics and can be employed to express various types of topological relations. In English there is no general locative preposition. Instead we find a large number of prepositions specialized to the expression of specific topological relations of Place (e.g., ‘at, on, in’) and others that incorporate dynamic senses of Goal, Source and Path (e.g., ‘to, from, through’).
- The use of (pre- or postpositional) relator nouns expressing the Region with general locative prepositions in order to express basic topological relations (e.g., ‘in, on, under’) in African languages. In contrast, English does not employ relator nouns by default, but only when a high degree of specificity is desired, and in non basic relations (e.g., ‘from behind, to the front of’).
- The use of serial verb constructions in descriptions of motion events in African languages. English makes exclusive use of mono-verbal constructions and Goal, Source or Path conflating prepositions.

I use ‘locative construction’ as a cover term for various types of structures describing spatial relations that are static or involve motion. Further, I employ the following terms (cf. e.g., Talmy 1978; Levinson 1992; Ameka & Essegbey 2006): The ‘Figure’ is the entity located or moving, the ‘Ground’ the entity which acts as a spatial reference point for the location or motion of the Figure. I employ the term ‘Place’ when referring to a Ground that is static, hence does not involve motion (‘at the house’). The terms ‘Goal’ and ‘Source’ refer to relations in which the Ground is the end-point (‘to the house’) and the point of origin (‘from the house’) of a motion. These are also referred to as ‘allative’ (Goal) and ‘ablative’

(Source) relations. The term ‘Path’ describes a motion event in which the Ground is a trajectory along which the Figure moves without mention of a Goal or Source (‘through/via the house’).

Individual AECs vary in the degree to which they make use of typologically more ‘African’ versus more English or “European” locative constructions. For example, the Surinamese Creole Ndyuka features Source-oriented constructions like (1), which are isomorphic with corresponding Ewe substrate constructions like (2). The common characteristics of the Ndyuka and Ewe constructions are the use of a general locative preposition (the first element in bold) and the simultaneous presence of a postpositional relator noun expressing the Region (the second element in bold), which functions as the head to the Ground in a possessive construction. I will henceforth refer to these constructions featuring a general locative preposition and a relator noun as ‘extended locative constructions.’

- (1) *a man puu a koosi ne a dosu ini.*
 DEF.SG man remove DEF.SG clothing LOC DEF.SG box inside
 ‘The man took the piece of clothing from the box.’ (Ndyuka)
- (2) *ɲútsù-lá tsó àwù lè àdákà mè.*
 man-DEF take clothing LOC box inside
 ‘The man took a piece of clothing from the box.’ (Ewe)

The degree to which individual AECs lean towards the African or European pole in the types of locative constructions partly reflects the intensity and duration of exposure of the language to (1) African substrates and adstrates, (2) English, or (3) other European languages that replaced English as the superstrate after the formative phase of the creole (e.g., Dutch in Suriname, Spanish in Equatorial Guinea). Hence in the AEC Pichi, we find Source-oriented locative constructions of the European type like (3) featuring Path-conflating prepositions, next to African ones like (4), featuring a general locative preposition with vague spatial semantics and this time a prepositional relator noun:

- (3) *e púl di klós frɔn di béd.*
 3SG.SBJ remove DEF clothing from DEF bed.
 ‘She took the piece of clothing from the bed.’ (Pichi)
- (4) *e púl di tɪn na pantáp di béd.*
 3SG.SBJ remove DEF thing LOC upper.surface DEF bed
 ‘She took the thing from the bed.’ (Pichi)

The homogeneity of the substrates and adstrates led to the retention of African-type locative constructions during the creolization process. Some of these African features have been retained in the AECs of the Caribbean throughout the centuries in

spite of extensive contact with European (colonial) languages. In the African AECs, in turn, these African features have been reinforced through continuing contact with African adstrate languages. However, even in Africa, two centuries of contact with English (and Spanish in the case of Pichi) have led to the transfer of European features to locative constructions in the AECs. Hence an example like (3) tells us that Pichi has probably undergone more contact with European languages (in this case English and Spanish) than Ndyuka (cf. (1)), next to contact with African adstrates, as evidenced by (4). I will also show in Section 5, however, that the picture is more complex. Many African languages also feature prepositional “European”-type locative constructions with basic relations like Goal and Source.

The type of internal variation in the morphosyntax of spatial relations encountered in Pichi, with many idiosyncrasies for each creole, is characteristic of other African and Caribbean AECs as well. In such a way, data from a variety of AECs, as well as African and European languages can be used to disentangle complex contact trajectories in order to account for the structural differentiation of the AECs since they emerged about 350 years ago.

4. Locative constructions in Sranan and Pichi

In the following two sections, I provide an overview of the functions of the general locative preposition and the constructions in which they appear in Sranan and Pichi. Both languages are spoken in linguistic scenarios different from the ones that characterize most other languages in the family. Sranan has not been in direct contact with its lexifier English since the late 17th century, and Pichi has not been in contact with English since the first half of the 19th century. As a result of the lack of contact with English there has been none of the pressure to converge with the superstrate-lexifier English captured by the term “decreolization” (see DeCamp 1971; Bickerton 1973; Rickford 1987). This may be the reason why Sranan and Pichi have preserved typologically African features of locative constructions to a larger extent than many other AECs.

4.1 Sranan (Suriname)

In the Surinamese creole Sranan, the general locative preposition *na* introduces locative constructions of Place, Source, Goal and Path (cf. Essegbey & Bruyn 2002; Yakpo & Bruyn 2015). *Na* ‘LOC’ is one of only a few items in Sranan that function unambiguously as locative prepositions. In contrast to *na*, other locative elements can also function as relator nouns in nominal slots. The Sranan locative preposition

na is employed to mark the Ground in Place relations. Compare the Basic Locative Construction in (5), which is the construction typically engendered by the answer to the question “Where is X?” (Ameka & Levinson 2007):

- (5) *a batra de na a tafra.*
 DEF.SG bottle BE.AT LOC DEF.SG table
 ‘The bottle is (standing) on the table.’ (Sranan)

The preposition *na* also marks the Ground in descriptions of motion events. For some speakers of Sranan, *na* is obligatory in Goal-oriented (6) Source-oriented (7) and Path-oriented (8) locative constructions like the following three.

