Coordinating constructions in Fongbe with reference to Haitian Creole

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1. Introduction

This paper is concerned with coordinating constructions in Fongbe, a Kwa language spoken mainly in Benin, and in Haitian Creole, a Caribbean creole spoken mainly in Haiti. These two languages are historically related in a way that will be specified below.

Akoha (1980:!210) identifies the Fongbe conjunctions in (1).¹

(1)	a.	bò	'and'	
		bó	'and then'	
		kpólkpódó…kpó	'and'	
	b.	àm5	'but'	
		àlō	'or else'	
		kàbī	'or else'	
		àdì	'or'	
		lobó	'and then'	
		lobà	'and then'	
		hú	'then'	
		có	'but'	
		lo-có	'nonetheless'	
		lō-ś	'while, but'	(from Akoha 1980: 210)

This paper is concerned only with the lexical entries in (1a): the clausal conjunctions $b\hat{\sigma}$ and $b\hat{\sigma}$, and the so-called NP conjunction made up of two lexical items, $kp\hat{\sigma}d\hat{\sigma}...kp\hat{\sigma}$ 'with...with'.

Anonymous (1983:!IX, 1) glosses both $b\hat{\sigma}$ and $b\acute{\sigma}$ as 'and'. The author specifies that when $b\hat{\sigma}$ and $b\acute{\sigma}$ occur in combination with lo yielding $lob\hat{\sigma}$ and $lob\acute{\sigma}$, respectively, the interpretation 'and then' obtains. Akoha (1980: 108 and 210, respectively) glosses $b\hat{\sigma}$ as

'and, then' and $b\acute{o}$ as 'and then'. He glosses both $lob\grave{o}$ and $lob\acute{o}$ as 'and then' (p. 210). Hounkpatin (1985: 160 and 233, respectively) glosses $b\grave{o}$ as 'then' and $b\acute{o}$ as 'and'. As can be seen from this brief review of the literature, there is variation among authors as to the meaning of $b\grave{o}$ and $b\acute{o}$.

According to my informants³, when $b\hat{\sigma}$ and $b\hat{\sigma}$ coordinate clauses that are in the perfective aspect, the coordinate clauses are generally interpreted as denoting related events occurring sequentially, and $b\hat{\sigma}$ and $b\hat{\sigma}$ are both glossed as 'and then'. This is illustrated in (2).

- (2) a. Kɔkú wá bɔ̀ Àsíbá yì.

 Koku arrive CONJ Asiba leave

 'Koku arrived and-then Asiba left.'
 - b. Kôkú dù nú bó nù sín.

 Koku eat thing CONJ drink water

'Koku ate and-then drank water.'

In contexts such as those in (3), however, even though the two clauses coordinated by $b\hat{\sigma}$ and $b\hat{\sigma}$ occur in the perfective aspect, they are interpreted as denoting two independent events (in terms of both sequentiality and causality) and the two conjunctions are glossed as 'and'. This is illustrated in (3).

- (3) a. $M\hat{e}$ $w\hat{e}$ $d\hat{u}$ - $d\hat{e}$ - $j\hat{i}$ $b\hat{o}$ $m\hat{e}$ $w\hat{e}$ $x\hat{o}$ - $kp\hat{o}$.

 person two win and person two fail

 'Two persons won and two persons failed.'
 - b. Kôkú₁ dù-dé-jí dò wèzù mè bó₁ xó-kpò dò kàn-línlón mè.
 Koku win be.at run in and-he loose be.at jump in 'Koku won at the race and lost at the jump.'

When $b\hat{\partial}$ and $b\hat{\partial}$ coordinate clauses that occur in the imperfective aspect, the coordinate clauses are always interpreted as denoting events that may be unrelated and that may occur simultaneously. This is illustrated in (4).

- (4) a. Kɔkú dò wíwá wè bò Àsíbá dò yìyì wè.

 Koku be.at arriving POST CONJ Asiba be.at leaving POST 'Koku is arriving and Asiba is leaving.'
 - b. Kỳkú dò nú dù wè bó dò sín nù wè.

 Koku be.at thing eat POST CONJ be.at water drink POST

 'Koku is eating and drinking water (at the same time).'

It thus appears that the variation between authors as regards to the meaning of the conjunctions $b\hat{\sigma}$ and $b\hat{\sigma}$ finds an explanation when the aspectual properties of the clauses they conjoin are taken into account.

The difference between $b\hat{\partial}$ and $b\hat{\partial}$ lies in the fact that, while the former basically coordinates clauses with referentially disjoint subjects, hence clauses involving switch-reference, the latter is restricted to coordinating clauses with coreferential subjects. This is illustrated in (5) and (6), respectively.

- (5) Kôkú wấ bồ Àsíbá yì.

 Koku arrive CONJ Asiba leave

 'Koku arrived and-then Asiba left.' (=(1) in Lefebvre and Brousseau 2002: 113)
- (6) $\dot{U}n_i$ wá $b\acute{o}_i$ yì.

 1sg arrive CONJ leave

'I arrived and-then left.' (=(3a) in Lefebvre and Brousseau 2002: 113)

The difference in the referential properties of the subjects of clauses coordinating by $b\hat{\sigma}$ and $b\hat{\sigma}$ has been noted on several occasions (e.g. Akoha 1980: 210, 1990: 229–234; Anonymous 1983: IX, 1). For some speakers reported on in Lefebvre and Brousseau (2002: 113), $b\hat{\sigma}$ can also coordinate clauses whose subjects are coreferential, as is illustrated in (7).

(7) Κὸκὑ₁ wá bò ć₁ lékò yì.
Koku arrive CONJ 3sg again leave
'Koku arrived and-then he left again.'

Another difference between the clauses coordinated by $b\hat{\sigma}$ or by $b\delta$ lies in the fact that, when the two clauses are coordinated by $b\hat{\sigma}$, the subject of the second conjunct clause must be overt, as in (5) and (7), and when the two clauses are coordinated by $b\hat{\sigma}$, the subject of the second conjunct must be covert, as in (6). This discrepancy raises the question of the syntactic status of $b\hat{\sigma}$ and $b\hat{\sigma}$. What features do they have in common, and what features distinguish them? Are they both clausal coordinators, as is generally assumed in the literature cited above, or could they be distinguished on the basis of the type of constituents that they are coordinating, e.g. clauses versus verb phrases? It will be argued that $b\hat{\sigma}$ and $b\hat{\sigma}$ are both clausal coordinators, and that furthermore, they can only coordinate clauses.

Another set of facts concerning these two lexical items is that, as will be seen below, in addition to being used as coordinating conjunctions, both can serve as complementisers in specific contexts. This raises the question of whether there are two different $b\hat{\sigma}$ s and two different $b\hat{\sigma}$ s, or alternatively, whether it is possible to account in a unified way for the properties of $b\hat{\sigma}$ and for those of $b\hat{\sigma}$. My theoretical standpoint on this issue is that monosemy is to be preferred over polysemy wherever possible (see also Bouchard 1995; Cowper 1989, 1995; Ghomeshi and Massam 1994; Johns 1992; Lefebvre 1999; Nida 1948; Ruhl 1989; etc). I assume the One Form/One Meaning Principle as formalised in Johns (1992: 84): "Where morphemes are identical or similar in phonological properties, in the unmarked case, they are identical or similar in all lexical properties". Assuming this general principle, one should avoid proposing several lexical entries with the same phonological form provided that the meanings corresponding to these forms are semantically related. I will argue that it is possible to provide a unified analysis for $b\hat{\sigma}$ and a unified analysis for $b\hat{\sigma}$.

Another property of $b\hat{\partial}$ and $b\acute{o}$ is that they cannot be used to coordinate noun phrases. Since $b\acute{o}$ occurs exclusively in contexts involving two coreferential subjects, it is not expected to occur in the context of NPs. However, $b\grave{\partial}$ being freer in this respect might be

expected to occur in the context of NPs. Nevertheless, $b\hat{\sigma}$ cannot coordinate two NPs, as is shown by the ungrammaticality of phrases like (8).

(8) *Kɔkú bɔ̀ Àsíbá

Koku CONJ Asiba

The use of distinct coordinators for NPs and sentences is very widespread cross-linguistically. But why can't $b\hat{\sigma}$ conjoin noun phrases? To my knowledge, a sound explanation of this fact has not been provided as yet. An account of this distribution will be proposed in §2.

The properties of $b\hat{\sigma}$ and $b\acute{\sigma}$ enumerated so far show that these two lexical items are quite similar. Both share the core meaning 'and/and then', both can serve as a coordinator of clauses and as a complementiser. Neither can coordinate NPs. The difference between them is that, while $b\acute{\sigma}$ is restricted to coordinating clauses with coreferential subjects, $b\grave{\sigma}$ coordinates clauses with either referentially disjoint or with coreferential subjects. This situation raises the question of whether $b\grave{\sigma}$ and $b\acute{\sigma}$ could be analysed as contextually determined allomorphs. Although this may be an appealing way of looking at the data at first glance, it will be argued that this cannot be the correct analysis. Although $b\grave{\sigma}$ and $b\acute{\sigma}$ appear to have a rather similar distribution in the linguistic contexts focused on in this paper, $b\acute{\sigma}$ has a wider distribution than $b\grave{\sigma}$, and therefore, $b\acute{\sigma}$ and $b\acute{\sigma}$ cannot be analysed as contextually determined allomorphs.

The equivalent of coordination of NPs is achieved by means of a circumposition involving adpositions meaning 'with', a typologically common strategy. This is illustrated in (9).

(9) Kɔkú kpó(dô) Àsíbá kpó/kpá

Koku with Asiba with/with

'Koku and Asiba'

Some authors consider the circumposition in (9) as a NP conjunction and gloss it as 'and' (see e.g. Akoha 1980: 210; Anonymous 1983: VII, 1). It will be argued that the

circumposition occurring in (9) also occurs in comitative, instrumental and manner constructions, and that in all of its occurrences, the phrase containing the circumposition $kp\delta d\delta ... kp\delta/kp\delta n$ is a syntactic adjunct. There thus appears to be no true NP conjunction in Fongbe.

In the course of the last twenty years, Fongbe has come to be known as an important substratum language of some Caribbean creoles (see e.g. Lefebvre 1986, 1998, and the references therein; Lefebvre and Kaye 1986; Singler 1996). In Lefebvre (1998), it is argued that the properties of a significant portion of the West African lexicons have been reproduced in Haitian Creole through the process of relexification. The question arises as to whether the particular properties of the Fongbe lexical items involved in clausal and NP coordination were in fact carried over into Haitian Creole through the process of relexification. This issue will be taken up in §6. It will be shown that, to a large extent, the properties of the Fongbe lexical items involved have been reproduced in the creole.

The paper is organised as follows. Section 2 discusses the properties of $b\hat{\sigma}$ and proposes a unified account of these properties. Section 3 does the same for $b\hat{\sigma}$. It ends with a subsection addressing the question of whether $b\hat{\sigma}$ and $b\hat{\sigma}$ really constitute separate lexical entries. Section 4 addresses theoretical issues raised by the properties of $b\hat{\sigma}$ and $b\hat{\sigma}$, including the sources of the functions of $b\hat{\sigma}$ and $b\hat{\sigma}$. Section 5 discusses the facts concerning coordination of NPs or lack thereof. Section 6 compares the Haitian Creole data with the Fongbe data within the framework of the relexification account of creole genesis as formulated in Lefebvre (1998 and the references therein). Section 7 concludes the paper with remarks on the typological features of the Fongbe lexical items discussed in this paper.

