Complexity revisited: Pichi (Equatorial Guinea) and Spanish in contact*

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1 Introduction

the original draft.

Recent attempts to prove the simplicity of Creoles with respect to non-Creoles (e.g. McWhorter 1998, 2001, 2005) have, like preceding ones (e.g. Coelho 1880; Whinnom 1971; Bickerton 1981, 1984; Seuren & Wekker 1986) concentrated on describing the assumed paucity of selected surface phenomena in quantitative terms. None of these accounts has taken into consideration that typically, Creoles are languages in contact. In the multilingual speech communities of West Africa but equally so in other regions, Creoles and Pidgins are in contact with lexifier superstrates, with historically unrelated non-lexifier superstrates and with a host of other, oftentimes substrate, languages. This paper attempts to provide answers to two questions. (1) Can we reconcile the complexity of the mixed grammar and lexicon of a language like Pichi with the notion of simplicity given that code-mixing of the type presented here forms an integral part of the linguistic system of the language? (2) Can we reconcile the restructuring (or "elaboration" in terms of the simplicity hypothesis) of Pichi grammar and lexicon through code-mixing within the short time-span of a hundred and seventy years with the notion that the youth of Creoles makes them simpler than non-Creoles (McWhorter 2001, 2005).

In sections 2 and 3, I present the patterns and range of Pichi-Spanish code-mixing. In section 4 I address the notions of simplicity and complexity. I present a point-by-point comparison of the syntactic complexity of Pichi (defined as the number of "syntactic rules" (McWhorter 2001)) and its lexifier language English with respect to the code-mixed structures presented in the following. I conclude that code-mixing produces structures in Pichi which are at least as complex, if not more complex than the corresponding ones in English (cf. 4.1). A number of socio-political and linguistic factors are identified that have favoured the rapid development of Pichi to its present shape, irrespective of the shallow time-depth of the language. In the course of this development, Pichi has become a modestly mixed language which shares a number of characteristics with more thoroughly mixed or intertwined languages like Media Lengua or Berbice Dutch (cf. 4.2). A brief

The data for this study was collected in Bioko in 2003, 2005 and 2007. I am grateful to my language consultants who patiently familiarised me with the intricacies of Pichi. This study constitutes a chapter of my dissertation thesis entitled "A Grammar of Pichi (Equatorial Guinea)" at the Radboud Universiteit Nijmegen under the supervision of Pieter Muysken and Norval Smith. I am particularly indebted to Pieter Muysken for his support and constant encouragement. I am also thankful to the Centre for Language Studies of Radboud Universiteit Nijmegen, which generously provided funding for the field research on which this study is based. A final word of thanks goes to the anonymous reviewers whose comments allowed me to remedy numerous shortcomings of

comment on the question of the general complexity of Pichi provides the final part of this paper (cf. 5).

Pichi is an English-lexifier Creole language spoken in Equatorial Guinea on Bioko, the largest island in the Gulf of Guinea. It is thought to be descended from an early form of Krio, which first arrived in Bioko, (formerly Fernando Po), with African settlers from Freetown, Sierra Leone in 1827 (Fyfe 1962: 165). For thirty years, Bioko, though formally a Spanish colony, was effectively under British political and economic control (del Molino 1993: 93ff). In 1857, Spain began asserting its suzerainty over Equatorial Guinea and Spanish replaced English as the language of colonial domination on the island. From then on, the Spanish language together with the enforcement of Spanish economic, cultural and religious systems, became an essential element in the colonial subjugation of the Bube, the autochthonous population of Bioko and the other peoples of the island. Pichi, however, continued to thrive – first as the native language of the Fernandinos, the African elite of settler origin in the capital Santa Isabel (today Malabo), then as the lingua franca of the entire island and first language of an increasing number of Bube, only to have become today the second most widely spoken African language of Equatorial Guinea after Fang (cf. www.ethnologue.com: "Equatorial Guinea").

The admixture of Spanish words, phrases and clauses is a typical feature of Pichi discourse. Pichi-Spanish language contact manifests itself in many ways. For one, Spanish elements belonging to different word classes and semantic fields are found in Pichi sentences, and speakers use a variety of strategies to accommodate Spanish material. Such language contact, henceforth termed code-mixing, can be classified into different patterns, in accordance with the structural characteristics of mixing. In using the terms insertion, alternation and congruent lexicalisation in differentiating these types, I rely on the terminology and analytical template of Van Hout and Muysken (1995) and Muysken (2000) (cf. section 2). Further, the integration of Spanish material into Pichi does not simply occur randomly. Code-mixing affects different areas of Pichi grammar and lexicon systematically and with differing frequency. Mixing is so generalised in certain semantic fields that Spanish lexical material has marginalised or supplanted corresponding Pichi lexicon. Likewise, certain constructions involving Pichi and Spanish material are so conventionalised that they can be said to constitute an integral part of the grammatical system of Pichi (cf. section 3).

In (1), we find many of the features that characterise Pichi-Spanish code-mixing: The adjunctional use of the discourse markers *entonces* 'then' and *pero* 'but' at the clausal fringe; a frozen verb form *cuenta* 'relate', which is integrated into a Pichi verb phrase; the copula *es* as a focus marker, and the Spanish noun *pareja* 'couple' in a Pichi noun phrase, as indicated by the preposed indefiniteness marker *wan* and nominal reduplication:

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(1)
       Entonces, lek
                                                             mì.
                         haw
                                mì
                                       mama
                                                  cuenta
                                                                    es
                                                                           tεl
                                                                                  mi
                                                                                             se,
                                       mother relate
       so
                  like
                         how 1sg
                                                             1s<sub>G</sub>
                                                                    FOC
                                                                           tell
                                                                                  1sg.obj
                                                                                             QUOT
       dὲn
              bìn
                     dè
                            kəmət
                                       pero
                                              dὲn
                                                     no
                                                             bìn
                                                                    bi
                                                                                  pàrèjà~pàréjà.
                                                                           wan
                                                                                  couple~INT
                     IPFV go.out
                                       but
                                              3<sub>PL</sub>
       3<sub>PL</sub>
              PST
                                                      NEG
                                                             PST
                                                                    COP
                                                                           one
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'So, according to what my mother told me, was to tell me that they were going out but they were not a real couple.'

The principal reason for the pervasiveness of Pichi-Spanish code-mixing patterns lies in the economic, social and political domination of Pichi by Spanish, the colonial, and present official language of Equatorial Guinea. Where the language used in state-institutional and many formal social contexts is almost exclusively Spanish, Pichi is relegated to the informal, the familiar, the local, to marginalised economic activities, to the in-group domain. An additional factor favouring code-mixing is the positive attitude towards multilingualism in a highly polyglot society, against the background of a tenacious vitality of Pichi as a symbol of social identity. Presumably, Pichi-Spanish code-mixing has for a long time served as a badge of identity for the autochthonous population in the course of a long history of large-scale immigration to Bioko by speakers of other varieties of West African English-lexifier Creoles such as Nigerian, Cameroonian and Ghanaian Pidgin. Today, the language also plays an important role for the self-identification of those who grew up on the island in the face of an accelerated pace of internal migration by Equatoguineans from the mainland. Bon na ya, gro na ya, 'born here, grown up here' is the mark which distinguishes Pichi-speaking islanders, irrespective of their ethnic background, from the late arrivals of mainland origin whose Pichi is faulty or non-existent. In the past ten years, the burgeoning oil economy of Equatorial Guinea has led to increased urbanisation, extending multiethnic social networks and the spread of Pichi and Spanish as native languages. In such a socioeconomic environment and amidst a high general competence in the official language Spanish, code-mixed Pichi-Spanish registers, rather than being exceptional, are consciously and confidently articulated in daily life.

Pichi and Spanish therefore form two points of a contact setting which features as a third point the other African language(s) spoken in Malabo (chiefly the autochthonous Bantu languages Bube and Fang, the Portuguese lexifier Creole Fa d'Ambu, as well as other African, non-equatoguinean languages). However, the import of African languages into Pichi is not-nearly as visible as admixture with Spanish, and is limited to a few lexical items in well-defined semantic areas. It is left to future research to uncover the possible syntactic and semantic mixing of Pichi and other African languages

The study of Pichi has tremendous potential for the scholar of contact and Creole linguistics. Here, we have an English-lexifier Creole, which has been cut off from its lexifier for a good hundred and fifty years. Rather than having to analyse such contact through a variationist model (cf. Patrick 1999) contact-induced effects are easily identified. Rather than viewing these effects in terms of a (de)creolisation continuum (e.g. O'Donnell & Todd 1980; Rickford 1987) involving historically unrelated baso- and acrolects, we can simply speak of regular language contact between a dominated language and a dominating one without assuming Creole exceptionalism (cf. DeGraff 2002 for a critique of exceptionalism). Such an analysis may help us obtain a better grasp of the dynamics of language contact and language change involving English-lexifier Creoles

and unrelated superstrates in other contact scenarios throughout the Atlantic basin (cf. Snow 2000: 151 for a list of the relevant Caribbean Creoles).

The present study of Pichi-Spanish code-mixing has some shortcomings. It is based on selected texts of a corpus compiled during two sojourns in Malabo in 2003, 2005 and 2007 as part of my ongoing dissertation project. Hence, the field methodology was not specifically geared towards the collection of code-mixing data. This work therefore relies on the traditional method of analysis of spontaneous speech, a method that has its limitations if not complemented by experimental techniques (cf. Muysken 2004). Beyond that, a more comprehensive study of Pichi-Spanish code-mixing should provide a thorough and systematic analysis of syntactic borrowing, calquing and interference from the superstrate language Spanish as well as relexification. The scope of this study is also limited because I have only been able to cast a cursory glance at phonological aspects of code-mixing. The interaction of the stress system of Spanish with the Pichi supra-segmental system which involves lexical and grammatical tone, as well as stress would certainly reveal highly interesting code-mixing phenomena.

In the code-mixed examples provided, Spanish material is presented in italic and spelled out using conventional Spanish orthography. The transcription of Pichi that I use here closely follows the Krio orthography used in the seminal Krio-English Dictionary (Fyle & Jones 1980) and subsequent revisions (Coomber 1992). Tone is only marked on personal pronouns and tense, aspect and modality markers. With members of these categories, grave accent indicates a low tone, while syllables devoid of marking bear a high tone. Elsewhere, acute accent marks a high tone. The graphemes $<\epsilon>$ and <0> designate the segments $[\epsilon]$ and [0] respectively.

2 Patterns of code-mixing

A type-token analysis of the corpus according to language and word class is given in Table 1. Altogether, the Pichi corpus studied here contains 1475 word types and 22 059 tokens. The table reveals a number of characteristics which are relevant for the following discussion. The high Spanish ratios of types (the number of different words) indicates that Spanish elements form an integral part of the vocabulary of Pichi – at least a third of the word class types below are of Spanish origin. Obviously, the ratio of Spanish types varies according to word class. Thus we have the highest ratios for numerals, conjunctions and nouns. The ratios of Spanish tokens (individual occurrences) reveal a different picture. Numerals still TOP the list, this time followed by nouns and property concepts ("adjectives") but there is a relatively sharp decline for all word classes but numerals, in particular conjunctions. This shows that the frequency with which Spanish words are used is considerably lower. With the exception of numerals, the Spanish ratio of tokens does not surpass a fifth of the total. Table 1 also suggests that there is apparently no particular restriction on the use of the Spanish function words included here (cf. Myers-Scotton 1993b; Joshi 1985 on the special behaviour of function words in code-mixing). Spanish conjunctions have relatively high ratios, while Spanish verbs, which are content words, score

lowest on types and tokens. A more fine-grained analysis of the relation between type and token in this corpus would certainly reveal more about the borrowability of members of specific word classes and the criteria that favour code-mixing between these two particular languages (cf. Van Hout & Muysken 1994).

