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78

Topics in Kwa Syntax



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Enoch, O. Aboh • James Essegbey Editors

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Foreword

This book grew out of a concern we have had that very many theoretical and descriptive work on the Kwa languages were not accessible to the general linguistic community. As a result, these languages were only referred to in the context of very specific discussions such as serial verb constructions. But as the reader of this book will notice, syntactic topics discussed in the context of Kwa range from bare nouns, relative clauses, negation, discourse markers and the interaction with the clausal periphery, to argument structure. Many issues remain that need to be brought to the fore of the community and we hope that this book will trigger the curiosity of the reader to get to know more about these languages. Much of the work presented here could not have been possible without the help of many colleagues and the contributors whom we thank warmly for joining this enterprise. We are also grateful to the editors of the series, Marcel den Dikken, Joan Maling, Liliane Haegeman to have offered us this platform to initiate the debate about Kwa. We will also like to thank Helen van der Stelt and Jolanda Voogd from Springer for their kind collaboration and patience. We are also very grateful to Joscelyn Essegbey and Leston Buell for helping with editing the manuscript.

> Enoch, O. Aboh James Essegbey

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Introduction

Enoch, O. Aboh, James Essegbey

The mention of Kwa brings to the mind of the linguist phonological issues like downstep, A(dvanced) T(ongue) R(oot) vowel harmony, and syntactic puzzles such as serial verbs, logophoric pronouns and secondary predicates. However, Kwa has offered a lot more towards linguistic theorizing than just the above issues. The aim of this book is to focus on those "Kwa topics" that have confronted syntacticians. It is the first book to discuss such a wide range of syntactic issues on the Kwa languages. But before we begin our discussion of these issues, we need to specify what we mean by Kwa. As observed by Stewart (1989), "Kwa has never been a precise concept;" it has undergone reclassification a number of times. We use the term in its oldest sense, that is, as used by Westermann (1927) and, to some extent, Greenberg (1966). In terms of Williamson's (1989) classification, the languages that we discuss in this book, that is, Ewegbe, Gungbe, and Fongbe, which are all part of Gbe (Capo 1991), together with Baule and Akan, belong to New Kwa, while Edo, Igbo and Yoruba, which once belonged to Eastern Kwa, are classified as Benue-Congo. On the other hand, Williamson and Blench (2000: 17) suggest that Greenberg's typological families Kwa and Benue-Congo form a "dialect continuum".

Given this debate, our use of the term Kwa makes no claim to genetic unity. The contributions in this book rather show that while more than one language may share a grammatical property, its manifestation is not necessarily the same across all the Kwa languages. The book therefore represents a distillation of certain tendencies and, sometimes, most outstanding aspects of Kwa, which have posed challenges to linguistic theory and whose study has shed light on various areas of Grammar.

The Book

Since the last half of the twentieth century, there has been an increasing number of studies on the syntax of Kwa languages, ranging from topics such as the verb phrase, argument structure, verb serialization and complex predicates, tense, mood,

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aspect and the structure of sentences, the noun phrase, and the syntax of discourse particles. The studies have shown that Kwa languages offer a very rich empirical domain for linguistic theorizing. In this book experts on the languages examine some of these issues, present the empirical data, and show their theoretical relevance. The book brings together a wealth of material with fresh insight in one place. It is therefore a gold mine to students and teachers of syntax, and for West Africanists.

The first three chapters offer a general introduction to the Kwa languages and are meant to familiarize the reader with some aspects of these languages that are relevant for the discussion in subsequent chapters. Chapter 1, by Aboh and Essegbey, deals with the "phonology-syntax interface". Aboh and Essegbey show that the Kwa languages are tone languages like most West African languages. As such they use suprasegmatals (tonemes) in addition to phonemes to form morphemes. The suprasegmentals also play a role in syntax where they sometimes express aspect and modality, as well as signal a syntactic configuration (e.g., that between a head and its licensed complement). Chapter 2, by Aboh, discusses general morphosyntactic properties of the noun phrase in the Kwa languages, and suggests an analysis in which these languages have roll-up structures where the noun phrase raises around its modifiers. In some of the languages this process produces a relative order of the modifiers with regard to the noun phrase that is the mirror image of that in English (i.e., noun-adjective-numeral-demonstrative). Interestingly, it appears that the same roll-up structure extends to relative clauses, where the head noun precedes the modifying (i.e., restrictive) relative clause, which itself precedes the determiners. Aboh also discusses possessive constructions and suggests that certain adpositions in the Kwa languages derive from nominals (see also Ameka 1995). Chapter 3, by Aboh and Essegbey, deals with aspects of the clause structure in the Kwa languages (e.g., argument structure, serialization, tense, mood, aspect marking). Aboh and Essegbey suggest that the INFL domain shows that the Kwa languages are analytic because they resort to free morphemes for marking tense, mood, and aspect, where synthetic languages display inflectional morphology. It appears from the description that the position of the verb with respect to both aspect markers and the internal argument is an indication of verb movement in the languages, which lack inflectional morphology of the Indo-European type. The discussion on discourse particles (e.g., topic, focus, question) further suggests that these are functional elements whose syntax has repercussion on word order variation.

