

Lost siblings

Areal forces in the divergence of Krio and Pichi

Kofi Yakpo

The University of Hong Kong

The two related English-lexifier creole languages Krio (Sierra Leone) and Pichi (Equatorial Guinea) have diverged due to differing contact ecologies since their split in the 19th century. Krio is spoken alongside its lexifier English as well as Atlantic and Mande adstrates. Pichi is spoken alongside Bantu adstrates and has been in contact with its superstrate Spanish, but not with English. I analyse and compare tense, aspect, and mood categories as well as participant marking and serial verb constructions to show that (a) Krio has become more similar to English than Pichi to Spanish because existing overlaps between creole and lexifier forms have facilitated transfer; (b) both Krio and Pichi have, respectively, aligned themselves with the Macro-Sudan and Bantu spread zone typological profiles of their ecologies. I interpret the findings via the stratal-areal contact model (Yakpo 2017a) to explain the divergence of Krio and Pichi as part of the differentiation of the whole African Caribbean English Creole cluster.

Keywords: Creole, Krio, Pichi, English, Spanish, Bantu, areal typology, language contact

1. Introduction

Felix Ameka's work on the complex amalgam of language, kinetics, and underlying value systems is an eminent contribution, not just to linguistics, but to the study of African aesthetics (e.g., Ameka 1992a; Ameka 1992b, 2003a, 2020; Ameka & Breedveld 2004, to name but a few). I read his work as a flipping of the script, with an unmistakable tinge of iconoclasm, prompted by questions like "*what would linguistics (or any subdiscipline thereof, including pragmatics) look like, had it been based on African language practices and data?*" (Ameka & Terkourafi 2019: 73). His subtle analyses of the grammar of Ewe (e.g., Ameka 1990, 2001, 2003b, 2005a), the Ghana-Togo-Mountain languages (e.g., the contributions

in Ameka 2017) and the languages of Suriname (e.g., Essegbey & Ameka 2007; Huttar, Essegbey & Ameka 2007; Huttar, Aboh & Ameka 2013) stand as examples for the kind of diligence and granularity that we would wish for in the description of creole languages in order to do away once and for all with the sweeping generalizations so common in writings about them.

In this chapter, I address the relationship between Pichi (Equatorial Guinea) and Krio (Sierra Leone), two members of the vast Transatlantic cluster of African Caribbean English Creole. Pichi split off from Krio in 1827. Differences in the linguistic ecologies in which Krio and Pichi have since then been spoken have led to the structural and lexical divergence of these two closely related varieties. Very few speakers of Krio and Pichi in Sierra Leone and Equatorial Guinea today know about the common ancestry of their respective languages or are even aware of the other's existence. Krio and Pichi have become lost siblings.

I cover three of Felix's favourite areas, namely tense, aspect, and mood systems (Ameka & Kropp Dakubu 2008), serial verb constructions (Ameka 2005b, 2006), and the role of adpositions in participant marking (Ameka 2003b; Ameka & Levinson 2007). The focus is on morphosyntax, a traditional realm of creole linguistics not nearly as sexy as pragmatics, Felix's field of predilection. But I take some consolation in the fact that no previous work has compared Krio and Pichi in much detail. I also look at developments in the two creole languages from the viewpoint of areal typology, hoping to garner Felix's endorsement, given the significant amount of ink he himself has spilt on the topic (e.g., Ameka & Breedveld 2004; Ameka 2005b; Ameka 2007; Ameka & Essegbey 2017).

A comparison of Krio and Pichi is interesting for several reasons. The central role of (Early) Krio as a proto-language, or a major contributor to all other varieties of the African branch of African Caribbean English Creole (henceforth AEC) is more or less accepted (e.g., Hancock 1987: 273–274), the ethnogenesis and dispersal of the Krio people along the West African coast in the 19th century well documented (see Fyfe 1962; Lynn 1992). The detailed study of the differences between Krio and its earliest offshoot Pichi may therefore provide us with insights on Early Krio and shed light on the differentiation of the entire cluster of African Caribbean English Creoles.

Further, Pichi is the only African English-lexifier Creole to have been cut off from the influence of its lexifier superstrate English since the 19th century. Pichi has since then been in contact with the non-lexifier superstrate Spanish. In this respect, the ecology in which Pichi is spoken is comparable to that of the creoles of Suriname in the Caribbean, which have been in contact with the non-lexifier superstrate Dutch for the past few centuries (for a comprehensive overview of the contact ecology of Suriname, see Muysken & Smith 2015; Yakpo & Muysken 2017). Like the latter, Pichi therefore offers the opportunity to study a lesser known

form of creole-superstrate contact than the continuum-type contact with the lexifier (see Bickerton 1973). I analyse the genetic divergence of Krio and Pichi due to areal advergence (i.e., unilateral convergence, Mattheier 1996: 34) of the two creoles with languages in their respective ecologies and use the stratal-areal contact model (Yakpo 2017a) as a heuristic tool to explain these processes. I conclude that contact and transfer from their respective superstrates and adstrates have made the greatest contribution to the divergences between Krio and Pichi in the realm of TAM marking, the use of serial verb constructions and strategies of participant marking.

The Pichi data in this chapter is based on a corpus of around fifty thousand words of naturalistic and elicited data collected during field work in Equatorial Guinea between 2003 and 2007. The Krio data is based on a smaller corpus of about six thousand words collected with Krio speakers outside Sierra Leone in West Africa. Secondary data on Krio was extracted from the Umeå University Krio Corpus (Krio Corpus Project 2003) and other sources. Sources of secondary data are provided where this applies.

2. Socio-historical background and linguistic ecologies

There are two main narratives of the formation of Krio, the English-lexifier creole language of Sierra Leone. In one account, Krio is seen as a continuation of an English-lexifier contact language spoken along the coast of present-day Sierra Leone and Guinea in the 16th century (Hancock 1986). Another account sees Krio as an offshoot of Western Maroon Creole of Jamaica transplanted to Freetown from 1787 onwards by African-descended returnees (Smith 2017). In spite of their differences, both accounts agree that some degree of mixing and levelling of pre-existing African and newly arrived American AEC varieties led to the emergence of Krio in the late 18th and 19th centuries. Once limited to the capital Freetown and its environs in the 19th century, Krio is now used as a native language and lingua franca in all of Sierra Leone and is spoken by the vast majority of the country's population of 7 million (Finney 2013).

Krio has continuously cohabited with English, its *lexifier* superstrate English (i.e., the language from which the bulk of the creole's lexicon stems). Krio is also spoken alongside Atlantic and Mande *adstrates* (i.e., languages that may influence a creole due to synchronic multilingualism) spoken in Sierra Leone, particularly Temne, Mende and Mandinka. Further, sources agree that Yoruba culture and language played a decisive role in shaping Krio culture and language in the 19th century, alongside other, less prominent, languages from further south along the coast (for the historical background, see Fyle 2004). The Nigerian Benue-Congo

language Yoruba, not Temne or Mende, is the largest source of African-derived words in Krio (Fyle 1998). A number of grammatical structures, including focus and certain types of serial verb constructions (Finney 2004: 65), causative constructions (Yakpo 2017a), and aspects of grammatical tone (Yakpo 2019a: 217) also bear a Yoruba signature. Yoruba is no longer spoken in Sierra Leone. The shift to Krio by Yoruba speakers was probably completed well over hundred years ago. Yoruba is therefore a *substrate* of Early Krio (i.e., a defunct language that has left traces in a creole in a situation of multilingualism before speakers shifted to the creole). Of course, proto-Krio had earlier substrates as well whose specific influence on contemporary Krio is more difficult to pinpoint, since the trajectory of proto-Krio extends far back into the early period of the European slave trade on both sides of the Atlantic (see e.g., Hancock 1971; Smith 1987).

Pichi is spoken by the majority of the population of Bioko island (Equatorial Guinea), hence at least 150,000 people (Yakpo 2013a). It is an offshoot of 19th century Krio, which arrived in Bioko (then called Fernando Po by the Europeans) with African settlers from Sierra Leone in 1827 and thereafter (Granda 1985). However, regular contact between Bioko and Freetown through much of the 19th century (Lynn 1984, 1992) would have also ensured a flow of linguistic features between the two places and other parts of coastal West Africa. Pichi was cut off from the direct influence of English after Spain began enforcing its colonial claim over Equatorial Guinea from 1857 onwards, and Spanish has remained the official language of Equatorial Guinea until today. In contrast, Sierra Leone was a British colony until 1961 and has retained English as its official language. Pichi has therefore co-evolved with its *non-lexifier* superstrate Spanish (the lexifier remains English, of course).