Table 1 Type-token analysis

	Types			Tokens		
	Pichi	Spanish	Spanish ratio	Pichi	Spanish	Spanish ratio
Nouns	345	346	0.50	2748	664	0.19
Verbs	246	94	0.28	3771	192	0.05
Property concepts	62	48	0.44	450	99	0.18
Numerals	17	28	0.62	166	146	0.47
Prepositions	16	9	0.36	1107	54	0.05
Conjunctions	6	8	0.57	663	95	0.14

Muysken (2000) identifies three fundamental patterns of code-mixing that accommodate cross-linguistic mixing phenomena: insertion, alternation and congruent lexicalisation. Insertion is characterised by the integration of donor language material, usually single constituents, into the morphosyntactic matrix of a recipient language. Alternation, on the other hand, denotes the alternating activation of the grammar and lexicon of the participating languages. Hence, alternation is bi-directional, usually occurs at clause peripheries and may affect larger syntactic chunks than code-mixing under insertion. Congruent lexicalisation is found where material from either language is grafted on shared grammatical structure. Congruent lexicalisation is therefore characterised by the simultaneous activation of two or more grammars and thence, the absence of significant structural constraints on mixing. All three of these patterns are operative in Pichi-Spanish code-mixing.

2.1 Insertion

Inserted Spanish constituents may belong to different word classes but the insertion of content words, and nouns in particular, prevails. Thus we find *novio* 'fiancé' and *pueblo* 'village' in (1). Notably, these nouns are selected elements, the former by the verb *get* 'get', the latter by the locative preposition *na*. Verb insertion is shown in (3) with *baja* 'descend' while *crudo* 'raw' in (4) can be analysed as a case of adjective insertion. Mixing of adjectives is taken up in more detail in sections 2.3 and 3, where an alternative explanation is proposed:

(2) Mek yù yù pueblo, no se dən gεt novio na na kantri fiancé LOC village SBJV know quot 2sg PRF get LOC home.town 'You should know that you already have a fiancé in the village, in the home-town

- lεk (3) εni è baja haw è dè baja, wan we yù si 3SG.SBJ descend like how descend every one SUB 2sg see 3SG.SBJ cinco, dan quinze dias we è kìn de na that forty and five that fifteen days sub 3SG.SBJ HAB COP LOC cinco dias dè fə tierra, o cuarenta y go skul inalés. five days 3sg.sbj school English **IPFV** go ASS 'Everyone that you see (that) has got off [from the oil rig], as soon as he gets off, those forty-five, those fifteen days that he usually is ashore, or forty-five days, he goes to English lessons.'
- (4) [...] lɛk se è de crudo o son tin.
 like QUOT 3SG.SBJ COP raw or some thing '[...] as if it were raw or something.'

Novio, pueblo and tierra in the examples above occur as bare nouns and are straightforward examples of insertion. In contrast, the mixed attributive construction skul fo inglés 'English school' in (3) is better analysed as an instance of congruent lexicalisation with the analogous Spanish construction 'escuela de inglés'. This construction involving a Pichi/ Spanish modified noun, the associative preposition fo and a Pichi/ Spanish modifier noun is quite frequent. Noun phrase insertion, here an adjective + noun combination headed by the Pichi determiner dan 'that', is exemplified by cuarenta y cinco/ quinze dias 'forty-five/ fifteen days', also in (3). Another example of the insertion of a selected element is (5), where we find a Spanish verbal complement reduce 'reduce' of the Pichi modal verb tray 'try'.

(5) Tray reduce in.
try reduce 3sg.emp 'Try to reduce it.'

As we will see below, alternation works in the opposite way to insertion. It does not involve the integration of Spanish material into the morphosyntactic mould of Pichi. Instead of syntactic integration and selection, we have paratactic coordination or adjunction and the alternating activation of Pichi and Spanish grammars.

2.2 Alternation

The long switch in (6), which occurs at a clause boundary and constitutes a sentences of its own is a typical instance of alternational code-mixing. A further indication of alternation is the whole or partial reiteration in one language of preceding material in the other language as in (7):

- (6) À bən nayntin por lo tanto ahora twenti fo. tengo twenty four therefore 1sg.sbj be.born nineteen I.have now ochenta años. 'I was born in 1924, therefore I am now 80 years old.' eighty years
- (7) Soy del veinte cuatro, à bon nayntin twenti fo.

I.am of the twenty four 1sg.sbj be.born nineteen twenty four 'I am of twenty-four, I was born nineteen twenty-four.'

A common multi constituent switch under alternation involves the Spanish focus syntagma *es que* 'it is that' in (8), which shares the feature of clause peripherality with switched adverbial adjuncts such as a *a parte* 'separately' in (9):

- (8) gεt bele siempre suele Es human así. It.is that woman 3SG.SBJ get belly always usually be so **SUB** 'It's that women who are pregnant are always like that.'
- (9) Ehε wan glas wata a parte, yù put àn insay. glas 2sg 3SG.OBI inside one water separate put PCL 'Exactly, one glass of water separately, you put it inside.'

Spanish discourse markers are also frequently in use at the clausal fringe. They include the high frequency item *pero* 'but' and *bueno* 'well'. The latter is encountered in a left-peripheral position (11) like the former (10), but also mixed-in, in what structurally appears to be an extrasentential mix, where the Spanish material is hemmed in by prosodic breaks (12):

- (10) Pero como dì arena tu lilili, [...].
 but since ART sand too little 'But since the sand was too little, [...].'
- (11)Bueno. è tεl tide. kan mì se na SO well tell today 3SG.SBJ CON 1sg OUOT FOC SO 'Well, so she told me that it was today.'
- (12)Son ten dèn wì kìn dè go de sεf fə fə bueno, go, go some time PL 1_{PL} go there EMP well HAB IPFV ASS ASS go go visit nə. 'Sometimes we would even go there to go, well, to go visit, right.' visit right

The exclamative *chico* 'boy' (13) is strongly favoured over other human-denoting Pichi equivalents such as *man*, *papa or mama*. *Mierda* 'shit' possesses no semantic equivalent in Pichi, since *kaka* 'faeces' is not used as an exclamative in Pichi (14):

- (13) Pero chico, na yù pikin ìn layf.
 but boy Foc 2sg child 3sg.poss life 'But, hey, it's your child's life.'
- (14) Mierda mierda, usay è pas? shit shit Q=side 3SG.SBJ pass 'Shit, shit, which way did she go?'

The switch in (15), involving the complex conjunction *de forma tal* 'in such way that' may result from insertion, or, the explanation that I prefer, may be indicative of alternation. The latter analysis is supported by the fact that the mix involves a multi-constituent and bears no syntactic relation to surrounding constituents. In fact, the cause-effect relation in (15) may just as well be expressed in Pichi by adjunction of the two phrases. Also, the mixed-in material is once more enframed by prosodic breaks, indicated by commas in the transcription. Alternational codemixing is also at play in (16), with the syntactically independent adverbial phrase *durante un mes entero* 'during an entire month':

- (15) Dèn bit àn, de forma tal, dèn brok ìn bilis.

 3PL beat 3SG.OBJ of form so 3PL break 3SG.POSS ?

 'They beat him, in such way (that), they broke his?
- (16) À fit hol dan moni durante un mes entero.

 1SG.SBJ be.able hold that money during ART month entire

 'I can keep that money during an entire month.'

The final pattern of code-mixing to which we now turn is congruent lexicalisation, which produces the most complex forms of code-mixing and may involve function words.

2.3 Congruent lexicalisation

Besides the non-linguistic factors mentioned in section 1, a number of structural characteristics facilitate the intense code-mixing relation that Pichi and Spanish have (cf. Clyne 2003: 162ff). Pichi and Spanish constituent order converges in main and subordinate clauses, with the exception of a few areas such as pronominal syntax (cf. Sankoff & Poplack 1981). The categorial equivalence of basic categories such as nouns and verbs in Spanish and Pichi and of certain functional categories, for example conjunctions, certainly also facilitates insertion. Some degree of equivalence may also encourage mixing under congruent lexicalisation in areas where the categorial overlap is less clear-cut, for example, with property concepts ("adjectives"). Furthermore, we should not forget that Spanish and Pichi have sparse inflectional morphology in many sub-areas of their respective grammars, a factor that appears to facilitate one-to-one mapping of equivalent syntactic categories (cf. Muysken 2004: 154; Van Hout and Muysken 1995: 60). Many of the examples that follow in these sections - i.e. selected mixes, long multiconstituent mixes, sudden changes in the base language from Pichi to Spanish, the mixing-in of function words, and mixed collocations consisting of copula-adjective combinations or mixed attributive constructions - reveal complex code-mixing that may indicate the simultaneous operation of two or more mixing patterns.

The type of back and forth switching that characterises Pichi discourse is exemplified in (17). Here, *colegio* 'college' and *cuatro años* 'four years' look like insertions. Meanwhile, the switch *fuera con mì* 'out with my' is best understood as an instance of congruent lexicalisation. For one, we

have linear equivalence of the two languages. Secondly, *mì* '1sg (Poss)' is a homophonous diamorph, a morpheme that is identical in form and function in both languages, right down to its suprasegmental feature of low tonedness/ non-stressability. Besides that, the form functions as a possessive pronoun through juxtaposition with the possessed noun in both languages. Furthermore, the bidirectional nature of code-mixing under congruent lexicalisation is evident in the ensuing switch to Pichi: *misis* 'socially superior woman' now looks like an insertion into a Spanish matrix, hemmed in by the preceding material and the subsequent *cuatro años* 'four years':

(17) À kəmət colegio à de fuera mì misis con high.school 1sg.sbj outside with 1sg 1SG.SBI leave COP superior.woman lεf años à no tek bele à no mì bajin. cuatro four years 1sg.sbj NEG take belly 1sg.sbj NEG leave 1sg virginity 'I came out of high school, I was outside with my guardian for four years, I didn't become pregnant, I didn't give up my virginity.'

The most frequently used Spanish function words are the subordinating conjunctions *como* 'since' and *porque* 'because'. Examples (18) and (19), as well as (20) and (21) demonstrate the equivalence of the two Spanish function words with their respective Pichi counterparts as and *bikas*:

- (18) Como wi dè kəl Panya, chek àn mono na in IPFV call since 1PL.EMP 3SG.OBI overall Loc Spanish 3sg.EMP think 3SG.OBJ se εf è təkse wan monki, gò de fayn. talk quot one monkey 3sg.sbj fut COP 'Since we [emphasis] call it "mono" in Spanish, he [emphasis] understood it such that if he said "one monkey", it would be all right.'
- (19) As in sista dèn bìn dè kəl mama sista, in as 3sg.poss sister 3pl PST IPFV call 3sg.poss mother ouot sister 3sg.emp dè kəl ìn mama se sista. call 3sg.poss mother quot sister 'As her sisters would call her mother sister, she [emphasis] would call her mother sister.'
- (20)mared. Υù nεa pikin porque yù nεa gεt 2sg get child because 2s_G NEG.PRF marry NEG.PRF 'You don't yet have a child, because you aren't yet married.'
- yù (21)fə dan tin dəkta dè chek Na no dè gò porque yù that thing 2sG think FUT doctor because 2sg FOC ASS NEG **IPFV IPFV** wich? Se na witchcraft QUOT FOC It's due to that, that you aren't going to the doctor because you think that it's witchraft?'

Congruent lexicalisation may also be at work in the widespread pattern whereby the [-time stable] Pichi copula *de* combines with any Spanish adjective as in (22). This construction is analogous to the Spanish [-time stable] *estar* + property concept construction (23):

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(22) Chico, è de complicado!

boy 3sg.sbj cop complicated 'Boy, that's complicated!'
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(23) Hoy estoy cansada.
today I.am tired 'Today I'm tired.'

Section 3 explores how the three patterns are at play in the conventionalisation of mixing involving noun phrases, verbs and functional elements.

3 Conventionalisation of code-mixing

The preceding sections have unearthed a variety of contact phenomena that cut across the three code-mixing patterns. In the following, we cast a glance at the effects of code-mixing involving noun phrases and predicates including an established pattern of expressing mixed predicate adjective structures. We also look at some semantic fields that are disproportionately affected by the admixture of Spanish lexical elements (3.3)-(3.4). Here, the conventionalisation of codemixing and borrowing has in some instances led to the attrition of the corresponding Pichi lexicon. Beyond that, we find the conventionalised mixing-in of particular Spanish function words (3.5). In both cases, the categorial equivalence between Pichi and Spanish appears to favour this kind of code-mixing that involves function words and functional categories (Meechan & Poplack 1995: 190ff; Muysken 2000: 154ff).