Chapter 4, by Adesola, deals with the distribution of resumptive pronouns in Yoruba. Adesola shows that Yoruba resorts to resumptive pronoun strategy in the context of long extraction or wh-movement. The availability of this strategy in Yoruba also means that the language does not exhibit syntactic phenomena such as island effect or weak crossover. Although similar properties have been identified in Indo-European languages like Irish, and Semitic languages like Hebrew, the interesting point about Yoruba is the type of resumptive pronouns it uses. Adesola shows that Yoruba has two types of resumptive pronouns: agreeing versus nonagreeing. Agreeing resumptive pronouns agree in number and person with their antecedent and can occur in both subject and object positions. Non-agreeing pronouns, on the other hand, do not agree with their antecedent and are restricted to subject positions only. The latter property makes Yoruba one of the very few languages that display non-agreeing subject resumptive pronoun. Adopting the minimalist approach, Adesola shows that the distribution of Yoruba non-agreeing resumptive subject pronouns is motivated by the necessity to satisfy the EPP: the non-agreeing resumptive subject is needed because a (null) operator cannot satisfy the EPP-requirement of T. Adesola's discussion certainly fits into a recent debate stimulated by Rizzi and Shlonsky (2007) who show that (spec TP) is a freezing position and that, in subject extraction contexts, languages use various strategies to satisfy the EPP requirement, without the subject transiting there. Under this view Yoruba falls in the class of languages that use resumptive subject strategy.

Chapter 5 by Saah shows that Akan is only partially similar to Yoruba because it requires an agreeing resumptive pronoun in all extraction contexts. Indeed, the Akan relative clause requires a head noun, a relativizer, a resumptive pronoun, and a clausal determiner. This means that in the Akan relative clause, the extraction site of the relative head (i.e., subject and object) must contain a resumptive pronoun. The subject position is particularly interesting because Keenan (1985) notes that there are not many languages in which the resumptive pronoun occurs in this position. He writes: "the only two languages we know of which regularly present subject NP₁₁S as pronouns are Urchobo and Yiddish" (Keenan 1985:147). Urchobo also happens to be a Kwa language, which we can now add to Akan and Yoruba, making Keenan's list a little bit longer. The interesting point, though, is why would three Kwa languages display a linguistic property supposed to be rare in human languages? There seems to be no clear answer to this question yet, but, as Saah argues, the use of resumptive pronouns in such contexts does not constitute a strategy to repair subjacency violations because these pronouns occur in (governed) argument positions as well. A point that may bear on the discussion is that in Akan, unlike in Yoruba, the relative clause involves a sentence-final particle that is homophonous with the determiner. In her account of the clausal determiner in Fongbe, for instance, Lefebvre (1992) suggests that they are manifestations of an agreement domain within which arguments are licensed. A slightly different view is found in Larson (2003) who treats these elements as adverbs of quantification. Whichever way, it might turn out that these elements have a say in the possibility of argument extraction in these languages.

In this regard, Chapter 6 by Aboh takes a look at clause-final discourse particles. He shows in his contribution that a striking property of many Kwa languages is that they have a wide range of particles that cluster sentence-finally and encode various discourse-oriented properties (e.g., topic, focus, specificity) and speech act modalities (e.g., interrogative, evidentiality). In looking at sentential negation, Aboh indicates that the Gbe languages provide us with a nice typological puzzle because they display pre-verbal and post-verbal (i.e., sentence-final) negation as well as a combination of the two. On the surface of it, it looks as if this small cluster of languages exploits all possible strategies to encode sentential negation. It turns out, however, on close inspection that the distribution of the sentence-final negative particle in Gbe is an expression of the complementizer system. In the spirit of the cartography

approach (Rizzi 1997; Cinque 1999), Aboh shows that the apparently post-verbal negation particle is actually the morphological expression of a functional head that is located within the left clausal periphery from where it constrains the selection of the pre-verbal negation particle. The latter is analyzed as part of the inflection system embedding the verb phrase. The author further argues that the Gbe C-type negative particles end up to the right edge because, like other discourse particles with which they form a paradigm, they require fronting of the proposition under their scope.