The data discussed in this paper are drawn either from the literature, in which case they are identified as such, or from my field notes, in which case no source is mentioned. Variation in the data between authors or between informants will be pointed out throughout.

2. The conjunction bɔ̀

This section bears on the properties of $b\hat{\partial}$. Its properties as a coordinating conjunction and as a complementiser are discussed in turn in the first two subsections. A unified analysis of $b\hat{\partial}$ is proposed in §2.3.

2.1. Bà as a coordinating conjunction

In (5), $b\hat{\sigma}$ coordinates clauses having referentially disjoint subjects. In (7), $b\hat{\sigma}$ coordinates clauses having coreferential subjects. The conjunct clause introduced by $b\hat{\sigma}$ has to have an overt subject (see (5) and (7)). In (10), the subject of the second conjunct is not overt and the sentence is not grammatical (compare (10) with (5) and (7)).

[Lit.: 'Koku arrived and-then (s)he left.']

Since the second clause coordinated by $b\hat{\sigma}$ has to have an overt subject, $b\hat{\sigma}$ is excluded from contexts where there is no overt subject. The various sets of data presented below document this distributional property.

First, the infinitival complement of verbs of the 'want' class has no overt subject when the subject of the main clause and that of the embedded clause are coreferential. This is shown in (11).

'Koku wants to drink water.'

 $B\hat{\sigma}$ cannot coordinate two complement clauses of a verb of the 'want' class, as is shown by the ungrammaticality of (12).

Second, the complement of the modal verb $six\acute{u}$ 'may' is an infinitival complement lacking an overt subject, as is shown in (13).

 $B\hat{\sigma}$ cannot conjoin two complements of $s\hat{\imath}x\hat{u}$, as is shown by the ungrammaticality of (14).

Finally, some contexts requiring deverbal nominalisations do not allow for an overt subject. The complement of the aspectual verb meaning 'to begin' constitutes such a context. It selects a complement headed by the postposition ji 'on' which, in turn, selects a nominalised VP. This nominalised phrase contains no overt subject, as is shown in (15). As is extensively discussed in Lefebvre and Brousseau (2002: 195–215), in nominalisation contexts, the object precedes the deverbal noun. Hence, in (15), the object nii 'thing' precedes the nominalised verb dii 'eating'.

(15)
$$\dot{U}n$$
 $\dot{j}\dot{e}$ [[$n\dot{u}$ $\dot{q}\dot{u}$] $\dot{j}\dot{l}$].

1sg fall thing eating on

'I began eating.' (=(136) in Lefebvre and Brousseau 2002: 287)

The lexical item $b\hat{\sigma}$ cannot conjoin complements so formed, as is shown by the ungrammaticality of (16).

The sentence in (16) can be rescued as (17), where $b\hat{\sigma}$ conjoins two full clauses with overt subjects.

(17)
$$\dot{U}n$$
 $j\dot{\varepsilon}$ $n\dot{u}$ $d\dot{u}$ $j\dot{t}$ $b\dot{\sigma}$ $\dot{u}n$ $j\dot{\varepsilon}$ $s\dot{n}$ $n\dot{u}$ $j\dot{t}$.

1sg fall thing eating on CONJ 1sg fall water drinking on

'I began eating and-then I began drinking water.'

The ungrammatical data in (10), (12), (14) and (16) all show that $b\hat{\sigma}$ cannot conjoin clauses lacking an overt subject. The ungrammaticality of the sentences in (14) and (16) further shows that $b\hat{\sigma}$ cannot conjoin VPs, regardless of whether they are nominalised (as in (16)), or not (as in (14)). The fact that $b\hat{\sigma}$ is excluded from contexts lacking an overt subject (that is, infinitival clauses of the type in (12) and (14), and nominalisations of the type in (16)), suggests that $b\hat{\sigma}$ cannot conjoin non-finite clauses.^{5,6}

Summarising: $b\hat{\sigma}$ coordinates clauses (not VPs). Clauses coordinated by $b\hat{\sigma}$ must have overt subjects. Consequently, $b\hat{\sigma}$ is excluded from infinitival clauses lacking an overt subject and from deverbal nominalisations. Finally, $b\hat{\sigma}$ is excluded from non-finite clauses. The latter claim will be shown to gain support from the distribution of $b\hat{\sigma}$ occurring as a complementiser.

2.2. Bà as a complementiser

The lexical item $b\hat{\sigma}$ may also be used to introduce the complement of the prepositions $k\hat{\alpha}k\hat{\alpha}$ 'until' and $c\hat{\sigma}$ 'before'. In (18), $b\hat{\sigma}$ introduces the clausal complement of the preposition $k\hat{\alpha}k\hat{\alpha}$ 'until'. In this context, $b\hat{\sigma}$ is optional (a fact that is represented by the parentheses in the examples below). The example in (18a) shows that the subjects of the two clauses related by $b\hat{\sigma}$ may be referentially disjoint. The example in (18b) shows that (for some speakers) the subjects of the two clauses related by $b\hat{\sigma}$ may be coreferential. In either case, the subject of the second conjunct has to be overt.

- (18) a. Kôkứ_i yốlố è_j kấká (bở) é_j wá.

 Koku call 3sg until CONJ 3sg come

 'Koku called her/him until (s)he came.'
 - b. Kôkú_i dù nú káká (bô) ć_i jè àzôn.
 Koku eat thing until CONJ 3sg fall sick
 'Koku ate until he fell sick.' (=(19a) in Lefebvre and Brousseau 2002: 118)

The lexical item $b\hat{\sigma}$ also introduces the clausal complements of $c\hat{\sigma}$, which, in one of its uses, may be glossed as 'before', as is illustrated in (19a). In (19b), the temporal clause has been topicalised. In Fongbe, topicalised constituents are headed by the definite determiner $\hat{\sigma}$. Note that, when the subordinate clause follows the matrix, the definite future marker is optional, as in (19a), whereas it is obligatory when the subordinate clause precedes the matrix, as in (19b).

- (19) a. Kòkú kò yì có bà à (ná) wá.

 Koku ANT leave before CONJ 2sg DEF.FUT arrive

 'Koku had left before you arrived.'
 - b. Có bò à ná wá ó, Kôkú kò yì.
 before CONJ 2sg DEF.FUT arrive DEF Koku ANT leave
 'Before you arrived, Koku had left.' (=(122) in Lefebvre and Brousseau 2002: 172)

The clausal complements of $k\acute{a}k\acute{a}$ and $c\acute{o}$ (see (18) and (19), respectively) are obligatorily finite; that is, there is no infinitival alternative available. So, as a conjunction of subordination, $b\grave{o}$ introduces finite clauses.

As a conjunction of subordination, $b\hat{\sigma}$ has the properties of complementisers. First, in (18) and (19), $b\hat{\sigma}$ occurs at the beginning of the complement clause, before the subject. This is the position where we find clause-initial complementisers (e.g. that in English). Second, in (18) and (19), $b\hat{\sigma}$ introduces only finite clauses. Complementisers may be specified for whether they introduce finite or non-finite clauses (e.g. that [+finite] versus for [-finite] in English). Third, $b\hat{\sigma}$ is selected by the prepositions $k\hat{a}k\hat{a}$ and $c\hat{\sigma}$. To my

knowledge, $b\hat{\sigma}$ is selected by no other preposition. It is a property of complementisers to be selected by specific lexical items or by classes of lexical items (e.g. in English, some verbs select *that* as a complementiser, others select *to*). Fourth, as can be seen in (18a) and (18b), the realisation of $b\hat{\sigma}$ is optional in the context of $k\hat{a}k\hat{a}$. Complementisers are optionally realised in specific contexts (e.g. English *He thinks (that) he will come*). Fifth, $b\hat{\sigma}$ occurs in the same position as the complementiser $n\hat{u}$ does. (The complementiser status of $n\hat{u}$ is discussed in Lefebvre and Brousseau (2002: 116–117).) Compare (20a) and (21a), and (20b) and (21b). Note that in (20b) and (21b), the temporal clause has been topicalised.

- (20) a. Kôkú kò yì có bò à wá.

 Koku ANT leave before CONJ 2sg arrive

 'Koku had left before you arrived.'
 - b. Có bò à ná wá ó, Kòkú kò yì.
 before CONJ 2sg DEF.FUT arrive DEF Koku ANT leave
 'Before you arrived, Koku had left.' (=(122) in Lefebvre and Brousseau 2002: 172)
- (21) a. Dó àmlòn có nú à ná wá.

 sleep sleep before COMP 2sg DEF.FUT come

 'Sleep before you come.'
 - b. Có nú à ná wá 5, d5 àmlòn.

 before COMP 2sg DEF.FUT come DEF sleep sleep

 'Before you come, sleep.' (=(123) in Lefebvre and Brousseau 2002: 172)

In the context of (20) and (21), $n\acute{u}$ and $b\grave{z}$ are interchangeable, as is illustrated in (22a) and (22b). According to my informants, the choice of either one of the two forms entails no difference in meaning.

(22) a. $D\delta$ àmlòn $c\delta$ $\left\{\begin{array}{c} n\omega\\ b\delta\end{array}\right\}$ à ná wá. sleep sleep before COMP 2sg DEF.FUT come 'Sleep before you come.'

b.
$$C\acute{o}$$
 $\left\{\begin{array}{c} n\acute{u} \\ b\grave{o} \end{array}\right\}$ \grave{a} $n\acute{a}$ $w\acute{a}$ \acute{o} , $d\acute{o}$ \grave{a} ml \grave{o} n. before COMP 2sg DEF.FUT come DEF sleep sleep 'Before you come, sleep.'

Since $n\acute{u}$ is a complementiser (see (21)), and since $b\grave{\sigma}$ can occur in complementary distribution with it (see (22)), the analysis that $b\grave{\sigma}$ is a complementiser in (18), (19) and (20) is a likely one.

There are thus five arguments supporting the claim that, in the context of $k\acute{a}k\acute{a}$ and of $c\acute{o}$, $b\grave{c}$ serves as a complementiser: position, finiteness, selectional properties, optionality and complementary distribution with the complementiser $n\acute{u}$.

2.3. A unified analysis of bò

In §2.1, we saw that $b\hat{\sigma}$ serves as a conjunction of coordination, and in §2.2, we saw that it serves as a conjunction of subordination, and more precisely, as a complementiser. The double function of $b\hat{\sigma}$ raises the question of whether it is necessary to postulate two lexical entries for $b\hat{\sigma}$. Alternatively, is it possible to provide a unified account for this lexical item? In the introduction to this paper, I took the theoretical standpoint that monosemy is to be preferred over polysemy wherever possible. Is a monosemic analysis of $b\hat{\sigma}$ supported by the properties of this lexical item across the environments in which it occurs? I argue below that the data support a monosemic analysis of $b\hat{\sigma}$.