- (6) *a man poti a batra na a tafra.*
 DEF.SG man put DEF.SG bottle LOC DEF.SG table
 ‘The man put the bottle on the table.’ (Sranan)

- (7) *den breki lolo komoto na a tafra*
 DEF.PL can roll exit LOC DEF.SG table
 ‘The cans rolled off the table.’ (Sranan)

- (8) *mi boro na a busi kon na oso.*
 1SG pierce LOC DEF.SG forest come LOC house
 ‘I (took a short-)cut through the forest to the house.’
 (Sranan; Yakpo & Bruyn 2015: 139)

In many instances, a Sranan speaker will wish to render the spatial description more specific by additionally using a relator noun that specifies the Region, i.e., the space attached to the Ground in which the Figure is located. In contemporary Sranan, this Region-denoting locative noun is preposed to the Ground-denoting noun; compare *tapu* ‘upper surface’ in Example (9). Note the co-occurrence and adjacency of the locative preposition and the relator noun. The Region and Ground nouns in constructions (9) and (10) are best seen as being in a possessive relation in which the relator noun *tapu* functions as the head and possessed noun, and the Ground as the dependent and possessor noun (cf. Yakpo & Bruyn 2015: 161–165, for the somewhat complicated variation in constituent order in these possessive constructions):

- (9) *a man poti a batra na tapu a tafra.*
 DEF.SG man put DEF.SG bottle LOC upper.surface DEF.SG table
 ‘The man put the bottle on (top of) the table.’ (Sranan)

One also hears locative constructions like (10), in which the relator noun is found in a postpositional slot following the Ground. Postpositional structures like (10) are exceedingly rare in contemporary speech but they appear to have been as common as prepositional structures (9) until well into the 20th century.

- (10) *a man poti a batra na a tafra tapu.*
 DEF.SG man put DEF.SG bottle LOC DEF.SG table upper.surface
 ‘The man put the bottle on (top of) the table.’ (Sranan)

Even though both post- and pre-positional structures have been attested in Sranan since the 18th century (Essegbey & Bruyn 2002; Yakpo & Bruyn 2015: 143), the overwhelming tendency towards prepositional structures in contemporary Sranan is best seen as the result of convergence towards the superstrate Dutch. In Dutch, basic topological relations like superior (‘on’), interior (‘in’), and inferior location (‘under’) are expressed through prepositions; compare (11) with (9):

- (11) *een vrouw legt een wijn-fles op een tafel.*
 a woman puts a wine-bottle on a bottle
 ‘A woman is putting a wine bottle on a table.’ (Dutch)

Locative constructions are undergoing further change in contemporary Sranan. There is a synchronic variation between structures like (9) and those found in the following two examples. So far we have only seen elements like *ini*, *tapu* and *ondro* being used as relator nouns denoting a Region in combination with the general locative preposition *na*, be they used pre- or postpositionally. In Examples (12)–(14) *ini* and *tapu* are arguably not employed as relator nouns at all. The general locative preposition is absent in these examples, and the locative elements that I have so far defined as relator nouns now appear in a prepositional slot reserved for “true” prepositions like the general locative preposition. The locative elements in these examples function just like a specific locative preposition of the Dutch (and ‘European’) type, which is why I now gloss them as ‘in’ and ‘on’ respectively. I henceforth refer to constructions like (12) and (13), which feature only one locative element (a preposition) as ‘simple locative constructions’ in analogy with the ‘extended locative constructions’ in examples (1) and (2).

- (12) *a de bezig ini a kukru e bori wan sani.*
 3SG be.at busy in DEF.SG kitchen IPFV cook INDF thing
 ‘She’s (busy) cooking something in the kitchen.’ (Sranan)
- (13) *wan yonguman e skriƒi wan sani tapu wan white board.*
 INDF youngster IPFV write INDF thing on INDF white board
 ‘A youngster is writing something on a white board.’ (Sranan)

The behaviour of *ini* and *tapu* in the examples above mirrors that of the corresponding Dutch prepositions *in* ‘in’ and *op* ‘on’, compare (11) and (14):

- (14) *er wordt gekookt in de keuken.*
 there is cooked in the kitchen
 ‘Someone is cooking in the kitchen.’ (Dutch)

Essegbey and Bruyn (2002) and Yakpo and Bruyn (2015) hold Dutch influence responsible for the changes witnessed in Sranan locative constructions. These changes represent quite a fundamental typological shift from African-style multiconstituent structures involving general locative prepositions and relator nouns to European-style structures involving Goal/Source/Path-conflating prepositions and no separate specification of the Region.

I will argue in Section 5, that the use of the general locative preposition to mark all types of Grounds is a feature that could have been transferred from Kikongo, an important substrate of Sranan, and that uniform marking of Grounds is found throughout the Benue-Congo subgrouping of Volta-Congo. However, the use of a preposition *rather than none* in Sranan could also be at least partially influenced by the superstrate Dutch. For in Sranan, contrary to Pichi (cf. Examples (22)–(24)), zero-marked Place, Goal and Source Grounds do not normally occur. In Dutch too, zero-marked Grounds do not normally occur, compare the following Goal- and Place-oriented constructions in (15) and (16):

- (15) *ik bracht het kind *(naar) het ziekenhuis.*
 I brought the child to the hospital.
 ‘I brought the child to the hospital’ (Dutch)
- (16) *ze zijn *(in) Amsterdam.*
 They are in Amsterdam.
 ‘They are in Amsterdam.’ (Dutch)

That said, Sranan still features various types of locative constructions that involve serial verb constructions whether they include post or prepositional relator nouns or not. These un-English constructions broadly follow African substrate patterns, even if there are minor divergences in the constitution of serial verb constructions in Sranan and a substrate language like Fon. I now move on to describing the functions and distribution of the general locative preposition in Pichi.

4.2 Pichi (Equatorial Guinea)

The general locative preposition *na* is also found in the African AECs, namely in Krio and its direct descendants Aku (The Gambia) and Pichi (Equatorial Guinea). The preposition is also found in the two African AECs with a substantial Krio lineage, namely Nigerian Pidgin and Cameroon Pidgin. In this section, I will focus on the description of the functions of the general locative preposition and its use in locative constructions in Pichi.

The element *na* can mark Place, Goal, Source and Path/Medium Grounds in Pichi. Pichi makes use of (a) a prepositional strategy involving the general locative

preposition, (b) a prepositional strategy involving path-incorporating prepositions like *to* ‘to’ and *frɔn* ‘from’, and (c) a zero strategy, in which the Ground remains unmarked. The preposition *na* can mark Place (17), Goal (18), Source (19) and Path (20) Grounds in Pichi, as in the following four examples:

- (17) *di teléfono dé na tébul.*²
 DEF telephone BE.AT LOC table
 ‘The phone is on the table.’ (Pichi)
- (18) *a fling=an na solwatá.*
 1SG.SBJ fling=3SG.OBJ LOC sea
 ‘I flung it into the sea.’
- (19) *a de kɔmót na tón nów nów.*
 1SG.SBJ IPFV exit LOC town now REP
 ‘I’m coming from town right now.’ (Pichi)
- (20) *pás na mákit mól!*
 pass LOC market more
 ‘Pass by the market again!’ (Pichi)

Constructions like those found in (17)–(20) can be extended via the use of locative (relator) nouns that specify the Region or Search Domain, as in (21):

- (21) *e púl=an na pantáp di béd.*
 3SG.SBJ remove=3SG.OBJ LOC top DEF bed
 ‘She took him from the bed.’ (Pichi)

So far, Pichi locative construction mirror the corresponding Sranan ones (cf. (5)–(9)). However, beyond this point, significant differences appear between the two languages. For one, extended locative constructions involving the simultaneous use of *na* and a locative noun as in (21) are not very common in my Pichi corpus. When they do occur in the data, they are limited to Source-oriented constructions. Even with Source-oriented constructions, there are restrictions on the co-occurrence of *na* and individual locative nouns, and these appear to vary from speaker to speaker (see Yakpo 2009a: 366). These bipartite extended constructions are therefore anything but generalised and speakers seem to have a preference for other structures.