3.1 Noun phrases

As indicated in Table 1, Spanish nouns make up a fifth of all noun tokens in the database. Most commonly, insertional code-mixing results in the integration of bare Spanish nouns into Pichi noun phrases. In the process, Spanish nouns are subjected to patterns of Pichi NP marking: they remain bare where Pichi nouns do so and are accompanied by Pichi determiners and the pluraliser in the same way as Pichi nouns would. In (24), a Spanish noun is preceded by the Pichi article $d\hat{i}$ and in (26) by the proximal demonstrative $d\hat{i}(s)$. In (25), we can observe how the noun pareja 'couple' is subjected to Pichi derivational morphology: the base receives a low tone on all syllables, while the reduplicant retains the Spanish prosodic structure (i.e. penultimate syllable stress, which gets reinterpreted as a low-high-low tonal sequence):

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(24) Porque
                        dì
                 fos,
                               paciencia,
                                              yù
                                                     no
                                                            gò
                                                                   gεt
                                                                          àn.
       because first ART
                               patience
                                              2s<sub>G</sub>
                                                     NEG
                                                            FUT
                                                                   get
                                                                          3sg.obj
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'Because first, the patience, you wouldn't have it.'

- (25) Entonces, lek haw mì mama cuenta mì, tεl es mi se, like so how 1sg mother relate 1s_G FOC tell 1sg.obj QUOT bìn dè dὲn kəmət pero dèn bi pàrèjà~pàréjà. no bìn wan but 3_{PL} PST IPFV go.out 3_{PL} NEG PST COP one couple~INT 'So, according to what my mother told me, was to tell me that they were going out but they were not a real couple.'
- (26) Bikas di pipul dὲn gò las mek mek dis plataforma ya end.up because this people 3_{PL} here fut make this oil.rig SBJV è wan de quema. day 3SG.SBJ burn one

'Because these people here will end up making this oil-rig burn one day.'

In contrast, the corpus contains only few examples of inserted Spanish determiner phrases like una desgracia 'a disgrace' in (27). Usually, Spanish determiner + noun combinations only appear in alternating sequences as does *el reportero más popular* 'the most popular reporter' in (28):

- (27) So mi mì yon è kan bi una desgracia.

 so 1sg.emp 1sg own 3sg.sbj con cop art disgrace

 'So me, my own [issue] came to be a disgrace.'
- el (28)reportero, programa más popular de este país, Na ìn nem programme more popular of this country 3sg.Poss name FOC reporter ART Vivencias na FOC Vivencias

'He's a reporter, the most popular programme of this country, its name is Vivencias.'

The conventionalised use of Spanish time measuring units involving nominalised numerals (cf. 3.3) is best explained by the operation of alternation. Time units are by their very nature non-selected adverbial adjuncts, even if they occur clause-medially as in (29). However, the occurrence of Spanish time units including the Spanish determiner las but without the preposition a 'at' in (30) may point towards an alternative explanation, namely that such determiner + noun mixes can be mixed in as holophrastic insertions as in (30). This interpretation is supported by the presence of the Pichi determiner wan 'a' before the truncated prepositional phrase:

- yù (29)Na nεt a las doce dèn gò kan dèn pul yù nəba day. night at ART twelve 3_{PL} FUT come 3_{PL} remove 2sG 2sg NEG.PRF LOC 'In the night, at twelve o'clock they will come and remove you and you aren't dead.'
- (30) Tumoro monin-ten, wan las siete so, à gò go de.

tomorrow morning-time one ART seven so 1sg.sbj fut go there 'Tomorrow in the morning, around seven or so, I will go there.'

The availability to Pichi speakers of holophrastic multi-constituent insertion with or without a Spanish determiner is also shown in (31). Las damas 'the (first) ladies' is the only token of a Spanish determiner phrase in object position. However, las damas is a borrowing that refers to the participants of the 2003 African summit of first ladies, which was convened in Equatorial Guinea. During the summit, las damas was a ubiquitous term in Malabo, as the event became the object of interest, joke and derision:

(31) À gò go luk àn fo wan *vecino* mek à luk*las damas*.

1sg.sbj fut go look 3sg.obj Ass one neighbour sbjv 1sg.sbj look Art ladies

'I will watch it [the summit] at a neighbour's, so that I may look at "las damas".'

As a general rule, Spanish plural denoting nouns are inserted with the appropriate allomorph of the Spanish plural morpheme $\{-s\}$. There is a strong likelihood that [+specific] Spanish plural nouns are additionally marked with the postposed Pichi pluraliser $d \grave{e} n$, in accordance with the pattern that applies to Pichi count nouns. Example (32) involves the [+specific] plural noun bloques 'bricks' followed by $d \grave{e} n$:

(32) Afta ùnà bay dì bloques dèn tumara.

after 2PL buy ART bricks PL tomorrow

'Then you [plural] buy the bricks tomorrow.'

Conversely, Spanish nouns have a strong tendency to occur wholly devoid of Pichi number and definiteness marking where Pichi nouns also occur bare, namely where the nominal referent is [specific]. We therefore find bare Spanish nouns with generic reference (33), and where [specific] coincides with the reduced pragmatic prominence of verbal (34) and prepositional (35) complements.

- (33) Aa, Guineano tu de son wowo~wo stayl.

 PCL Guinean TOP COP some ugly ~INT style

 'As for Guineans, they behave in a very irresponsible way.
- (34) Yù gò get pruebas.

 2sg fut get proofs 'You will have proof.'
- (35) À raya in wit rayador.

 1sg.sbj grate 3sg.emp with grater 'I grated it with a grater.'

The occurrence of *pruebas* 'proofs' in (35) demonstrates that Spanish nouns may well be devoid of Pichi noun phrase marking, but not necessarily so of the Spanish plural morpheme. This is not surprising, however, since in Spanish, determiner-less [+count] plural NPs may have [-specific] reference. The semantic overlap between Spanish plural nouns and Pichi bare nouns in codemixing can be seen in (36). Here the Pichi bare nouns *pia* 'avocado' and *sadin* 'sardine' are functionally equivalent to the Spanish plural noun *tomates* 'tomatoes':

(36) Mi wit Rubi wì mek jwεn~jwεn, wì bay bay sadin. pia, 1SG.EMP with Rubi 1PL make join~DISTR avocado 1PL sardine buy buy tomates, wì desayuna. wì bay tomatoes 1_{PL} have.breakfast 'Me and Rubi, we teamed up and bought avocados, we bought sardines, we bought tomatoes, we had breakfast.'

The insertion of larger nominal groups as opposed to single nouns is rarer than that of single nouns and many of the adjective-noun combinations we encounter are collocations that are lexicalised in Spanish. Compare the multi-constituent NPs nota máxima in (37), and traducción directa in (38):

```
(37) Dì TOP, dì nota máxima na diez [...].

ART TOP ART mark highest FOC ten 'The TOP, the highest mark is ten [...].'
```

(38) Na traducción directa è mek.

FOC translation direct 3sg.sbj make 'It's a direct translation that she made.'

Pichi NP constituent order remains unchanged when a Pichi property concept is used attributively with an inserted Spanish noun - the attribute precedes the Spanish head noun as with *las semana* 'last week' in (39).

(39) Ef yù bigin las semana bìn fə dən finis tide. bìn kan yù if 2sg PST CON begin last week 2s_G PST ASS PRF finish today 'If you had begun last week you would have been finished today.'

We could assume that the inverse NP constituent order of Spanish (NP + adjective) blocks the admixture of single Spanish attributive adjectives into Pichi NPs (cf. Sankoff & Poplack 1981). This is largely borne out by the data. There are, however, a handful of counter-examples that show how congruent lexicalisation may annul any potential constraint imposed by linear equivalence. Thus the usage of the Spanish adjective *serio* 'serious' in (40) is in line with the potential use of some Pichi (value) property concepts as phrasal adverbial modifiers in the same syntactic slot. Two of these, very frequent, property concepts are *fayn* 'nice; beautiful'(41) and *bad* 'bad' (42):

- (40) [...] di wan gò tən plaba *serio*.

 this one FUT turn trouble serious '[...] this will turn into real trouble.'
- (41)"Di trən" fayn, è man de de gεt sentido fayn. no no meaning fine this fine 3sg.sbj get man COP strong NEG COP NEG "Di man de tron" is not fine, it doesn't really have a meaning."
- (42) È fayn bad, è fayn bad. 3sg.sbj fine bad 3sg.sbj fine bad

'She is really beautiful, she is really beautiful

But there are also a few straightforward cases of postnominal insertion of Spanish attributive adjectives into Pichi NPs - *normal* 'normal' in (43) and *directo* 'direct' in (44). In (45), we find the opposite – the Spanish adjective *especial* 'special' is in prenominal position, the syntactic slot for attributively used Pichi property concepts:

- (43)Dì dən baja, we dì wata, ùnà dən dè si àn эp ART thing PRF go.down SUB ART water 2PL PRF IPFV see 3sg.obj up lεkε se wata normal. na like ouot foc water normal '(When) the thing has gone down, as for the water, you [plural] already see it above as if it were normal water.'
- (44)Na wan ənkul directo. fə ìn mì mama papa ìn uncle direct mother 3sg.poss father 3SG.POSS FOC one ASS 1s_G fambul pat. 'He's a direct uncle on the part of my mother's father's family.' family part
- [...] fis, è (45)bring kuk sən especial è mì gi 3SG.SBJ bring fish 3SG.SBJ cook some special fish 3SG.SBJ give 1s_G chop. mek à eat SBJV 1sg.sbj

'[...] she brought (a) fish, she cooked a particular fish and gave it to me in order to eat.'

So, the most common type of code-mixing that affects NPs is the insertion of single Spanish nouns into Pichi NP matrices. The insertion of Spanish multi-constituent noun phrases is less frequent, and the insertion of Spanish determiner phrases is limited to a handful of examples.

3.2 Predicates

The low ratio of Spanish verbs as opposed to nouns in the type and token count in Table 1 may be striking at first glance. However, the low token ratio may stem from the fact that Spanish has more nouns than verbs (cf. Muysken & Van Hout 1994: 44). But it may also be due to the fact that a small number of high frequency Pichi verbs (e.g. mek 'make', get 'get; receive', gi 'give') participate in mixed verb-noun collocations, in which the noun is Spanish. These collocations may express 'verbal' meanings and some of them are sufficiently lexicalised to be called light verb constructions. Compare gi wan vuelta 'take a walk' below:

```
(46) È dè gi wan vuelta kwik.

3SG.SBJ IPFV give one round quickly 'She's taking a walk quickly.'
```

Spanish verbs are inserted into Pichi VPs in the 3sG person of the Spanish present tense paradigm. This insertion rule is valid without exception across the three Spanish verb inflection classes. Examples follow with *controla* 'control' (< *controlar*) in (47), *entiende* 'understand' (< *entender*) in (48), and *sufre* 'suffer' (< *sufrir*) in (49):

(47) Fron na ya so dèn kìn controla dì human. from Loc here so 3PL HAB control ART woman

'From here they control the woman.'

(48) Posin gò *entiende* bot è no de *bien.* person FUT understand but 3sg.sbj NEG COP good

'One would understand but it isn't good.'

(49)È sufre we dèn dən 1ef àn. dən klos. 3SG.SBI suffer 3_{PL} PRF leave 3SG.OBI 3SG.SBI PRF close SUB now 'It [the building] suffered, while now they have abandoned it, it is closed.'

The 3sG frozen form is combined with Pichi TMA markers across all tenses and aspects and occurs in non-finite contexts. Hence in (50), we find *cobra* 'charge' cooccurring with the past marker bin and the imperfective marker $d\dot{e}$, and the reduplication of the Spanish base pica 'snip (trimmings)' yields iterative aspect (51). Just like non-stative bare verbs in Pichi, bare Spanish verbs are marked for perfective aspect by default. Compare *chapea* '(to) weed' (52) and the non-finite use of *carga* 'load' in (50):

(50) Dèn bìn dè cobra, mil fə dè dos carga wan camión, dὲn na thousand 3_{PL} PST IPFV charge FOC two ASS load one lorry IPFV 3_{PL} cobra naw diez mil francos. thousand francs now ten

'They used to charge, it was two thousand for loading one lorry, now they're charging ten thousand.'

