<table>
<thead>
<tr>
<th>Title</th>
<th>Complexity revisited: Pichi (Equatorial Guinea) and Spanish in contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>Yakpo, K</td>
</tr>
<tr>
<td>Citation</td>
<td>Complexity revisited: Pichi (Equatorial Guinea) and Spanish in contact. In Faracles, NG &amp; Klein, TB (Eds.), Simplicity and complexity in creoles and pidgins, p. 183-215. London: Battlebridge, 2009</td>
</tr>
<tr>
<td>Issued Date</td>
<td>2009</td>
</tr>
<tr>
<td>URL</td>
<td><a href="http://hdl.handle.net/10722/195023">http://hdl.handle.net/10722/195023</a></td>
</tr>
<tr>
<td>Rights</td>
<td>This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.</td>
</tr>
</tbody>
</table>
Complexity revisited: Pichi (Equatorial Guinea) and Spanish in contact*

Kofi Yakpo

1 Introduction

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 the original draft.
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 Kríoi, 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:

(1)  
Entonces, lek haw mi mama cuenta mi, es têl mi se,  
so like how 1sg mother relate 1sg foc tell 1sg.obj quot  
dên bin dê kômôt pero dên no bin bi wan pârêjâ-pârêjâ.  
3pl pst ipfv go.out but 3pl 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.'

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 multi-ethnic social networks and the spread of Pichi and Spanish as native languages. In such a socio-economic 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 $<$ and $>$ designate the segments [$\epsilon$] and [o] 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

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

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 no se yù dɔn get novio na pueblo, na kontri.
    SBJV 2SG know QUOT 2SG PRF get fiancé LOC village LOC home.town
    ‘You should know that you already have a fiancé in the village, in the home-town
'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.'

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 try 'try'.

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):

'I was born in 1924, therefore I am now 80 years old.'
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 adverbal adjuncts such as a a parte 'separately' in (9):

(8) Es que human we è get be.le siempre suele ser así.
It.is that woman SUB 3SG.SBJ get belly always usually be so
'It's that women who are pregnant are always like that.'

(9) Ehè wan glas wata a parte, yù put àn insay.
PCL one glas water separate 2SG put 3SG.OBJ inside
'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, so è kan tel mì se na tide.
well so 3SG.SBJ CON tell 1SG QUOT FOC today
'Well, so she told me that it was today.'

(12) Son tèn dèn wi kin dè go de sef fo go, bueno, fo go some time PL 1PL HAB IPFV go there EMP ASS go well ASS go visit no.
visit right 'Sometimes we would even go there to go, well, to go 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 in 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 code-mixing is also at play in (16), with the syntactically independent adverbial phrase *durante un mes entero* ‘during an entire month’:

(15) Dén bit àn, *de forma tal*, dën brok in 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 multi-constituent 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 mi* ‘out with my’ is best understood as an instance of congruent lexicalisation. For one, we
have linear equivalence of the two languages. Secondly, mi ‘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 komot colegio à de fuera con mi misis
    1SG.SBJ leave high.school 1SG.SBJ COP outside with 1SG superior.woman
    cuatro años à no tek belè à no lef mi bajin.
    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 bikos:

(18) Como wi dè kol àn mono na Panya, in chek àn
    since 1PL.EMP IPFV call 3SG.OBJ overall LOC Spanish 3SG.EMP think 3SG.OBJ
    se ef è tokse wan monki, è gò de fayn.
    QUOT if 3SG.SBJ talk QUOT one monkey 3SG.SBJ FUT COP fine
'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 bin dè kol in mama se sista, in
    as 3SG.POSS sister 3PL PST IPFV call 3SG.POSS mother QUOT sister 3SG.EMP
    dè kol in mama se sista.
    IPFV call 3SG.POSS mother QUOT sister
'As her sisters would call her mother sister, she [emphasis] would call her mother sister.'

(20) Yù nea get pikin porque yù nea mared.
    2SG NEG.PRF get child because 2SG NEG.PRF marry
    'You don't yet have a child, because you aren't yet married.'