2. Pichi has a two-tone system. Low-toned syllables remain unmarked and high-toned syllables are marked with an acute accent. Spanish words in Pichi examples are written following Spanish orthographic conventions. In the transcription of other languages in this chapter, I follow the conventions of their respective sources. Tone-marking conventions are contained in the list of abbreviations.

Secondly, the preposition *na* is not obligatory in spatial descriptions in the first place. Even the events in (17)–(20), which do not involve additional specification by means of locative nouns, can all be expressed without the use of the general locative preposition. There are two reasons for this. One is that Pichi also allows many types of Grounds to remain. Examples follow with unmarked Goal (22) and Source (23) Grounds. Unmarked Place Grounds are most likely to involve a named Place, as in (24):

- (22) *a k  r di pik  n hospital.*
 1SG.SBJ carry/take DEF child hospital
 ‘I took the child to hospital.’ (Pichi)
- (23) *e f  d  n di b  d.*
 3SG.SBJ fall DEF bed
 ‘He fell off the bed.’ (Pichi)
- (24) *d  n d   Lub  .*
 3PL BE.AT PLACE
 ‘They are in [the town called] Luba.’ (Pichi)

The other reason for the absence of *na* in constructions like the one above is that Pichi has two path-incorporating prepositions that can substitute for *na*. These are the Goal-oriented preposition *to* ‘to’ and the Source-oriented preposition *fr  n* ‘from’. Compare the uses of these two prepositions in (25) and (26) respectively.

- (25) *w   d  n bin k  r=an g   to d  kta (...)*
 SUB 3PL PST carry=3SG.OBJ go to doctor
 ‘When they had taken her to a doctor (...)’ (Pichi)
- (26) *di bol   f  d  n fr  n di t  bul.*
 DEF pen fall from DEF table
 ‘The pen fell from the table.’ (Pichi)

The prepositional uses of *to* and *fr  n* in the two examples above are no different from those of their corresponding English source forms. Both are portmanteau elements that incorporate Path. The similarity between English and Pichi ends, however, with the possibility of combining a directional preposition like *fr  n* with a locative noun in an extended (bipartite) locative construction like (27). Once more, such extended constructions are only attested for describing Source-oriented motion events:

- (27) *di pik  n f  d  n fr  n   p di st  k.*
 DEF child fall from upper.side DEF tree
 ‘The child fell from (up in) the tree.’ (Pichi)

Finally, Pichi speakers may avail themselves of directional serial verb constructions (SVCs) in order to render descriptions of Goal- and Source-oriented motion events. Grounds are marked in exactly the same ways in directional SVCs as they are in non-SVCs, hence the three Ground-marking options encountered above. In (28), the Source is marked via the general locative preposition *na*, in (25), the Goal is marked by the directional preposition *tò* and in (29), the Goal remains unmarked:

- (28) *e kán rón kómót na kóntri.*
 3SG.SBJ PFV run exit LOC country
 ‘She fled from (her) hometown.’ (Pichi)
- (29) *yu nó kér=an gó hospital?*
 2SG NEG carry/take=3SG.OBJ go hospital
 ‘You didn’t take him to the hospital?’ (Pichi)

The facts presented in this section allow me conclude that there are parallels and differences in the distribution of *na* between Sranan and Pichi. Pichi allows the illustration of the whole gamut of typological possibilities in the grammar of space that characterise AECs on both sides of the Atlantic. The surprising amount of variation in Pichi is probably a consequence of the contact profile of this language, which was in intense contact with Nigerian Pidgin, Cameroon Pidgin, Ghanaian Pidgin English and Kru Pidgin English in the course of the 20th century (see Lipski 1992), next to extensive contact with its superstrate Spanish in the present (Yakpo 2009b).

There are two principal areas of difference between Pichi and Sranan. One is that in Sranan all Grounds can be marked by the general locative preposition *na* in simple locative constructions. In Pichi, there are two more strategies of Ground-marking in addition to marking by *na*, namely the zero strategy and directional preposition strategy. A second difference is that in Sranan the locative preposition is in principle also obligatory in extended locative constructions featuring Region-denoting locative nouns. I say “in principle” because I have also argued that contact with Dutch is eroding the canonical use of the general locative preposition *na* in Sranan extended locative constructions. In Pichi, the simultaneous use of *na* and a locative noun is only somewhat common in Source-oriented constructions.

Language contact may also have been responsible for narrowing the distribution of the general locative preposition *na* in Pichi’s ancestor Krio in earlier times, in this case through superstratal influence from English rather than Dutch, and contact with Spanish may be promoting this tendency in contemporary Pichi. In both Spanish and English, as in Dutch, there are, of course, no general locative prepositions and the description of motion events involves the use of portmanteau prepositions. Compare the Spanish Source-oriented construction below with its Pichi equivalent in (26), as well as the use of ‘from’ in the English translation of (26):

- (30) *el bolí se cayó de la meza.*
the pen PRON fell from the table
'The pen fell from the table.' (Spanish)

I will now go on to compare Sranan and Pichi locative constructions with their counterparts in a cross-section of related and unrelated African languages.

5. Locative constructions in West and Central Africa

In this section, I will provide evidence for the existence across a broad swath of West and Central Africa of general locative prepositions that are functionally equivalent with those found in Sranan and Pichi. Secondly, I will show that these African languages also feature extended locative constructions that make use of locative nouns. I conclude that the uniformity of the substrate (or adstrate) played a decisive role in consolidating these structures in the AECs. Two (groups of) Volta-Congo languages are of particular relevance for the ensuing discussion. The Gbe languages and particularly Fon (spoken in Benin), as well as the cluster of closely related lects regrouped under the name Kikongo (spoken in DRC, Congo, Angola) formed the most important (group of) substrate language(s) of the Surinamese AECs (see e.g., Huttar 1981, 1986, Arends 1996; Migge 2003; Huttar, Essegbey & Ameka 2007; Winford & Migge 2007; Smith 2015b). Parallels in morphosyntax, lexis, and phonology between the Gbe and Central African Bantu languages and the Surinamese creoles have been described in great detail in a recent volume by Muysken & Smith (2015). As discussed in Section 2, these groups of languages can be argued to have had an important substratal input into Krio and Pichi as well.