Taking up the issue of the discourse-syntax interface in Chapter 7, Felix Ameka gives an overview of focus strategies in Kwa languages, while paying attention to the variation that one finds among these languages. Several of the languages have a dedicated focus position and focus marker (e.g. Akan, Ga, Ewe, Yoruba, etc.) while others (e.g. Likpe) do not seem to involve a focus marker. Similarly, whereas all the languages investigated can focus verbs (and predicates), they differ in the strategies they employ: some just copy the verb; others nominalise it before fronting it. The languages also differ with respect to the syntactic strategies that operate in the various focus constructions. For instance, there is a difference in when gaps are allowed or when pronominals (overt or non-overt) are used to refer to the focused constituent. Ameka also considers the forms of auxiliary focus in some Kwa languages. Until recently, Kwa languages were not generally known to have auxiliary focus in Kwa is restricted to situations where the subject is either in focus or included in the scope of focus.

Chapter 8 departs from the upper layer of clausal functional structure and tackles the question of the VP and the licensing of double objects in Inherent Complement Verbs (ICV). In most relevant literature in the Gbe languages (e.g., Avolonto 1995; Nwachukwu 1985) the discussion on ICVs centers around verbs that take only one complement and, in the discussions involving more than one complement, the construction is set apart from double object constructions (DOCs). In this chapter, Essegbey takes a different look at ICVs by comparing constructions in which the ICVs take more than one complement to simple DOCs. He shows that those ICVs and their complements behave similarly to the verbs and complements in DOCs (Larson 1988; Johnson 1991). Essegbey considers this parallel to be strong evidence that the two constructions have the same structure. This would mean that ICVs are complex phrases, a position that goes contrary to the atomic approach proposed by Avolonto where the ICV complex V + N is treated as a complex lexical head that projects its own verb phrase.

Chapter 9 by Larson discusses the issue of verb serialization in Baule. This language has sentences that contain series of finite verbs but lack overt markers of coordination. As the discussion shows, a notable property of such constructions is that only the initial verb has an overtly expressed subject. In this regard, the Baule verb chains superficially resemble monoclausal Serial Verb Construction (SVC) in other Kwa languages. However, close examination indicates that these Baule constructions are better characterized as involving *Parataxis plus Pro-drop*. Put another way, these constructions involve covert coordination of two complete IP clauses where the subject of the initial IP controls the null pronouns that realize the subject position of subsequent IPs. According to Larson, the licensing of the subsequent subjects derives from a Coupling Mechanism that constrains the reference of the pronominal arguments of non-initial verbs. The discussion concludes with a comparison of Baule ESC with serialization phenomena in other languages.

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Classification of Kwa Languages (Formally Eastern Kwa - adapted from Williamson and Blench 2000)



Classification of Benue - Congo Languages (Formally Western Kwa - adapted from Williamson and Blench 2000)

Chapter 1 The Phonology Syntax Interface

Enoch, O. Aboh and James Essegbey

1.1 Introduction

One cannot talk about Kwa languages without referring to tones. Like many West African languages, Kwa languages are tone languages because they use both phonemes and suprasegmentals to form morphemes. In the literature, these suprasegmentals are often referred to as tones or tonemes, and they appear to have both lexical and syntactic manifestations. Languages vary as to the number of tone distinctions that they allow. Stewart notes that the majority of Kwa languages have either a two basic-level tone (e.g. Igbo and Akan) or a three basic-level tone (e.g. the Gbe languages and Yoruba). To our knowledge, only a few Ghana Togo Mountain (GTM) languages have four basic-level tones. In languages where tones are integrated in the orthography, these are often marked by various diacritics or accentuations superimposed on the phoneme.¹

1.2 Lexical Tones

In the Gbe languages every syllable is marked with a high or non-high toneme. The exact realization of the tone can be high, low, or mid depending on the underlying tone, the onset of the syllable, if any, the surrounding tone, the place of the syllable in an utterance, and the dialect of the speaker. The following discussion of lexical tones in

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¹We thank Victor Manfredi for his comments, criticisms, and suggestions on previous versions of this chapter.