(21) Na fo dan tin yù no dè gò dokta porque yù dè chek
    FOC ASS that thing 2SG NEG IPFV FUT doctor because 2SG IPFV think
    se na wich?
    QUOT FOC witchcraft
'It's due to that, that you aren't going to the doctor because you think that it's witchcraft?'
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):

(22) Chico, è de complicado!
boy 3SG.SBJ COP complicated 'Boy, that’s complicated!'

(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 code-mixing 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 dì and in (26) by the proximal demonstrative di(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):

(24) Porque fós, dì paciencia, yù no gò get àn.
because first ART patience 2SG NEG FUT get 3SG.OBJ 'Because first, the patience, you wouldn't have it.'
(25) Entonces, lek haw mi mama cuenta mi, es tel mi se, 
so like how 1SG mother relate 1SG FOC tell 1SG.OBJ QUOT 
dèn bin dè komot pero dèn no bin bi wan pârâjá-pârâjá.  
3PL PST IPFV go.out but 3PL 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) Bikòs di pipul dèn ya gò las mek mek dis plataformà  
because this people 3PL here FUT end.up make SBJV this oil.rig 
wan de è quema.  
one day 3SG.SBJ burn '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 mi 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.'

(28) Na reportero, el programa más popular de este país, in nem  
FOC reporter ART programme more popular of this country 3SG.Poss name 
na Vivencias  
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:

(29) Na net a las doce dèn gò kan dèn pul yù yù noba day. 
LOC night at ART twelve 3PL FUT come 3PL remove 2SG 2SG NEG.PRF die 
'In the night, at twelve o'clock they will come and remove you and you aren't dead.'

(30) Tumôro mònín- tên, wan las sîte 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 luklass 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 *dèn*, in accordance with the pattern that applies to Pichi count nouns. Example (32) involves the [+specific] plural noun *bloques* 'bricks' followed by *dèn*:

(32) Àfta 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) À, Guineano tu de sôn wòwò~wò 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 code-mixing 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 wi mek jwen-jwen, wi bay pia, wi bay sadin,
   1SG.EMP with Rubi 1PL make join-DISTR 1PL buy avocado 1PL buy sardine
   wi bay tomatos, wi desayuna.
   1PL buy tomatoes 1PL 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 bin kan bigin las semaine yù bin fo don finis tide.
   if 2SG PST CON begin last week 2SG 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):
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 tin don baja, we di wata, ùnà don dè si àn op
    ART thing PRF go.down SUB ART water 2PL PRF IPFV see 3SG.OBJ up
    like se na wata normal.
    like QUOT 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 onkul directo, fo mì mama in papa in
    FOC one uncle direct ASS 1SG mother 3SG.POSS father 3SG.POSS
    fambul pat.
    family part
    'He's a direct uncle on the part of my mother's father's family.'

(45) [...] è bring fis, è kuk son especial fis è gi mì
    3SG.SBJ bring fish 3SG.SBJ cook some special fish 3SG.SBJ give 1SG
    mek à chop.
    SBJV 1SG.SBJ eat
    '[...] 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) From 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 naw dèn don lef àn, è don klos.  
3SG.SBJ suffer SUB now 3PL PRF leave 3SG.OBJ 3SG.SBJ PRF close  
'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 dè, 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 cha pea '(to) weed' (52) and the non-finite use of carga 'load' in (50):

(50) Dèn bin dè cobra, na dos mil fo carga wan camión, dèn dè  
3PL PST IPFV charge FOC two thousand ASS load one lorry 3PL IPFV  
cobra naw diez mil francos.  
charge now ten thousand francs
'They used to charge, it was two thousand for loading one lorry, now they're charging ten thousand.'

(51) À begin dè pica-pica, wi fray patata wi fray planti.  
1SG.SBJ begin IPFV cut.up-ITR 1PL fry potato 1PL fry plantain  
'I began to leisurely snip (the trimmings), we fried potatoes, we fried plantain.'

(52) Dan gyal, à tél yù se è chapea lek wan say we  
that girl 1SG.SBJ tell 2SG QUOT 3SG.SBJ weed like one side SUB  
è big pas di wan.  
3SG.SBJ big pass this 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'  
hóntin '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 fo (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) hóntin-mán 'hunter'
Conversely, the 3SG person is always 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 /àn/ (60). This includes polysyllabic vowel-final Pichi verbs with a low-high tonal configuration (61):

(60) *Dan chòp, yù get fo pe àn.*
    that food 2SG get ASS pay 3SG.OBJ
    'That food, you have to pay (for) it.'