General locative prepositions used for static and motion events, as well as their functional equivalents (i.e., general locative affixes or clitics), and extended locative constructions are found throughout the Volta-Congo family, thus including all principal substrate and African adstrate languages of Sranan and Pichi. While general locative prepositions are a genealogical trait in Volta-Congo, this type of functional element and the corresponding use of extended locative constructions is also encountered in the entire geographical region of West Africa, encompassing non-Volta-Congo groupings such as Mande (e.g., Bambara, Dombrowsky-Hahn 2012), Chadic (e.g., Hausa, cf. Newman 2000: 466; Pawlak 2005) and Nilo-Saharan (e.g., Fur, cf. Waag 2007). The existence of such prepositions and the constructions they appear in should therefore also both be seen as an areal trait. In order to show the typological similarities of locative constructions in the Volta-Congo

family, I will present data from the cross-section of subgroupings and individual languages listed here:

- Benue-Congo, Bantu (Kikongo, Myènè, Eton)
- Bantu-based Creole (Lingala)
- Benue-Congo, Delta Edoid (Degema)
- Kwa, Gbe, (Ewe, Gen, Fon)

These languages do not, of course, constitute a large representative sample of potential substrate and adstrate languages of Sranan and Pichi. The data from these languages however shows that the structures we are interested in are sufficiently widespread in the genealogical (sub)groupings whose speakers created the proto-languages of Sranan and Pichi. Two characteristics make general locative prepositions of the Volta-Conga family typologically noteworthy. Firstly, they function as grammatical markers of locative constructions, and therefore have little semantic content. This means that they may mark the position of a Figure in a variety of topological relations (e.g., superior, lateral, containment), as shown for Pichi, for example, in (17)–(20). A second aspect related to the semantic indeterminacy of general locative prepositions is their occurrence both in static relations (where the Ground is a Place) as well as in motion events (where the Ground is a Goal, Source or Path/Medium).

Within the Volta-Congo grouping we find general locative prepositions in the two major substrates of Sranan, namely the Kikongo cluster (Benue-Congo, Narrow Bantu; spoken in Angola, DRC, Congo) and the Gbe cluster (Kwa; Ghana, Togo, Benin). Secondly, we find general locative prepositions occurring throughout all of Benue-Congo from Angola to Nigeria. The following three Kikongo sentences exemplify the use of the general locative element *ku* (a noun class prefix in Kikongo) with a Place (31), a Goal (32) and a Source (33) role respectively (Examples cited in Yakpo & Bruyn 2015: 169):

- (31) *ku-Matadi tuamonana* (...)

LOC-PLACE see:RECP:PST:1PL

'In Matadi we saw each other (...)' (Kikongo; Söderberg & Widman 1966: 57)
- (32) *ku-Kisantu kayele.*

LOC-PLACE go:PST.HST:3SG

'He went to Kisantu.' (Kikongo; Anonymous 1964: 37)
- (33) *ntama yâkatuka ku-bwâla dyâme.*

since.long leave:PST:1SG LOC-village 1SG.POSS

'It's a long time since I left my village.' (Kikongo; Déreau 1955: 138)

A general locative marker is also encountered in other Bantu languages of the Gabon-Congo-Angola region from which European slave trading nations deported Africans to the Caribbean. In Myènè (Benue-Congo, Narrow Bantu; Gabon), the locative element $\gamma(\acute{o})$ marks Grounds with a Place role in static relations and Grounds in motion events; compare (34) and (35). The second example is also interesting because it features an SVC-like use of the verb *pílà* ‘(come)from’ as a Path-denoting locative element in addition to the general locative preposition. I will come back to this when discussing locative constructions in the Gbe languages below.

- (34) γ -*ísèkyè*
 LOC+PLACE
 ‘at Isèkyè’ (Myènè; Ambouroué 2007: 269)
- (35) *àdýyóyó* γ é *pílà* γ ó *nōmbà*.
 hear:PST:3SG 3SG.OBJ (come)from LOC mountain
 ‘He heard him from the mountain.’ (Myènè; Ambouroué 2007: 157)

General locative prepositions are again present as we move farther north from Kikongo-speaking and adjoining areas. In the north-western Bantu language Eton (Benue-Congo, Narrow Bantu; Cameroon), the general locative preposition *à* ‘LOC’ not only marks Grounds with a Place role. It is also employed to mark Source (36), Goal (37), and Path/Medium (38) senses:

- (36) *à-kódgí* *múná* *á* *méndím*.
 3SG-save:PST child LOC water
 ‘He saved the child from the water.’ (Eton; van de Velde 2008: 250)
- (37) *à-ké* *á* *lépàn*.
 3SG-go:PST LOC forest
 ‘He went into the forest.’ (Eton; van de Velde 2008: 194)
- (38) *m-ùhá* *á-bé* *déñbégàná* *mă* *à* *éjóh*.
 child 3SG-IPFV watch:INF 1SG.OBJ LOC hole
 ‘The child watched me through the (key) hole.’ (Eton; van de Velde 2008: 194)

A general locative preposition is also found in the Bantu-based creole language Lingala (DRC and Congo). In the following three examples, we find the general locative preposition *na* ‘LOC’ marking a Place (39), a Goal (40) and a Source (41). The use of the locative preposition with a named place in (40) underlines the wide distribution of the preposition in Lingala, where it introduces a similarly wide range of locative adjuncts as in Sranan and Pichi:

- (39) *ndeke* *ebakémi* *na* *etápe*.
 bird perch:PFV:3SG LOC branch
 ‘The bird is perching on the branch.’ (Lingala; van Everbroecke 1985: 145)

- (40) *akozónɡa na Kamina.*
 return:FUT:3SG LOC PLACE
 ‘He will return to Kamina.’ (Lingala; Moiso 1983: 136)
- (41) *aúti na zám̄ba.*
 come.out:PFV:3SG LOC forest
 ‘He came from the forest.’ (Lingala; van Everbroecke 1985: 145)

In all of the languages presented so far, more specific location readings are expressed through the use of relator nouns, thus rendering the same kind of extended locative construction that we have seen in Sranan and Pichi. In the following example from Kikongo, we find the general locative prefix *ku-* prefixed to the relator noun *ntundu* ‘top’ indicating the Region. The entire expression is linked to the Ground *meza* ‘table’ via the possessive linker *a* ‘poss’.