- (51) À bigin dè pica~pica, wì fray patata wì fray planti. begin IPFV fry plantain cut.up~ITR 1_{PL} fry potato 1_{PL} 1SG.SBJ 'I began to leisurely snip (the trimmings), we fried potatoes, we fried plantain.'
- (52) Dan gyal, à tεl yù è chapea lεk se wan say we weed like that girl 1sg.sbj tell 2SG QUOT 3SG.SBJ one side SUB di big pas wan. this 3SG.SBJ big pass one

'That girl, I tell you that she weeded for example a place which was bigger than this.'

Pichi phonotactics can be adduced to explain why the Spanish 3sg present has prevailed as the base form for verb insertion as opposed to other high frequency forms such as the infinitive. Pichi words can be divided into tone classes according to their lexically assigned tonal configuration. The largest, and probably default, tone class for bisyllabic verbs (in Pichi, there are very few words with more than two syllables) has a high-low tonal configuration:

(53) hánsà 'answer' hóntìn 'hunt'

wándà 'be surprised'kóstòn 'be used to'

In contrast, Spanish infinitives receive stress on the final syllable (54). If infinitives were inserted into Pichi VPS Spanish primary stress would get reinterpreted as a high tone in the phonologically tightly organised Pichi verb phrase, in which subject and object person forms as well as TMA particles have lexically assigned tone. The class of Pichi polysyllabic words that bear a high tone on their final syllable is, however, very small and comprises an etymologically distinct subset of the lexicon, namely words of non-English origin (55), as well as certain compounds and reduplicatives (56). Equally rare in Pichi are words with a word-final /r/. Where we do have an underlying /r/ – namely in a few verbs (57) and in the associative preposition f_{2} (58) – its realisation although conditioned by the existence of a following vowel, is irregular and subject to idiosyncratic variation:

- (54) inten'tar 'try' ve'nir 'come'
- (55) sàbí '(get to) know'nyàngá 'show off'chàkrá 'destroy'
- (56) hòntìn-mán 'hunter'

fò chàp~cháp 'to chop into small pieces'

(57) klír~klíà '(to) clear' wέr~wέ 'wear'

chér~ché 'tear (apart)'
(58) fòr àn; fò mì 'for him; for me'

Conversely, the 3sG person is always is assigned stress on the penultimate syllable and thus aligns with the majority tonal class of Pichi (59). Also, the frozen form is not subject to the irregular behaviour that characterises the 1sG person of the Spanish present tense paradigm:

(59) en'tiende 's/he/it understands'
'sufre 's/he/it suffers'
con'trola 's/he/it controls'

In this context, it is worth noting that the systematic insertion of the Spanish frozen form into Pichi verb phrases is most probably the source of a quite profound restructuring of the Pichi pronominal system: Pichi verbs of most tonal configuration classes take the enclitic general object pronoun $\frac{\dot{\alpha}n}{60}$. This includes polysyllabic vowel-final Pichi verbs with a low-high tonal configuration (61):

(60) Dan chop, yù get fo pe àn.
that food 2sg get Ass pay 3sg.obj 'That food, you have to pay (for) it.'

(61) [...] dan məni, è chàkrá àn segundo. gò na un second that money 3sg.sbj FUT destroy 3sg.obj one '[...] that money, he would waste it in one second.'

Meanwhile a small class of polysyllabic, vowel-final verbs with a high-low tonal configuration takes the phonologically and syntactically independent emphatic pronoun /in/ as an object pronoun (62) The use of /in/ as an independent pronoun is exemplified in (63):

(62) È fíbà/ hálà in.

3SG.SBJ liken shout 3SG.EMP 'She resembles him/ shouted at him.'

(63) Mì man, in sidon ya, mi sidon ya.

1SG man 3SG.EMP sit here 1SG.EMP sit here

'My husband, he [emphasis] sat down here, I [emphasis] sat down here.'

All inserted Spanish verbs are also polysyllabic, vowel-final and have penultimate syllable stress. This makes the stress pattern over the two final syllables of Spanish verbs and the tonal pattern of this particular class of polysyllabic Pichi verbs identical. Unsurprisingly, Spanish verbs of all

inflectional classes also invariably take the emphatic (object) pronoun as in (64) and (65):

```
(64) [...] tray reduce in.

try reduce 3SG.EMP '[...] try to cut down on it.'
```

fron doce pikin, yù aconseja in años. (65)We уù no child 2sG advise 3sg.EMP from twelve SUB 2s_G NEG vears 'While your child, if you don't advise her from 12 years onwards [...].'

This morphophonologically conditioned differentiation of the prononimal system appears to have first developed with the insertion of 3sg present tense Spanish verbs, since such suppletion is not found in any other West African English-lexifier Creole, including Pichi's closest relative Krio. In Krio and Nigerian Pidgin all verbs, including the relevant class, invariably take the cognate form / am / as exemplified in (66) (Krio; Sulayman Njie, p.c.) and (67) (Nigerian Pidgin; Faraclas, p.c.) respectively:

```
(66) Ì fíbà àm

3sG liken 3sG,OBJ 'He resembles her'
```

(67) À wáya -am.

1SG bother-3SG.OBJ 'I bothered him/her.

A plausible explanation for this singular development may be sought in Pichi prosody. The object pronoun $/\dot{a}n/$ is enclitic to the left-adjacent syllable. If this syllable is light (vowel-final) the encliticisation of $/\dot{a}n/$ produces a bi-moric vowel hiatus. Pichi phonotactics require that the tonal configuration over bimoric syllable nuclei surface as high-low sequences only - other sequences are illicit. Therefore, verbs with a low surface tone on the final vowel – i.e. inserted Spanish verbs and the bisyllabic, vowel-final verbs in (53) – may not take the inherently low-toned clitic $/\dot{a}n/$. Compare the following two examples:

```
(68) *Yù no aconseja àn .2SG NEG advise 3SG.0BJ *You didn't advise her.
```

(69) È fíbà/ hálà àn.

3sg.sbj liken shout 3sg.obj *She resembles him/ shouted at him.

This restriction is bypassed by the recruitment into the object paradigm of the phonologically and syntactically independent emphatic pronoun in, which forms a tact in its own right.

There is a conspicuous absence of inserted Spanish irregular verbs. There is, however, a single instance of a Spanish helping verb in a Pichi utterance (70). In this example, there is a partial structural equivalence between *intenta* 'try' and its Pichi counterpart *tray*, which suggests

congruent lexicalisation. The Pichi helping verb can either subcategorise for a verbal complement or for a prepositional phrase introduced by the associative preposition *fo*. For the Spanish verb *intentar*, only the complement verb option is available.

```
(70) À bìn want intenta dring wata.

1SG.SBJ PST want intend drink water 'I wanted to drink water.
```

In summary, the mixing-in of Spanish verbs is highly regularised and subject to little if any variation. Also, it has led to, or at least reinforced the restructuring of the Pichi pronominal system.

The final examples of conventionalised code-mixing involving predictes are drawn from the formation of mixed predicate adjective constructions. It was shown above, that code-mixing may result in a combination of the Pichi [-time stable] copula *de* and a Spanish adjective (cf. (22)-(23)). Spanish predicate adjectives in this kind of mixed collocation account for a third of all adjective tokens in Table 1. Certainly, the advantage of this construction lies in the instant access that Pichi speakers have to the rich adjectival resources of Spanish. In contrast, if Pichi speakers do not code-mix, the lower number of "true" adjectives in Pichi requires diverse strategies rather than a single one in order to express equivalent semantic concepts. This is exemplified in (71), where the property concept 'be impotent' is rendered by a light verb construction 'not to have power':

```
(71) A lo mejor
                  dì
                                     impotente,
                                                 sənten
                                                           dì
                         boy
                               es
                                                                 bəy
                                                                       no
                                                                             get
                                                                                    pawa.
      perhaps
                                                 perhaps ART
                        boy
                                     impotent
                                                                 boy
                                                                       NEG
                                                                             get
                  ART
                               is
                                                                                    power
                                                  'Perhaps the boy is impotent, perhaps he has no power.'
```

Pichi allows for the distinction of [+/-timestability] with a few lexically defined property concepts when these are predicatively used. This particular group of property concepts can function as complements to the copula *de* when they are [-time stable] or be realised as stative verbs when they are [+time stable]. In the examples below, *bad* referring to an intrinsic quality is therefore a stative verb (72), while *bad* referring to transitory quality is found in a copular construction with *de* (73). Spanish also has a [+/-timestability] distinction to which, however, only very few semantic restrictions apply. (74) and (75) involve the 3sg present of the [-time stable] copula *ser* and the 2sg present of the [-time stable] copula *estar* respectively. These examples show the partial functional overlap of the relevant constructions in the two languages:

```
(72) Son mama dèn, dèn bad.

some mother PL 3PL bad 'Some mothers, they are bad.'
```

(73)fədən yù bad, klin. We уù gò gò de yù grab no gò SUB FUT fall 2s_G FUT COP bad 2s_G NEG FUT get.up clean potopoto lεf yù skin na bεlε dat. gò

mud FUT leave LOC 2SG body, FOC belly that 'When you fall, you will feel bad, you won't get up clean, mud [sperm] will remain in your body , and that means pregnancy.'

- (74) Es malo.

 He.is bad 'He is bad.'
- (75) Estás mal hoy?
 You.are bad today 'Do you feel bad today?'

Despite the similarities between the de + property concept construction and the Spanish estar + adjective construction all mixed predicate adjective collocations are, however, constructed with de. The corpus does not contain any instance of a Spanish adjective used like a Pichi stative verb in order to express a [+time stable] situation. Hence, we find the [+time stable] situation involving a Spanish colour adjective with the Pichi copular de in (76). Note the analogous construction with the Pichi colour term colour term blak 'black' as a stative verb in (77):

- (76)blanco dè Wan yay de no si. one eye COP white 3SG.SBI **IPFV** see 'One eye is white, it doesn't see.' NEG
- (77) Dì chia blak.

 ART chair black 'The chair is black.'

Why has the [+/-timestability] distinction not asserted itself with Spanish predicate adjectives? A possible explanation is that the generalisation of the [-time stable] construction of Pichi to encompass [+/-time stable] situations is more compatible with congruent lexicalisation than the recategorisation of Spanish adjectives as stative verbs. With the former pattern, the phrasal syntax of adjectival predication remains identical in both languages. This allows speakers to uphold linear and categorial equivalence in order to graft such mixed collocations on common grammatical structure (cf. Meechan & Poplack 1995 for a similar analysis of mixed Fongbe-French predicate adjective constructions). Indeed, the obligatory use of a copula in these mixed collocations may also be seen as a case of structural interference from Spanish where a copular verb must be used in predicative adjectival constructions. Incidentally, the inverse switch in (71) – the Pichi noun dì boy is inserted into what looks like a Spanish matrix – illustrates how categorial equivalence facilitates back and forth switching both ways with this particular construction.

3.3 Numerals and other progressions

Progressions such as cardinal numerals higher than three, all ordinal numerals and coordinates of time measuring clusters are expressed via Spanish single or multi-constituents. The elicitation

of cardinal numerals up to 10 with a random group of speakers below the age of thirty met with difficulties in lexical retrieval as exemplified in (78):

(78) Wan, tu, tri, fo, fayf, siks, et, sɛvin, [pause], nayn, tɛn, [no further retrieval].

one two three four five six eight seven nine ten

'One, two, three, four, five, six, eight, seven, nine, ten.'