Ewegbe draws extensively on Duthie (1996) but see also Ansre (1966) and Clements (1972). Capo (1983, 1988, 1991) further provides a comparative phonology of Gbe.

In this language, the high tone can be realized as high or mid. It is high when the syllable in which it occurs is nucleus-only as \acute{e} , which is the third person singular pronoun as well as the focus marker, and \acute{m} , which is the progressive morpheme. It is also high when the onset of the syllable is a voiceless obstruent or a sonorant. Among the examples with a voiceless obstruent provided by Duthie (1996:23) are *kplé* 'with', *afé* 'house', *kpó* see' and *tó* 'ear'. Examples with a sonorant onset are *mi* 'we' *ná* 'give', *wó* 'they' and *lé* 'catch'. When the high tone occurs in a syllable with a voiced obstruent, it is realized either as high, or mid in the Anlo dialect of Ewegbe and as rising in the inland dialects. Examples of the words in which the tones are realized as high are $gb\delta$ 'place', $g\acute{e}$ 'drop', $d\acute{o}$ 'to put on' and $dz\acute{o}$ 'to leave'. Those with a mid/rising tone are $gb\overline{a}/gb\delta$ 'goat', $d\overline{o}/d\delta$ 'hole', $dz\overline{o}/dz\delta$ 'fire', and $v\overline{v}/vi$ 'child'.

The non-high toneme can be realized as low or mid. It is realized as low when the syllable onset is a voiced obstruent, as illustrated by *adzo* 'riddle', *agbà* 'load', *gbà* 'to arrive' *bè* 'to hide' and *vù* 'to open'. When the syllable is a voiceless obstruent or a sonorant, the non-high toneme is realized as mid. Examples with a voiceless obstruent and sonorant are $ts\bar{i}$ 'water', $sr\bar{\delta}$ 'spouse', $t\bar{u}$ 'to grind', and $\eta l\bar{\rho}$ 'to write' and $ny\bar{i}$ 'cow' respectively.

Note from the foregoing discussion that in dialects like Anlo, words like $gb\partial$ 'arrive' $gb\overline{\partial}$ 'goat', and $gb\partial$ 'place', on the one hand, and $d\partial$ 'exit' $d\overline{\partial}$ 'hole', and $d\partial$ 'to put on' constitute minimal pairs in which segments are distinguished by Low, Mid and High tones. Such contrasts exist in other Gbe varieties as well, e.g., $t\partial$ 'mountain', $t\partial$ 'to align' and $t\overline{\partial}$ 'country', and $t\partial$ 'father', $t\partial$ 'river', and $t\partial$ 'to sew' in Gungbe. This raises the question of whether at the tonemic level one should set up a three-level tonal distinction in the Gbe languages instead of two.

Akan has two basic-level tones. Stewart (1971) notes that monosyllabic verbs are marked in the lexicon for High or Low tone. Examples are $b\delta$ 'to hit' versus $b\delta$ 'to be firmly stuck on', and $d\delta$ 'to weed' versus $d\delta$ 'to love'. In contrast to verbs, monosyllabic nouns have an underlying High tone. All bisyllabic verbs have a basic Low-High tone pattern. Examples are $s\delta r \epsilon$ 'to get up', didi 'to eat (intransitive)' and $s\delta i$ 'cheat'. Stewart (1971: 184) writes: "Although some Kwa languages would appear to be among the world's most straightforward tone languages, however, the tonal situation is complicated in very many Kwa languages by the phenomenon of KEY LOWERING." One such lowering is downstep which, according to Stewart, occurs in all Kwa languages which have only two basic-level tones. He describes it thus (Stewart 1971: 184):

Where a high tone is followed by a Low tone which is followed in turn by a high tone in this language the second high tone is normally lower in pitch than the first, so that when the high tones of a sentence are interrupted by Low tones at a number of points, the high normally descend in pitch by a series of steps from the beginning to the end of the sentence.