First, in both coordination and subordination contexts, $b\hat{\sigma}$ relates two clauses with subjects that are either disjoint (see (5) and (18a)) or coreferential (see (7) and (18b)). In both cases, the subject of the second conjunct or of the subordinate clause must be overt. This appears to be a consequence of the fact that, in both environments, $b\hat{\sigma}$ only occurs in the context of finite clauses. It thus appears that the properties of $b\hat{\sigma}$ conjoining two clauses are the same as those of $b\hat{\sigma}$ introducing the sentential complement of $k\hat{a}k\hat{a}$ 'until' and of $c\hat{\sigma}$ 'before'. The difference between the two contexts is that, in one case, $b\hat{\sigma}$ serves as a conjunction of coordination, whereas in the other one, it serves as a complementiser.

Interestingly enough, there are contexts of occurrence of $b\hat{\sigma}$ where its semantics seems intermediate between that of a coordinating and that of a subordinating conjunction. For example, in the context of the temporal adverbial clause in (23), $b\hat{\sigma}$ is intermediate between being interpreted as a coordinating conjunction (e.g. 'Koku arrived and-then Asiba left'), or as a subordinating one (e.g. 'It is as soon as Koku arrived that Asiba left').

(23) Wá Kờ kứ wá (tlólô) bờ À síbá yì.

arrive Koku arrive as.soon.as CONJ Asiba leave

'As soon as Koku arrived, Asiba left.' (=(120) in Lefebvre and Brousseau 2002: 172) Similar examples are provided by Anonymous (1983:!VI, 7). One of them is reproduced as (24); it can be paraphrased either as 'Something happened (what is it) and then you came', or as 'What happened that you came/that caused you to come?'.

(24) Nè (wè) ká gbòn bò à wá.

what it.is ADV happen CONJ 2sg come

'What happened and-then/that you came.' (Anonymous 1983: VI, 7)

The type of fuzziness reported above has been noted in the literature (see e.g. Payne's 1985 discussion of similar cases on the basis of Fijian data).⁷

The ambiguity relative to the interpretation of $b\hat{\sigma}$ in (23) and (24) is possibly related to the fact that, regardless of its grammatical function as a marker of coordination or as a marker of subordination, $b\hat{\sigma}$ generally relates two events that are sequentially ordered. Hence, the ordering of events denoted by (5) can be paraphrased as (25a), that by (18a) as (25b), that by (19) as (25c), that by (21) as (25d), that by (23) as (25e), and that by (24) as (25f).

- (25) a. 'Koku arrived and-then Asiba left'
 - b. 'Koku ate to the point that then he fell sick.'
 - c. 'Koku left and-then you arrived.'
 - d. 'Sleep and-then come.'
 - e. 'Koku arrived and-then Asiba left.'
 - f. 'Something happened and-then you came.'

Note that the surface order of the conjuncts does not need to reflect the sequential order of events in (25). For example, in the (a) version of (19), (20) and (21), the temporal clause follows the matrix clause. In the (b) version of the same sentences, the temporal clause has been topicalised and hence, it precedes the matrix.⁸

Given that $b\hat{\sigma}$ generally relates events that are sequentially ordered, it is not surprising to find that the second conjunct of two clauses related by $b\hat{\sigma}$ may be assigned a purposive interpretation, as is illustrated in (26). Note that the clause interpreted as purposive must contain the definite future marker $n\hat{\sigma}$.

On the basis of the above discussion, I conclude that it is possible to describe the properties of $b\hat{\sigma}$ in a unified way, and that these can be recorded within a single lexical entry. This lexical entry would minimally contain the information informally identified in (27).

The fact that the subject of the clause introduced by $b\hat{\sigma}$ has to be overt follows from the [+finite] character of $b\hat{\sigma}$, and hence, of the clauses that it relates. This information does not need to be specified in the lexical entry because this is what is expected: finite clauses do have overt subjects. The fact that $b\hat{\sigma}$ can relate two clauses whose subjects are referentially disjoint or not does not need to be specified either, for it is also the unmarked case. The reason why $b\hat{\sigma}$ does not occur with NPs follows from the feature [+finite] associated with it. Typically, NPs are not identified for finiteness. Consequently, they cannot be related by $b\hat{\sigma}$.

3. The conjunction $b\acute{o}$

Like $b\hat{\partial}$, $b\hat{o}$ serves both as a coordinating conjunction and as a complementiser. The properties of $b\hat{o}$ in each of these two functions are discussed in §3.1 and §3.2, respectively.

Section 3.3 proposes a unified analysis of $b\delta$. Given the fact that $b\delta$ and $b\delta$ share a number of properties, the question arises as to whether they constitute two separate lexical entries. This question is addressed in §3.4, where it is argued that $b\delta$ and $b\delta$ do indeed constitute separate lexical entries.

3.1. Bó as a coordinating conjunction

The lexical item $b\delta$ conjoins clauses whose subjects are coreferential. As is shown in (28a)–(28e), this applies throughout the person paradigm. Recall from (6) that, in this case, the subject of the conjunct clause is not, and it cannot be, overt.

- (28) a. $\dot{U}n_i$ wá $b\acute{o_i}$ yì.
 - 1sg arrive CONJ leave

'I arrived and-then I left.'

- b. \hat{A}_i wá $b\hat{\phi}_i$ yì.
 - 2sg arrive CONJ leave

'You arrived and-then you left.'

- c. $\acute{E_{\rm i}}$ wá $b\acute{o_{\rm i}}$ yì.
 - 3sg arrive CONJ leave

'(S)he arrived and-then (s)he left.'

- d. Mi_i^9 wá bo_i yì.
 - 1/2pl arrive CONJ leave

'We/you arrived and-then we/you left.'

- e. Yé_i wá bó_i yì.
 - 3pl arrive CONJ leave

'They arrived and-then they left.'

In order to account for the fact that the subject of the second conjunct cannot be overt in the environment of $b\delta$, I will assume that $b\delta$ binds the subject position of the second conjunct. Adjacency is required for $b\delta$ to bind this position.¹⁰

In order to account for the fact that the subjects of the clauses conjoined by $b\delta$ must be coreferential in (28), I will assume that the subject of the first conjunct and $b\delta$ are coindexed. In this view, the two subject positions are related through $b\delta$. All three positions form a chain, schematically represented in (29), where [e] stands for 'empty position'.

(29)
$$DP_{i}$$
 $b\acute{o}_{i}$ [e]_i

According to the representation in (29), $b\acute{o}$ coordinates two clauses. The data in (30) and (31) may, however, lead one to the conclusion that $b\acute{o}$ may coordinate phrases that are smaller than a clause. In (30), $b\acute{o}$ conjoins two finite clauses with $jl\acute{o}$ 'to want' occurring as the main verb in each clause. The verb $jl\acute{o}$ may be omitted (that is, not pronounced) from the second conjunct, a fact that is represented by parentheses in the example.

In (31), the verb *sìxú* occurring in the second conjunct may be left unpronounced.

(31)
$$K \partial k \hat{u}_1$$
 six \hat{u} w \hat{u} b \hat{o}_1 (six \hat{u}) y \hat{i} .

Koku may come CONJ may leave

'Koku may come and (he may) leave.'

The ellipses in (30) and (31) may be analysed as stylistic (that is, they would have the function of avoiding repetitions) rather than as syntactic. The fact that $b\phi$ is otherwise not allowed to conjoin VPs nor non-finite complements supports this claim. For example, $b\phi$ cannot conjoin two complements of the verb 'to begin', as is shown by the ungrammaticality of the sentence in (32).

(32) *
$$\dot{u}n_i$$
 $\dot{j}\dot{e}$ $n\dot{u}$ $d\dot{u}$ $b\dot{o}_i$ sin $n\dot{u}$ $\dot{j}i$

1sg fall thing eat CONJ water drink on

[Lit.: 'I began eating and drinking water.']

The sentence in (32) can be rescued as (33), where $b\delta$ coordinates two full finite clauses.

(33)
$$\dot{U}n_1$$
 $\dot{j}\hat{e}$ $n\hat{u}$ $d\hat{u}$ $j\hat{i}$ $b\acute{o_1}$ $j\hat{e}$ $sìn$ $n\hat{u}$ $j\hat{i}$.

1sg fall thing eat on CONJ fall water drink on 'I began eating and I began drinking water.'

Moreover, the ungrammaticality of the sentence in (34) shows that $b\acute{o}$ cannot conjoin verbs.

Again, the sentence in (34) can be rescued as (35), where $b\delta$ conjoins two finite clauses.

'Koku cultivates bananas and sells them.'

The data in (32) and (33), (34) and (35) show that $b\phi$ cannot conjoin VPs nor Vs. On empirical grounds, it is not possible to exclude the possibility that $b\phi$ could conjoin phrases that are smaller than a clause but larger than a VP. I leave further discussion of this possibility open for future research.

Since $b\delta$ entails that the conjuncts it relates have coreferential subjects, it is not expected to occur as a NP conjunction. This prediction is borne out, as $b\delta$ is excluded from NPs. As is pointed out in Anonymous (1983: IX, 3), even in the case of NPs of the type 'He does not eat salt or pepper', the coordination is rendered by two finite clauses related by $b\delta$. This is illustrated in (36). Note that the presence of the negative marker \check{a} in (36) argues for the finite character of the clause, for, as is shown in Lefebvre and Brousseau (2002: 128–130), the negative marker \check{a} only occurs in finite clauses.

(36)
$$\not E_1$$
 $\not n
ightharpoonup div j
ightharpoonup bón $\not n
ightharpoonup div tàkín
ightharpoonup á.$

3sg HAB eat salt CONJ HAB eat pepper Neg

'He does not eat salt nor pepper.' (from Anonymous 1983:!IX, 3)$

Summarising: the data in (28), (33) and (35) suggest that $b\phi$ coordinates clauses. The data in (32) show that $b\phi$ cannot coordinate nominalised VPs. The data in (34) show

that $b\acute{o}$ cannot coordinate Vs nor truncated VPs. Since $b\acute{o}$ does not coordinate NPs either, I conclude that $b\acute{o}$ can only coordinate clauses. As we saw above, clauses coordinated by $b\acute{o}$ have to be finite (see (36); also (33) and (35)). The distribution of $b\acute{o}$ in contexts of subordination (discussed in §3.2 below) further argues that $b\acute{o}$ only occurs in finite clauses. The fact that, on the one hand, $b\acute{o}$ does not coordinate VPs, and the fact that, on the other hand, it is restricted to finite clauses, further support the suggestion that the ellipses in (30) and (31) are stylistic rather than syntactic. 12

3.2. Bó as a complementiser

As is the case of $b\hat{\rho}$, $b\hat{\rho}$ can be used as a complementiser. As such, it introduces the clausal complement of the preposition $k\hat{\alpha}k\hat{\alpha}$ 'until', as is shown in (37).

The form $b\acute{o}$ also introduces the clausal complement of $c\acute{o}$ in its use as meaning 'before', as is illustrated in (38a) and (38b). In (38b) the temporal clause has been topicalised.