Pichi still continues to function as a language of ethnic identity to the Krio founder population, the *Fernandinos* (Lynn 1984). However, multilingual speakers of Bube, the Narrow Bantu language of the autochthonous population of Bioko and shifters from Bube to Pichi (and Spanish) today constitute the majority of native Pichi speakers in the capital Malabo and other towns of Bioko (Morgades Besari 2011). The Bube language, in turn, has incorporated a considerable number of Pichi words into its lexicon in accordance with a progressive acculturation of the Bube people with the Pichi-dominant urban culture (Bolekia Boleká 2007). Pichi has, indeed, become so closely associated with the Bube people that its use is now seen as a marker of Bube ethnic identity (Bolekia Boleká 2016; Yakpo 2016: 31).

Bube can, therefore, be seen to constitute both an adstrate (it is synchronically spoken alongside Pichi by multilinguals) and a substrate (it is no longer spoken by shifters) to Pichi. Further, Pichi shows lexical and structural traces of contact and koineization with the adstrates Cameroon Pidgin and Nigerian Pidgin (Yakpo

2013b:290–294). Plantation laborers from Cameroon and Nigeria in particular, by far outnumbered the Bube and Krio-speaking populations of Bioko during the cocoa boom of the late 19th to mid-20th century (for the historical background, see Sundiata 1990; Martino 2012).

Despite their common genealogy and a common lexifier (English), Krio and Pichi have therefore been subjected to very different stratal-areal forces in their respective linguistic ecologies for the last two centuries. Their contact trajectories involve a lexifier superstrate English (in the case of Krio) and a non-lexifier superstrate Spanish (in the case of Pichi), which are genetically related but typologically and lexically distinct.

Krio and Pichi have also been in contact with respective adstrates from genetically and typologically distant groupings (i.e., Atlantic and Mande vs. Narrow Bantu). In addition, the major adstrates (Temne, Mende, and Manding) and the substrate of Krio (Yoruba), although genetically far apart or unrelated, are part of the linguistic area known as the *Macro-Sudan* (Güldemann 2008). Among the cross-cutting areal features that have been identified for the Macro-Sudan are serial verb constructions, which are investigated here, too. Further, although Pichi has its origins in the Macro-Sudan via its descent from Krio, Pichi is now located in the northern fringe of the *Bantu spread zone*, the macro-area of Narrow Bantu languages covering most of Africa from Equatorial Guinea southwards (Güldemann 2018). These differing areal profiles are at the root of much of the differentiation of Krio and Pichi, as I will argue in Section 4. Table 1 summarizes aspects of the contact ecologies in which two languages partake and the respective contact strata.

Table 1. Contact ecologies and contact strata

Contact strata	Krio (Sierra Leone)	Pichi (Bioko, Equatorial Guinea)
Lexifier	English	English
Superstrate	English	Spanish
Major substrate	Yoruba	Bube, Yoruba (via Early Krio)
Major adstrates	Temne, Mende, Mandinka	Bube; koineization with Cameroon Pidgin and Nigerian Pidgin

The differences in the contact ecologies in which Krio and Pichi are spoken play out in the three domains of tense, aspect, and mood (§ 3.1), participant marking (§ 3.2), and serial verb constructions (§ 3.3).

3. Comparison of Krio and Pichi

There is compelling linguistic evidence for a close linguistic relationship between Krio and Pichi. However, a look at specific domains of the grammar shows that Pichi has diverged considerably from its Krio forebear. In the following, I compare the two languages with respect to tense-aspect-mood marking, participant marking, and serial verb constructions, analysing differences where they occur.

3.1 Tense-aspect-mood marking

There is a high degree of correspondence between the forms and functions of the core Pichi and Krio tense, aspect, and mood (TAM) markers. Table 2 shows TAM forms and their order in the sentence structure of Krio and Pichi.

Table 2. Forms and order of TAM markers in Krio and Pichi

Mood	Pron	Neg	Tense	Mood	Aspect		Verb	Object	Aspect
<i>mék, lé</i>	<i>yù</i>	<i>nó/nó</i>	<i>bìn</i>	<i>gò</i>	<i>dè</i>	Ø	<i>bigín</i>	<i>skúl</i>	<i>dón</i>
SBJV	2SG	NEG	PST	POT/FUT	IPFV	FACT	‘begin’	‘school’	COMPL
				<i>ǰ</i>	<i>dé pàn</i>	<i>kán</i>			
				COND/OBL	PROG	PFV			
				<i>mòs</i>	<i>kìn</i>	<i>dón</i>			
				OBL	HAB, ABIL	PRF			
					<i>blàn</i>	<i>néà, nóbà</i>			
					HAB	PRE, NEG			

Underlined: Only in Krio; Regular font: In Krio and Pichi

Table 2 shows an overlap in the form inventory of Pichi and Krio with respect to the categories of FACT, PST, PFV, IPFV, PRF, FUT/POT, and SBJV. The parallels therefore extend well beyond the four core TAM categories that constitute the backbone of the aspect- and mood-prominent systems of all varieties: the perfective-imperfective opposition expressed by Ø ‘FACT’ (i.e., factative TAM, see Yakpo 2019b: 141–145) vs. *dè* ‘IPFV’, the potential mood/modal future marker *gò* ‘POT/FUT’, and the subjunctive complementizer *mék* ‘SBJV’.

The differences between Krio and Pichi are found in more peripheral categories, but they are nonetheless of interest. First, Krio features two markers/constructions not attested in Pichi. Both Krio and Pichi have the H-toned lexical verb *blánt* ‘reside’, but only Krio additionally features the L-toned habitual aspect marker *blàn* ‘HAB’, derived from *blánt* ‘reside’ (Hancock 2018). Compare (1) and (2).

- (1) À *bìn dón blánt nà Nìgeria ó.*
 1SG.SBJ PST PRF reside PREP PLACE SP
 ‘I have actually lived in Nigeria before.’ (Pichi; Krio)
- (2) Òlú *blàn gó London fɔ́ krísmès.*
 NAME HAB go PLACE PREP Christmas
 ‘Olu habitually goes to London for Christmas.’
 (Krio; Yillah & Corcoran 2006: 181)

Note that *blàn* ‘HAB’ bears a low tone, like most Krio and Pichi TAM markers, while the lexical verb *blánt* ‘reside’ bears a high tone in both languages. Further, the TAM marker shows familiar signs of phonological erosion (i.e. [blà] ‘HAB’ vs. [blán(t)] ‘reside’) that distinguish other Pichi and Krio TAM markers from their lexical source forms (e.g., *kán* [ká] ‘PFV’ vs. *kán* [kán~kám] ‘come’, *dón* [dó] ‘PRF’ vs. *dón* [dón] ‘finish’). The habitual marker has therefore been fully integrated into the Krio TAM system.

Both Krio and Pichi have another dedicated habitual marker, namely *kìn* ‘HAB’ (< ‘can’), see (3), and here I move on to a second point of divergence between Krio and Pichi. In a handful of instances, two speakers above sixty years in the Pichi corpus also use an equally L-toned *kìn* as a marker of abilitive mood (4).

- (3) *Dóg kìn bét.*
 dog HAB bite.
 ‘Dogs bite.’ (Krio/Pichi)
- (4) *Bífó à kìn grab, à dè sí bíg bíg fáyà.*
 before 1SG.SBJ ABIL get.up 1SG.SBJ IPFV see big REP fire
 ‘Before I could get up, I was seeing a huge fire.’ (Pichi)

Contrary to Pichi, abilitive uses of *kìn* like (4) are widespread in Krio and found across all age groups ((4) is also a possible utterance in Krio). The conventional way of expressing ability in Pichi is by way of the modal auxiliary *fít* ‘can’ (< ‘fit’) (Yakpo 2019a: 166–168). With its preference for the modal auxiliary *fít* rather than the preverbal mood marker *kìn* ‘ABIL’ Pichi aligns with the other African AEC varieties rather than Krio, compare Ghanaian Pidgin (5):

- (5) *Chalé, à nó fít gó dé yéstèdé ó.*
 INTJ 1SG.SBJ NEG can go there yesterday SP
 ‘Man, I really couldn’t go there yesterday.’ (Ghanaian Pidgin)

A third Krio feature unknown to the Pichi speakers I consulted is a progressive aspect construction that employs the progressive marker *dé pàn* ‘PROG’, a conventionalized collocation consisting of the locative-existential verb *dé* ‘be.at’ and the

preposition *pàn* ‘on’ (6). The progressive marker is seen as an L2 Krio feature by some sources (e.g., Johnson 1992: 29) that evolved through calquing from major adstrates like Mende and Temne. But the presence of similar constructions in Caribbean AEC varieties like Jamaican and Creolese (Guyana) suggests reinforcement through adstrate contact (see Hancock 2017 and the sources cited there). Pichi, by contrast, has no specialized progressive construction. Speakers employ the general imperfective marker *dè* ‘IPFV’ instead (7). The resulting structure is therefore potentially ambiguous between the various aspectual and modal readings (habitual, progressive, future, conditional, etc.) associated with imperfective marking in Pichi (see Yakpo 2019b: 148–149). Note that *dé* ‘be.at’ (high tone) and *dè* ‘IPFV’ (low tone) are tonal minimal pairs and lexically distinct forms.