- (42) *e mpu ame iina ku-ntundu a meza.*
 DEF hat 1SG.POSS BE.AT LOC-top POSS table
 ‘My hat is (lying) on the table.’
 (Kikongo; Tavares 1915: 80, cited in Yakpo & Bruyn 2015: 162)

We find the same structure in Eton, with the relator noun expressing the Region (the body-part-derived noun *zúđ* ‘buttocks, back’) being linked to the following Ground (*ndá* ‘house’) in a possessive relation via a possessive linker *i* ‘poss’:

- (43) *ké m-àyi tébê á zúđ i=ndá á vâ.*
 DP 1SG-want:PRS stand:INF LOC buttocks POSS=house LOC there
 ‘I will certainly go and stand there at the back of the house.’
 (Eton; van de Velde 2008: 197)

Close parallels in the functions of the general locative preposition are found further afield in higher branches of the Benue-Congo family, as in the Delta Edoid language Degema (Nigeria). In (44), the general locative marker *m(ú)* marks a Place, in (45) a Goal and in (46) a Source:

- (44) *m̄i-món óyi m-ívóm úvay yọ*
 1SG-see 3SG.OBJ LOC-inside house DEF
 ‘I saw him in the house’ (Degema; Kari 1997: 61)
- (45) *ọ-tá-té m-úvay.*
 3SG-go-PRF LOC-house
 ‘He has gone home.’ (Degema; Kari 1997: 61)
- (46) (...) *ẹnú Degema ẹ-yókúró-n mú Bini (...)*
 people Degema 3PL-leave-FACT LOC PLACE
 ‘(...) the Degema people left Bini (...)’ (Degema; Kari 1997: 62)

At the same time, the sources suggest that Degema allows zero-marking of Grounds as also encountered in Pichi above. In the following example, the Source *Àkinima* (a place name) is left unmarked. The absence of the locative preposition *mú* in this example cannot be due to its co-occurrence with the named place *Àkinima* since *mú* does cooccur with the Source and named place *Bini* in Example (46).

- (47) *Uḍekaama* *ẹ-véké-n* *Àkinima (...)*
 NAME 3PL-leave-FACT PLACE
 ‘The Uḍekaama group left Àkinima (...)’ (Degema; Kari 1997:63)

I now turn to the Gbe languages of the Kwa group of Volta-Congo. There are many parallels with the Benue-Congo languages covered above, but also some differences. In all Gbe languages, a general locative preposition marks Grounds in descriptions of both static *and* motion events. However, while Place and Source can be marked uniformly (i.e., by means of the general locative preposition), Goal is always marked differently (i.e., it remains unmarked or is marked by means of a directional preposition). The Kwa languages in general appear to favour more diverse Ground-marking options than the Benue-Congo languages. In the following, I use examples from the Gbe languages Fon (Benin), Gen (Togo) and Ewe (Ghana, Togo). There are no significant differences in this respect between these three languages and across the Gbe languages in general. Compare the following examples from Ewe involving Place and Source Grounds respectively, both of which are marked by means of the general locative preposition *lè* ‘LOC’:

- (48) *mè-kpó-è* *lè* *tsilèfé*
 1SG.SBJ-see-3SG.OBJ LOC bathroom
 ‘I saw her in the bathroom.’ (Ewe)
- (49) *lè* *yèmáyì-á*, *nyè* *há* *mè-dò* *lè* *sùkú* *xóxó*.
 LOC that.time-DEF 1SG.EMP too 1SG.SBJ-exit LOC school already
 ‘At that time, I too had already left school.’ (Ewe)

Contrast the two examples above with the Goal-oriented locative constructions in the following two examples. Sentence (50) from the Gbe language Gen (Togo) features a bare (unmarked) Goal *kǎjí* ‘hospital’. Sentence (51) shows the alternative way of expressing Goal in Gbe: The directional allative preposition *dé* ‘ALL’ is recruited to mark the Goal *Gé* ‘Accra’:

- (50) *wò* *yì* *kǎjí* *à?*
 2SG go hospital Q
 ‘Did you go to the hospital?’ (Gen)

- (51) *m-á* *dò-è* *dé* *Gé*
 1SG.SBJ-POT send-3SG.OBJ ALL Accra
 ‘I’ll send it to Accra.’ (Ewe)

The Gbe languages also alternatively feature the use of directional prepositions in Source-oriented locative constructions. Instead of employing the general locative preposition *lè* as in (49), speakers can opt for using a directional ablative preposition, as in the following two examples featuring *tsó* ‘from’ (Ewe) and *sín* ‘from’ (Fon) respectively. The presence of the ablative preposition with its directional semantics emphasizes the dynamic character of the event, in contrast to constructions featuring the general locative preposition, with its static semantics:

- (52) *é-tsó* *gà* *tsó* *é-fé* *àdákà mè.*
 3SG-take money from 3SG-POSS box inside
 ‘He took money out of his box.’ (Ewe)
- (53) *nì* *só* *àkwé* *sín* *gbàví* *ò* *mè.*
 1SG take money from box DEF inside
 ‘I took money out of the box.’ (Fon; Höftmann 1993: 140)

In sum, the Gbe languages employ a general locative preposition in static and in motion events, albeit limited to Source-oriented constructions with the latter type of event. The Gbe pattern of Ground marking, in which Place and Goal are marked in the same way and Source is marked in a different way, can be represented schematically as Place/Goal, Source. The Benue-Congo languages are characterised by a unitary pattern, in which all three types of Ground *can* be marked in the same way, hence Place/Goal/Source. This is not to say that all languages covered in this section cannot and do not make use of other strategies, these being either prepositional or being characterized by the absence of marking altogether for any of the three types of Ground.

6. Stratal contact as a source of unity and diversity

In the preceding sections, I presented data from two AECs and from a variety of West and Central African languages. The aim was to show the functional similarity of the general locative preposition and the constructions they occur in across these languages. I have argued that the similarities between the African languages are both genetic and areal in kind. The homogeneous nature of the input from African substrates and adstrates into Sranan and Pichi led to the transfer and maintenance of typologically African locative constructions in these two languages. There is a conspicuous degree of unity that characterizes Sranan and Pichi locative

constructions: Both languages employ a general locative preposition in static *and* dynamic spatial descriptions alike. Both also make use of (pre- or postpositional) relator nouns in order to express basic topological relations like *on*, *in* and *under*. These structures could be maintained after being inherited in Sranan and Pichi from a putative common proto-language because both languages were cut off from English early enough in their history to prevent convergence with English in the grammar of space.