(61) [...] *dan moni, è gò chàkrá àn na un segundo.*
    that money 3SG.SBJ FUT destroy 3SG.OBJ LOC one second
    ' [...] 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 fibà/ hálà in.*
    3SG.SBJ liken shout 3SG.EMP
    'She resembles him/ shouted at him.'

(63) *Mì man, in sidòn ya, mi sidòn 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) [...] try reduce in.
      try reduce 3SG.EMP
      '[...] try to cut down on it.'

(65) We yù pikin, yù no aconseja in from doce años.
     SUB 2SG child 2SG NEG advise 3SG.EMP from twelve years
     '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 /àm/ 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 /àn/ is enclitic to the left-adjacent syllable. If this syllable is light (vowel-final) the
encliticisation of /àn/ 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 /àn/.

(68) *Yù no aconseja àn.
     2SG NEG advise 3SG.OBJ
     *You didn’t advise her.

(69) È fibà/ 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 /ín/, 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 fō. For the Spanish verb *intentar*, only the complement verb option is available.

(70) À bìn want *intentar* drīng 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 b/uni0254y es *impotente*, s/uni0254nt/uni025Bn dì b/uni0254y no  g/uni025Bt  pawa.
perhaps ART boy is impotent perhaps ART boy NEG get 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) S/uni0254n mama d/uni025B̀n, d/uni025B̀n *bad*.
some mother PL 3PL bad 'Some mothers, they are bad.'

(73) We yù gò f/uni0254d/uni0254n yù gò *bad*, yù no gò  g/uni025Bt pawa.
SUB 2SG FUT fall 2SG FUT COP bad 2SG NEG FUT get.up clean p/uni0254t/uni0254p/uni0254t  gò l/uni025Bf  n/uni0254a yù  skin na bele dat.

19
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)  Wan  yay  de  blanco  è  no  dè  si.
  one  eye  COP  white  3SG.SBJ  NEG  IPFV  see  'One eye is white, it doesn't see.'

(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 di 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, sevin, [pause], nayn, tcn, [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>
<thead>
<tr>
<th>Cardinal numeral</th>
<th>Pichi ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.89</td>
</tr>
<tr>
<td>2</td>
<td>0.80</td>
</tr>
<tr>
<td>3</td>
<td>0.63</td>
</tr>
<tr>
<td>4</td>
<td>0.45</td>
</tr>
<tr>
<td>5</td>
<td>0.30</td>
</tr>
<tr>
<td>6</td>
<td>0.40</td>
</tr>
<tr>
<td>7</td>
<td>0.22</td>
</tr>
<tr>
<td>8</td>
<td>0.00</td>
</tr>
<tr>
<td>9</td>
<td>0.00</td>
</tr>
</tbody>
</table>

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) Na in dën hol mi, *dia tres del mayo*, à fil di
     FOC 3SG.EMP 3PL hold 1SG day three of the may 1SG.SBJ feel ART
     pikin in 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.'
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:

(81) Son las cuatro y media
They are the four and half
'It's four thirty.'

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 lunes '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):

(87) Wensde?
'Wednesday?'
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 gö bigin.
this day PL rainy.season FUT begin

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

(90) Draysisin?
dry.season

'The dry season?'

(91) Wi dè kol ya so amatan dan, leke se è kin de leke niebla.
1PL IPFV call here so harmattan that like QUOT 3SG.SBJ HAB COP like fog