In the above examples, $b\delta$ has all the characteristics of a complementiser. The arguments supporting this analysis are of the same type as those used in the discussion of

 $b\hat{\sigma}$. First, as is the case of $b\hat{\sigma}$, $b\hat{\sigma}$ occurs at the beginning of the complement clause of $k\hat{\alpha}k\hat{\alpha}$ and $c\hat{\sigma}$ (see (37) and (38)). This is the position where we expect complementisers to occur. Second, $b\hat{\sigma}$ is [+finite] since it introduces only finite clauses (see e.g. (37), (38)). Recall from §2.2 that $k\hat{\alpha}k\hat{\alpha}$ and $c\hat{\sigma}$ select only [+finite] clausal complements. Complementisers are either finite or non-finite. Third, $b\hat{\sigma}$ is selected by the prepositions $k\hat{\alpha}k\hat{\alpha}$ and $c\hat{\sigma}$. It is a property of complementisers to be selected. Fourth, $b\hat{\sigma}$ is obligatory in the context of $k\hat{\alpha}k\hat{\alpha}$ and $c\hat{\sigma}$. This follows from the analysis that $b\hat{\sigma}$ binds its adjacent subject position. Complementisers that bind their adjacent subject position are obligatory (see e.g. French qui). Fifth, the syntactic position occupied by $b\hat{\sigma}$ introducing a subordinate clause is the same as that occupied by the complementiser $n\hat{u}$. This is shown in (39) and (40). Note, however, that, since the complementiser $n\hat{u}$ does not have the property of binding its adjacent subject position, the subject position following $n\hat{u}$ is obligatorily spelled out in (40), in contrast to that following $b\hat{\sigma}$ in (39).

- (39) Dó àmlòn có bó (ná) wá.

 sleep sleep before CONJ DEF.FUT come

 'Sleep before you come.'
- (40) Dó àmlòn có nú à ná wá.

 sleep sleep before COMP 2sg DEF.FUT come

 'Sleep before you come.'

According to my informants, there is no difference in meaning between (39) and (40). The fact that $b\delta$ occurs in complementary distribution with the complementiser $n\hat{u}$ supports the analysis according to which $b\delta$ in (39) is a complementiser.

 $B\acute{o}$ also occurs in purposive clauses. In this case, it is obligatorily followed by the definite future marker $n\acute{a}$. Examples of this structure are given in (41) and (42).

(41)
$$\dot{U}n_i$$
 $n\acute{a}$ yi $b\acute{o}_i$ $n\acute{a}$ $w\grave{a}$ $\grave{a}z\grave{c}$.

1sg DEF.FUT go CONJ DEF.FUT do work

'I will leave in order to work.' (=(127) in Lefebvre and Brousseau 2002: 174)

(42) $A s \hat{i} b \hat{a}_i \quad x \hat{j} \quad l \hat{i} n f \hat{i} n \hat{j} \hat{a} \quad w \hat{j}$.

Asiba buy flour CONJ DEF.FUT prepare dough

'Asiba bought flour in order to prepare dough.' (=(128) in Lefebvre and Brousseau 2002: 174)

The sentence in (43a) shows that a purposive clause introduced by $b\delta$ can be topicalised.

The sentence in (43b) shows that it can be clefted; in this case, the purposive clause must contain the word wátú 'cause'. 15

(43) a. $B\acute{o_1}$ ná $d\grave{a}$ wó ó, $A\grave{sib\acute{a_1}}$ xò lìnfín.

CONJ DEF.FUT prepare dough DEF Asiba buy flour

'In order to prepare the dough, Asiba bought flour.'

(=(129a) in Lefebvre and Brousseau 2002: 174)

b. $B\acute{o}_1$ ná dà wó wútú wè, $A\dot{s}ib\acute{a}_1$ xò lìnfín.

CONJ DEF.FUT prepare dough cause it.is Asiba buy flour

'It is in order to prepare dough that Asiba bought flour.'

(=(129b) in Lefebvre and Brousseau 2002: 174)

In the two sentences in (43), $b\dot{o}$ cannot be analysed as a conjunction of coordination. It is best analysed as a complementiser.

There are thus five arguments supporting the claim that, in addition to fulfilling the function of coordinator, $b\acute{o}$ also fulfills the function of complementiser when occurring in the context of $k\acute{a}k\acute{a}$, $c\acute{o}$ and purposive clauses: position, finiteness, selectional properties, obligatoriness (due to the fact that $b\acute{o}$ binds its adjacent subject position), and complementary distribution with the complementiser $n\acute{u}$.

3.3. A unified account of bó

In §3.1, we saw that $b\acute{o}$ is a coordinator, and in §3.2 we saw that it may also serve as a complementiser. As in the case of $b\grave{o}$, the double function of $b\acute{o}$ raises the question of whether two lexical entries are needed for $b\acute{o}$ or whether it is possible to provide a unified

account for this lexical item. As in the case of $b\hat{o}$, I believe that it is possible to provide a unified account of the properties of $b\hat{o}$ discussed so far, on the following grounds.

In both environments, $b\acute{o}$ relates clauses that have the same subject. In both environments, $b\acute{o}$ coordinates finite clauses. It thus appears that the properties of $b\acute{o}$ conjoining two clauses are the same as those of $b\acute{o}$ introducing the sentential complement of $k\acute{a}k\acute{a}$ and of $c\acute{o}$, or of $b\acute{o}$ introducing purposive clauses. As in the case of $b\acute{o}$, the difference between the two contexts in which $b\acute{o}$ occurs is that, in one case, $b\acute{o}$ serves as a coordinator, whereas in the other, it serves as a complementiser.

As in the case of $b\hat{\sigma}$, there are contexts where $b\hat{\sigma}$ is semantically ambiguous. For example, in the context of (44), the meaning of $b\hat{\sigma}$ is intermediate between that of a coordinator (e.g. 'Koku arrived and-then he left'), and that of a complementiser (e.g. 'It is as soon as Koku arrived that he left').

(44)
$$K \partial k u_1^2$$
 wá thó bó₁ yì. 17

Koku arrive as.soon.as CONJ leave

'As soon as Koku arrived, he left.'

The semantic ambiguity observed in (44) may be related to the fact that $b\acute{o}$ generally relates clauses denoting events that are sequentially ordered with one another. The sequences of events that are related by $b\acute{o}$ are of the same type as those related by $b\grave{o}$ in (23). Finally, purposive clauses in which $b\acute{o}$ occurs (see (41), (42)) also involve sequences of events.

I thus conclude that it is possible to describe the properties of $b\delta$ discussed so far in a unified way, and that these can be recorded within a single lexical entry. This lexical entry would minimally contain the information identified in (45): $B\delta$ is a coordinator and a complementiser, and it is [+finite]. The feature [+F] represents the property that $b\delta$ has of binding the subject position that is adjacent to it.

(45) bó: coordinator, complementiser

[+finite]

[+F] under adjacency¹⁸

On this analysis, the reason why $b\acute{o}$ does not occur with NPs follows from its being marked for both [+F] and [+finite]. On the above proposal, $b\acute{o}$ in (45) differs from $b\grave{j}$ in (27) only by its feature [+F], the feature that identifies $b\acute{o}$ as binding the subject position that is adjacent to it. This raises the question of whether $b\grave{j}$ and $b\acute{o}$ could be analysed as contextually conditioned allomorphs. This issue is the topic of the next section.

3.4. Does bó constitute a separate lexical entry from bò?

The lexical properties of $b\hat{\sigma}$ (discussed in §2) and those of $b\hat{\sigma}$ (discussed in §3) are summarised in (46).

(46) bò

•conjunction
of coordination
of subordination
ambiguous cases

•[+finite]
conjoins finite clauses
does not conjoin NPs

•The subject of the second conjunct is overt.

•The subjects of the two conjuncts are referentially free.

bό •conjunction

of coordination of subordination ambiguous cases

•[+finite]
conjoins finite clauses
does not conjoin NPs

•The subject of the second conjunct is covert. The empty position is bound by $b\phi$.

•The subjects of the two conjuncts are coreferential.

On the basis of the properties of $b\hat{\partial}$ and $b\acute{o}$ in (46), it could be hypothesised that these two forms are contextually conditioned allomorphs of a single morpheme. On this view, $b\grave{\partial}$ could be said to occur in the context of an adjacent overt subject and $b\acute{o}$ could be said to occur elsewhere. This would account in a simple way for the distribution of $b\grave{\partial}$ and $b\acute{o}$.

This analysis could be a plausible one if the list of properties in (46) exhausted the distributional properties of both forms. Such is not the case, however. While $b\hat{\sigma}$ does not appear in other environments than those discussed so far, $b\hat{\sigma}$ does. For example, $b\hat{\sigma}$ also occurs in contexts such as in (47). Various authors (e.g. Akoha 1990:!161; Anonymous 1983: V, 1) assign it the French gloss 'donc' in this context. In this case, $b\hat{\sigma}$ obligatorily links the content of the clause it appears in to something that has been said earlier in

discourse. 'Then' thus appears to be an adequate translation for $b\delta$ occurring in this context.

 $B\phi$ may also occur between the subject and the verb, as is illustrated in (48). In this case, $b\phi$ is sometimes referred to as a 'permissive' marker (e.g. Akoha 1980:!176; Hounkpatin 1985:!114). In this context as well, $b\phi$ cannot be used unless it relates the clause it is part of to something that has been said earlier in discourse. I will thus also gloss $b\phi$ occurring in this position as 'then' as well.

These additional uses of $b\acute{o}$ distinguish $b\acute{o}$ from $b\grave{\partial}$. They constitute a serious drawback for an allomorphy analysis of the two forms. I thus conclude that $b\grave{\partial}$ and $b\acute{o}$ constitute two distinct lexical entries.

The new facts concerning $b\phi$, introduced in (47) and (48), raise yet another question: do these new facts constitute counter-examples to a unified analysis of $b\phi$? In (45), $b\phi$ has been identified as a coordinating or subordinating conjunction. However, $b\phi$ occurring in the context of (47) and (48) has been identified as a connective adverb (see Avolonto 1992: 43). In spite of these differences, I believe that it is possible to maintain a unified analysis of $b\phi$. For example, when $b\phi$ is used in contexts such as (47) and (48), it only occurs in finite clauses. It also relates two events that are sequencially ordered; in this case, however, $b\phi$ relates the event of the clause it is part of to an event that was mentioned earlier in discourse.

So, the properties of $b\acute{o}$ in contexts such as (47) and (48) do not differ from those of $b\acute{o}$ summarised in (45), in a way that would force an analysis according to which $b\acute{o}$ would signal two distinct lexical entries.

4. The theoretical relevance of the properties of $b\hat{\sigma}$ and $b\hat{\sigma}$

The content of this section is dedicated to the discussion of the properties of $b\hat{\sigma}$ and $b\hat{\sigma}$ that bear on theoretical issues. The following points will be discussed in turn: the marked character of AND-THEN conjunctions, the disjoint/coreferential subjects distinction and finally, the historical development of the functions of $b\hat{\sigma}$ and $b\hat{\sigma}$.

4.1. On the marked character of AND-THEN conjunctions

As we saw in the previous sections, while $b\hat{\sigma}$ and $b\hat{\sigma}$ may conjoin clauses denoting unrelated events occurring simultaneously in the context of the imperfective aspect (see (4)), and in some cases involving the perfective aspect (see (3)), they otherwise relate events that are sequentially ordered with one another. This sequential interpretation obtains in the context of clauses in the perfective aspect (see §2.2 and §3.2). Consequently, both lexical items are interpreted as either 'and-then' or 'and' depending on the context in which they occur. Only the sequential interpretation is available, however, in cases where $b\hat{\sigma}$ and $b\hat{\sigma}$ introduce a subordinate clause (see §2.2 and §3.2), and furthermore, with this interpretation $b\hat{\sigma}$ can also relate an event described by a simple clause to an event referred to in discourse (see (47), (48)).