At the same time, a difference in the length of contact with English between Sranan and Pichi may be the cause of diversity in locative constructions in these two languages. The various AECs that merged to become Krio in Sierra Leone and then split off to become Pichi in Equatorial Guinea were in contact with English for 150 years longer than Sranan, during which time English served as a lexifier-superstrate. Thus there is evidence for *some* degree of convergence with English in Pichi that we do not find in Sranan. Longer exposure to English is probably the reason why we find prepositional relator nouns in Pichi, while Sranan featured pre- and postpositional relator nouns until very recently. Another possible carry-over from English due to a longer period of contact is the existence of the English-like Path incorporating prepositions *to* 'to' and *frɔn* 'from'. There are no reflexes of these two Path-incorporating prepositions in Sranan. At the same time, the data presented in Section 5 shows that the functions of the locative element *frɔn* in Pichi can also be accounted for by convergence of African and English patterns; Source-oriented prepositions are also attested in Volta-Congo and beyond as an areal phenomenon.

A second source of differentiation between Sranan and Pichi is contact with different types of (non-lexifier) superstrates, and in differing degrees of intensity. Dutch has been a non-lexifier superstrate to Sranan for three hundred and fifty years and Sranan has been undergoing particularly intense contact with Dutch since the 20th century (van den Berg 2013; Yakpo et al. 2015). I showed that contact with Dutch has led to the demise of postpositional structures in contemporary Sranan, erstwhile relator nouns have been reanalysed as Dutch-style prepositions. Pichi contact with Spanish began much later than that of Sranan with Dutch, namely in the mid 19th century, when Equatorial Guinea formally became a Spanish colony. Contact with Spanish only picked up in intensity when larger sections of the population of Bioko began to acquire competence in Spanish in the course of the 20th century. The system-wide effects of non-lexifier superstrate contact with Spanish on Pichi therefore only began to make themselves felt much later and have not (yet) manifested themselves on the same scale as those of Dutch on Sranan (cf. Yakpo 2009b). It is however possible that the use of prepositions like *to* and *frɔn* and the narrower distribution of the general locative preposition in Pichi than in Sranan is also being influenced by Spanish. Spanish, like Dutch and English, has no general locative preposition, and makes use of Path-incorporating prepositions as well.

Looking at the functions of the general locative preposition in Sranan and Pichi can also provide some additional insights on the differing contact trajectories of these two English-lexifier creoles. In contemporary Sranan, the general locative preposition may be used before Place, Goal and Source Grounds alike, even if it is no longer canonical due to contact with Dutch. This contrasts with Pichi, where the use of the general locative preposition varies with other, equally common options of marking a Ground, e.g., zero marking and the use of Path-incorporating prepositions. The peculiar distribution of the locative preposition *na* in Sranan can be explained in various ways. First, the canonical appearance of the locative preposition may be seen as a consequence of ‘simplification’ during creolization, i.e., a regularization of the paradigm. This has been argued by Essegbey (2005: 256). Secondly, the occurrence of *na* in Place, Goal and Source-oriented locative constructions in Sranan can be seen as a consequence of substratal influence from Kikongo. We saw in the preceding section that the Bantu languages, and in fact, the languages of the Benue-Congo phylum in general, are characterized by a uniform marking pattern of Place/Goal/Source involving the generalized use of locative prepositions in descriptions of static and dynamic location events. Thirdly, the canonical use of the general locative preposition in Sranan may be seen as a consequence of superstratal influence from Dutch. Although Dutch does not have the equivalent of the Sranan and African general locative preposition, the use of *a* preposition rather than *none* (as is possible in Pichi and many African substrate and adstrate languages) is obligatory in Dutch. However, there is no need to appeal to single sources (i.e., Kikongo vs Gbe vs Dutch) or a single mechanism (i.e., ‘simplification’ vs ‘transfer’) for explaining the emergence of canonical marking of locatives via *na* in Sranan. An equally appealing possibility is that of a multiple source origin of the functions of the locative preposition in Sranan, suggesting convergence between the various patterns referred to above.

In sum, the homogeneity of the substrates and adstrates of Pichi and Sranan led to both languages sharing the same basic template for describing spatial relations. Both creoles make use of a general locative preposition and relator nouns, all of which do not by themselves contribute motion semantics to the spatial description. Assuming that Sranan and Pichi indeed have a shared origin, and could have started out with very similar or identical locative constructions, the divergences in the grammar of space that we today observe are the result of a process of differentiation caused by contact with different strata in the past few centuries since the emergence of these two creole languages during the European slave trade.

7. Concluding remarks

John Singler first formulated the principle of homogeneity of *the* substrate with a literal understanding in mind: the more a specific creole or pidgin has been influenced by a *specific* substrate language, rather than multiple, and typologically diverse ones, the more likely it is that the creole or pidgin will have substrate features in its grammar (Singler 1983: 75). In a later article (1988), John Singler extends the principle of homogeneity to include the notion of typological likeness and distinguishes it from the case of specific substrate influence:

Generally, this evidence has been of one of two types. In one type, perhaps best illustrated by Alleyne (1980), the sheer weight of the parallels between West African languages and Atlantic creoles comes to serve as evidence of substratal influence. In the second type, illustrated by Smith et al. (Smith, Robertson & Williamson 1987), particular phenomena in a specific creole, Berbice Dutch, are linked to the presence of those phenomena in a specific substrate language, Ijò, and the strong historical ties between the two are demonstrated.

(Singler 1988: 28)

In this chapter, I have concentrated on the first type of evidence referred to above. I have shown that the principle of homogeneity is valid with respect to the typological similarity of a broad range of genealogically related and unrelated substrates and adstrates. This is so because the description of topological relations relies on similar semantic foundations and is achieved by very similar formal means in languages from Ghana to Angola and beyond in a genealogical and linguistic area encompassing much of West and Central Africa.

References

- Alleyne, M. 1980. *Comparative Afro-American: An historical-comparative study of English-based Afro-American dialects of the New World*. Ann Arbor MI: Karoma.
- Ambourou, O. 2007. *Éléments de description de l'orungu, langue bantu du Gabon (B11b)*. PhD dissertation, Université Libre de Bruxelles.
- Ameka, F. & Essegbey, J. 2006. Elements of the grammar of space in Ewe. In *Grammars of space: Explorations in Cognitive Diversity*, Vol. 6, S. Levinson & D. Wilkins (eds), 359–399. Cambridge: CUP. doi:10.1017/CBO9780511486753.011
- Ameka, F. & Levinson, S. 2007. Introduction: The typology and semantics of locative predicates: Posturals, positionals, and other beasts. *Linguistics* 45(5–6): 847–871.
- Anonymous. 1964. *Leçons de kikongo par des bakongo*. Louvain: Eegenhoven.
- Arends, J. 1996. Demographic factors in the formation of Sranan. In *The Early Stages of Creolization* [Creole Language Library 13], J. Arends (ed.), 233–285. Amsterdam: John Benjamins. doi:10.1075/cll.13.11are