- (6) *Wì dé.pàn kám.*
 1PL.SBJ PROG come
 ‘We are coming (right now).’ (Krio)
- (7) *Wì dè kám dé.*
 1PL.SBJ IPFV come there
 ‘We are coming/habitually come/will come/would come there.’ (Pichi)

The two languages also diverge with respect to the formation of four aspectual auxiliary constructions. Krio expresses completive aspect by way of postverbal *dón* ‘COMPL’ (< ‘done’). The completive aspect structure originates in a resultative serial verb construction featuring the lexical verb *dón* ‘finish’ as the second verb in the series (8). The construction is found in all other African AEC varieties (see Yakpo 2013b) except Pichi because Pichi has no resultative SVCs (see §3.3 for more on this).

- (8) *Wén ì bèlfúl dón, ì gó lidóm.*
 when 3SG.SBJ be.satiated COMPL 3SG.SBJ go lie.down
 ‘When he was completely full, he went to lie down.’ (Krio)

The completive differs in its postverbal position from the homophonous preverbal perfect marker *dón* ‘PRF’ common to Krio and Pichi. In Krio, the perfect aspect marker, the completive aspect marker, and the lexical verb *dón* ‘finish’ are therefore all identical. In the preverbal position, the perfect sense and a more lexical completive auxiliary-like sense as in English *finish doing something* are therefore syncretic, hence the potential ambiguity of (9).

- (9) *Wì dón ít.*
 1PL PRF/finish eat
 ‘We’ve already eaten’ OR ‘We’ve finished eating.’ (Krio)

In Pichi, the lexical verb is *fínis* (< ‘finish’) while *dón* is only used with the meaning ‘done’ in reference to cooked food. In Pichi, the preverbal auxiliary construction featuring *fínis* is the only way of expressing a completive nuance. Since *fínis* is not homophonous with *dón*, the preverbal completive and the preverbal perfect are, therefore, neatly distinct categories (10), also when they are combined, i.e., *dón fínis chóp*.

- (10) *À dón/fínis chóp.*
 1SG.SBJ PRF/finish eat
 ‘I’ve already eaten/finished eating.’ (Pichi)

A further difference is that my Krio informants uniformly reject the Pichi construction in (11), where the verb *kòmót* ‘go/come out’ is employed as an aspectual auxiliary with an egressive function. Krio speakers can only express an egressive notion adverbially, by employing the preverbal adverb *jís* ‘just’ (12). The use of *jís* in addition to *kòmót* is optional in Pichi. The source of the Pichi egressive construction is unclear. It may well have developed in analogy with the other aspectual auxiliary constructions covered in this section along a trajectory of internal change.

- (11) *Wì (jís) kòmót chóp.*
 1PL just come.out eat
 ‘We’ve just eaten/We just ate.’ (Pichi)
- (12) *Wì jís (*kòmót) ít.*
 1PL just come.out eat
 ‘We’ve just eaten/We just ate.’ (Krio)

Further, Pichi has calqued a continuative aspect auxiliary construction featuring the 3SG present tense borrowing *sigue* ‘continue’ (< Span. *seguir* ‘follow, continue’), see (13), which is followed by a lexical verb without an intervening complementizer, as in Spanish. Krio has an equivalent structure with the English-sourced verb *kòntínyù* ‘continue’ (14). The presence of the preposition (and non-finite complementizer) *fɔ* may actually point to borrowing and calquing from English ‘continue to’ as well; the absence of *kòntínyù* in Pichi seems to support this. Krio also has a less anglicized equivalent of the *kòntínyù* construction involving *kipón* (< Eng. ‘keep on’) followed by the imperfective marked main verb. Interestingly, the *kipón* construction is not attested in my Pichi data. Krio and Pichi therefore probably both developed the *sigue* and *kòntínyù* continuative constructions through later contact with their respective superstrates, and in Pichi, the older *kipón* construction may have been replaced by the Spanish *sigue* construction.

- (13) *Dèn sigue plé ból sóté ívìn tén.*
 3PL continue play ball until evening time
 ‘They continued to play ball until the evening.’ (Pichi)
- (14) *À kòntínyù fɔ ríd sóté mónìn tém.*
 1SG.SBJ continue PREP read until morning time
 ‘I continued to read until the morning.’ (Krio)
- (15) *À kípón dè ríd sóté mónìn tém.*
 1SG.SBJ continue IPFV read until morning time
 ‘I continued to read until the morning.’ (Krio; Ian Hancock, p.c.)

Additionally, Pichi has a durative aspect auxiliary construction featuring *sté* ‘stay’ (16). Krio speakers can only express durative by clausal periphrasis, hence a less integrated structure. The Krio sentence in (17) features the same verb *sté* (often realized as *té* in Krio) in a main clause with an expletive subject. The temporal modification is expressed by a full adverbial clause introduced by the subordinator *wé* ‘SUB’. The structure in (17) is also possible in Pichi but it appears to be the only option in Krio.

- (16) *À dón sté chóp.*
 1SG.SBJ PRF stay eat
 ‘It’s been a while since I ate.’ (Pichi)
- (17) *Ì dón té wé à ít.*
 3SG.SBJ PRF stay SUB 1SG.SBJ eat
 ‘It’s been a while since I ate.’ (Krio)

In sum, the major aspect and mood oppositions in Krio and Pichi have remained the same. Outside the core system we see differences, however. Krio features two imperfective aspect readings expressed by separate constructions, both unknown to Pichi, namely an additional habitual (*blàn* ‘HAB’) and a progressive (*dé pàn* ‘PROG’). Krio speakers also continue to use an abilitive marker (*kìn* ‘ABIL’) that has fallen out of use in Pichi. Additionally, Krio alone makes use of a resultative serial verb construction for the expression of completive aspect (*dón* ‘finish’). In turn, Pichi makes use of four aspectual auxiliary constructions that appear to be unknown to Krio speakers. These express completive (*fínis* ‘finish’), egressive (*kòmót* ‘come out’), continuative (*sigue* ‘continue’) and durative (*sté* ‘stay’) readings.

3.2 Expression of participant roles

The core syntactic case relations of subject and object and prototypical participant roles of Agent and Patient are expressed via word order with full nouns in

both Pichi and Krio (Yakpo 2019b: 307–311), and additionally by suppletion and tonal inflection with person forms (Bordal Steien & Yakpo 2020: 27–28). Substantial differences between the two languages are, however, found in the expression of additional (non-locative) participant roles. Pichi makes use of fewer specialized prepositions than Krio, instead relying on multipurpose forms to mark non-Agent roles. Table 3 shows the maximal system of marking participant roles other than those expressed by absence of marking and word order alone in Pichi and Krio. Participant roles in parentheses are only attested in Krio. Table 3 includes animate (ANIM) Goal (*she flung the stick to us; she shouted at us*) and Source (*she hid from me*), which straddle the boundary of non-locative roles like Recipient and Stimulus.

Table 3. Prepositional marking of non-locative participant roles in Krio and Pichi

	<i>fɔ̃</i> 'PREP'	<i>wit/</i> <i>wèt</i> 'with'	<i>lèk</i> 'like'	<i>bikòs;</i> <i>fɔ̃séka</i> 'due to'	<i>bitáwt</i> 'without'	<i>ɔ̃f</i> 'of'	<i>bàý</i> 'by'	<i>bòt</i> 'about'	<i>tò</i> 'to'	<i>pàn</i> 'on'
Recipient									(x)	
Beneficiary	x								(x)	
Experiencer									(x)	(x)
Stimulus	x	x						(x)	(x)	
Goal (ANIM)	x								(x)	
Source (ANIM)	x									(x)
Instrument	x	x					x			
Cause	x	x		x						
Circumstance	x	x						(x)		(x)
Comitative		x								
NEG comitative					x					
Purpose	x									
Manner		x								
Equative/ similative			x							
Possessor	x						x			

Table 3 shows that both languages have an identical form inventory save those in the last three columns, which are exclusive to Krio. Most significantly, the multifunctional prepositions *fɔ̃* 'PREP' and *wit/wèt* 'with' (/wìt/ in Krio and /wèt/ in

Pichi) and *lèk* (*lèk~lèkè~làyk~làk*) can mark all roles save Negative Comitative, which is exclusively expressed by *bitáwt* ‘without’. However Pichi prefers clausal strategies to express the equivalent of Negative Comitative (for an example, see Yakpo 2019b: 316) and if a nominal strategy is used at all, makes almost exclusive use of the Spanish loan *sin* ‘without’ (for an example, see Yakpo 2019b: 406). The prepositions *fɔ̃*, *wèt*, and *lèk* therefore constitute the core system of participant marking in Krio and Pichi. Krio and Pichi differ quite fundamentally in the distribution and frequency of all other prepositions, however.