Some languages that exhibit clausal AND-THEN coordination are discussed in e.g. Longacre (1985), Payne (1985) and in the references therein. A point of interest for the present discussion is that, on Payne's (1985) typology of conjunctions, AND-THEN-type conjunctions are analysed as marked as opposed to AND-type ones. This fact will be shown to be relevant for the discussion of the Haitian data in §6.

4.2. The disjoint/coreferential subjects distinction

As we saw in the preceding sections, while $b\hat{\sigma}$ can conjoin clauses that have disjoint subjects (see (5)) or coreferential ones (see (7)), $b\hat{\sigma}$ is restricted to conjoining clauses that have coreferential subjects (see (6)), provided that it is adjacent to the subject position of the second conjunct (see (28) and note 10). The disjoint versus coreferential subjects distinction associated with conjunctions (or with conjunctive affixes) is also found in languages of various genetically unrelated language families. For example, Ibaloi a language spoken in the Philippines, has a conjunction meaning 'and then' that conjoins clauses having coreferential subjects (Longacre 1985). (There is no mention of another conjunction that would coordinate clauses having disjoint subjects.) In Wojukeso, a language spoken in Papua New Guinea, conjunctive suffixes that indicate temporal relations also indicate same versus different subject(s) in reference to the conjunct clause (Longacre 1985). Another example is Paez, a language spoken in Colombia that has two conjunctive morphemes: one used to coordinate clauses with same subjects and one used to coordinate clauses with different subjects (Longacre 1985).

4.3. From connective adverb to complementiser through conjunction of coordination

We saw that $b\hat{\sigma}$ and $b\acute{\sigma}$ serve as conjunctions of coordination. Both lexical items also serve as complementisers, in contexts where the event described by the subordinate clause is temporally ordered with respect to that described by the matrix clause. It was argued that the multifunctional properties of each lexical item can be accommodated within single lexical entries. It was shown, however, that $b\hat{\sigma}$ and $b\acute{\sigma}$ constitute two separate lexical entries. This section presents a hypothesis concerning a likely historical development of the multifunctional character of $b\hat{\sigma}$ and $b\acute{\sigma}$, respectively. I begin with $b\acute{\sigma}$ which has a wider range of functions than $b\hat{\sigma}$, as per the discussion in §3.4.

Recall from §3.4 that $b\delta$ can occur in simple clauses as a connective adverb linking the content of the clause it is part of to an event that has been referred to earlier in discourse.

This connective adverb — which I suggested translating as 'then' — may very well be the source of the coordinating function of $b\delta$ occurring between two matrix clauses. The similarity of the properties of $b\delta$ in these two contexts, as discussed in §3.4, supports such a hypothesis. The historical relationship between connective adverbs and conjunctions of coordination has already been noted. For example, Mithun (1988:!345) reports that, typically, in languages with no overt coordinators, particles with meanings like 'also', 'then', 'and so', 'and now', etc. appear in separate sentences. According to the author, the primary function of these particles "is to provide a semantic or pragmatic link to previous discourse, not to specify a syntactic one". Mithun (1988: 346) adds that "the fluidity of the boundary between discourse adverbials and syntactic conjunctions is significant. The adverbial particles appear to be the source of most clausal coordinating conjunction". Given this situation, it is not unlikely that the connective adverbial $b\delta$ may have been the source of the coordinating function of $b\delta$.

Now, $b\delta$ also serves as a complementiser (see §3.2). In this function, $b\delta$ has properties that are similar to those it has as a conjunction of coordination (see §3.3). For example, as a complementiser, $b\delta$ is restricted to contexts where the event described by the clause it is part of is sequentially ordered with respect to that described by the matrix clause. As a conjunction of coordination, $b\delta$ conjoins clauses describing events that are generally interpreted as being sequentially ordered with one another in the context of the perfective aspect. Given this situation, it is logical to hypothesise that the subordinating function of $b\delta$ is the result of the expansion of its function as a coordinator of clauses. Such reported cases of reanalysis are extremely rare. Complementisers have been shown to have evolved from various sources. For example, the pronoun *that* gave rise to the complementiser *that* in English (see e.g. Hopper and Traugott 1993; Langacker 1977; Lockwood 1968; Noonan 1985; etc.); the preposition $t\delta$ was the source of the complementiser $t\delta$ (see e.g. Noonan 1985; etc.); verbs meaning 'to say' gave rise to THAT-type complementisers in West African languages (see e.g. Lord 1976). (For extensive discussions on the source of

complementisers, see e.g. König 1985; Lord 1973; Ransom 1988; Traugott 1985; etc.) To my knowledge, the closest case to the Fongbe one discussed here has been reported by Pepicello (1982). On the basis of Sanskrit, Greek and Latin, the author shows that markers of connectivity in discourse may develop in several ways; among them they may develop as coordinating and subordinating markers that may come to introduce subordinate clauses of purpose, cause or result. In the Fongbe case reported on here, temporal and purposive clauses are involved (see §2.2 and §3.2), but not cause or result clauses. A few other similar cases of linguistic change have been pointed out to me. Bernard Comrie (p.c.) notes that the coordinating conjunction than in English is being reanalysed as a subordinating conjunction at the same time as it is becoming a preposition. Martin Haspelmath (p.c.) points out that, in spoken Norvegian, the word og 'and' has come to be used as an infinitival complementiser. In Haspelmath (to appear), he further reports (based on Culicover and Jackendoff 1997) on a class of English clause-combining constructions that show mixed subordinate-coordinate behavior. So, if the change hypothesised for the Fongbe data above is not entirely unheard of, it is sufficiently unusual to be worth emphasising. The Fongbe data discussed in this paper thus appear to constitute an original contribution to our current knowledge of the possible sources for complementisers.

Have the functions of $b\hat{\sigma}$ followed the same developmental path as $b\hat{\sigma}$? According to available data, $b\hat{\sigma}$ shows no evidence of being or having been an adverbial connector in simple clauses (see §3.4). So, as far as we know, the history of $b\hat{\sigma}$ starts with its function as a conjunction of coordination (see §2.1). Recall from §2.2 and §2.3 that, as a complementiser, $b\hat{\sigma}$ has properties that are similar to those it has as a conjunction of coordination. Therefore, I see no reason why the complementiser function of $b\hat{\sigma}$ would not have developed in a way similar to that of $b\hat{\sigma}$. Consequently, I assume that, as is the case of $b\hat{\sigma}$, the subordinating function of $b\hat{\sigma}$ is the result of an expansion of its coordinating function.

The hypothesised developmental path of $b\hat{\sigma}$ and $b\hat{\sigma}$ can be summarised as follows.

CONNECTIVE ADVERB > CONJUNCTION OF CONJUNCTION OF SUBORDINATION (complementiser) COORDINATION 'then' 'and then' after temporal in the context adverbs of perfective aspect 'and' in the context of imperfective aspect and in some other particular cases

The hypothesised historical development of the functions of $b\partial/b\dot{o}$ is compatible with the fact that these lexical items may not conjoin NPs.

5. Can NPs be conjoined?

This section addresses the question of whether NPs can be conjoined in Fongbe. In §5.1, it is shown that the equivalent of coordination of NPs is achieved by means of a circumposition made up of two lexical items meaning 'with'. It is argued that these lexical items do not have the properties of conjunctions and that therefore there is no true AND-conjunction of NPs in this language. In §5.2, the Fongbe data are discussed in light of the properties of other WITH-type languages.

5.1. The Kpódó...kpó 'with...with' circumposition

The equivalent of coordination of NPs is achieved by means of a circumposition made up of a preposition $kp\acute{o}d\acute{o}$ 'with' (lit.: 'with.at'), and of the postpositions $kp\acute{o}$ or $kp\acute{a}n$ which both mean 'with'. This is examplified in (49).¹⁹

(49) Àsíbá [kpódó Kòkú kpó/kpán] yì àxì mè.

Asiba with Koku with/with go market in

'Asiba with Koku went to the market.'

As we saw in the introduction, some authors consider this circumposition a conjunction (see e.g. Akoha 1980: 210; Anonymous 1983: VII, 1) and gloss it as 'and'. It is argued below

that $kp\delta d\delta$ is best analysed as a preposition and $kp\delta$ as a postposition, that the phrase headed by $kp\delta d\delta$ is a prepositional phrase and that, from a syntactic point of view, this phrase is a syntactic adjunct. Note that $kp\delta d\delta$ may always reduce to $kp\delta$; no difference in meaning nor in syntactic properties is involved in the selection of either one of the two forms.

In (49), *kpódó* introduces a comitative phrase. In (50) it introduces an instrumental phrase.

(50) Kɔkú xò Àsíbá kpódó àtín kpó/kpán.

Koku hit Asiba with stick with

'Koku hit Asiba with a stick.'

While it is possible to assign a conjunctive interpretation to the phrase headed by $kp\acute{o}d\acute{o}$ in (49), it is not possible to do so in the case of (50), nor is it possible to do so in the case of (51), where $kp\acute{o}d\acute{o}$ introduces a manner phrase.

(51) Kôkú gbá xwé ó kpódó àyì kpó.

Koku build house DEF with heart with 'Koku built the house with care.'

Finally, *kpódó* may also introduce phrases of the type in (52). In this case also, a conjunctive interpretation is impossible.

(52) Kôkú gó hừn ó kpódó gbàdé kpó.

Koku fill truck DEF with corn with

'Koku filled the truck with corn.' (=(38a) in Brousseau 1998:!102)

The distribution of $kp\delta d\delta$ is thus not compatible with that of conjunctions of coordination. This strongly suggests that $kp\delta d\delta$ is not a conjunction. This conclusion is further supported by other properties of this lexical item.

From a categorial point of view, *kpódó* is a preposition. In Lefebvre and Brousseau (2002: 303–312), it is extensively argued that *kpódó* shares no properties with verbs. It is shown, however, that it shares its syntactic properties with the prepositions of the language.

The conclusion is thus that $kp\acute{o}d\acute{o}$ is of the syntactic category P, defined by the features [-N, -V].

From a syntactic point of view, there are several arguments attesting to the adjunct status of the phrase introduced by kpódó. These constitute further arguments against a conjunction analysis of kpódó. First, the phrase headed by kpódó can always be extraposed, as is illustrated in (53).

- (53) a. Àsíbá yì àxì mê [kpódó Kɔkú kpó].

 Asiba go market in with Koku with

 'Asiba went to the market with Koku.'
 - b. Kôkú zé mòlìkún ó dó mótò ó mè [kpódó súklè ó kpó].
 Koku take rice DEF put car DEF in with sugar DEF with 'Koku put the rice in the car with the sugar.'

Phrases conjoined by 'and' cannot be extraposed. Second, the phrase headed by *kpódó* is optional, as is shown in (54), where optionality is signalled by parentheses.

(54) Kôkú yì àxì mề (kpódó Àsíbá kpó/kpán).

Koku go market in with Asiba with

'Koku went to the market (with Asiba).' (=(51b) in Lefebvre and Brousseau 2002: 314) While arguments are obligatory, adjuncts are optional (see e.g. Baker 1996; Pinker 1989; Randall 1987). Third, the phrase headed by $kp\delta d\delta$ may occur outside of nominalised VPs. The imperfective construction provides an appropriate context to illustrate this fact. The imperfective construction makes use of $d\delta$ 'to be at', which selects a phrase headed by $w\hat{e}$, which in turn selects a nominalised VP. In this construction, the arguments of the verb all occur within the phrase headed by $w\hat{e}$. This is exemplified in (55) for a serial verb construction involving the verbs $s\delta$ 'to take' and $y\hat{i}$ 'to go'.