- van den Berg, M. 2013. Talen in contact in Suriname en Nederland: Eenheid in Verscheidenheid? *OSO, Tijdschrift voor Surinamistiek en het Caraïbisch gebied* 32(1): 38–65.
- van den Berg, M. 2015. Morphology, cross-linguistic effects, and creole formation. In *Surviving the Middle Passage: The West Africa-Surinam Sprachbund*, P. Muysken & N. Smith (eds), 207–239. Berlin: Mouton de Gruyter.
- Bickerton, D. 1973. On the nature of a creole continuum. *Language* 49(3): 640–669.
doi:10.2307/412355
- Borges, R., Muysken, P., Villerius, S. & Yakpo, K. 2013. Tense, mood, and aspect in Suriname. In *The Life of Language: Dynamics of Language Contact in Suriname*, R. Borges (ed.), 115–162. Utrecht: LOT.
- Corum, M. 2015. *Substrate and Adstrate: The Origins of Spatial Semantics in West African Pidgincreoles*. Berlin: Mouton de Gruyter. doi:10.1515/9781614514626
- Creissels, D. 2006. Encoding the distinction between location, source and destination. *Space in Languages: Linguistic Systems and Cognitive Categories* 66: 19–28. doi:10.1075/tsl.66.03cre
- DeCamp, D. 1971. Toward a generative analysis of the post-creole continuum. In *Pidginization and Creolization of Languages*, D. Hymes (ed.), 349–370. Cambridge: CUP.
- Déreau, L. 1955. *Cours de kikongo*. Namur, Belgium: Ad Wesmael-Charlier. <www.nekongo.org/akongo/docs/langue_culture/cours_kikongo_dereau.pdf>
- Dixon-Fyle, M. & Cole, G. 2006. Introduction. In *New Perspectives on the Sierra Leone Krio*, M. Dixon-Fyle & G. Cole (eds), 1–24. Bruxelles: Peter Lang.
- Dombrowsky-Hahn, K. 2012. Motion events in Bambara (Mande). *Journal of African Languages and Linguistics* 33(1): 37–65. doi:10.1515/jall-2012-0002
- Essegbey, J. 2005. The “basic locative construction” in Gbe languages and Surinamese creoles. *Journal of Pidgin and Creole Languages* 20(2): 229–267. doi:10.1075/jpcl.20.2.02ess
- Essegbey, J. & Bruyn, A. 2002. *Moving into and out of Sranantongo: Multiple Effects of Contact*. Leuven: Catholic University of Leuven.
- van Everbroecke, R. 1985. *Maloba ma lokóta lingála / Dictionnaire lingála: lingála-français, français-lingála*. Kinshasa: Editions Epiphanie.
- Finney, M. 2008. Universal and substrate influence on the phonotactics and syllable structure of Krio. In *Synchronic and Diachronic Perspectives on Contact Languages* [Creole Language Library 32], M. Huber & V. Velupillai (eds), 23–42. Amsterdam: John Benjamins.
- Fyle, M. 1998. *Yoruba Loan Words in Krio: A Study of Language and Culture Change*. MA thesis, Ohio State University.
- Hancock, I. 1969. A provisional comparison of the English-based Atlantic creoles. *African Language Review* 8: 7–72.
- Hancock, I. 1971. *A Study of the Sources and Development of the Lexicon of Sierra Leone Krio*. PhD dissertation, University of London.
- Hancock, I. 1987. A preliminary classification of Anglophone Atlantic creoles, with syntactic data from thirty-three representative dialects. In *Pidgin and Creole Languages: Essays in Memory of John Reinecke*, G. Gilbert (ed.), 264–333. Honolulu HI: University of Hawai'i Press.
- Heine, B., Claudi, U. & Hünnemeyer, F. 1991. *Grammaticalization: A Conceptual Framework*. Chicago IL: Chicago University Press.
- Huber, M. 1996. Ghanaian Pidgin English: A preliminary consideration of its position among West African Pidgin Englishes. In *Matériaux pour l'étude des classes grammaticales dans les langues créoles*, D. Véronique (ed.), 285–303. Aix-en-Provence: Publications de l'Université de Provence.

- Huber, M. 1999. *Ghanaian Pidgin English in its West African Context: A Sociohistorical and Structural Analysis* [Varieties of English around the World G24]. Amsterdam: John Benjamins. doi:10.1075/veaw.g24
- Huber, M. 2000. Restructuring in vitro? Evidence from early Krio. In *Degrees of Restructuring in Creole Languages* [Creole Language Library 22], I. Neumann-Holzschuh & E. Schneider (eds), 275–307. Amsterdam: John Benjamins.
- Huttar, G. 1981. Some Kwa-like features of Djuka syntax. *Studies in African Linguistics* 12(3): 291–323.
- Huttar, G. 1986. Kikongo, Saramaccan and Ndjuka. In *Language in Global Perspective: Papers in Honor of the 50th Anniversary of the Summer Institute of Linguistics, 1935–1985*, B. Elson (ed.), 563–586. Dallas TX: Summer Institute of Linguistics.
- Huttar, G., Essegbey, J. & Ameka, F. 2007. Gbe and other West African sources of Suriname creole semantic structures. *Journal of Pidgin and Creole Languages* 22(1): 57–72. Special issue: Substrate Influence in Creole Formation, B. Migge & N. Smith (eds). doi:10.1075/jpcl.22.1.05hut
- Kari, E. 1997. *Degema*. Munich: Lincom.
- Kouwenberg, S. & Singler, J. 2008. Introduction. *The Handbook of Pidgin and Creole Studies*, S. Kouwenberg & J. Singler (eds), 1–16. Oxford: Wiley-Blackwell. doi:10.1002/9781444305982
- Levinson, S. 1992. Primer for the field investigation of spatial description and conception. *Pragmatics* 2(1): 5–47. doi:10.1075/prag.2.1.02lev
- Lipski, J. 1992. Pidgin English usage in Equatorial Guinea (Fernando Poo). *English World-Wide* 13(1): 33–57. doi:10.1075/eww.13.1.03lip
- Lynn, M. 1984. Commerce, Christianity and the origins of the ‘Creoles’ of Fernando Po. *The Journal of African History* 25(3): 257–278. doi:10.1017/S0021853700028164
- Martín del Molino, A. 1993. *La ciudad de Clarence*. Malabo: Ediciones Centro Cultural Hispano-Guineano.
- Migge, B. 2003. *Creole Formation as Language Contact: The Case of the Surinamese Creoles* [Creole Language Library 25]. Amsterdam: John Benjamins. doi:10.1075/cll.25
- Moiso, B. 1983. *Le lingala au Zaïre: Défense et analyse grammaticale*. Kisangani: Éditions de Base.
- Morgades Bessari, T. 2011. Los criollos (Fernandinos-Kriös) de Guinea Ecuatorial. La Gaceta de Guinea Ecuatorial. Malabo, Equatorial Guinea, No. 162 edition, sec. Misceláneas. <www.lagacetadeguinea.com/162/19.htm> (30 May 2013).
- Muysken, P. & Smith, N. 2015. *Surviving the Middle Passage: The West Africa-Surinam Sprachbund*. Berlin: Mouton de Gruyter. doi:10.1515/9783110343977
- Newman, P. 2000. *The Hausa Language: An Encyclopedic Reference Grammar*. New Haven CT: Yale University Press.
- Pawlak, N. 2005. Locative prepositions in Chadic: Lexical or grammatical morphemes? In *Motion, Direction and Location in Languages: In Honor of Zygmunt Frajzyngier* [Typological Studies in Language 56], E. Shay & U. Seibert (eds), 235–254. Amsterdam: John Benjamins.
- Rickford, J. 1987. *Dimensions of a Creole Continuum: History, Texts, and Linguistic Analysis of Guyanese Creole*. Stanford CA: Stanford University Press.
- Selbach, R. 2008. The superstrate is not always the lexifier: Lingua Franca in the Barbary Coast, 1530–1830. In *Roots of Creole Structures: Weighing the Contribution of Substrates and Superstrates* [Creole Language Library 33], S. Michaelis (ed.), 29–58. Amsterdam: John Benjamins. doi:10.1075/cll.33.05sel