In the examples below taken from Stewart, the numbering in subscript represent the relative pitch of the syllables:

 a. Ko₁fi₄ hwe₁ hwε₃ Kwa₁ be₁ na₂ 'Kofi looks for Kwabena'
b. Kwa₁ be₁ na₄ hwe₁ hwε₃ Ko₁fi₂ 'Kwabena looks for for Kofi'

In the next section we discuss the grammatical use of tones.

1.3 Syntactic Tones

Since Kwa languages use tones in word formation process, it is not surprising that in some of these languages, tones also encode inflectional or discourse specifications. Put differently, some grammatical morphemes in these languages are expressed with tones. The degree to which tones are used syntactically varies across the Kwa languages. For instance, while Akan uses tone to distinguish between the habitual and the stative (e.g. $d\hat{a}$ 'sleeps' versus $d\hat{a}$ 'in a lying posture'), Gungbe does not seem to use tone in such a grammatical function, but rather for discourse functions (e.g., clause typing).

As a way of illustration, let us consider the following Gbe facts. In Gungbe, for instance, yes–no questions require a sentence-final Low tone, as illustrated by the sentence-final Low tone in (2b) which gives rise to a falling tone.

(2)	a.	Súrù	dù	wèlí	[Gungbe]
		Suru	eat	sweet_potato	
		'Suru a	ate swe	et potatoes'	
	b.	Súrù	dù	wèlî?	
		Suru	eat	sweet_potato-INTER	
		'Did S	uru eat	sweet potatoes?'	

In many languages one can realize the equivalent of the Gungbe yes–no quesion (2b) by means of intonation only (e.g., rising intonation in French direct yes–no questions with no inversion: Jean est venu? John/is/come/ 'did John come?'). Such correspondences obviously raise the issue of the relation between tone and intonation (Gussenhoven 2004). Interestingly, however, while Gungbe uses this floating Low tone as question marker, all related languages display a full morpheme. As the following Fongbe example shows, the question marker is \dot{a} in this language.

(3)	a.	Súrù	dù	wèlí	[Fongbe]
		Suru	eat	sweet.potato	
		'Suru ate	sweet pot	tatoes'	
	b.	Súrù	dù	wèlí	à?
		Suru	eat	sweet_potato	INTER
		'Did Suru	eat swee	et potatoes?'	

A similar contrast is observed with regard to imperfective (i.e., progressive) aspect which is expressed by a construction with an OV order in Gbe. Interestingly, some Gbe languages in the east use a final Low tone while the inland dialects of Ewe in the west use a high tone. The Low tone in Gungbe is represented with an additional Low on $d\hat{u}$ 'eat' in (4a), which is the progressive counterpart of example (3a), while the equivalent in (4b) has a rising tone instead. Unlike these two varieties, the rest of the Gbe languages use full segments with tones, with the eastern segments possessing low tone while the western segments possess high tone. This is illustrated by Fongbe in (4c) and Anlogbe in (4d) (see Kluge 2000; Aboh 2004; Ameka 2008).

(4)	a.	Súrù Suru 'Suru ate	tò be_at e sweet potatoes	wèlí sweet_potato s'	dù eat.NR		[Gungbe]
	b.	Suru Suru 'Suru is	lè be_at eating rice'	nāgótē sweet_potato	dŭ eat:PROC	3:NR	[Inland Ewe]
	c.	Koku	dò be_at eating sweet p	wèlí sweet_potato otato'	dù eat	wè NR	[Fongbe]
	d.	Kəku Koku Koku is	nãgótē sweet_potato eating sweet po	dù-ḿ eat-PROG:NR otatoes			[Anlogbe]

Given the systematic correspondence between the tone-only morphemes in some dialects and their full segment + tone counterparts in others, Aboh (2004) suggests that certain syntactic tones could be vestiges of functional morphemes that have been partially deleted as the language evolved. This would mean that syntactic tones generally develop from full morphemes. This view obviously raises the question of the origin of tones in general, the relation between tone and syllable structure and, most crucially, the relation between the presence of tone, inflectional morphology, and clausal structure.

As the reader will immediately realize, most of the languages under discussion here lack the typical Indo-European type of inflectional morphology. Instead, the verb surfaces as a root that may show various tonal properties in different contexts. When faced with this observation, one may want to ask whether there is a correlation between the presence of tone and the absence of inflection in these languages. Not much has been done in this regard but the following facts from Abidji and Yoruba may be of some relevance.