Turning to Krio, the general associative preposition *fɔ̃* ‘PREP’ and *wit* ‘with’ mark the broadest range of roles. The overlapping continuum of Instrument and Comitative roles is most frequently expressed by *wit* ‘with’ (18)–(19). It also includes Manner roles like (20).

- (18) *Dèm kám sí=àm wit dèm yón yáy.*
 3PL PFV see=3SG.OBJ with 3PL own eye
 ‘The saw it with their own eyes.’ (Krio)
- (19) *À drím dís nèt sé à ít wit yú.*
 1SG.SBJ dream this night QUOT 1SG.SBJ eat with 2SG.OBJ
 ‘I dreamt this night that I ate with you.’ (Krio)
- (20) *Ól ìn pìkín fibà=àm wit fés.*
 all 3SG.POSS child resemble=3SG.OBJ with face
 ‘All her children resemble her by their faces.’ (Krio)

The preposition *fɔ̃* is found across an even greater range, marking roles as diverse as Beneficiary (21), Cause (22) and Purpose (23), among others.

- (21) *Mì bródà báy wán tín Milo fɔ̃ mí.*
 1SG.POSS brother buy one tin NAME PREP 1SG.OBJ
 ‘My brother bought me a tin of Milo.’ (Krio)
- (22) *Dèn kós=àm fɔ̃ dá tín wé ì dú.*
 3PL insult=3SG.OBJ PREP that thing SUB 3SG.SBJ do
 ‘They insulted him because of that thing he did.’ (Krio)
- (23) *À nó gò ték ìn mán fɔ̃ wítnès.*
 1SG.SBJ NEG POT take 3SG.POSS man PREP witness
 ‘I won’t take her man for a witness.’ (Krio; Taylor-Pearce 1989: 6)

Krio, however, also employs all the other prepositions in Table 3 besides *fɔ̃* ‘PREP’, *wit* ‘with’ and *lèk* ‘like’ in addition, and often preferably, to mark very specific participant roles. For example, the low transitivity verb *láy* ‘lie’ is followed by a prepositional phrase (PP) introduced by *pàn* ‘on’ or *tò* ‘to’ to mark Circumstance and Recipient roles respectively (24). The use of either preposition therefore entails a

significant difference in meaning. The same holds for *mém̀bà* ‘remember, think, remind’, where the preposition *b̀t* ‘about’ marks a Stimulus (25) while a direct complement (i.e., word order alone) instantiates a Patient (26). Such verb-PP collocations appear to have been part of the Krio repertoire since earliest times (see further below), suggesting that Pichi has lost them.

- (24) *Ỳù láy p̀àn/tò mí.*
 2SG lie on/to 1SG.OBJ
 ‘You lied about/to me.’ (Krio)
- (25) *À kìn mém̀bà b̀t ỳú.*
 1SG.SBJ HAB think about 2SG.OBJ
 ‘I always think about you.’ (Krio)
- (26) *À gò mém̀bà ỳú.*
 1SG.SBJ POT think 2SG.OBJ
 ‘I will remind you.’ (Krio)

The Recipient/animate Goal of a speech transfer verb like *t̀s̀k* ‘talk’ is often marked by the preposition *tò* ‘to’ (27). Krio speakers also occasionally mark a Recipient indirect object of *gí* ‘give’ by way of *tò*, particularly in more acrolectal registers (28).

- (27) *Ì t̀s̀k tò wí l̀èk nà ín b̀ón wí.*
 3SG.SBJ talk to 1PL.OBJ like FOC 3SG.INDP procreate 1PL.OBJ
 ‘She talked to us as if it was her who gave birth to us [i.e., as if talking to one’s child].’ (Krio; Krio Corpus Project 2003: BM1:S2:PW25:4)
- (28) *Ì gí òl ìn m̀nì tò ch̀och.*
 3SG.SBJ give all 3SG.POSS money to church
 ‘She gave all her money to (her) church.’ (Krio)

The differences between marking by direct complement and various prepositions are therefore lexical, very much like in English. Obsolete English uses of prepositions for marking a range of participant roles have, in fact, been retained in numerous Krio collocations, including the uses of *p̀àn* ‘on’ in the following ones: *ì véks p̀àn mí* ‘he’s angry with me’, *à lúk p̀àn àm* ‘I looked at her’, *ì t̀s̀k p̀àn mí* ‘he scolded me’, *ì t̀s̀k p̀àn Krìó* ‘he spoke in Krio’, *ì áyd p̀àn mí* ‘she hid from me’ (examples from Hancock 2017: 162). Similar verb-preposition collocations are also found in contemporary Jamaican Creole, with the expected amount of micro-variation, i.e., *no shout pan/aafa mi* ‘don’t shout at me!’, literally, ‘don’t shout on/after me!’ (field data). This supports the assumption that these uses of prepositions are neither due to more recent influence from English, nor did they necessarily arise independently in Krio.

In Krio, a large range of participant roles, including core ones like Beneficiary and Recipient can therefore be expressed as PPs, very much like in English. Additionally, specific prepositions with narrower functions are often used rather than the multipurpose ones *fɔ̃* and *wèt*. All these constructions look very English from the perspective of Pichi and are very unlikely to be heard in any register of contemporary Pichi.

In Pichi, prepositions other than *fɔ̃*, *wèt*, *lèk* are so seldom heard that they are best characterized as peripheral. In fact, these peripheral prepositions of Pichi either uniquely occur in idiomatic phrases (e.g., *bày gód in páwa*, lit. ‘by the power of God’, i.e., ‘God willing’), or are exceedingly rare in my corpus, e.g., *ɔ̃f* ‘of’ (1 occurrence), *tò* ‘to’ (4 occurrences, all of which with a locative sense), *bàt* ‘about’ (1 occurrence), *bitáwt* ‘without’ (1 occurrence).

In contrast to Krio, Pichi therefore expresses almost all participant roles either by way of a direct complement, or via the polyfunctional prepositions *fɔ̃* ‘PREP’ and *wèt* ‘with’. Hence, the conventional way of coding the Experiencer of the verb *láy* ‘lie’ in Pichi is via a direct complement, compare (24) with (29). Equally, the Experiencer and the Stimulus of the verb *mém̀bà* ‘remember, think (about), remind’ are both only expressed as direct complements. The resulting ambiguity between ‘remember/think about’, on the one hand, and ‘remind’, on the other, is resolved by context (30).

- (29) *Dán mán dón láy yú bád ó.*
 that man PRF lie 2SG.OBJ bad SP
 ‘That man has really lied to you.’ (Pichi)

- (30) *À kìn mém̀bà yú bókú.*
 1SG.SBJ HAB think 2SG.OBJ much
 ‘I habitually think about/remember/remind you a lot.’ (Pichi)

The vast majority of Pichi verbs, including those characterized by low semantic transitivity can take direct complements like *mém̀bà* in (30), even when some of the more specialized participant roles in Table 3 are expressed. This includes Recipients of transfer verbs like *tók* ‘talk, tell’, *báy* ‘buy’ (see (51)), *gí* ‘give’, and *dás* ‘give as present’ (see (52)). These verbs never take PPs introduced by *tò* ‘to’ in Pichi. Transfer verbs invariably appear in double object constructions if a Theme is additionally present (31).

- (31) *À nó gò tók dán mán nó wán wód sɛ́f.*
 1SG.SBJ NEG POT talk that man NEG one word EMP
 ‘I’m not going to tell that man a single word.’ (Pichi)

Direct complements or PPs introduced by the multipurpose preposition *fɔ̃* are also the only options in the Pichi equivalents of the Krio examples cited above

from Hancock (2017), i.e., à *lúk àm* ‘I looked at her’, è *tók mí* ‘she talked to me’, è *háyd fɔ mí* ‘she hid from me’, è *véks fɔ mí* ‘she’s annoyed with me’, and è *hálà mí* ‘she shouted at me’. The use of direct complements also extends to so-called associative objects. These are lexicalized verb-noun collocations in which the direct complement fulfills a diverse range of participant roles including less common ones like Content (*fúlɔp wàtá* ‘filled with water’) and Price (*sél dos mil* ‘sell for two thousand’), see Yakpo (2019b: 339–343).

Where direct complements are not common, the multipurpose prepositions *fɔ* and *wèt* cover the remaining options in Pichi. This includes the expression of Instrument (32), Manner (33), Cause (34), and animate Goal (see *fɔ* in (40)). A multipurpose preposition is usually preferred even where a more specific one may be used, compare (34) and (35). Also note that *wèt* and *fɔ* are often interchangeable. The examples involving *wèt* are also possible in Krio, but unlike Krio, the range of *fɔ* seems to be even broader in Pichi.