- Singler, J. 1983. The influence of African languages on pidgins and creoles. In *Current Approaches to African Linguistics*, Vol. 2, J. Kaye, H. Koopman, D. Sportiche & A. Dugas (eds). Dordrecht: Foris.
- Singler, J. 1988. The homogeneity of the substrate as a factor in pidgin/creole genesis. *Language* 64(1): 27–51. doi:10.2307/414784
- Smith, N. 2015a. Ingredient X: The shared African lexical element in the English-lexifier Atlantic creoles, and the theory of rapid creolization. In *Surviving the Middle Passage: The West Africa-Surinam Sprachbund*, P. Muysken & N. Smith (eds), 67–106. Berlin: Mouton de Gruyter.
- Smith, N. 2015b. A preliminary list of probable Kikongo (KiKoongo) lexical items in the Surinam creoles. In *Surviving the Middle Passage: The West Africa-Surinam Sprachbund*, P. Muysken & N. Smith (eds), 417–462. Berlin: Mouton de Gruyter.
- Smith, N., Robertson, I. & Williamson, K. 1987. The Ijo Element in Berbice Dutch. *Language in Society* 16(1): 49–89. doi:10.1017/S0047404500012124
- Söderberg, B. & Widman, R. 1966. *Kikongo*, Vol. 2. Stockholm: Svenska Bokförlaget Bonniers.
- Talmy, L. 1978. Figure and ground in complex sentences. In *Universals of Human Language*, Vol. 4: *Syntax*, J. Greenberg, C. Ferguson & E. Moravcsik (eds), 625–649. Stanford CA: Stanford University Press.
- Tavares, J. 1915. *Gramática da língua do Congo (kikongo), dialecte kisikongo*. Luanda: Imprensa Nacional de Angola.
- van de Velde, M. 2008. *A Grammar of Eton*. Berlin: Mouton de Gruyter. doi:10.1515/9783110207859
- Waag, C. 2007. Location and motion in Fur. In *Encoding Motion: Case Studies from Africa*, In Memory of Ursula Droic, A. Mietzner & Y. Treis (eds), 229–240. Köln: Rüdiger Köppe.
- Winford, D. & Migge, B. 2007. Substrate influence on the emergence of the TMA systems of the Surinamese creoles. *Journal of Pidgin and Creole Languages* 22(1): 73–99. doi:10.1075/jpcl.22.1.06win
- Wyse, A. 1989. *The Krio of Sierra Leone: An interpretive History*. London: Hurst.
- Yakpo, K. 2009a. *A Grammar of Pichi*. PhD dissertation, Radboud University Nijmegen.
- Yakpo, K. 2009b. Complexity revisited: Pichi (Equatorial Guinea) and Spanish in contact. In *Simplicity and Complexity in Creoles and Pidgins*, N. Faraclas & T. Klein (eds), 183–215. London: Battlebridge.
- Yakpo, K. 2013. Wayward daughter: Language contact in the emergence of Pichi (Equatorial Guinea). *Journal of African Languages and Linguistics* 34(2): 275–299. doi:10.1515/jall-2013-0009
- Yakpo, K. 2015. Code-switching and social change: Convergent language mixing in a multilingual society. In *Codeswitching Between Structural and Sociolinguistic Perspectives*, G. Stell & K. Yakpo (eds), 259–287. Berlin: Mouton de Gruyter.
- Yakpo, K., van den Berg, M. & Borges, R. 2015. On the linguistic consequences of language contact in Suriname: The case of convergence. In *In and Out of Suriname: Language, Mobility and Identity*, E. Carlin, I. Léglise, B. Migge & P. Tjon Sie Fat (eds), 164–195. Leiden: Brill.
- Yakpo, K. & Bruyn, A. 2015. Transatlantic patterns: The relexification of locative constructions in Sranan. In *Surviving the Middle Passage: The West Africa-Surinam Sprachbund*, P. Muysken & N. Smith (eds), 135–75. Berlin: Mouton de Gruyter.

Appendix: Conventions for interlinear glosses and abbreviations

–	morpheme boundary	INT	intensifier
=	clitic morpheme boundary	IPFV	imperfective aspect
ó	high tone	ITI	itive particle
ò	low tone	LOC	locative
ō	mid tone	LOG	logophoric pronoun
ABL	ablative	M	masculine gender
ADV	adverbial	NEG	negative particle
AEC	Atlantic English-lexifier Creole	OBJ	object case
AFF	affix	PFV	perfective aspect
ALL	allative particle	PL	plural number
BE.AT	locative-existential copula	PLACE	place name
CL	noun class prefix	POSS	possessive case
COM	comitative preposition	POT	potential mood
COMP	complementizer	PRF	perfect aspect
COMPL	completive aspect	PRS	present tense
DEF	definite article	PST	past tense
DP	discourse particle	Q	question particle
EMP	emphatic particle	QUOT	quotative
FOC	focus particle	RECP	reciprocal affix
HAB	habitual aspect marker	SBJ	subject case
HST	hesternal past	SG	singular number
INDF	indefinite article	SUB	subordinator
INDP	independent person form	SVC	serial verb construction
INF	infinitive	VEN	venitive particle