Abidji is a Kwa language spoken in Ivory Coast. According to Mboua (1999), sentential negation in this language requires a bi-partite morpheme comprising a floating high tone that always occurs between the subject and the verb, and the particle $m \dot{u}/m \dot{\omega}$, which follows the verb. The preverbal floating tone always attaches to a support vowel $o/\dot{\omega}$, glossed as v, whose choice is subject to various phonological constraints.

(5) a. Kìrî ó búkù mú òkókò [Abidji]
Kere v + NEG ask NEG banana
'Kere did not ask for the banana'

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b. Kìrî ώ kpώkpó mώ òkókò
Kere v + NEG beg NEG banana
'Kere did not beg for the banana'

One would ask what sort of analysis could be offered for this tonal morpheme. Without getting into details of the tonal system in Abidji, it looks from the surface as though the negation strategy of this language is similar to that of French *ne* ... *pas* sequences illustrated in (6), where the high syntactic tone would correspond to French negative head *ne* and the following adverbial negative element $m\dot{u}/m\dot{\omega}$ would correspond to pas.

(6) Kere ne demande pas la banane [French]
Kere NEG ask NEG the banana
'Kere is not asking for the banana'

In terms of recent generative works on the syntax of negation (e.g., Haegeman 1995; Zanuttini 1997) the generalization seems to be that the functional head which hosts the negative head (and interacts with various syntactic phenomena in French-type languages (e.g., cliticization) is realized as a tone-only in languages like Abidji.

Yoruba offers additional evidence for the interaction between syntax and tone marking in these languages. Consider the following pair. (7a) is interpreted as progressive, while (7b) corresponds to a negative imperative.

(7)	a.	Máa	lọ	b.	Máà	lọ
		be	go		be.neg	go
		'to be	going'		'do not go'	

As suggested to us by V. Manfredi (personal communication), the low tone in the negative example derives from the common sentential negation $k\partial$. Given this view, it is reasonable to suggest that the Low tone in (7b) is a syntactic tone expressing negation that happens to cliticize to the left on the preceding syllable. Under this view, Yoruba and Abidji behave similarly.

Interestingly enough, the manifestation of tone in Yoruba syntax goes beyond the context of Negation and raises the question of the syntax-phonology interface. Déchaine (2001) argues that syntactic operations affect both lexical and syntactic tones in Yoruba. She shows, for instance, that the inherent lexical low tone on monosyllabic verbs is suppressed before an accusative-marked complement (including nominalised clauses). The relevant examples are given under (8) (Déchaine 2001: 83).

(8)	a.	Mo	mộ	ilé	e	rè
		1sg	know	house	POSS	3sg
		ʻI knov	v his/her r	esidence'		
	b.	Мо	jē	ila		
		1sg	eat	okro		
		'I ate (s	some/the)	okro'		
	c.	Mo	kợ	ilé		
		1sg	build	house		
		'I built	a house'			

The verbs *mò* 'know', je 'eat', *kó* 'build', have Low, Mid, and High tones respectively in isolation. As indicated by (8a), monosyllabic verbs with Low tone drop the Low tone and are realized as Mid when followed by an accusative-marked DP. Examples (8b, c) show that verbs with Mid and High tones, on the other hand, maintain their lexical tones in the same context. The same contrast is observed with the following examples involving complement clauses.

(9)	a.	Mo	gbà	[kí	ó	lọ]
		1sg	receive	Сомр	3sg	go
		'I agree	e that s/he sh	ould go'		
	b.	Mo	gba	[kí	ó	lọ]
		1sg	receive	Comp	3sg	go
		'I accep	ot the suggest	tion that s/h	e should	go'
		'What I	accept is th	at s/he sho	uld go'	

It appears from these examples that Low-tone-drop occurs before a DP complement as well as certain types of CP-complements. In accounting for this distribution, Déchaine (2001) suggests that Low-tone-drop is a phenomenon that relates to the interface between phonology and syntax because it is sensitive to accusative case assignment and appears contingent to the presence of an abstract nominalizer functional head whose presence determines the different interpretations in (9).

Under the assumption that accusative case can be determined structurally in a configuration like (10), where the functional head F determines the case on its complement, Déchaine (2001) argues that Low-tone-drop can be seen as a consequence of this structural configuration relation.



Under current analyses in terms of vP-shell (e.g., Larson 1988; Marantz 1993; Collins 1996), where the object is introduced in [spec VP], representation (10) translates into a structure like (11) where accusative case is determined by v-appl, and the verb moves successively to v-ext.