- (32) À *wákà wèt/fɔ fút.*
 1SG.SBJ walk with/PRP foot
 ‘I walked by foot.’ (Pichi)
- (33) Yù *géfɔ tók=àn wèt páwà.*
 2SG have.to talk=3SG.OBJ with power
 ‘You have to say it forcefully.’ (Pichi)
- (34) Èf wì *nó dríng nàw, wì gò dáy wèt/fɔ tístì.*
 if 1PL NEG drink now 1PL POT die with/PRP thirst
 ‘If we don’t drink now, we’ll die of thirst.’ (Pichi)
- (35) Èf wì *nó dríng nàw, wì gò dáy fɔsékà/bikòs tístì.*
 if 1PL NEG drink now 1PL POT die due.to/because.of thirst
 ‘If we don’t drink now, we’ll die because due to thirst.’ (Pichi)

With a few low transitivity verbs in the corpus, all three options are found with no appreciable difference in meaning, i.e., expression as a direct complement and marking by *fɔ* and *wèt* respectively. One of these is *kóstòn* ‘accustom’. The following occurrences are part of a conversation. Examples (36)–(37) were uttered by one speaker, and (38) by another speaker in support of (36)–(37).

- (36) *Láyfhád pero à dón kóstòn=àn só.*
 life be.hard but 1SG.SBJ PRF accustom=3SG.OBJ like.that
 ‘Life is hard but we are accustomed to it like that.’ (Pichi)
- (37) À *dón kóstòn wèt dì trón láyf.*
 1SG.SBJ PRF accustom with DEF strong life
 ‘I’m accustomed to the hard life.’ (Pichi)

(38) *Wì dón kóstòn f̂(r)=àn.*

1PL PRF accustom PREP=3SG.OBJ

‘We’re accustomed to it.’

(Pichi)

The preposition *ɔ̂f* sometimes occurs in Krio sources to mark the possessor or part-of-a-whole. This is particularly true of written sources such as (39), from the Krio version of the Universal Declaration of Human Rights, and in fixed expressions like *dì wóys ɔ̂f gód* ‘the voice of God’. Besides these uses, it is rarely heard in basilectal registers.

(39) *Dì góvàmènt ɔ̂f ìn kóntrì.*

DEF government of 3SG.POSS country

‘The government of his/her country.’

(Krio; UDHR art. 21)

Possessors and parts-of-wholes are marked by a variety of strategies in Pichi, i.e., by juxtaposition in associative constructions, compounding and the multipurpose associative preposition *f̂*, but only once in the corpus by the preposition *ɔ̂f* as in (40). Example (41) presents the usual way of expressing a comparable partitive relation by means of *f̂*.

(40) *Wán ɔ̂f dì gál-s dèn wé dèn bìn kéri dèn bájìn gó f̂ mán.*

one of DEF girl-PL PL SUB 3PL PST carry 3PL virginity go PREP man

‘[I was] one of the girls that kept their virginity for their husbands.’

(Pichi)

(41) *Góbnà dè jí yú pát f̂ dì m̀nì.*

government IPFV give 2SG.OBJ part PREP DEF money

‘Government gives you part of the money.’

(Pichi)

In sum, Pichi makes use of the two multipurpose prepositions *f̂* ‘PREP’ and *wèt* ‘with’ to mark almost the entire range of participant roles expressed by PPs. Beyond that, an equally large range of participant roles is expressed by direct complements without the use of any preposition. This differs markedly from Krio with its larger range of prepositional marking of participants and a dispreference, it seems, for direct complements.

3.3 Serial verb constructions

A comparison of serial verb constructions (SVCs) that occur in Pichi (Yakpo 2019b: 424–434) and Krio (Gebhart 1991; Njeuma 1995; Finney 2004; Yillah & Corcoran 2007; Nyampong 2015) shows that Krio features a wider range and a more frequent use of SVCs than Pichi. SVCs only make up a small proportion of the options for event integration and participant marking in a given Pichi text (Yakpo 2019b: 423). This observation holds for the most common SVCs in both

languages, i.e., motion-direction, participant-introducing, and sequential SVCs. Resultative SVCs, also common in Krio, are not attested in Pichi at all. Example (42) shows a motion-direction SVC in Pichi involving the V₁ (i.e., the first verb in the series) *sén* ‘send’ and the V₂ *gó* ‘go’. The V₂ is optional, more on this below.

- (42) À *sén*=à̀n (*gó*) nà comedor.
 1SG.SBJ send=3SG.OBJ go LOC dining-room
 ‘I sent him to the dining-room’ (Pichi)

In motion-direction SVCs, the V₁ describes a type of motion (locomotion, direction, caused motion, manner). Only eight verbs are attested in the V₁ slot in Pichi corpus, namely *wákà* ‘walk’, *rón* ‘run’, *fláy* ‘fly’, *fálà* ‘follow’, *ték* ‘take’, *kér* ‘take to’, *bríng* ‘bring’, and *sén* ‘send, throw’. The V₂, in turn, specifies the direction of the motion described by the V₁. Only two verbs are regularly found in the V₂ slot, namely allative *gó* ‘go’ and ablative *kán* ‘come’. The elative verb *kòmót* ‘come out’ and terminative *rích* ‘arrive’ occur only very rarely in the corpus, the former only once.

The construction is deemed ungrammatical if a verb other than those listed appears in the V₁ or V₂ position. For example, *sén* ‘send, throw’ and *flíng* ‘fling’ are both propulsion verbs with overlapping meanings. However, only *sén* may occur in a motion-direction SVC as in (42) above. Example (43) below is therefore not accepted if the motion event is expressed by a motion-direction SVC. The Goal of the caused motion described by *flíng* is instead expressed as a prepositional phrase introduced by the locative preposition *nà* ‘LOC’.

- (43) À *flíng*=à̀n (**gó*) nà sòlwàtá.
 1SG.SBJ fling=3SG.OBJ go LOC sea
 ‘I flung it into the sea.’ (Pichi)

The use of an SVC as in (42) is, in fact, entirely optional. With the eight V₁s listed the Goal or Source is preferably expressed as a prepositional phrase in all instances, as in (43). Hence both the V₁ and the V₂ in motion-direction SVCs belong to a closed set of verbs and are therefore best analysed as lexically conventionalized structures, maybe even types of compound verbs.

The situation in Pichi contrasts with that in Krio. The latter language makes use of a wider range of motion-direction SVCs in lexically more open structures. For example, the caused motion verb *púsh* can be combined with the V₂ *kòmót* ‘come out’ in Krio to render an elative motion event (44). The use of the Pichi equivalent *pús* in a similar way is not possible, since it does not belong to the eight verbs listed above and the V₂ *kòmót* is exceedingly rare in Pichi. Similarly, the combination of the V₁ *kòmót* and the V₂ *gó* as in the Krio example in (45) would be highly unusual, if not unacceptable in Pichi. Neither Krio nor Pichi feature SVCs for the expression of upward and downward motion. Both languages instead

employ the locative nouns *dón* ‘up(per side)’ and *óp* ‘down (side)’ in English-like constructions, e.g., *è híb=àn dón* ‘s/he threw it down.’

- (44) *Dì gyál púsh=àm kòmót nà ród.*
 DEF girl push=3SG.OBJ come.out LOC road
 ‘The girl pushed him off the road.’ (Krio)

- (45) *Ì kòmót gó nà tóng.*
 3SG.SBJ come.out go LOC town
 ‘She left for town.’ (Krio)

SVCs may also be used to introduce syntactic objects that express the semantic role of Standard in comparative constructions, Accompanee, Theme, Instrument, and Beneficiary. In such participant-introducing SVCs, Krio again features a larger range of structures. Krio makes frequent use of an instrumental SVC where the instrument (*róp*) is introduced by *ték* ‘take’ and the manipulee (*tròsis*) is the complement of a manipulation/handling verb (46).

- (46) *Ì gò ték róp táyìn tròsis?*
 3SG.SBJ POT take rope tie 3SG.POSS trousers
 ‘Would he tie his trousers with a rope [instead of a belt]?’
 (Krio; Krio Corpus Project 2003: BM1:S1:SAM3:1)

Pichi also has TAKE SVCs (47) but they are exceedingly rare in the corpus and out-done by far in frequency by equivalent combinations of verbs and the comitative/instrumental preposition *wèt* ‘with’ (48). Alternatively to prepositional structures like (48), Pichi speakers make use of TAKE in clause chaining (49), a type of multi-verb construction that differs from SVCs because it is not monoclausal. Clause chaining can be distinguished from SVCs by the mandatory presence of resumptive subject marking (see *yù* ‘2SG’ in (49)), i.e., the subject is repeated with non-initial verbs in the chain.