'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>
<thead>
<tr>
<th>Below 28 years</th>
<th>From 55 years upwards</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>blak</td>
<td>blak</td>
<td>'black'</td>
</tr>
<tr>
<td>wayt</td>
<td>wayt</td>
<td>'white'</td>
</tr>
<tr>
<td>red, rojo</td>
<td>red</td>
<td>'red'</td>
</tr>
<tr>
<td>yelo, amarillo</td>
<td>yelo, amarillo</td>
<td>'yellow'</td>
</tr>
<tr>
<td>azul</td>
<td>blu, azul</td>
<td>'blue'</td>
</tr>
<tr>
<td>verde</td>
<td>grin, verde</td>
<td>'green'</td>
</tr>
<tr>
<td>naranja</td>
<td>naranja</td>
<td>'orange'</td>
</tr>
<tr>
<td>rosa</td>
<td>rosa</td>
<td>'pink'</td>
</tr>
<tr>
<td>violeta</td>
<td>violeta</td>
<td>'violet'</td>
</tr>
<tr>
<td>marrón</td>
<td>marrón</td>
<td>'brown'</td>
</tr>
</tbody>
</table>

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  b/uni0254y y/uni025Blo l/uni025Bk/uni025B Ćici.

*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 lck 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).

(94) […] à tink se na judías blancas o no sé.

1SG.SBJ think QUOT FOC beans white or *NEG* I.know

‘[…] I think they're white beans or so.’

### 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 kon 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 dên plente ya.
    Cameroonians yes 3PL plenty here 'Cameroonians, yes they are many here.'

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

(97) È dé go fo, son skul we de fo govna [...].
    3SG.SBJ IPFV go ASS some school SUB COP ASS government
    'She goes to, a school that belongs to government [...].' (97)

(98) È se è go chach fo, fo Marieta na Ela Nguema,
    3SG.SBJ say 3SG.SBJ go church ASS ASS PLACE LOC PLACE
    na catedrál.
    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 profes(s)or '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, yù want bay cuaderno, bolí ol dan tin dên na wit dólar.
    SUB 2SG want buy exercise.book pen all that thing PL FOC with dollar
    'While, if you want to buy exercise books, pens, all those things are with the dollar.'

(100) Dì profesor, na beta profè.
    ART teacher FOC very.good teacher

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

(101) À bin get fo chenj in nem na registro à registra in.
    1SG.SBJ PST get ASS change 3SG.POSS name LOC register 1SG.SBJ register 3SG.EMP

    '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 'b/uni025Bl/uni025B' exists in Pichi and membrano 'membrane', which has no equivalent in Pichi:

(102) We dokta opin, we dên bigin drō dî, sôn tin we è
    SUB doctor open SUB 3PL begin draw ART some thing SUB 3SG.SBJ
    Kin de bihen placenta, na membrano, sôn kan lef bifo
    HAB COP behind placenta FOC membrane, some COP remain before
    dî matriz, so dî matriz no kan lok.
    ART womb so ART womb NEG COP 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 br/uni0254da 'brother'. However, Spanish-origin abuela 'grandmother' and abuelo 'grandfather' are also in use as the main terms to express these two kinship relations:

(103) Hè, à gò fala yù bikos sông电缆 de we na fo
    PCL 1SG.SBJ FUT accompany 2SG because some cable COP SUB FOC ASS
    Opel, yù intenta bring Opel in yon na corriente, Opel dè
    NAME 2SG try bring NAME 3SG.POSS own FOC electricity NAME IPFV
    kyër buku corriente so è no gò fit ěnta na dan
    take a lot electricity so 3SG.SBJ NEG FUT be.able enter LOC that
    bujía, yù gò wanda sêf.
    ignition.plug 2SG FUT wonder EMP

'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 se dên papa na mì mama in primo.
    1SG.SBJ think QUOT 3PL father FOC 1SG mother 3SG.POSS cousin

'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 gron 'plough up the ground', plant 'to)
plant', *gadin* 'small field; garden' and *kip* 'grow; rear' and in (106) *pamayn* 'palm-oil' and *gadineks* 'egg-plant':

(105) À dig grôn, à plant chap, à go na gadin, à 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 we yù gò nid èn, yù gò se à no get palm-oil 2SG FUT cut egg-plant
'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
'The day when you would, Bube cocoa yam, local taro, we call it "bìhèní".'