In natural speech, the occurrence of Pichi cardinal numerals drops rapidly after *tri* 'three'. The relative proportions of attributive cardinal numerals of Pichi and Spanish provenance are given in Table 2. As indicated in Table 1, Spanish numerals score highest on both the type and token count. No doubt borrowing has impacted most on the Pichi numeral system, where Spanish numerals have substituted all but the basic Pichi numerals below eight. Note that this table only lists the usage of *wan* 'one' as a cardinal numeral and does not include *wan* 'a' in its use as an indefinite determiner:

Table 2 Proportion of Pichi cardinal numeral to total

Cardinal numeral	Pichi ratio
1	0.89
2	0.80
3	0.63
4	0.45
5	0.30
6	0.40
7	0.22
8	0.00
9	0.00

The attributive use of Spanish numerals goes along with the insertion of Spanish head nouns – there is no instance of a mixed Spanish numeral and Pichi noun combination. It also corresponds to the use of Spanish in time measuring expressions as with the date *dia tres del mayo* '3rd of May' and when telling the time as in *a las siete de la noche* 'at 7 o'clock in the evening' (79). When responding to a request for the time, Spanish lexical items are fit into an original Pichi construction (80) that does not have an equivalent in Spanish (81):

(79)hol fil dì Na in dὲn mì, dia del mayo, à tres FOC 3SG.EMP hold 1sg day three of.the may 1SG.SBI feel ART pikin ìn pen, à las siete de la noche, è bon. child 3sg.poss pain at ART seven of the night 3SG.SBJ be.born 'That's why they kept me, on May 3rd I felt the child's pain, at seven at night, it was born.'

- (80) Wì de *las cuatro y media*.

 1PL COP the four and half 'It's four thirty.'
- (81) Son las cuatro y media

 They.are the four and half 'It's four thirty.'

The only token of a date in English-derived lexicon was produced by a lady of 79 years (82). However, I assume this to be a single, holophrastic insertion of her date of birth since her use of numerals in general parallels the one outlined in Table 2 (83), and because, perhaps more significantly, she had been married to a Nigerian in her youth:

- (82)del à ban fo. Soy veinte cuatro. nayntin twenti I am of.ART be.born nineteen twenty four twenty four 1SG.SBJ 'I am of [the year] twenty-four, I was born in nineteen twenty-four.'
- (83) Lef àn mek è rich a los quinze años. leave fifteen 3SG.OBJ SBJV 3SG.SBJ reach to ART vears 'Leave her, let her reach [the age of] fifteen years.'

The substitution of Pichi lexicon has also progressed far with the day nomenclature. In natural speech, we exclusively find Spanish week days whereas Pichi day terms are moribund. The elicitation of Pichi week days in two speakers below 28 years was unsuccessful save sonde 'sunday', certainly because of its social importance for religious practice. A speaker above 55 years experienced considerable difficulties in retrieving Pichi day terms (86). Wensde 'Wednesday' was only retrieved after an external input (87) and the elicitation of 'Thursday' and 'Friday' produced the misnomers tuysde 'Tuesday' and wensde 'Wednesday' respectively' (88):

- (84) Di *miercoles* à dè go Luba. this wednesday 1sg.sbj IPFV go Luba.' This Wednesday, I am going to Luba.'
- (85) Lunes na monde. Tuysde we na martes.

 monday FOC Monday tuesday SUB FOC tuesday

 ""Lunes" is Monday. Tuesday that's "martes".'
- (86) Miercoles na, ay [pause], pero à sabi àn.

 wednesday FOC PCL but 1sg.sbj know 3sg.obj

 "Miercoles" is, ah [pause], but I know it.'
- (87) Wensde? 'Wednesday?'

(88) Wensde, satide, sonde. *Jueves* na tuysde. Frayde na *miercoles*. wednesday saturday sunday Thursday Foc tuesday friday Foc wednesday 'Wednesday, Saturday, Sunday, Thursday is "tuysde", Friday is "miercoles"'

In contrast, Pichi designations for the seasons of the year are fully in use, as shown by *rensisin* 'rainy season' (89), *draysisin* 'dry season' (90) and *amatan* 'harmattan' (91):

(89) Dis de dèn rensisin gò bigin. this day PL rainy.season FUT begin

'In the coming days, the rainy season will begin.'

- (90) Draysisin?
 dry.season 'The dry season?'
- leke niebla. (91) Wì dè dan, leke se kìn de kəl ya amatan harmattan that like HAB like 1_{PL} here so OUOT 3SG.SBI COP fog **IPFV** call 'We call (it) harmattan here, that, as if it were like fog.'

Colour terminology was elicited in three speakers between the ages of 21 and 27 and in two speakers above the age of 55. The exercise revealed the apparent-time differences in colour terminology contained in Table 3. Spanish terms are in italics, variants are indicated by a comma:

Table 3 Apparent time differences in the use of colour terms

Below 28 years	From 55 years upwards	Gloss
blak	blak	'black'
wayt	wayt	'white'
red, rojo	red	'red'
yɛlo, amarillo	yɛlo, amarillo	'yellow'
azul	blu, azul	'blue'
verde	grin, verde	'green'
naranja	naranja	'orange'
rosa	rosa	'pink'
violeta	violeta	'violet'
marrón	marrón	'brown'

Table 3 shows that the younger group employs the basic Pichi colour terms blak '(be) black and wayt '(be) white' consistently. The colours 'RED' and 'yellow' are more frequently referred to by the Spanish terms rojo and amarillo respectively, but the Pichi terms red '(be) red' and yelo '(be) yellow' are also employed. All other colours are uniquely referred to by Spanish terms. The older group consistently makes use of Pichi red '(be) red' in addition to the basic colours blak and wayt. Meanwhile 'yellow', 'blue' and 'green' are referred to by the Pichi terms yelo, blu and grin

respectively, or by their Spanish equivalents *amarillo*, *azul* and *verde*. At least in apparent time, the range of Pichi colour terms appears to have been reduced from the six colours *blak*, *wayt*, *red*, *yelo*, *blu* and *grin* with the older group, to the two basic colours *blak* and *wayt*, supplemented by the less frequent *red* and *yelo*. Nonetheless, the terms *blu* and *grin* are also heard with the younger group, albeit with another meaning. For all Pichi speakers, *blu* is also associated with the detergent brand 'Omo Blue', ubiquitous in West Africa, which exudes a deep blue colour when admixed to water. Similarly, both groups use *grin* to refer to the homonymous vegetable leaf that is used in preparing sauces. Many West African languages, including basilectal Nigerian Pidgin (Faraclas 1996: 286) express colours and hues other than 'black', and 'white' through periphrasis, suprasegmentals and ideophones. We also find the expression of colours through periphrasis in Pichi, as in the following two example:

```
(92) Dì boy yɛlo lɛkɛ Chici.

ART boy be.yellow like NAME

'The guy is yellow like Chici.' [i.e. He has a light brown skin colour]
```

(93) Dan tin yelo lek banana.

that thing be.yellow like banana

'That thing is yellow like a banana.' [i.e. It has a bright yellow colour]

The rarity of Pichi colour terms beyond the basic ones of *blak* and *wayt* with the younger group may therefore be indicative of a departure from the West African composite system of colour denomination towards a European simplex system in which non-basic colours are also denoted by specific property concepts.

When Spanish colour terms are used attributively, they usually occur with Spanish head nouns (94). The corpus contains no examples of mixed collocations involving a Spanish colour denoting property concept and a Pichi head noun. Spanish colour terms also occur as predicates in the specific type of mixed copula clause involving Spanish adjectives. In contrast, Pichi colour terms are lexicalised as stative verbs. The characteristics of these constructions are covered below in (71)-(77).

3.4 Other semantic fields

Other semantic fields characterised by a high incidence of code-mixing are those pertaining to formal, institutional socio-political domains. Thus, the only Pichi country name in use is *Panya* 'Spain', the designation for the former colonial power. In turn, we find the Spanish country names *Guinea* 'Equatorial Guinea', *Gabón* 'Gabon' (95), and nationalities *cameruneses*

'Cameroonians' (96) as well as terms belonging to the state domain *problema diplomatico* (95): [LEGOS, but Ni[x]eria]

- (95) Entonces wan problema diplomatico kan de entre Guinea wit Gabón.

 so one problem diplomatic con cop between Place with Place

 'So a diplomatic problem came about between Guinea and Gabon.'
- (96) Cameruneses, yes dèn plente ya.

 Cameroonians yes 3PL plenty here 'Cameroonians, yes they are many here.'

The Pichi lexemes *skul* 'school', *govna* 'government' (97) and *choch* 'church' (98) designate these institutions in their general sense and are favoured over their Spanish equivalents *escuela*, *iglesia* and *gobierno*:

- (97) È dè fə, sən skul we de fə govna [...]. go school government 3SG.SBJ COP ASS **IPFV** go ASS some SUB 'She goes to, a school that belongs to government [...].'
- (98)È choch se è go fo, fə Marieta na Ela Nguema, church Ass 3SG.SBJ 3SG.SBJ say go ASS PLACE LOC PLACE catedrál. na LOC cathedral

'She said she went to church at Marieta's in Ela Nguema, in the cathedral.'

Meanwhile, the incidence of Spanish lexemes rises with the degree of specificity of words within the semantic fields designated by these superordinates. Thus, we have *catedrál* 'cathedral' (98), *bolí* 'pen' and *cuaderno* 'exercise book' (99), as well as *profe*(*sor*) 'teacher' – though *ticha* 'teacher' is also common, however less so beyond primary school. In (101), we encounter *registro* '(civil) registry' and *registra* 'register':

- (99) We, want bay cuaderno. bolí əl dan tin dèn na wit dólar. yù exercise.book pen all that thing PL with dollar want buy FOC SUB 2sg 'While, if you want to buy exercise books, pens, all those things are with the dollar.'
- (100) Dì profesor, na bεta profe.

 ART teacher FOC very.good teacher

'The (secondary school) teacher is a very good teacher.'

(101) À fə cheni registro à registra in. bìn get ìn nem na 1SG.SBJ get change 3sg.poss name Loc register 1sg.sbj register 3SG.EMP PST ASS 'I had to change her name in the register, I registered her.' The existence of other, preponderantly Spanish fields reflects the asymmetric power relation that holds between Pichi and Spanish in a different way. For example, the semantic field of medical terminology and internal organs that is highly differentiated in other languages of the region (for Yoruba, see e.g. Adegbite 1993) has probably not asserted itself in Pichi due to the decline of African medical science with the advent of colonialism. In (102), we therefore find placenta 'placenta' and *matriz* 'womb' for which only the general term 'bɛlɛ' exists in Pichi and *membrano* 'membrane', which has no equivalent in Pichi:

```
(102) We
               dokta opin, we
                                    dèn
                                            bigin dro dì,
                                                                                      è
                                                                       tin
                                                              sən
                                                                                we
                                                                       thing
               doctor open SUB
                                    3<sub>PL</sub>
                                            begin drawART
      SUB
                                                             some
                                                                                SUB
                                                                                      3SG.SBJ
              de
      kìn
                         bihen
                                                                                   lεf
                                                                                             bifo
                                   placenta, na
                                                         membrano,
                                                                       sən
                                                                             kan
      HAB
              COP
                         behind
                                   placenta Foc
                                                         membrane
                                                                                   remain before
                                                                       some CON
      dì
                     so dì
                               matriz
                                              kan
                                                    lək.
            matriz,
                                        no
            womb
                     SO ART
                               womb
                                        NEG
                                              CON
                                                    lock
```

'When the doctor opened (the womb), they began to draw the, something that is usually behind the placenta, it's a membrane, some remained in front of the womb, so the womb didn't close.'