- (47) *Ús=káyn plénk dèn ték bíl dì hós?*
 Q=kind board 3PL take build DEF house
 ‘What kind of board was the house built with?’
- (48) *Dèn bíl dì hós wèt plénk.*
 3PL build DEF house with board
 ‘The house was built with boards.’ (Pichi)
- (49) *Yù ték dì m̀nì yù gí mí.*
 2SG take DEF money 2SG give 1SG.OBJ
 ‘You took the money (and) gave it to me.’ OR
 ‘You gave me the money.’ (Pichi)

Krio speakers also have recourse to GIVE SVCs featuring a transfer verb as V1 (e.g., *báy* ‘buy’) and the verb *gí* ‘give’ in the V2 slot marking the Beneficiary (50), even if this use is somewhat rare in contemporary Krio (see Hancock 1987: 281).

- (50) *Ì báy klós gí ìn pìkín.*
 3SG.SBJ buy clothes give 3SG.POSS child
 ‘He bought some clothes for his child.’ (Krio; Finney 2004: 72)

By contrast, benefactive GIVE SVCs are not attested in the Pichi corpus and any attempt to elicit them was rejected by speakers. Pichi speakers can only make use of equivalent combinations of a transfer verb and a prepositional phrase introduced by the general associative preposition *fɔ̃* ‘PREP’ (51) or a double object construction (52) (also see (31)). Both options are also possible in Krio.

- (51) *Bòyé báy klós fɔ̃ ìn gyál pìkín.*
 NAME buy clothes PREP 3SG.POSS girl child
 ‘Boye bought clothes for his daughter.’ (Pichi)
- (52) *Mì pàpá dás mì sístà regalo.*
 1SG.POSS father gift 1SG.POSS sister present
 ‘My father gave my sister a present.’ (Pichi)

Clause chaining, which I mentioned above in relation to the expression of Theme roles (see (49)), is also employed in lieu of SVCs in order to describe consecutive events in Pichi (53). Example (53) shows the intermediary character of Pichi clause-chaining between SVCs and clausal coordination. We find personal pronouns with each verb in the series, like in coordinate clauses. At the same time, there is no TAM marking with non-initial verbs, like in many types of SVCs.

- (53) *Dèn gò rèdí yú dèn ték yú dèn pút yú nà avión dèn sèn*
 3PL POT prepare 2SG.OBJ 3PL take 2SG.OBJ 3PL put 2SG.OBJ LOC plane 3PL send
yú fɔ̃ ɔ̀dà kóntrì.
 2SG.OBJ PREP other country
 ‘They’d prepare you (and) take you (and) put you into a plane (and) send you to another country.’ (Pichi)

Contrary to Pichi, Krio can make use of sequential SVCs like (54), characterized by the asyndetic juxtaposition of verbs, as well as the absence of personal pronouns and TAM marking on all verbs but V1.

- (54) *Dèn bìn kéch dì tíf-mañ bít=àm pút-àm ínsày mòtó*
 3PL PST catch DEF steal-man beat=3SG.OBJ put=3SG.OBJ inside car
kér=àm gó nà pòlís.
 carry-3SG.OBJ go LOC police
 ‘They caught the thief, beat him, put him inside the car and took him to the police.’ (Krio)

Further, Krio alone makes use of subject- and object-oriented resultative SVCs featuring dynamic verbs in the V2 position (55).

- (55) *Dì úmàn kúk rés sél.*
 DEF woman cook rice sell
 ‘The woman cooked rice and sold it.’ (Krio; Finney 2004: 72)

In Pichi, by contrast, resultative states of affairs like the one above may only be expressed by an object-oriented resultative V2 that designates a property (56), hence a stative, not a dynamic verb. Such constructions are resultant state secondary predications, not SVCs (for formal differences, see Yakpo 2019b: 435–436). Krio has resultative secondary predications in addition to resultative SVCs.

- (56) *Dèn bíl dì ród wòwò.*
 3PL build DEF road be.shoddy
 ‘They built the road (and it’s) shoddy.’ (Pichi/Krio)

When the secondary predicate does not designate a property and is subject-oriented, a clause linker like *sóté* ‘until’ needs to be inserted between the two verbs in Pichi (57). When the secondary predicate is not a property item and object-oriented, a chained clause with explicit person-marking for the participating verbs is required (58). In contrast to Krio (56), the resultative state of affairs in the Pichi structures in (56)–(58) is therefore exclusively expressed via reduced clauses, not SVCs.

- (57) *À chóp *(sóté) táyà.*
 1SG.SBJ eat until be.tired
 ‘I ate until (I was) tired of it.’ (Pichi)
- (58) *Wì fít dè plé, à jám yú yù fɔ́dón.*
 1PL can IPFV play 1SG.SBJ make.contact 2SG.OBJ 2SG.SBJ fall
 ‘We could be playing (ball), I hit you (and) you fall.’ (Pichi)

The absence of benefactive GIVE SVCs and of resultative SVCs, and the rare use of TAKE instrumental and theme SVCs in Pichi is striking, given their prominence in the languages of the West African littoral, their presence in Krio and all other African AEC varieties, as well as in many Caribbean AEC varieties (e.g., Sranan, see Yakpo 2017b). However, the absence of SVCs is one of the typological fault

lines separating Narrow Bantu languages from other Benue-Congo languages of the region (e.g., Yoruba and Igbo) as well as the Kwa languages (e.g., Gbe and Akan) which serve(d) as substrates and adstrates to AEC varieties on both sides of the Atlantic. It is therefore well possible that contact with the non-serializing Bantu language Bube, the most important substrate and adstrate of Pichi, as well as the non-serializing superstrate Spanish, have driven the restriction and lexicalization of SVCs in Pichi.

Another possibility is that Early Krio did not make use of many SVCs either and Krio only acquired them in greater number and frequency through later contact with serializing languages. Indeed, the bulk of speakers of the heavily serializing Yoruba substrate of Early Krio arrived in Sierra Leone after 1827, the year of the split between Krio and Pichi (on the Yoruba factor, see Section 2). In such a scenario, contemporary Pichi would have remained conservative through the convergent forces of genetic transfer from a marginally serializing Early Krio and areal reinforcement from non-serializing Bube and Spanish.

The evidence is, however, firmer for deserialization in Pichi. If Krio was transplanted to Sierra Leone from Jamaica, as (not uncontroversially) claimed by various sources (Huber 1999; Smith 2017), then the presence of SVCs in contemporary Jamaican (Arsenec 2020) is good evidence for the use of SVCs in Early Krio. The continued presence of a larger range of SVCs in Jamaican (including GIVE SVCs) than in Pichi is even more relevant because Jamaican has had no significant contact with serializing African languages since the early 19th century. SVCs have therefore undergone a restriction in use and functions in Pichi because the linguistic ecology no longer supports them.

3.4 Summary of findings

Table 4 provides a summary of the phenomena that I have looked at in the preceding sections in the same order of occurrence. Reference to the corresponding examples is given in the rightmost column.

Table 4. Differences between Krio and Pichi

Category	Krio	Pichi	Examples
1. Tense, aspect, and mood			
Habitual	<i>kin</i> ‘HAB’ and <i>blàn</i> ‘HAB’	only <i>kin</i> ; <i>blàn</i> not attested	(1), (2), (3)
Abilitive	<i>kin</i> ‘ABIL’	obsolete	(4)
Progressive	<i>dé pàn</i> ‘PROG’	not attested	(6), (7)

Table 4. (continued)

Category	Krio	Pichi	Examples
Completive	<i>dón</i> 'COMPL' (V2 in resultative SVC) <i>dón</i> 'finish' (preverbal)	not attested <i>fínis</i> 'finish' (preverbal); no <i>dón</i> 'finish'	(8) (9), (10)
Egressive	not attested; only <i>jís</i> 'just'	<i>kòmót</i> 'come out'	(11), (12)
Continuative	<i>kipón dè</i> 'keep on' and <i>kòntínyù fɔ̃</i> 'continue to'	<i>sigue</i> 'continue' (<Span.)	(13), (14)
Durative	only clausal periphrasis with <i>sté</i> 'stay'	clausal periphrasis and auxiliary construction with <i>sté</i> 'stay'	(16), (17)
2. Non-locative participant roles			
Direct complements	rare	common	(26), (29), (30), (36)
<i>fɔ̃</i>	common	common, larger range than in Krio	(21), (22), (23), (32), (34), (38), (40), (41)
<i>wit/wèt</i>	common	common, similar range as in Krio	(18)–(20), (32)–(34), (37)
<i>pàn</i>	common	not attested	(24), § 3.2
<i>bòt</i>	common	not attested	(25)
<i>tò</i>	common	not attested	(24), (27), (28)
<i>bày</i>	rare	rare	§ 3.2
<i>ɔ̃f</i>	rare	rare	(39), (40)
3. Serial verb constructions			
Motion-direction	common; lexically open	rare; lexically closed	(42)–(45)
Instrumental/Theme (TAKE)	common	rare; only <i>wèt</i> PPs	(46)–(49), (53)
Benefactive (GIVE)	rare	not attested; only <i>fɔ̃</i> PPs and double object constructions	(50)–(53)
Sequential	common	not attested; only clause chaining	(53)–(54)
Resultative	common with dynamic verbs	not attested with dynamic verbs; only clause chaining	(55)–(57)

The differences between Krio and Pichi summarized in Table 4 are quite substantial, and I am quite certain that there are similar ones in other sub-systems of the two languages (see Yakpo 2013b for some phonological and lexical differences; also Yakpo 2019a). In the next section, I attempt to provide some explanations for the divergence that Krio and Pichi have undergone.