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 *go/op* and *go/don* respectively. The same holds for *chapea* '(to) weed' (109):

(108) Boku moto dèn de ya so, à no no se Pancho mek much car PL COP here so 1SG.SBJ NEG know QUOT Pancho make lek se è dè sube bìhèní wi è baja mo. 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 gò chapea, è dè kol sòn human dèn, dèn klin àn쁨 3PL FUT weed 3SG.SBJ IPFV call some woman PL 3PL clean 3SG.OBJ dèn plant dì chap. 3PL plant ART food '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 tél àn se ef yù want à dè alquila yù
taxi, yù sube op, è saful.
tax 2SG go.up up 3SG.SBJ soft
'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 occurrences, 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>
<thead>
<tr>
<th>Ratios</th>
<th>como</th>
<th>porque</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single constituent/ total</td>
<td>0.89</td>
<td>0.91</td>
</tr>
<tr>
<td>Spanish conjunction/ total</td>
<td>0.76</td>
<td>0.41</td>
</tr>
</tbody>
</table>

*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 noto paludismo if dèn giv tratamiento yù no gò day
although NEG.FOC malaria if 3PL give treatment 2SG NEG FUT die
'Even if it isn't malaria, if you are given treatment, you won't die.'
We yù dè mek àn na hos, jàs tek àn, put àn
SUB 2SG IPFV make 3SG.OBJ LOC house just take 3SG.OBJ put 3SG.OBJ
na pat aunque wan tasa so.
LOC pot like one cup so

'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 takni Panya, è se è want
3SG.SBJ NEG know talk neither Spanish 3SG.SBJ say 3SG.SBJ 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 in 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 si se dì tin dè transforma posin yù
while 2SG IPFV see QUOT ART thing IPFV transform person 2SG
dè kotwan tin fo in 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 jàs get wan diecisiete años [...].
2SG just get one seventeen years

'You’re just about 17 years old.'
Me faltan unos dos mil francos. 'I am short of some 2000 francs.'

Tumoro mënin-tén, wan las siete so, à gò go de. '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>
<thead>
<tr>
<th>Form</th>
<th>Elements involved</th>
<th>Mixing pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conjunctions</td>
<td>Functional</td>
<td>Congruent lexicalisation/insertion</td>
</tr>
<tr>
<td>NP + NP constructions</td>
<td>Functional/lexical</td>
<td>Congruent lexicalisation/insertion</td>
</tr>
<tr>
<td>de + adjectives</td>
<td>Functional/lexical</td>
<td>Congruent lexicalisation/interference</td>
</tr>
<tr>
<td>wan</td>
<td>Functional</td>
<td>Interference</td>
</tr>
<tr>
<td>3SG object pronoun agreement</td>
<td>Functional</td>
<td>— (contact-induced structural change)</td>
</tr>
<tr>
<td>3SG PRS Spanish verb</td>
<td>Lexical</td>
<td>Insertion</td>
</tr>
<tr>
<td>Noun phrases</td>
<td>Lexical</td>
<td>Insertion</td>
</tr>
<tr>
<td>Numerals, dates, time</td>
<td>Lexical</td>
<td>Insertion/alternation</td>
</tr>
<tr>
<td>Discourse markers</td>
<td>Lexical</td>
<td>Alternation</td>
</tr>
</tbody>
</table>

4 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. Faracas 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 dën:

(119) Afta ùnà bay dì block-s dën tumara.
    after 2PL buy ART brick-PL PL tomorrow

‘Then you [plural] buy the bricks 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 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 dən after numerals and quantifiers. In contrast, English does not feature a split lexicon and morphology in these constructions:

(122) Na de à bin sidon sote à bin get seis años.

'It’s there that I lived until I was six years old.'

(123) È get fayf hia?

‘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 modifier + 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 *red* ‘(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) [...] *dan casa verde*, *dan casa fo madeira*, *we de de we yù*
that house green that house ASS wood SUB COP there SUB 2SG
*komot na policía.*
come.from LOC police
‘[...] that green house, that house of wood, which is there when you’re from the police-station.’

(126) *À no di tèn à dè wer wan grin klos.*
1SG.SBJ know this time 1SG.SBJ IPFV wear one be.green clothing
‘I know (that) that time I was wearing a green dress.’