The systematic use of Spanish items also occurs semantic in fields that designate aspects of material and non-material culture of external origin. In (103), a car mechanic explains the disadvantages of an Opel ignition cable. In (104), we find *primo* 'cousin', a kinship concept that is otherwise captured by Pichi *broda* 'brother'. However, Spanish-origin *abuela* 'grandmother' and *abuelo* 'grandfather' are also in use as the main terms to express these two kinship relations:

```
(103) H\epsilon,
                                                bikəs
                                                                cable de
                                                                                          fə
                à
                      gò
                             fala
                                         yù
                                                          sən
                                                                             we
                                                                                    na
                                                because some cable COP
      PCL
             1SG.SBJ
                      FUT
                             accompany 2sG
                                                                             SUB
                                                                                   FOC
                                                                                          ASS
      Opel,
                yù
                      intenta
                                bring
                                          Opel in
                                                                       corriente,
                                                                                    Opel dè
                                                          yon
                                                                na
                                bring
                                          NAME 3SG.POSS own
                                                                FOC
                                                                       electricity
                                                                                   NAME IPFV
      NAME
                2SG
                      try
      kyer boku
                                                                fit
                                                                          enta na
                                                                                       dan
                      corriente
                                   so
                                          è
                                                   no
                                                          gò
      take a.lot
                      electricity
                                          3SG.SBJ
                                                   NEG
                                                          FUT
                                                                be.able enter Loc
                                                                                       that
                                   wanda
                                             sεf.
      bujía,
                      yù
                             gò
                                   wonder EMP
      ignition.plug
                      2s<sub>G</sub>
                            FUT
```

'Hey, I'll accompany you because there's a cable which is an Opel (cable), (and if) you try to connect the Opel one with electricity, Opel takes a lot of electricity, so it won't be able to enter that ignition plug, (and) you'll be very surprised.'

```
(104) À
                tink
                                 dèn
                                                        mì
                                                               mama
                                                                         ìn
                                        papa
                                                  na
                                                                                   primo.
                                                               mother 3sg.poss cousin
      1SG.SBJ
                think
                          QUOT 3PL
                                        father
                                                  FOC
                                                        1s<sub>G</sub>
                                                              'I think that their father is my mother's cousin.'
```

Conversely, the incidence of Spanish words is low in semantic fields that are characterised by the use of autochthonous technology, such as farming and with designations for locally-grown foodstuffs and other flora. Thus, in (105), we have *dig gran* 'plough up the ground', *plant* '(to)

plant', *gadin* 'small field; garden' and *kip* 'grow; rear' and in (106) *pamayn* 'palm-oil' and *gadinɛks* 'egg-plant':

- (105) À plant chop, à dig gadin, à gron, à go na 1SG.SBI dig ground 1sg.sbj plant food 1sg.sbj garden go FOC 1sg.sbj kipnchakato, verdura. grow bitter.tomato vegetables 'I ploughed the ground, I planted food, I went to the garden, I grew bitter tomato, vegetables.'
- (106) Dì de yù gò nid àn, yù gò à se no gεt ART day SUB 2sg fut need 3SG.OBI 2SG FUT say 1SG.SBJ NEG get pamayn, kət gadineks. yù gò palm-oil 2sg cut egg-plant FUT 'The day when you would need him, you would say "I don't have palm-oil", (and) you would harvest egg-plants.'

In fact, fauna and flora are the only semantic fields in which we come across the few Pichi lexical items derived from Bube, the language that is original to Bioko – for example bìhèní 'taro' in (107):

(107) Dì de we yù gò, Bube koko, malanga de país, lo llamamos bìhèní

ART day SUB 2SG FUT NAME cocoa.yam taro of country it we.call taro

'The day when you would, Bube cocoa yam, local taro, we call it "biheni".'

Beyond that, a number of basic vocabulary items appear to have asserted themselves in Spanish over their Pichi equivalents. Thus, *sube* 'go up' and *baja* 'go down' (108) are by far more frequent than *qo op* and *qo don* respectively. The same holds for *chapea* '(to) weed' (109):

- de (108) Bəku moto dèn à Pancho mek se ya SO, no no much COP here so 1sg.sbj know QUOT Pancho make car PL NEG lεk se è dè sube bihen wì è baja mə. like QUOT 3SG.SBJ IPFV go.up behind 1PL 3SG.SBJ go.down more 'So many cars were there, I didn't know Pancho pretended to go up behind us (and) went down again.'
- (109) Dèn chapea, dè kəl dὲn klin àn gò human dèn, weed call clean 3sg.obj 3_{PL} 3SG.SBI IPFV some woman PL 3_{PL} dὲn plant dì chop. plant food 3PL ART

'They would weed, she'd call some women, they clean it, they plant the food.'

In fact, the occurrence of mixed *sube op* 'go up' in (110) and elsewhere in the corpus demonstrates that this verb is more than an established loan and is relexified by many speakers - Spanish *sube* is not followed by a preposition, while Pichi go(op) is:

```
(110) À
                                          εf
                 tεl
                         àn
                                   se
                                                 yù
                                                        want
                                                                   à
                                                                              dè
                                                                                     alguila
                                                                                               yù
                 tell
                        3SG.OBI
                                   ouor if
                                                  2sg
                                                        want
                                                                                     rent
                                                                                                2s<sub>G</sub>
       1SG.SBI
                                                                   1SG.SBI
                                                                              IPFV
                                       è
                                                  saful.
       taxi, yù
                     sube
                                эp,
                                                 soft
       taxi 2sG
                                       3SG.SBJ
                     go.up
                                up
```

'I told her that if you wanted, I'd rent you a taxi, you go up (and) it's cool.'

3.5 Functional elements

We have seen that congruent lexicalisation allows for code-mixing without particular structural constraints as to the word class of the item. Accordingly, four Spanish conjunctions have been identified that may be said to form an integral part of the system of Pichi function words. *Porque* 'because' (38%), *como* 'since' (22%), *aunque* 'although; like' (11%), and *ni* 'neither – nor; not even' (9%) together make up 80% of all tokens of Spanish conjunctions.

The causal conjunctions *como* and *porque* are the two most frequent Spanish-derived conjunctions in Pichi clauses. They are used alongside their Pichi equivalents *as* 'since' and *bikos* 'because' respectively. The first line of Table 4 indicates that in the overwhelming majority of cases (89% for *como* and 91% for *porque*) both conjunctions occur as single constituents in Pichi matrix clauses rather than in clausal switches in which the following material is also in Spanish. The second line of Table 4 shows that these two Spanish functions words are established loans. In 76% of all occurences, the causal conjunction 'since' is expressed as *como*, hence only 24% is expressed with the Pichi equivalent *as*. In 41% of all cases 'because' is expressed as *porque*, so Pichi *bikos* occurs as the causal conjunction in 59% of all cases:

Table 4 Distributional pattern and frequency of como and porque

Ratios	como	porque
Single constituent/ total	0.89	0.91
Spanish conjunction/total	0.76	0.41

Aunque 'although' is a conjunction which is so frequent that it may be taken to be fully integrated into the Pichi lexicon. However, its use as a concessive or adversative conjunction is marginal in Pichi clauses. Aunque is generally found to function as an adverbial, a function that represents an idiosyncratic development in Equatoguinean Spanish and Pichi alike:

(111) Aunque if dèn noto paludismo giv tratamiento yù gò day no NEG.FOC malaria if 3PL although give treatment 2sg NEG FUT die 'Even if it isn't malaria, if you are given treatment, you won't die.'

```
dè
(112) We
           уù
                       mek àn
                                            hos,
                                                          tek
                                                                àn,
                                                                               àn
                                      na
                                                    jos
                                                                         put
      SUB
           2sg
                 IPFV
                       make 3sg.obj
                                            house
                                                    just take 3sg.obj
                                                                               3SG.OBJ
                                      LOC
                                                                         put
           pot
      na
                 aunque wan tasa
                                      so.
                 like
      LOC
           pot
                          one
                                cup
```

'When you make it at home, just take it (and) put it into a pot, like one cup or so.'

The Spanish coordinator pair *ni* - *ni* 'neither – nor; not even' can express negative disjunction in Pichi utterances. Like in Spanish, *ni* can be used alone (113) or in iteration (114). Unlike in Spanish, however, subject disjunction in Pichi requires negative concord in the verb phrase as in (114):

```
(113) È
               no
                     sabi
                              təkni
                                           Panya,
                                                             se
                                                                   è
                                                                            want
                              talk neither Spanish 3sg.sbj
      3SG.SBI
               NEG
                     know
                                                                      3SG.SBJ
                                                                say
                                                                               want
      muchachita de diecisiete
                                 años.
      young.girl of seventeen years
                    'He doesn't even know how to speak Spanish, (and) he says he wants a girl of 17 years.'
```

```
(114) Ni in ni ìn broda dèn no lan.

neither 3sg.emp neither 3sg.poss brother 3pl neg learn

'Neither him nor his brother studied.'
```

The Spanish conjunction *mientras* 'while' occurs less systematically, but it still provides an optional resource for combining clauses:

```
(115) Mientras yù
                     dè
                                       dì
                                             tin
                                                      dè
                                                            transforma
                                                                        posin
                                                                                 yù
      while
               2sg
                     IPFV
                           see
                                 OUOT ART
                                             thing
                                                      IPFV
                                                            transform
                                                                        person
                                                                                 2SG
      dè
            kətwan tin
                           fə
                                 ìn
                                          finga.
      IPFV cut one thing ASS
                                    3sg.poss finger
      'While you see that the thing is turning into a human-being you cut off a part of the finger.'
```

In (30) above, we find the cardinal numeral wan 'one' in a peculiar construction with the meaning 'around'. This lexically specialised meaning is derived from its numeral sense. But I attribute this particular usage of the numeral wan to structural borrowing from Spanish via interference and subsequent conventionalisation. In Spanish, the plural indefinite article unos, unas serves the same function as shown in (117). This usage of wan is conventionalised and can modify NPs containing numerals as in (116) and time measuring units as in (118):

```
(116) Yù jos get wan diecisiete años [...].
2SG just get one seventeen years 'You're just about 17 years old.'
```

- faltan francos. (117) Me unos dos mil they.lack thousand francs 'I am short of some 2000 francs.' Me one.PL two (118) Tumoro monin-ten, las à de. wan siete SO, gò go
- morning-time one 1sg.sbj FUT go there tomorrow ART seven so

'Tomorrow in the morning, around seven or so, I will go there.'

We have seen that the conventionalisation of Pichi-Spanish code-mixing has a lexical dimension: it affects certain semantic fields more than others, and is so pervasive in some that it is accompanied by the lexical attrition of corresponding Pichi vocabulary. Intense code-mixing also results in the conventionalised use of Spanish functional elements. In this chapter, only a very preliminary attempt has been made to explore an additional dimension of conventionalisation - lexical and syntactic interference. Table 5 presents a summary of the conventionalised forms of code-mixing that we have been able to identify so far:

Table 5 Forms of conventionalised code-mixing

Form	Elements involved	Mixing pattern
Conjunctions	Functional	Congruent lexicalisation/insertion
NP fo NP constructions	Functional/lexical	Congruent lexicalisation/insertion
de + adjectives	Functional/lexical	Congruent lexicalisation/interference
wan	Functional	Interference
3sg object pronoun agreement	Functional	(contact-induced structural change)
3sg prs Spanish verb	Lexical	Insertion
Noun phrases	Lexical	Insertion
Numerals, dates, time	Lexical	Insertion/alternation
Discourse markers	Lexical	Alternation

Simplicity and complexity in Pichi

The foregoing analysis has shown that code-mixing forms an integral part of the linguistic system of Pichi. Pichi and Spanish relate to each other in an extended mode of language contact (van Coetsem 2000) that impacts on different structural areas of Pichi. Here we have dealt principally with the lexicon and morphosyntax, although some phonological aspects of code-mixing have also been addressed. What are the implications of our findings in relation to the question of simplicity versus complexity of Pichi?

Attempts to prove the simplicity of Creoles are, of course, linked to the hypothesis that Creoles represent a special, diachronically defined language type that originates in a pidgin, a code that is assumed to be 'simplified' by definition. Usually, proponents of simplicity compare selected surface phenomena in Creoles and non-Creoles - such as the amount and nature of inflectional and derivational morphology or the size of phoneme inventories (e.g. McWhorter 2001, 2005) – in order to argue for a simpler structure of Creoles .

This view has been strongly contested. Some of the arguments advanced against the assumption of simplicity include the following: (1) the difficulty in measuring complexity (e.g. Arends 2001); (2) the limitations of the available data-base, given the lack of comprehensive descriptions of Creoles available (Kusters & Muysken 2001); (3) the European-lexifier bias of available descriptions (Arends 2001); (4) the lack of comparison of Creole structures with the simplicity/ complexity of structures found in substrate languages (e.g. Faraclas 2003 and this volume); (5) a selective view of Creole grammar and lexicon, which excludes the complex combining of roots in Creoles and (6) the need to include language processing rules in any notion of complexity (Kusters & Muysken 2001).