(55) Kôkú dò [[àsón só yì àxi] wè].

Koku be.at crab taking going market POST

'Koku is bringing crab to the market.' (=(52) in Lefebvre and Brousseau 2002: 315)

The arguments of the verbs in (55) cannot occur to the right of $w\dot{e}$. In contrast, all PPs including a phrase headed by $kp\delta d\delta$ may occur to the right of $w\dot{e}$ (that is, outside of the phrase headed by $w\dot{e}$). This is shown in (56).

(=(53b) in Lefebvre and Brousseau 2002: 315)

The fact that the $kp\acute{o}d\acute{o}$ phrase can occur outside of the nominalised VP in (56) follows from its adjunct status. Fourth, like other PPs, the $kp\acute{o}d\acute{o}$ phrase may be left behind in VP fronting. For example, the nominalised VP of (55) can be clefted, as in (57). In this case, the whole nominalised VP is fronted, including all the internal arguments.

(=(54) in Lefebvre and Brousseau 2002: 316)

What happens when the nominalised VP containing a PP is clefted? In this case, the PP may be left behind, as is illustrated in (58).

(=(55b) in Lefebvre and Brousseau 2002: 316)

These extraction facts follow directly if the prepositional phrase is adjoined to VP.

The syntactic tests illustrated in (53) to (58) thus all point to the conclusion that $kp\acute{o}d\acute{o}$ is not a conjunction. Typically, conjunctions cannot be separated from one of their conjuncts. The phrase headed by $kp\acute{o}d\acute{o}$ can be separated from one of its potential conjuncts in various ways (see (53), (56), (58)). These facts rather strongly argue for an adjunct analysis of the phrase headed by $kp\acute{o}d\acute{o}$.

Summarising: the lexical item $kp\delta d\delta$ introducing the so-called conjunction of NPs does not have the properties of conjunctions. Rather, it has distributional properties that manifest its status as a major category lexical item, namely as a preposition. Finally, several arguments demonstrate that the phrase headed by $kp\delta d\delta$ is a syntactic adjunct. This conclusion holds even in the context of the sentence in (59).

I now turn to a brief discussion of the properties of the synonymous postpositions $kp\delta/kp\delta n$ 'with'. Out of some twenty postpositions in the language, $kp\delta$ and $kp\delta n$ are the only postpositions that do not have a nominal counterpart. In Lefebvre and Brousseau (2002:!327–329) it is argued that the properties of the Fongbe postpositions, including those of $kp\delta$ and $kp\delta n$, differ from those of case markers, and that therefore, postpositions are not case markers. Rather, they have the status of major category lexical items. It is further argued that the properties of postpositions contrast in a systematic way with those of nouns (Lefebvre and Brousseau 2002: 330–334) and with those of verbs (Lefebvre and Brousseau 2002: 334–337), thus defining postpositions as being of the category [-N, -V] in this language.²⁰ In all the examples above, the postpositions are obligatory even though, from a semantic point of view, they are redundant with respect to $kp\delta d\delta$.

So, the equivalent of coordination of NPs is achieved in Fongbe by means of the circumposition $kp\delta(d\delta)...kp\delta/kp\delta n$. To my knowledge, the sequence *NP $kp\delta$ NP, where $kp\delta$ could be perceived as a conjunction of NPs, is not possible. None of the informants consulted accept it and I found no example of this structure in the available literature. I thus conclude that there is no AND-conjunction of NPs in Fongbe.

5.2. Fongbe and other WITH-type languages

According to Stassen (2000:!41), WITH-type languages are found in Asia, in the Americas and in Africa. "With the possible exception of Khoisan, all the languages of Africa in and below the Sahara exhibit some degree of WITH-encoding" (Stassen 2000:!41). With respect to coordination of NPs, Fongbe is thus of the same type as the languages of its areal group.

Stassen (2000:!44) remarks that the distinction between WITH-type and AND-type languages correlates with two parameters: case and tense. On the basis of a large sample of languages, he observes that tensed and cased languages tend to be AND-type languages, whereas [-tensed] and [-cased] languages tend to be WITH-type languages. The Fongbe data support this correlation. On the one hand, Fongbe expresses aspect rather than tense (see Lefebvre and Brousseau 2002: chapter 5). On the other hand, although it exhibits case markers in nominal structures (see Lefebvre and Brousseau 2002:!47–48), the language is generally not a cased language.

Finally, it has been noted in several instances that WITH-type languages have the tendancy to drift towards AND-status by the reanalysis of the comitative marker as a conjunction (see e.g. Haspelmath to appear:!26–30; Mithun 1988; Stassen 2000:!1, and the references cited therein). Such a change has been proposed to have occurred in some West African languages. For example, Lord (1973) proposes that in Yoruba, Gã and Ewe, a comitative verb has been reanalysed as a comitative preposition which, in turn, has been reanalysed as a conjunction of NPs. Note that in all these cases the sequence NP 'with' NP is possible, thus supporting a reanalysis analysis. As was mentioned in §5.1, however, the sequence *NP kpó NP is not licit in Fongbe. It thus appears that Fongbe is more conservative than some neighbouring languages as far as the properties of this particular lexical item are concerned.

In the course of my field work, however, I have come across data involving the postposition $kp\delta$ which depart from the pattern described so far. These are reproduced in (60).

- (60) a. Mé-kpó Àsíbá-kpó wé yì àxì-mè?

 who with Asiba with this go market in

 'Who with did Asiba go to the market?'
 - b. *Nú.kíkó kpó àwà.jíjé kpó mè wè, é nò nò tégbé.*thing-smiling with joy-falling with in it.is 3sg HAB stay always
 [Lit.: 'It is with smiling with enjoying that he always is.']
 'He lives in happiness.'
 - c. [À kó.nú] kpó], [à yà.ví] kpó] 5, ...
 2sg laugh with 2sg cry with DEF
 'Whether you laugh or whether you cry, ...'

The uses of the postposition $kp\delta$ in the three sentences above are quite unusual as compared with those discussed in §5.1. Do they signal an incipient change whereby the postposition $kp\delta$ would be becoming a case marker? This would explain the fact that its meaning in (60) appears to be removed from the original one 'with'. Could it also explain its clausal complement in (60c)? I leave further investigation of this possible incipient change for future research.

6. Coordinating construction in Haitian Creole

Haitian Creole has a lexical item (e)pi used to conjoin clauses. The equivalent of NP coordination is achieved by means of the lexical item $(k\partial l)ak$. In this section, it is shown that, to a large extent, the properties of (e)pi correspond to those of Fongbe $b\hat{\rho}$, and that those of $(k\partial l)ak$ correspond to those of Fongbe $kp\hat{\rho}(d\hat{\rho})$. To my knowledge, there is no Haitian lexical item corresponding to Fongbe $b\hat{\rho}$. The section ends with a short discussion on how the properties of $b\hat{\rho}$ and those of $kp\hat{\rho}d\hat{\rho}$ are hypothesised to have been transferred

into the creole, and why there is no lexical item corresponding to Fongbe $b\delta$ in the Haitian lexicon. The data discussed in this section are based on the literature and on my own field notes gathered from speakers who speak a rather conservative variety of Haitian Creole.²¹

6.1. The clausal conjunction epi

Haitian has a conjunction (e)pi used to conjoin clauses, as is shown in (61).

In Valdman et al. (1981), Haitian epi is glossed as 'and, then, and then'.

This conjunction derives its phonological representation from the French sequence of words *et puis* [lit.: 'and then'], pronounced [(e)pi] in popular French. In this variety of French, (e)pi is used in complementary distribution with *et* 'and' to conjoin clauses and noun phrases, as is shown in (62).

While Haitian (e)pi derives its phonological representation from the French sequence of words identified above, it does not have the same distributional properties as this French sequence of words. For example, in contrast to French (e)pi, Haitian (e)pi cannot be used to conjoin NPs, as is shown by the ungrammaticality of (63). Compare (63) with (62b).²³

In fact, Haitian *epi* has properties that are quite similar to those of Fongbe $b\hat{\partial}$.

According to my informants, when *epi* relates clauses that are in the perfective aspect, the conjoined clauses are interpreted as denoting related events occurring sequentially. This is illustrated in (64).

'John arrived and-then Mary left.'

In contexts such as those in (65), even though the two clauses coordinated by *epi* occur in the perfective aspect, they are interpreted as denoting two independent events (in terms of both sequentiality and causality) and the conjunction is glossed as 'and'.

When *epi* relates clauses that are in the imperfective aspect, the conjoined clauses may be interpreted as denoting events that are unrelated and that may occur simultaneously. This is shown in (66).

Compare the Haitian data in (64), (65) and (66) with the Fongbe corresponding data in (2), (3) and (4).

Like Fongbe $b\partial$, Haitian (e)pi may conjoin clauses that have different or coreferential subjects, as is shown in (67a) and (67b). Compare the Haitian data in (67) with the Fongbe ones in (5) and (7).

'John arrived and-then he left.'

As is the case of Fongbe $b\hat{\sigma}$, the subject of the second conjunct introduced by epi has to be overt. The sentence in (68) is not grammatical because the second conjunct has no overt subject. Compare Haitian (68) with Fongbe (10).

As is the case of $b\hat{\sigma}$, epi is excluded from subjectless clauses. As is shown in (69), epi cannot conjoin two infinitival complements of the verb meaning 'to want'. Compare Haitian (69) with Fongbe (12).

The sentence in (69) can be rescued as (70) where *epi* conjoins two complete clauses with two overt subjects.

Epi cannot be used to conjoin two infinitival complements of the modal verb *kap* 'may' as is shown by the ungrammaticality of (71). Compare Haitian (71) with Fongbe (14).

The sentence in (71) can be rescued as (72) where *epi* relates two full clauses with two overt subjects.

HAITIAN

(72) Jan kap vini epi li kap pati.

John may come CONJ 3sg may go

'John may come and-then he may go.'

Haitian *epi* cannot relate two complements of the verb meaning 'to begin'. This is shown by the ungrammaticality of (73).

(73) *Jan kòmanse manje pèn epi bwè dlo HAITIAN

John begin eat bread CONJ drink water

The sentence in (73) can be rescued as (74) where *epi* relates two full clauses with two overt subjects.

(74) Jan kòmanse manje pen epi li kòmanse bwè dlo.

HAITIAN

John begin eat bread CONJ 3sg begin drink water

'John began to eat bread and-then he began to drink water.'

Compare the Haitian sentences in (73) and (74) with the Fongbe ones in (16) and (17).

The Haitian data in (69)–(74) show that *epi* is excluded from subjectless clauses. This suggests that *epi* cannot conjoin non-finite clauses. This conclusion would gain support if it could be shown that *epi* is also excluded from infinitival clauses containing an overt subject. In addition to the infinitival structure in (70), in which the subject of the infinitival complement of *vle* 'to want' is covert, Haitian exhibits another infinitival structure in which the subject of the infinitival complement of *vle* is overt. This structure is exemplified in (75). In (75), the subject of the main clause and that of the embedded clause are obligatorily disjoint, and, as per the analysis in Sterlin (1988, 1989), the subject of the infinitival clause bears accusative case, assigned to it by the verb *vle* under Exceptional Case Marking.²⁴

(75) Jan_i vle Mari/li_j bwè dlo.