4. The stratal areal contact model: Genetic divergence and areal advergence of the African Caribbean English Creole varieties

The stratal-areal contact model proposed in earlier work (Yakpo 2017a) is a heuristic tool for explaining and predicting long-term contact outcomes in the varieties of African Caribbean English Creole spoken in the multilingual linguistic ecologies of the Caribbean and West Africa. Much theoretical work on language contact and change in Afro-European creole languages addresses their *diachronic* emergence in the early European colonial period (i.e., the pidgin-to-creole cycle, see Hall 1966; the substratist school, see Alleyne 1980; the universalist school, see Bickerton 1984; the gradualist school, see Arends 1989; the superstratist school, see Chaudenson 1992). Further, the majority of theoretical and descriptive work has been done on (1) predominantly bilingual societies in the Americas (e.g., Jamaica) and in Africa (e.g., Cape Verde) featuring contact between a European lexifier and a creole (see Winford 1997 for an overview), and the resulting “creole continuum” (DeCamp 1971; Rickford 1987).

The bulk of existing descriptive work and theorization therefore does not take the following four additional, often overlapping *synchronic* characteristics of creole ecologies into account: (2) the lexifier of the creole is no longer spoken alongside the creole and has been replaced by a non-lexifier superstrate; (3) society-wide multilingualism is prevalent, and is not limited to bilingualism in the creole and the lexifier; (4) the creole is spoken alongside both African (historical substrate and non-substrate) languages and European (lexifier and non-lexifier) languages; (5) the creole is an L2 lingua franca but not necessarily an L1 vernacular for the majority.

The overwhelming majority of AEC speakers (up to 95%, see Yakpo 2020b: 64), and indeed European-lexifier creole speakers *tout court* today live in linguistic ecologies characterized by (3)–(5) above in West Africa. All five characteristics are therefore important for an understanding of the genetic *divergence* processes that characterize related languages inhabiting different ecologies (like the varieties of African Caribbean English Creole) as well as the *advergence and convergence* processes that typify unrelated languages inhabiting the same ecologies. On a broader foundation of this kind, creole linguistics has a lot more to offer

to contact linguistics, areal-typological linguistics and historical linguistics than the theorization of creolization per se.

The stratal-areal contact model attempts a unified account of the processes of genetic divergence and areal advergence of creoles that cover all five characteristics listed above, including those applying to Krio and Pichi. The model explains satisfactorily, I believe, areal divergence between African and Caribbean varieties in the realms of spatial grammar (Yakpo 2017c), causative constructions (Yakpo 2017a), prosodic systems (Bordal Steien & Yakpo 2020; Yakpo 2021b), copula systems (Yakpo 2021a, 2023b) and pronominal systems (Yakpo 2019a). The stratal-areal contact model is premised on the fact that creoles are spoken in sociolinguistically stratified ecologies that are nonetheless characterized by general principles of contact and areal advergence and convergence. Differences in the stratal constellation in an ecology will therefore lead to differing contact outcomes.

First, (a) the cohabitation in the same ecology of the creole and a superstrate that is at the same time the creole's lexifier will lead to more significant change in the creoles towards the superstrate than when the superstrate is not the lexifier. Secondly, (b) the presence of African adstrates in an ecology will reinforce and expand existing African substrate features in a creole, while the absence of contact with African adstrates will lead to a weakening of substrate features. Thirdly, (c) the deeper a creole is socially entrenched, the more genetic features will be retained when a creole is transplanted elsewhere by some of its speakers (as has happened with Krio and its speciation into Pichi). The shallower social entrenchment is, the more areal features from adstrates will, in turn, eventually take hold in the creole. The relative size of L1 and L2 communities is not particularly important in this regard (for details on social entrenchment, see Yakpo 2021a).

The processes that lead to such outcomes are no different from those found in non-creole contact scenarios. However, creole ecologies shine a spotlight on the importance of social factors in all language contact outcomes (Yakpo 2020a). Table 5 singles out the areal contact scenarios of Pichi and Krio (for all constellations, see Yakpo 2017a: 68–69). *Areal contact constellation* indicates the presence (+) or absence (–) of contact with the relevant strata of lexifier, superstrate(s), substrate(s), and adstrate(s). Hypotheses on *areal contact outcomes* are provided in the rightmost column and itemized (a)–(d).

In areal contact constellation 1 in Table 5, represented by Krio, the creole has been in unbroken contact with the lexifier English since its emergence. The creole is also spoken alongside one or several African adstrates, the most prominent being Temne, Mende, and Mandinka. The areal contact outcomes of this stratal constellation are the following: (a) features are transferred to Krio from the superstrate English and features inherited from the English lexifier are strength-

Table 5. Areal contact scenarios

	Areal contact constellation	Areal contact outcomes
1 Krio	+contact with English –contact with non-lexifier superstrate +contact with African adstrates	Transfer from the English lexifier superstrate and strengthening of English lexifier features Transfer from a non-lexifier superstrate does not apply Transfer from the adstrates Temne, Mende, and Mandinka Strengthening of Macro-Sudan features
2 Pichi	–contact with English +contact with non-lexifier superstrate +contact with African adstrates	No transfer from English and weakening of English lexifier features Transfer from the non-lexifier superstrate Spanish Transfer from the adstrates Bube, Nigerian Pidgin, and Cameroon Pidgin Weakening of Macro-Sudan features

ened; (b) Krio has been in unbroken contact with English so there has never been any contact with a non-lexifier superstrate; (c) features from the African adstrates are transferred to Krio; and (d) areal Macro-Sudan features inherited from Yoruba and other West African substrate languages from the Krio founder period are retained and strengthened through contact with the adstrates. Overall, Krio appears more English-like and at the same time exhibits more Macro Sudan features than Pichi.

In constellation 2, represented by Pichi, the creole is no longer in contact with the lexifier English but instead with the non-lexifier superstrate Spanish. The creole is also spoken alongside African adstrates, in this case the Bantu language Bube, and during the 20th century and to some extent still today, Nigerian Pidgin and Cameroon Pidgin. The areal contact outcomes of this stratal constellation are: (a) there is no transfer from the lexifier English and a concomitant weakening of inherited English lexifier features; (b) features of the non-lexifier superstrate Spanish are transferred to Pichi; (c) features of the major adstrate Bube and the adstrates Nigerian Pidgin and Cameroon Pidgin are/were transferred into Pichi; and (d) Macro-Sudan features inherited from Early Krio and its substrates are weakened. Overall, Pichi appears less English-like, more Spanish-like, less Macro-Sudan-like, and more Bantu-like than Krio. The overall outcome is therefore a certain degree of genetic divergence of these two closely related languages through their areal advergence with typologically very different languages in their respective linguistic ecologies.

In the following, I briefly detail these two contact constellations where they contrast, namely with respect to contact with the lexifier vs. contact with a non-lexifier, listed under (a) and (b) in Table 5 and contact with differing adstrates, listed under (c) and (d).

4.1 Contact with the lexifier superstrate (a) vs. Contact with a non-lexifier superstrate (b)

The segmental similarity between a creole and its lexifier superstrate provides a cognitive basis for interlingual identification that does not exist with a non-lexifier superstrate, leading to different contact outcomes in Krio and Pichi (see Yakpo 2017a, 2023a). Form priming triggers and drives phonological change of etymologically related creole words in the direction of their lexifier etymons (see Yakpo & Smith 2020: 189–191 for phonological evidence). A pre-existing formal similarity may, in turn, accelerate the development of shared polysemy and idiomatics beyond what is usual in cases of contact between unrelated languages (see Dawson 2003; Yakubovich 2010; Law 2013). Put together, segmental and structural similarities between the creole and the lexifier will lead to more than the usual amount of transfer from the lexifier of segmental material, semantics, combinatorial and frequential patterns (Johanson 2002). In this, creole-lexifier contact is akin to dialect contact and convergence (see Gaetano 2005).