The present analysis raises two questions with respect to the discussion of Creole simplicity/ complexity. Firstly, why would Pichi 'needlessly' (in terms of McWhorter 2001) permit itself the luxury of developing within the short time span of 170 years parallel lexicons and a dual grammatical system, one based on its Krio heritage and the other the outcome of contact with Spanish? Furthermore, what does a comparison of Pichi and its lexifier language English tell us about Pichi simplicity or complexity? Beginning with the second question, one is immediately confronted with the difficulty of measuring complexity across different sub-systems of a language. Where slightly more verbal and nominal inflection in English than in Pichi may mean more morphological complexity in the former language, the presence of a suprasegmental system involving lexical and grammatical tone as well as stress in Pichi may mean more complexity of Pichi vis-à-vis English. However, a brief comparison of Pichi with its lexifier language English on the more neutral ground of syntactic complexity - as far as it is possible to isolate syntax and morphology - defined by McWhorter (2001: 136) as requiring "the processing of more rules", is in order with respect to the conventionalisation of code-mixing in Pichi as presented in the previous sections. The issue of syntactic complexity is adressed in section 4.1. Language change and the time-depth of Pichi is covered in section 4.2.

4.1 Complexity in code-mixing

The relevant areas for our discussion are the insertion of Spanish nouns and adjectives, the occurrence of mixed predicate adjective constructions, and the agreement of Pichi object pronouns with inserted Spanish verbs.

It was shown earlier on that code-mixed noun phrases featuring Spanish head nouns are very similar to Pichi head nouns in their distribution. A notable exception is that [+specific] Spanish plural denoting head nouns are marked twice for plural – once by way of regular Spanish plural marking and additionally by means of the post-posed Pichi pluraliser *dèn*:

```
(119) Afta ùnà bay dì bloque-s dèn tumara.

after 2PL buy ART brick-PL PL tomorrow
```

Equivalent Spanish NPs also require dual marking – on the noun and on the article, the latter in addition to gender marking. English, on the other hand, features a less complex construction than both Pichi and Spanish in which plural number is only marked on the head noun. Compare the following examples from Spanish (120) and English (121):

```
(120) Tenemos que comprar los bloque-s mañana.
we.have COMP buy ART.PL block-PL tomorrow
```

'We have to buy the bricks tomorrow.'

(121) We have to buy the brick-s tomorrow

Code-mixing in noun phrases has other effects on syntactic complexity. We have seen that the insertion of – usually lexicalised – Spanish adjective-noun collocations occurs, although it is far rarer than the insertion of single Spanish nouns (cf. (37)-(38)). In two areas, however, the mixing-in of Spanish modifier-noun combinations is conventionalised: In the use of Spanish numerals and in the use of Spanish colour terms.

The (attributive and predicative) use of Spanish numerals is resorted to when expressing cardinal numerals above seven (c.f. Table 2). In the corpus, the use of a Spanish numeral always correlates with the use of a Spanish head noun, while a Pichi numeral always comes along with a Pichi head noun. There are no mixed NPs with a numeral and a head noun from each language. This is also valid for selected mixes like (122), in which the NP seis años is an object of get 'get, have'. The analogous construction in (123) features the Pichi numeral fayf 'five' and the head noun hia 'year'. Note that Spanish años exhibits regular plural marking, while the Pichi equivalent hia remains unmarked for plural in accordance with the optional absence of the Pichi pluraliser dèn after numerals and quantifiers. In contrast, English does not feature a split lexicon and morphology in these constructions:

```
(122) Na
             de
                    à
                                     sidən
                                                sote à
                              bìn
                                                                bìn
                                                                       get
                                                                              seis
                                                                                     años.
      FOC
             there 1sg.sbj
                              PST
                                     stay
                                                until 1sg.sbj
                                                                       get
                                                                              six
                                                                                     years
                                                                  'It's there that I lived until I was six years old.'
```

```
(123) È get fayf hia?

3sg.sbj get five year 'Is she five years old?'
```

(124) I was six years (old)/ She is five years (old).

It is noteworthy that Pichi and Spanish have an identical word order in NPs involving numerals. In both languages the numeral precedes the head noun. Thus, the quest for linear equivalence – an identical order of NP elements – between Pichi and Spanish NPs cannot be the primary motivation for the wholesale insertion of modifer + noun combinations. Instead, the occurrence

of monolingual NPs seems to be determined by the preference of Pichi speakers for the insertion of uniform noun phrases (but not for uniform determiner phrases, see *dan casa verde* 'that green house' in (125) below).

The same pattern can be observed in adjective-noun collocations involving colour terms. In these collocations, the use of Spanish colour adjectives is common-place with the exception of the basic Pichi terms blak '(be) black', wayt '(be) white', and $r\varepsilon d$ '(be) red'. Whenever Spanish colour-denoting adjectives are used, we encounter a Spanish head noun. When a Pichi colour term is used, the head noun is a Pichi noun as well. Compare the use of Spanish verde 'green' and (the rarely used) Pichi grin 'be green' in (125) and (126) respectively.

```
(125) [...]
                     casa verde,
                                     dan casa
                                                    fə
                                                          madeira, we
                                                                          de
                                                                                de
                                                                                            yù
                                                                                      we
            that house
                           green
                                     that house
                                                          wood
                                                                                there sub
                                                                                            2SG
                                                    ASS
                                                                    SUB
                                                                          COP
      kəmət
                        policía.
                  na
      come.from Loc
                        police
            '[...] that green house, that house of wood, which is there when you're from the police-station.'
```

Hence, the constructions covered present the following characteristics: In NPs involving numerals, Pichi speakers access the Pichi or the Spanish lexicon in order to form NPs if the numeral is lower than seven (cf. Table 2). Above seven, Pichi speakers access the Spanish lexicon. Anytime a Spanish numeral is used, a Spanish head noun must also be used together with Spanish nominal morphology and vice-versa for Pichi. When colour terms other than 'black', 'white', and 'red' are used, monolingual Pichi NPs with a modifier-noun order and Pichi morphology are the norm. With other colour terms, Spanish NPs with a noun-modifier order and Spanish nominal morphology are employed. In contrast, English has a single construction for both semantic fields, featuring a single word order and morphology:

In terms of the number of (morpho-) syntactic rules, the Pichi constructions are more complex than the corresponding English ones.

The syntax of predicate adjective constructions in Pichi, is also at least as complex as that of its lexifier language English. It was shown earlier that the majority of Pichi property concepts is lexicalised as stative or dynamic verbs. With the dynamic property concept *kres* 'be crazy', the bare, unmarked verb is interpreted as perfective (130). The bare stative property concept *lesi* 'be lazy', on the other hand, receives an ongoing state interpretation:

- (128) À kres.

 1sg.sbj go.mad 'I went mad.' [*I am mad]
- (129) À sabi se Toechoa dèn *lesi*.

 1SG.SBJ know QUOT NAME PL be.lazy 'I know that the Toechoas are lazy.'

Meanwhile a small number of Pichi value-denoting property concepts alternates between uses as stative verbs [+time stable] and uses as adjectives in copula clauses [-time stable]. Alternating property concepts are principally employed to differentiate between intrinsic and transitory qualities of animate nominal referents (cf. (72)-(77)). But we also find them used with inanimate referents. In (130), the property concept fayn 'fine' is employed as a stative verb in order to express an intrinsic quality of the inanimate referent Pichi. In (131) and (132), fayn occurs as an adjectival complement of the [-time stable] copula de and modifies the inanimate referent rod 'road'. In these two examples, the quality attributed to the inanimate referent is transitory (131) or it simply holds at the particular discourse-relevant point in time (132):

- (130) Bot we yù dən dè gro, go skul bəku tal, se no, Pichi no fayn. grow go school be.much so but SUB 2s_G PRF NEG Pichi NEG fine say 'But then when you begin to grow up, and have been educated a lot and the likes, (then you) say no, Pichi is no good.'
- (131) Yes, dì rod de fayn.

 yes ART road COP fine 'Yes, the road is good [at the moment].'
- (132) No, è no de fayn.

 NEG 3SG.SBJ NEG COP fine 'No, that [what you said this time] is not correct.'

We have already seen that there is no time stability distinction with inserted Spanish adjectives and derived adjectivals like Spanish past participles. Both are always integrated into the mould of the Pichi *de* predicative construction irrespective of the time depth of the designated property (133). Neither adjectives nor past participles usually exhibit Spanish gender agreement with the subject, with the masculine form serving as the default form. However past participles always come with the regular Spanish adjective-deriving morphology (134):

- (133) Dì bìn de difícil di hos. fə nivél. tin we ma na put this house COP difficult more Loc level thing SUB PST ASS put ART 'The thing that was more difficult in [building] this house, was to level the ground.'
- (134) À want de *flipa-do* ol hawa, ol hawa.

 1SG.SBJ want COP turned.on-ADJ all hour all hour

 '[If I had a pair of glasses with which I could see people naked] I would want to be turned on all the time, all the time.'

Pichi therefore lexicalises property concepts in four different ways: as dynamic verbs, as stative verbs and as states of affairs which alternate between stative verbs and adjectives in accordance with the features [+/-time stable], and as adjectives only if the property concept is of Spanish origin. The syntax of clauses containing these four lexically-defined types varies in accordance with lexical aspect (dynamic vs. stative verb) and syntactic category (verb vs. adjective) of the property concept: dynamic and stative verb property concepts cooccur with the tense-aspect markers of other dynamic and stative verbs respectively and receive the appropriate tense-aspect interpretations. Alternating [-time stable] property concepts and Spanish-origin adjectivals (complete with Spanish morphology) additionally occur in a separate predicative adjective construction involving the copula *de*. In contrast, all the Pichi and Spanish-origin property concepts covered here are lexicalised as adjectives in the lexifier language English. In English, a single, uniform construction corresponds to the range of Pichi constructions presented. Adjectives only occur in copula clauses as complements to the defective verb *be*, the only copula that English has:

(135) I am angry/lazy/fine/difficult/turned on.

In terms of semantic opacity (the largely unpredictable lexicalisation pattern of property concepts and the timestability distinction) and syntactic variation (the cooccurence of the four types of property concepts with tense-aspect markers and the copula de), Pichi constructions involving property concepts are more complex than English ones. Even with respect to morphology, Pichi constructions can compete in complexity with the English constructions involving the defective copula be and adjectival morphology: The integration of Spanish-origin adjectivals complete with Spanish adjective (and adjective-deriving) morphology is conventionalised and forms an integral part of the linguistic system of Pichi.

The final area relevant to this brief survey of complexity is the morphosyntax of case marking. Pichi and English both have subject and object case person form paradigms. In Pichi, the opposition is operative in the 1sG and 3sG persons. Additionally, Pichi exhibits a phonologically conditioned agreement between the verb and a following 3sG object pronoun. Vowel-final verbs with a low tone on the final vowel take the suppletive object pronoun /in/ this group includes a few Pichi verbs and all inserted Spanish verbs. Other verbs take the object pronoun /an/. Two examples follow in (136) and (137) (see also (60)-(67) for further examples):

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    (136) Fiba no sube in.
        fever NEG go.up 3SG.EMP 'The fever hasn't risen on him.'
    (137) Na mi lɛf gɛt àn.
        FOC 1SG.EMP leave get 3SG.OBJ 'It's only me who still has it.'
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In comparison, English has a subject and an object person form series. Both series allow for a distinction between feminine, masculine and neuter gender. But gender assignment in basic clauses such as (138) is not conditioned by the syntagmatic relation between verb and object:

(138) S/he/it left her/him/it.

If morphological complexity is to be measured alone by the number of overt distinctions, then the higher number of suppletive forms in the English object series may be offset by the higher number of distinctions in the Pichi emphatic pronoun series (five distinctions as opposed to the subject and object series). However, suppletive 3sg object agreement in Pichi as presented in clauses such as (136) and (137) is syntactically at least as complex as the corresponding English system. While English verbs select a pronoun in the object case, gender in basic clauses such as the ones covered here is assigned by pragmatic context, not by way of agreement. In contrast, Pichi verbs not only select object case with 3sg pronouns. They also control agreement of the object pronoun in accordance with the tonal class of the verb.