John want Mary/3sg drink water

'John wants Mary/him/her to drink water.'

Epi cannot relate two infinitival complements of the type in (75). This is attested by the ungrammaticality of (76).

(76) *Jan; vle Mari, bwè dlo epi li, manje pen

HAITIAN

John want Mary drink water CONJ she eat bread

The sentence in (76) can be rescued as (77) where *epi* conjoins two complete finite clauses.

(77) Jan_i vle Mari_j bwè dlo epi li_i vle li_j manje pen. HAITIAN

John want Mary drink water CONJ 3sg want 3sg eat bread

'John wants Mary to drink water and-then he wants her to eat bread.'

The contrast in grammaticality between (76) and (77) shows that epi is indeed excluded from infinitival clauses. It thus appears that, like Fongbe $b\hat{\rho}$, Haitian epi only conjoins finite clauses (for Fongbe see also note 10). This is an interesting conclusion in view of the fact that French (e)pi may conjoin infinitival clauses. For example, the grammaticality of the French sentence in (78a) contrasts with the ungrammaticality of the corresponding Haitian sentence in (69), that of (78b) with that of (71), and that of (78c) with that of (73).

- (78) a. Jean veut boire de l'eau (e)pi manger du pain. FRENCH

 'John wants to drink water and eat bread.'
 - b. Jean peut venir (e)pi partir. FRENCH

 'John may come and go.'
 - c. Jean a commencé à boire de l'eau (e)pi à manger du pain. FRENCH

 'John started drinking water and eating bread.'

Unlike Fongbe $b\hat{\sigma}$ (see (18), (19), (26)), Haitian *epi* does not introduce the sentential complements of adverbs meaning 'until' or 'before', nor does it participate in purposive clauses. Haitian *epi* does, however, occur with the verb doubling construction involved in the expression of temporal clauses. Consider the structure in (79).

(79) Rive Jan rive epi Mari pati.

arrive John arrive CONJ Mary leave

'As soon as John arrived, Mary left.'

(=(19) in Lefebvre 1994)

The Haitian data in (79) parallel in a striking way the Fongbe data in (23). Both languages contrast in a similar way with French in presenting the structure in (79) involving verb doubling phenomena. French presents none of the verb doubling phenomena observed in both Haitian and Fongbe. (For a thorough discussion of these facts, see Lefebvre 1998:!363–374.)

The properties of Haitian (e)pi presented in this section replicate in a remarkable way those of Fongbe $b\hat{\sigma}$ presented in §2 and §3, instead of those of the French form from which it is phonologically derived. How did this situation obtain? This question will be taken up in §6.3.

6.2. Can NPs be conjoined in Haitian Creole?

The equivalent of coordination of NPs is achieved by means of the preposition $(k\partial l)ak$ 'with', as is illustrated in (80). $K\partial l$ -ak is a complex word made up of $k\partial le$ 'close' and ak 'with' (see Gilles 1988). Haitian ak is a reduced form of Haitian av ek 'with', phonologically derived from French avec 'with'.

'John with Mary'

Haitian $(k\partial l)ak$ has the properties of Fongbe $kp\delta(d\delta)$. Like $kp\delta d\delta$ (see (49)), it occurs as a comitative preposition, as in (81).

(81) Mari ak Jan ale nan mache.

Mary with John go in market

'Mary with John went to the market.'

Like $kp \delta d \delta$ (see (50)), it occurs as an instrumental preposition, as in (82).

Like $kp \acute{o} d\acute{o}$ (see (51)), it occurs in manner phrases, as in (83).

(83) Jan bati kay la ak swen.

HAITIAN

John build house DEF with care

'John built the house with care.'

Like *kpódó* (see (52)), it occurs in the context of (84).

(84) Jan plèn kamyon an ak mayi.

HAITIAN

John load truck DEF with corn

'John loaded the truck with corn.'

Note that while the distribution of Haitian ak is systematically parallel to that of its Fongbe counterpart, it is not systematically parallel to that of the French lexical item avec 'with' from which it is phonologically derived. In French, avec 'with' cannot relate two NPs, hence, *Marie avec Jean is not grammatical as compared to the corresponding grammatical Haitian structure in (81). Likewise, the use of Haitian ak in (84) does not correspond to that of French avec. The French sentence *Jean a rempli le camion avec avec

As is the case of the Fongbe phrase headed by $kp\delta d\delta$ (see (53)), the Haitian phrase headed by ak can be extraposed, as is shown in (85). Furthermore, like the Fongbe phrases headed by $kp\delta d\delta$ in (53), the Haitian phrase headed by ak in (85) is optional. Optionality is signalled by parentheses.

(85) a. Mari ale nan mache (ak Jan).

HAITIAN

Mary go in market with John

'Mary went to the market with John.'

b. Jan mete diri a nan kamyon an (ak sik la).

HAITIAN

John put rice DEF in truck DEF with sugar DEF

'John put the rice in the truck with the sugar.'

The fact that the phrase headed by ak can be extraposed, and the fact that it is optional, argues for the adjunct status of this phrase. This conclusion holds even in the context of the sentence in (86).

'I worked in Port-au-Prince and Jacmel.'

The Haitian data in (86) parallel the Fongbe ones in (59).

Haitian $(k\partial l)ak$ thus has the semantic and distributional properties of Fongbe $kp\delta(d\delta)$. As will be seen below, Haitian $(k\partial l)ak$ also has the morphological structure of corresponding lexical items in West African languages.

6.3. How did the properties of the Haitian lexical items get to be the way they are?

How did the properties of the Haitian lexical items (e)pi and ($k \partial l$)ak get to be the way they are? In Lefebvre (1998), it is argued that the process of relexification has played a major role in the formation of the lexicons of creole languages. On this process, a given lexical entry is relabelled on the basis of a phonetic string found in a contact language. The resulting lexical entry thus has the properties of the original lexical entry with a phonological representation taken from another language (for various representations of the process, see Lefebvre 1998; Lefebvre and Lumsden 1994a, 1994b; Mous 1995, to appear; Muysken 1981).

On this view, the Fongbe lexical entry $b\hat{\jmath}$ would have been relabelled on the basis of the French phonetic string [epi] yielding Haitian /epi/ with the semantic and distributional properties of Fongbe $b\hat{\jmath}$. As was mentioned in §6.1, however, in contrast to $b\hat{\jmath}$, epi does not introduce the complements of the prepositions meaning 'until' and 'before'. The relexification account of creole genesis predicts that epi would have occurred in these contexts as well in the incipient creole and that it ceased to be used in these contexts as the creole developed. Another possibility is that relexification took place prior to the time when

Fongbe $b\hat{\sigma}$ had acquired the function of complementiser. In this case, the Haitian lexical entry would reflect the properties of Fongbe $b\hat{\sigma}$ prior to the hypothesised change. In conclusion, the remarkable similarity between epi and $b\hat{\sigma}$ supports the relexification account of the history of the Haitian lexical entry epi 'and then, and'.

As was mentioned earlier, there is no Haitian lexical entry corresponding to Fongbe $b\delta$, discussed in §3. As unexpected as it may be, this fact also follows from the relexification account of creole genesis. As is shown in Lefebvre (1998), the relabelling of a given lexical entry is only possible if the superstratum language of an incipient creole offers a phonetic string available to relabel an original lexical entry. A suitable phonetic string must share some semantics with the original lexical entry for relabelling to take place (see Muysken 1981). Did French offer an appropriate phonetic string to relabel Fongbe $b\delta$? There does not appear to be any French lexical material that could have been used to relabel $b\delta$. The original lexical entry could thus not be relabelled.

The Haitian lexical entry $(k\partial l)ak$ was also derived by the process of relexification. The form $(k\partial l)ak$ is made up of two morphemes $k\partial le.ak$ 'close.with'. The forms of these morphemes are derived from French $coll\acute{e}$ 'close' and avec 'with'. The resulting Haitian compound word is built on the model of the West African compound prepositions meaning 'with'. For example, Fongbe $kp\acute{o}d\acute{o}$ is made up of $kp\acute{o}$ 'with' and of $d\acute{o}$ 'be.at'. Lord (1973) documents the fact that corresponding words in other West African languages also involve a verb meaning 'to come in contact', 'to collide', 'to bring together', 'to assemble', etc. combined with a form meaning 'with'. The claim that the complex preposition meaning 'with' in West African languages has been relabelled on the basis of French words compounded to yield the Haitian lexical entry $(k\partial l)ak$ on the model of corresponding West African languages is thus borne out. Furthermore, as we saw in §6.2 the distributional properties of the Haitian complex form are modelled on those of the corresponding substratum lexical entry rather than on those of French avec 'with'.

Concluding: the Haitian lexical entries involved in clausal and nominal coordination reproduce the details of the corresponding substratum lexical entries rather than those of the superstratum form from which the Haitian forms are phonologically derived. This follows from the relexification account of creole genesis. This provides a straightforward explanation for the fact that Haitian is typologically like its West African substratum languages in having an AND-THEN-type of clausal conjunction, a marked form as per the discussion in §4.1, and a WITH-type of 'so-called' NP conjunction.

7. Concluding remarks: the typological features of Fongbe

This section concludes the paper with remarks on the properties of the lexical items discussed in this paper considered from the point of view of language typology.

It has long been noted that, in African languages, coordination of NPs and coordination of clauses are achieved by means of different lexical items (e.g. Welmers 1973:!305). Fongbe is no exception: while $b\hat{\sigma}$ and $b\hat{\sigma}$, 'and then, and', are used to conjoin clauses, the circumposition $kp\hat{\sigma}d\hat{\sigma}...kp\hat{\sigma}$ 'with...with' is used to achieve the equivalent of NP coordination. It has been proposed that the reason why $b\hat{\sigma}$ and $b\hat{\sigma}$ are excluded from NPs is for the same reason that they are excluded from non-finite clauses: they bear the feature [+finite]. This also explains why Fongbe $b\hat{\sigma}/b\hat{\sigma}$ do not conjoin verbs nor VPs.²⁵

As is noted by Welmers (1973:!365), the coordinating constructions indicate a following or simultaneous action. "Simultaneous constructions do not appear to be widespread in Niger-Congo languages, but consecutive constructions are frequently found; [...]." Fongbe falls into this general pattern. Both $b\hat{\sigma}$ and $b\hat{\sigma}$ introduce consecutive constructions. A simultaneous interpretation is, however, triggered in the context of clauses occurring in the imperfective aspect and in specific cases involving the perfective.

Fongbe exhibits the difference found in some languages between disjoint and coreferential subjects. While this distinction is found in other West African languages, it is also found in unrelated language families (see §4.2).

In modern Fongbe, both $b\hat{\sigma}$ and $b\hat{\sigma}$ have the double function of coordinating and subordinating conjunction. It has been argued that, in the latter function, $b\hat{\sigma}$ and $b\hat{\sigma}$ have the properties of complementisers. This is an interesting point for, there are only a few cases of coordinating conjunctions that have been reported to have been reanalysed as complementisers (see §3.3).