An example of the differential outcomes of lexifier vs. non-lexifier contact is the fate of the habitual marker *kin* ‘HAB’ in Krio and Pichi, listed under category (1) in Table 4, Section 1. In Pichi, the use of *kin* as an abilitive modal is obsolete. By contrast, continuous reinforcement by the English source etymon *can* during Krio-English contact in Sierra Leone has ensured the enduring vitality of the abilitive function of *kìn* in Krio, which constituted the lexical source of the habitual function in the first place. This reinforcement is (i) segmental-formal (the pronunciation of *kìn* and *can* is very similar), (ii) lexical (both express ability), (iii) combinatorial (in English and Krio, preverbal auxiliaries cooccur with morphologically invariant lexical verbs in a right adjacent position), and (iv) frequential (in English and Krio, *can* and *kìn* are high frequency items compared to words with overlapping meanings, e.g., *able* and *ébùl* in English/Krio). In contrast, there is no formal overlap between Pichi *kin* and the Spanish auxiliary *poder* ‘can’, in spite of a semantic overlap. The alternative habitual marker *blàn* (see (1) in Table 4) may have evolved in Krio because the abilitive and habitual senses of *kin* are difficult to disambiguate.

Beyond that, the expression of the entire range of participant roles via English-like verb-PP collocations in Krio (see (2) in Table 4) has been maintained and possibly expanded through form priming as well. However, the presence of

the Spanish-origin continuative auxiliary *sigue* ‘continue’ in Pichi shows that the phonological shapes, their meanings, and combinatorics can also be borrowed from their respective superstrates without formal correspondences.

4.2 Contact with adstrates (c) and strengthening/weakening of Macro-Sudan features (d)

The distinction between European superstrate and African adstrates also stands for differing contact outcomes. The superstrate is the socially superordinate, standardized, colonial, and official language with the highest prestige in the ecology. Creole speakers therefore preferably borrow lexicon from the superstrate not the adstrates, even if the superstrate is not widely spoken in the ecology, as in most African ecologies. Transfer from the adstrates will, by contrast, tend to be structural in nature. The superstrate-adstrate distinction therefore predicts the tendency towards the borrowing of matter (morphological material and phonological shapes) and patterns (the organization, distribution and mapping of grammar and semantics) from the superstrate, and pattern borrowing from adstrates (for the terms, see Sakel 2007). A superstrate may, however, become socially so dominant and so widely spoken that both matter and pattern are predominantly borrowed from the (lexifier or non-lexifier) superstrate into the creole and adstrates eventually play a very minor role in contact-induced change in an ecology (e.g., Dutch in Suriname, see Yakpo 2021c).

In the case of Pichi, large-scale language shift to Pichi by Bube speakers is therefore likely to have contributed to the demise of lexically more restricted prepositions like *b̀t* ‘about’ and *p̀n* ‘on’ and the expansion of the multipurpose forms *f̃* ‘PREP’ and *ẁt* ‘with’. The consolidation of these multipurpose forms would have been reinforced by adstratal contact of Pichi with Cameroon Pidgin and Nigerian Pidgin. In the basilectal registers of the latter two varieties, the preposition *f̃* may fulfil all of the functions listed under (2) in Table 4 (Faraclas 1996: 63–64, 223–224; Nkengasong 2016: 86–88). This brings Pichi in line with a Niger-Congo and areal tendency towards few multipurpose prepositions (Creissels 2006) as well as “hypertransitivity” (Essegbey 2015), i.e., the use of direct complements to encode non-prototypical undergoers in a multiplicity of semantic functions (for a Bantu language of the region, see van de Velde 2008: 292–299).

The emergence of the progressive aspect marker *dé p̀n* ‘PROG’ in Krio has, in turn, been attributed to more recent adstrate transfer (see Hancock 2017), which explains its absence in Pichi. The cause of divergences between Krio and Pichi in other TAM marking strategies listed under (1) in Table 4 is less straightforward in the absence of comparative data from Bube. The origins of the Pichi egressive

construction involving *kòmót* ‘come out’ and the durative construction involving *sté* ‘stay’ remain obscure; allowance must therefore always be made for independent development in creoles without any direct transfer from superstrates, adstrates, and substrates.

The decline of SVCs in Pichi, in turn, is best ascribed to contact with Spanish and Bube (see (3) in Table 4). The lexicalization of motion-direction SVCs, the rarity of instrumental and theme-introducing TAKE-SVCs, the demise of benefactive GIVE SVCs and of sequential and resultative SVCs in Pichi is not too surprising on the backdrop of Bantu typology. SVCs are a trivial areal feature of the Macro-Sudan but are largely absent in the Bantu spread zone (Güldemann 2011: 117). It is well possible that the completive construction involving post-verbal *dón* ‘finish’ (see (1) in Table 4), also essentially a resultative SVC, did not survive in Pichi for the same reason. The survival of a large range of SVCs in Krio can be seen in the same light. Since SVCs are so pervasive an areal trait across all Macro-Sudan adstrate and substrate languages of Krio, even centuries of intense lexifier-superstrate contact with English have not diminished their role.

On the flip side, it is quite remarkable how *similar* Krio and Pichi have remained despite two centuries of separation and independent evolution without top-down standardization. This contrasts with the far more significant differences between Krio on the one hand, and Nigerian Pidgin, Cameroon Pidgin and Ghanaian Pidgin on the other (Yakpo 2013b). One important reason for their enduring similarity is that despite their geographical distance, Krio and Pichi have continued to exist in socially similar linguistic ecologies. Crucially, Krio and Pichi are *socially deeply entrenched*, having been continuously spoken by numerically modest but economically vibrant, prestigious, and norm-setting L1 Krio communities with a high ethnolinguistic vitality. This sets Krio and Pichi apart from the other African AEC varieties (see Yakpo 2021a).

5. Conclusion

The comparison of Krio and Pichi in the preceding sections shows that they are closely related. The correspondences in their TAM systems go well beyond the core markers shared by all African varieties. They do, however, also show some significant divergences.

The difference between contact with the lexifier superstrate (Krio and English) and a non-lexifier superstrate (Pichi and Spanish) has been crucial with respect to some contact outcomes in the TAM domain, and even more so in the realm of participation. When an English-lexifier creole like Krio is spoken alongside its lexifier, parallels in form and meaning provide cognitive links for transfer

from English that initiate and accelerate the lexical and functional alignment of creole forms and structures with those of the superstrate. By comparison, contact with a non-lexifier superstrate like Spanish has not led to the same degree of areal advergence in the case of Pichi.

This is also supported by negative evidence in the absence of English-leaning contact outcomes in the domain of serial verb constructions. SVCs of the kind described here are absent in English but areally so pervasive in West Africa that Krio has maintained a large range of them despite centuries of contact with English. In Pichi, by contrast, the same process of areal transfer, this time via contact with the non-serializing languages Bube and Spanish, has led to the restriction and in some cases, the disappearance of SVCs.

In this way, superstrate and adstrate contact, and concomitant contact-induced innovation have led to the genetic divergence of the two creoles and their areal advergence with other languages in their respective ecologies. Since the languages spoken alongside Krio and Pichi in their respective ecologies are so different, these changes have not proceeded in a similar direction. The overall outcomes are instructive for understanding the evolution of African Caribbean English Creole per se and that of other large pluri-areal language continua (e.g., Swahili, Hindustani, or Malay).

Further studies will surely reveal an even more complex picture. It is therefore appropriate to conclude with a caveat of Felix, who has always been reluctant to propose magic bullet and cast-iron explanations, no matter how elegant they may seem: *“In comparative linguistics one of the greatest challenges is to tease apart features that are shared by a group of languages from those features that are due to geographical proximity, genetic inheritance, contact or borrowing or coincidence or universal tendencies.”* (Ameka & Essegbey 2017: 266)

Conventions for interlinear glosses and abbreviations

-	Morpheme boundary	EMP	Emphatic
=	Clitic morpheme boundary	FOC	Focus
1	First person	FUT	Future tense
2	Second person	HAB	Habitual aspect
3	Third person	INDP	Independent person form
ABIL	Abilitive mood	INTJ	Interjection
ANIM	Animate	IPFV	Imperfective aspect
COMPL	Completive aspect	LOC	Locative
COND	Conditional mood	NAME	Proper name
COP	Copula	NEG	Negative
DEF	Definite article	OBJ	Object case


OBL	Obligative mood	PST	Past tense
PFV	(Narrative) perfective aspect	QUOT	Quotative
PL	Plural number	REP	Repetition
PLACE	Place name	SBJ	Subject case
POSS	Possessive case	SBJV	Subjunctive mood
POT	Potential mood	SG	Singular number
PREP	General associative preposition	SP	Sentence (pragmatic) particle
PRF	Perfect aspect	SUB	Subordinator
PROG	Progressive aspect	TAM	Tense-aspect-mood

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