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:

(127) *That green house/* That black house

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:
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 don dè gro, go skul boku tal, se no, Pichi no *fayn.*  
*but SUB 2SG PRF IPFV grow go school be.much so say NEG Pichi NEG fine*  
'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 tin we bin *de *dificil* mo na di hos, fo put nivèl.*  
*ART thing SUB PST COP difficult more LOC this house ASS put level*  
'The thing that was more difficult in [building] this house, was to level the ground.'

(134) *À want de *flipa-do øl hawa, øl 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 cooccurrence 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 /ín/ - this group includes a few Pichi verbs and all inserted Spanish verbs. Other verbs take the object pronoun /àn/. Two examples follow in (136) and (137) (see also (60)-(67) for further examples):

(136) Fiba no sube in.
fever NEG go.up 3SG.EMP  
‘The fever hasn’t risen on him.’

(137) Na mi lef get àn.
FOC 1SG.EMP leave get 3SG.OBJ  
‘It’s only me who still has it.’
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>
<thead>
<tr>
<th>Structure</th>
<th>Pichi</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plural-marking</td>
<td>[-specific, +plural] Spanish NPs are inserted into Pichi DPs with Spanish gender and number inflection</td>
<td>[-specific, +plural] NPs feature an invariable determiner and number inflection on the noun</td>
</tr>
<tr>
<td></td>
<td>Mixed DPs with a Pichi article additionally feature the [+specific] Pichi pluraliser <em>dn</em></td>
<td>There is no conventionalised overlaying of two systems of number marking</td>
</tr>
<tr>
<td>Attributive use of numerals</td>
<td>Numerals up to 7 occur in monolingual Spanish collocations with Spanish gender and number inflection or Pichi collocations with Pichi number marking</td>
<td>All numerals occur in a single type of monolingual modifier + noun collocation</td>
</tr>
<tr>
<td></td>
<td>Numerals above 7 occur in Spanish collocations with Spanish gender and number inflection in Pichi DPs</td>
<td></td>
</tr>
<tr>
<td>Attributive use of colour terms</td>
<td><em>Blak</em> '(be) black', <em>wayt</em> '(be) white', <em>red</em> '(be) red' occur in monolingual Pichi DPs</td>
<td>All colour terms occur in a single type of monolingual modifier + noun collocation</td>
</tr>
<tr>
<td></td>
<td>Other colours occur in Spanish modifier + noun collocations with Spanish gender and number inflection in Pichi DPs</td>
<td></td>
</tr>
<tr>
<td>Property concepts</td>
<td>Pichi lexicalises property concepts in three states of affairs classes: dynamic verbs, stative verbs, and adjectives</td>
<td>English lexicalises property concepts in a single state of affairs class: adjectives</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Adjectives alternate in their state of affairs class according to the feature [+/-time stable]</td>
<td>There is no [+/-time stable] distinction</td>
</tr>
<tr>
<td>Case-marking and pronoun agreement</td>
<td>Pichi has subject and object case person form paradigms with two distinctions</td>
<td>English has subject and object case person form paradigms with four distinctions</td>
</tr>
<tr>
<td></td>
<td>Pichi has two suppletive 3SG.OBJ pronouns; agreement is controlled by the tonal class of the verb</td>
<td>English has a 3SG gender distinction; there is no agreement in non-anaphoric environments</td>
</tr>
</tbody>
</table>

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 Spanish-mediated 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 interetnic 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 communities in West and Central Africa, where African, rather than colonial languages function as the principal interregional and interetnic 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 insert 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 idiosyncrasies 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 unpredictable 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 occur 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:

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

References


Hout, R van & Muysken, P 1995 Insertion, alternation, congruent lexicalization, corpus-based approaches to bilingual speech. Summer School Code-Switching and Language Contact. Ljouwert/Leeuwarden, 14-17 September 1994, Ljouwert/Leeuwarden. Fryske Academy, 302-06

Hout, R van & Muysken, P 1995 Insertion, alternation, congruent lexicalization, corpus-based approaches to bilingual speech. Summer School Code-Switching and Language Contact. Ljouwert/Leeuwarden, 14-17 September 1994, Ljouwert/Leeuwarden. Fryske Academy, 302-06


Muysken P 1994 Media Lengua. In Bakker & Mous, 201-05


Zarco, M de 1938 *Dialecto Inglés Africano.* Turnhout: H. Proost.