As has been pointed out by Mithun (1988: 351), "a surprising number of coordinating constructions do share one characteristic [...]: their youth." According to her, there are two possible paths for the development of conjunctions; these are schematically represented in (87).

(87) a. connective adverb > clause conjunctor > phrase conjunctor
b. comitative marker > phrase conjunctor > clause conjunctor

The first path is illustrated by Nguna, which has an adverbial connector go that links new sentences to previous discourse. As is observed by Mithun (1988:!348), this connector can also conjoin full clauses, which may represent sequential events or generic ones, and it can conjoin noun phrases. Fongbe $b\delta$ is partially similar to Nguna go. Recall from §3 that, in one of its uses, $b\delta$ is an adverbial connector that links new sentences to previous discourse. $B\delta$ is also used to conjoin full clauses that generally represent sequential events. Clauses conjoined by $b\delta$ may be interpreted as representing non-sequential events only in the context of the imperfective aspect. However, unlike Nguna go, Fongbe $b\delta$ is not a phrase conjunctor; recall from §2 that $b\delta$ only conjoins clauses. $B\delta$ is like $b\delta$ except that no connective adverbial function is associated with it. So, on the one hand, Fongbe may be considered a conservative language in the fact that $b\delta/b\delta$ have not become phrasal conjunctions. On the other hand, Fongbe may be considered innovative in the fact that both $b\delta$ and $b\delta$ appear to also fulfill the function of complementiser in contexts involving temporal subordination.

The second path in Mithun's diagram in (87b) is illustrated by some West African languages discussed in Lord (1973), where comitative markers appear to have been

reanalysed as phrasal conjunctor but not (yet) as clausal conjunctor. On this point also, Fongbe appears to be more conservative than some neighboring languages for, according to the data presented in §5, the phrase headed by the preposition $kp\delta d\delta$ 'with' in Fongbe is still a syntactic adjunct. So on this path, Fongbe is still at the first of the three stages hypothesised by Mithun.

Haitian Creole was shown to be like Fongbe in manifesting an AND-THEN-type clausal coordinator and a WITH-type nominal coordinator. On these constructions, then, Haitian Creole is typologically similar to Fongbe. This should not come as a surprise for similar results obtain when a wide range of lexical items and constructions are considered (see Lefebvre 1998, and the references therein, 1999, 2001). This follows from the relexification account of creole genesis. Interestingly enough, even marked aspects of lexical entries get transferred into a creole through relexification. Indeed, as per the discussion in §4.1, AND-THEN conjunctions are marked as opposed to AND ones. Both Fongbe and Haitian exhibit the first type. This is a major drawback to Bickerton's (1981) claim, according to which creoles manifest only unmarked features. (For further discussion of this point, see Lefebvre 1998, 2001.)

Notes

- The content of this paper builds on earlier research on Fongbe (see Lefebvre and Brousseau 2002, and the references therein). The research underlying this paper has been funded by SSHRCC, FIR-UQAM and the Max Planck Institute for Evolutionary Anthropology, Leipzig. I would like to thank Marijo Denis and Virginie Loranger for their assistance in documenting the issues discussed in this paper, and Andrée Bélanger for formatting the manuscript. I am greatful to Bernard Comrie, Martin Haspelmath, the participants to the MPI seminar on coordinating constructions and to the McGill-UQAM joint project on syntactic categories for their helpful comments and questions on an earlier version of this paper.
- The orthographic conventions used in this paper correspond to the official orthographic conventions of Benin (for details, see Lefebvre and Brousseau 2002: 29–37).
- Note, however, that in (1) $b\hat{\sigma}$ is glossed as 'and' by the same author.
- Several informants provided the original data discussed in this paper. They are named in the Preface to Lefebvre and Brousseau 2002. Marcellin Gangbe provided me with subtle judgements on data that are crucial for the analyses presented in this paper.
- In deverbal nominalisations, the verb appears in its reduplicated form unless it has an overt object, or some other particle preceding it (see Fabb 1992a, 1992b). For example, when the nominalised verb has an overt object, the nominalised verb appears in its basic form and it is preceded by its object. Hence: wiwa 'arrival' < wa 'to arrive', and nu du 'eating' from du nu 'to eat', where nu 'thing' is the generic inherent object of the verb du.
- In Fongbe, there is no tense morphology. The temporal interpretation of a clause is computed from the various components of a clause that participate in establishing its aspectual properties (see Lefebvre and Brousseau 2002:!85–113, and the references therein). Non-infinitival clauses are here referred to as finite clauses. Finite clauses must have an overt subject. This subject occurs in the nominative case; this case is visible when

the subject is a pronominal clitic; [+ nominative] pronominal clitics bear a high tone, as opposed to [- nominative] pronominal clitics that bear a low tone. Finite clauses also contrast with non-finite clauses in allowing markers that give the speaker's point of view of the proposition, including the negative marker (see e.g. (36)).

This conclusion would gain support if it could be shown that $b\hat{\sigma}$ is also excluded from infinitival clauses containing an overt subject. In addition to the infinitival structure in (14), in which the subject is covert, Fongbe exhibits another infinitival structure, in which the subject is overt. The latter structure is exemplified in (i). As is the case in the corresponding structure in English, the subject of the main clause and that of the infinitival clause have to be referentially disjoint. Furthermore, as is the case in the corresponding structure in English, the subject of the infinitival clause bears accusative case. In English, accusative case is visible in the suppletive form *him* of the third person pronoun. In Fongbe, this case is manifested by the low tone on the third person clitic. (For an extensive discussion of this structure, see Lefebvre and Brousseau 2002: 280–281.)

(i)
$$\acute{E_i}$$
 jlo $\grave{e_j}$ yi .

3sg want 3sg go

'He wants him/her to go.' (=(116) in Lefebvre and Brousseau 2002: 281)

If $b\hat{\sigma}$ is not allowed to conjoin two infinitival complements of the type of that in (i), there is additional evidence supporting the claimed relationship between $b\hat{\sigma}$ and finiteness. Hence, (ii) is predicted to be ungrammatical.

It should be possible to rescue (ii) as (iii).

(iii)
$$b\acute{o_i}$$
 $\acute{E_i}$ $jl\acute{o}$ $w\grave{e_i}$ $y\grave{i}$ $b\grave{o}\acute{e_i}$ $jl\acute{o}$ $\grave{e_k}$ $w\acute{a}$.

3sg want 2sg leave CONJ 3sg want 3sg come 'He wants you to leave and he wants him/her to come.'

Unfortunately, I do not have this piece of data in my notes, and the sole informant that is available to me at the time I am writing this paper does not have the infinitival structure of the type in (i) in his grammar. The result of this test will thus have to await future research. On the basis of the data of the type of those in (11) to (17), however, I will assume that $b\hat{\sigma}$ is restricted to conjoining finite clauses.

- Haspelmath (1995, to appear) notes that in most cases, subordination structures may be distinguished from coordination structures on the basis of syntactic tests. I believe that this is correct. Of the four tests he formulates, however, none apply to the structure in (24). This suggests that tests distinguishing between subordination and coordination structures are, to a large extent, language specific. Tests distinguishing between these structures in Fongbe remain to be designed.
- For a discussion on the fact that some languages impose a surface constraint on the order of temporally ordered propositions, see Longacre (1985).
- As is discussed at length in Lefebvre and Brousseau (2002: 61–63), first and second person plural personal pronouns are rendered by the same form, and likewise first and second person plural clitics. In other words, Fongbe does not distinguish between first and second person plural.
- The morpheme $b\delta$ may combine with $n\acute{u}$ to form the complex expression $b\delta$ - $n\acute{u}$ 'in order that'. In this case, $b\delta$ and the following subject position are no longer adjacent, and $b\delta$ cannot bind the subject position of the conjunct clause anymore. In this case, the subjects of the two clauses related by $b\delta$ cannot be interpreted as being coreferential; in fact, in this case, a disjoint reference is obligatorily induced. This is depicted in (i).
- (i) Ùn jì hàn (bó)-nú à ní kò-nú.

 1sg produce song CONJ for 2sg IRR smile

'I sing in order to make you smile.'

(=(130) in Lefebvre and Brousseau 2002: 174)

Similar examples are provided in Akoha (1980: 211, 1990: 266–273, 278, 290–293) and Anonymous (1983: IX, 6).

- The negative marker in (36) (to be distinguished from the negation marker $m\dot{a}$), is part of the paradigm of markers that give the speaker's point of view of the proposition. As per the analysis in Lefebvre 1998, these markers have scope over the proposition that they are part of.
- An account of possible contexts of ellipses in Fongbe is far beyond the scope of this paper. To my knowledge, the contexts in (30) and (31) are among the rare ones which allow for ellipses in the language (but see Lefebvre and Brousseau (2002: 67–70) for other cases of ellipses in the language). The question of why ellipsis is permitted in these two contexts is a topic for future research. For discussions of the motivation for ellipsis, see Haspelmath (to appear: 34 and the following, and the references therein).
- All accounts of the distribution of the French complementiser *qui* hold some version of an analysis according to which *qui* binds the subject position that it is adjacent to, see e.g. Kayne (1981).
- Note that $b\acute{o}$ and $n\acute{a}$ can be contracted as [bá].
- Similar data on purposive structures may be found in Akoha (1980: 210–211, 1990: 290–293) and in Anonymous (1983: IX, 3–7).
- As is the case with $b\hat{\partial}$, none of the tests proposed by Haspelmath (1995, to appear) to disambiguate between coordinating and subordinating structures apply in the case of clauses related by $b\hat{o}$ (see note 7).
- For my informants, the verb doubling construction corresponding to (23) is not available in this case. This type of verb doubling construction requires disjoint reference of subjects. $B\acute{o}$ conjoins clauses that have coreferential subjects. Hence, (i) is not grammatical.

- (i) *wá Kôkú; wá tlóló bó; yì
 arrive Koku arrive as.soon.as CONJ leave
- As has been pointed out to me by Martin Haspelmath, the feature [+F] could alternatively be represented as [+bind subject position].
- For an extensive discussion of the Fongbe circumpositions, see Lefebvre and Brousseau 2002: 299–346.
- The issue of whether prepositions and postpositions constitute a uniform syntactic class, aside from their directionality properties, is discussed in Lefebvre and Brousseau (2002: 340–342).
- I am particularly endebted to Joseph Sauveur Joseph for his contribution to this topic.
- The spelling of (e)pi reflects its pronounciation in popular French. There are no orthographic conventions for the spelling of this lexical item.
- According to Valdman's *et al.* (1981) dictionary *epi* may conjoin NPs as well as clauses. My understanding of the situation is that *epi* will be found as a conjunction of NPs in the grammar of those speakers who had more exposure to French than my informants who reject this use of *epi*.
- The theory of Case adopted by Sterlin for her analysis is that in Chomsky (1981).
- Conjunction of verbs appears to be a rare phenomenon in African languages, as is pointed out by Welmers (1973:!365).

List of abbreviations

ADV adverb

ANT marker of anteriority

AUX auxiliary

COMP complementiser

CONJ conjunction

DEF definite determiner

DEF.FUT definite future marker

DP determiner phrase

GEN genitive case marker

HAB habitual marker

IMP imperfective

IRR irrealis mood marker

Neg negative marker

NP nominal phrase

pl plural

POST postposition

PP prepositional/postpositional phrase

RES resumptive pronoun

sg singular

SUB subjunctive marker

VP verbal phrase

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