The phenomena covered in this section are summarised in the following table:

Table 6 Pichi and English complexity compared

Structure	Pichi	English
Plural-marking	 [+specific, +plural] Spanish NPs are inserted into Pichi DPs with Spanish gender and number inflection 	- [+specific, +plural] NPs feature an invariable determiner and number inflection on the noun
	 Mixed DPs with a Pichi article additionally feature the [+specific] Pichi pluraliser dèn 	 There is no conventionalised overlayering of two systems of number marking
Attributive use of numerals	 Numerals up to 7 occur in monolingual Spanish collocations with Spanish gender and number inflection or Pichi collocations with Pichi number marking 	 All numerals occur in a single type of monolingual modifier + noun collocation
	 Numerals above 7 occur in Spanish collocations with Spanish gender and number inflection in Pichi DPs 	
Attributive use of colour terms	- Blak '(be) black', wayt '(be) white', rɛd '(be) red' occur in monolingual Pichi DPs	 All colour terms occur in a single type of monolingual modifier + noun collocation
	 Other colours occur in Spanish modifier + noun collocations with Spanish gender and number inflection in Pichi DPs 	

Property concepts	 Pichi lexicalises property concepts in three states of affairs classes: dynamic verbs, stative verbs, and adjectives English lexicalises property concepts in a single state of affairs class: adjectives
	- Adjectives alternate in their state of affairs class according to the feature [+/-time stable]
Case-marking and pronoun agreement	 Pichi has subject and object case person form paradigms with two distinctions English has subject and object case person form paradigms with four distinctions
	- Pichi has two suppletive 3sg.obj pronouns; agreement is controlled by the tonal class of the verb - English has a 3sg gender distinction; there is no agreement in non-anaphoric environments

I hope to have shown that the Pichi structures presented in this section are at least as complex or more complex than their counterparts in the lexifier language English. With respect to Pichi, any claim of simplicity also merits thorough rethinking in the light of evidence about the complexity of code-mixed speech perception, processing and production (see e.g. Grosjean 1995; Perecman 1989). Finally, the present analysis has not touched upon the complex social norms that govern the use of Pichi-Spanish code-mixing in different socio-pragmatic domains (see Tessoneau 2005 on greeting conventions in code-mixing between Guadeloupian Creole and French).

4.2 Language contact & linguistic economy

Returning to the first question posed at the beginning of section, we may again ask why within the short time of contact with Spanish, Pichi has developed code-mixed structures as an integral part of its grammar against all principles of an assumed Creole economy in linguistic structure? Pichi, like any other language, is embedded in a historical, political, economic and linguistic setting. Speakers acquire and use Pichi within this setting and bring in the full baggage of their respective linguistic, social, political and economic practices and experiences.

The baggage that has contributed to the quick rise of conventionalised code-mixing in Pichi may be summarised in the following five points: (1) the small number of speakers and geographically limited language area (for a long time only the capital of Bioko and the adjoining areas) facilitate the spread of linguistic innovations; (2) the 'Fernandinos', the former élite of Sierra Leonean and West African coastal origin, to whom Pichi has always been the principal native language, lost most of its economic and political power in the course of the 20th century. Whatever normative power the speech of Fernandinos may have had has given way to a relaxed attitude of present-day Pichi speakers of diverse ethnic backgrounds – an attitude which espouses

heteroglossia and tolerance for variation instead of favouring more rigid linguistic norms; (3) the ideological battle waged against Pichi - under the banner of its alleged simplicity - by the Spanish colonisers (for a pungent exposition of this view, see Zarco 1938: 5-7), and until present by many educated Equatoguineans and foreign residents in Malabo, as well as the dominance of Spanishmediated political and economic activities have made Pichi highly receptive for the admixture of elements from the prestige language Spanish. In such a context, code-mixing serves an important flagging function - "I speak Pichi, yes, but I also master Spanish"; (4) Pichi and Spanish share a number of significant typological features, which may facilitate the kind of mixing described here: both languages have a very similar noun phrase structure, with prenominal determiners and postnominal number-marking. There is no morphological case, no NP agreement in Pichi and a modest system of agreement in Spanish, when measured against the noun class systems of the Bantu languages of Equatorial Guinea. Both languages have a basic SVO word order and other ordering equivalences, for example in copula clauses. In Pichi and Spanish, there is a conspicuous absence of a Bantu-style head-marking agreement system in the verb phrase - a factor which may facilitate the insertion of Spanish verbs; (5) Finally, there is widespread if not generalised competence in different registers of Spanish by Pichi speakers in Malabo (cf. Lipski 1985, 1992). The acquisition of the colonial and official language Spanish begins in early childhood, even for working-class Equatoguineans with little or no school education. What Pichi is for Malabo and parts of Bioko, Spanish is for the entire nation including the continental part of the country. Besides serving as an interregional and interethnic lingua franca, the use of Spanish is an important means of identity neutralisation in a country, in which the concept of ethnicity is exploited by the ruling class in order to cement its power. This stands in stark contrast to most other speech communites in West and Central Africa, where African, rather than colonial languages function as the principal interregional and interethnic vehicular languages. In such a context, Spanish is handled alongside Pichi with a confidence and suppleness that opens up a creative mixing space within the confines of linguistic and socio-political structure.

The example of Pichi shows that the right socio-political matrix and language mix can lead to making parts of a grammar more complex within a relatively short period. In the process of contact with Spanish, Pichi has become akin to a mixed or intertwined language (Bakker & Mous 1994), but there are also differences to other mixed languages described in the literature. Like the Peruvian intertwined language Media Lengua (Muysken 1994), the superstrate language Spanish chiefly provides lexical material, namely content words. However, despite a tendency towards lexical attrition in some semantic fields, the Krio-derived lexicon of Pichi is vibrant and far from being completely replaced like the original Quechua lexicon of Media Lengua. Similar to Media Lengua, the functional elements and morphosyntax of Pichi are primarily derived from another language; Krio in the case of Pichi (e.g. the use of Spanish verbs with the selectional restrictions of the corresponding Pichi verb), and Quechua in the case of Media Lengua. But Pichi speakers also inserts Spanish content words, and NPs in particular, together with the corresponding Spanish morphology in accordance with Spanish inflectional and derivational

rules. Nevertheless, in spite of the morpho-syntax of Pichi having remained overwhelmingly Pichi in nature, we do find morpho-syntactic mixing phenomena in specific, sub-areas of the grammar – e.g. in mixed predicate adjective clauses or with mixing-induced object pronoun agreement.

Pichi is also characterised by similarities and differences with respect to Berbice Dutch (Kouwenberg 1994, Robertson 1993), a Creole language that overtly exhibits a mixed nature. Like Berbice Dutch, Pichi has a recognisable portion of its lexicon and grammar derived from at least two different sources. While a significant number of the grammatical morphemes and morphosyntactic patterns of Berbice Dutch are derived from Eastern Ijo, the lexicon is dominated by forms from the lexifier language Dutch. In contrast, the lexicon of Pichi is preponderantly of Krio origin in spite of the heavy presence of Spanish lexemes. In comparison to Pichi, conventionalised mixing in Media Lengua and Berbice Dutch Creole appears to have led to a stronger fusion of the participating linguistic systems. Mixing in these two languages seems to affect different structural areas of the grammar in a more thorough and systematic way and is on a whole, more grammaticalised than in Pichi. Pichi is therefore representative of a milder form of language mixing than Media Lengua and Berbice Dutch.

5 A final note on complexity

Pichi and the other West African English-lexifier Creoles and Pidgins are languages in contact. Already, a point-by-point comparison of the code-mixed and conventionalised phrasal syntax of Pichi has revealed at least as much or more surface complexity than the respective areas of English grammar. It has also been mentioned that Pichi is a language which displays an intricate interaction between lexical and grammatical tone, and stress. Other areas of Pichi grammar which remain unaffected by the kind of mixing we have witnessed also leave little to be desired in terms of morpho-syntactic and semantic/ pragmatic complexity. In the following, I name but the most salient aspects of Pichi grammar relevant to an enquiry on complexity while referring the interested reader to my grammar of Pichi (Yakpo, in preparation) for details.

The TMA system of Pichi is characterised by an overt perfective-imperfective opposition supplemented by separately grammaticalised aspectual readings of ingressive, egressive, completive, continuative, iterative and habitual. Besides the existence of a past tense marker, Pichi makes use of portmanteau morphemes which encode perfect tense-aspect as well as a consecutive tense-aspect specialised to narrative discourse. In turn, the semantic space of future is subtly divided up between a proximative aspect, a future tense marker, and the imperfective aspect. The latter two also serve essential functions in the Pichi modality marking system, which additionally features a grammaticalised indicative-subjunctive opposition operative in main and subordinate clauses as a concomitant to deontic modality.

Pichi clause linkage is characterised by three major strategies – juxtaposition, linkage by overt clause introducers and serial verb constructions. Four elements share overlapping

functions in the area of complementation alone. Their use is in part lexically determined by the main verb, in part by the modal value assigned to the subordinate clause by the main verb. Amongst these elements the quotative marker *se* stands out as a highly polyfunctional form with semantically opaque uses extending into functions as a copula, and a relative and adverbial clause introducer next to some 20 or so linkers which introduce clauses with more specific adverbial meanings.

Pichi argument structure is equally challenging in its intricacy. Besides the existence of a lexical distinction between transitive and intransitive verbs, the argument structure of clauses involving transitive verbs is determined by verbal lexical aspect, clausal transitivity and the semantic class of the verb. There are countless restrictions and idiosyncracies with individual verbs regarding the availability of reflexive, reciprocal, unexpressed object or dative alternations. Aside from that, Pichi makes use of a system of causativisation via the manipulation of the transitivity value of clauses involving inchoative-stative alternating verbs, and the use of two types of fully productive causative formation. Most of these constructions feature the use of subjunctive clauses, and one is specialised to expressing the causative of stative states of affairs. The number of semantically opaque and idiomatised verb-NP collocations in Pichi runs into the hundreds. Amongst these we find code-mixed, conventionalised light verb constructions with the distributional characteristics of equivalent Spanish constructions, as well as associative object constructions. In the latter, direct objects express a wide range of impredictable semantic roles such as Manner, Instrument, Purpose or Source.

The copular system of Pichi has three core copulas at its disposal. One of these displays a defective distribution and may only coocur with the emphatic series of the personal pronoun paradigm. The use of these copulas is determined by the feature of time-stability of the designated state of affairs, tense-aspect marking and whether the state of affairs can be expressed in a predicate adjective construction. Suppletion is not only a characteristic of the copular system. In the nominal system, Pichi also has optional suppletive plural forms like *gEls* 'girls', *bOys* 'boys' which take the plural morpheme {-s} as well as two suppletive 1sG possessive pronouns. Besides that, Pichi morphology exhibits some 20 or so derivational and inflectional affixes and a highly productive use of, often semantically intransparent, compounding. Last but not least, Pichi has a rich system of grammaticalised pragmatic particles and phrases, which serve to express emotional involvement, speaker-listener interaction and provide adverbial modification.

I find it extremely difficult to reconcile the facts about Pichi with any notion of simplicity.

Abbreviations:

ADJ	adjective	PRS	present tense
ART	article	PST	relative past tense
ASS	associative preposition	Q=	clitic question particle
CON	consecutive tense-aspect	QUOT	quotative marker
COP	copula	SBJ	subject case
DISTR	distributive	SBJV	subjunctive marker
DP	determiner phrase	SG	singular
EMP	emphatic form	SUB	subordinator
FOC	focus marker	TMA	tense-mood-aspect
FUT	future tense	VP	verb phrase
IPFV	imperfective aspect	1	first person
ITR	iterative	2	second person
LOC	locative preposition	3	third person
NEG	negative	-	morpheme boundary
NP	noun phrase	~	morpheme boundary (reduplicant)
OBJ	object case	`	low tone
PCL	discourse particle	,	high tone
PL	plural	Ĺ	stressed syllable
POSS	possessive	•	one-to-many correspondence of object to metalanguage
PRF	perfect tense-aspect		

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