Regardless of the formal analysis that one adopts (i.e., 10 versus 11), Déchaine's generalization indicates that Low-tone-drop is sensitive to a syntactic configuration, namely that between the accusative case assigner and the case-marked element. Put another way, Low-tone-drop appears a consequence of the relation between a functional head and (the specifier of) its complement. As discussed in Déchaine (2001), the proposed analysis captures the fact that Low-tone-drop does not occur with adjuncts. The same holds true of complement clauses for which it is not obvious that they occur in a case position (Aboh 2004 and references cited there). Interestingly, however, those nominalized complement clauses for which accusative case might be at stake (9b) do show Low-tone-drop. Under Déchaine (2001: 94), these are similar to relative clauses in that the CP is embedded under a D-layer as illustrated in (12). See also Kayne (1994) on Romance and Germanic, and Aboh (2005) and references cited there on relative clauses in Gbe.

(12) VP V' V' V' DP D CP CP

According to this view, the Yoruba embedded complements are ambiguous between CPs and DPs, that is nominalised CPs. The former are immune to Low-tone-drop, while the latter are not because they require accusative case. Given that Low-tone-drop selectively affects lexical tones in a very specific syntactic context, it represents a strong instantiation of the syntax-phonology interface, which ultimately may shed some light on phase properties and spell out conditions in current minimalism (Chomsky 1995, 2001a,b).

1.4 Conclusion

All in all, what this discussion shows is that the so-called tonemes do not operate in isolation in these languages. Whatever the final characterization, the Kwa facts suggest to us that the usual claims about tone languages (whether from a biological point of view or not, e.g., Dediu and Ladd 2007) are certainly too simplistic. Instead, one thing this chapter suggests is the need for linguists to pay attention to the intricacies of the grammars of these languages so as to promote new studies and developments that take the tone facts very seriously. It goes without saying that we cannot reach a full understanding of the grammar of these languages without paying careful attention to the interaction between tone, prosody and syntax. It is therefore unfortunate that many generativists working on these languages appear not to mark tone systematically.

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Chapter 2 The Morphosyntax of the Noun Phrase

Enoch, O. Aboh

2.1 Introduction

This chapter presents the reader with general morphosyntactic properties of the noun phrase in the Kwa languages.¹ Given that the languages vary in many respects, I deliberately focus on those points which are common to them and help give a very broad impression as to what are the key syntactic properties of the DP in these languages. The discussion shows that Kwa languages display bare nouns in a variety of contexts where other languages (e.g., Romance and Germanic) require a determined noun. This is so even though most Kwa languages have determiner-like elements that appear to mark discourse-specificity. These markers occur postnominally, similarly to other modifiers (e.g., adjective, numerals, demonstratives). In most Kwa languages, the sequence of noun and modifiers exhibits the order Noun–Adjective–Numeral–(relative clause)–Demonstrative–discourse specificity marker–plural marker. Furthermore, it appears that while most Kwa languages lack a noun class system (and therefore make no opposition between singular forms and plural forms), some Kwa (e.g., Twi) do show a residual class system while others like GTM languages have fully developed systems. I start with bare nouns in Gungbe.

2.2 Bare Nouns and Discourse Specificity Marking

A notable property of these languages is that they can use bare noun phrases in all contexts. This is illustrated by the bare noun $aj\dot{a}$ 'dog' in the Yoruba sentence in (1a), and $as\dot{e}$ 'cat' in the Gungbe sentence in (1b). Here, these noun phrases function as subjects and the sentences are felicitous replies to the question 'What happened?'

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(1)	a.	Ajá	je	eja	na	[Yoruba]
		Dog	eat	fish	DET _[deixis]	
		'A/the	e dog at	te the fish?		
	b.	Àsé	jè	càzù	mè!	[Gungbe]
		cat	fall	pot	in	
		'A cat	fell in	a pot!'		

In the examples in (1), the bare nouns $aj\dot{a}$ 'dog' and $as\dot{e}$ 'cat' are interpreted as (in) definite. However, bare nouns in Kwa languages can also be interpreted as definite in a context where they refer to unique entities like the sun in (2).

 (2) ŋdo vu sesie egbea akpa [Ewegbe] sun open hard today too_much 'The sun was too hot today'

There appears to be an interesting contrast among Kwa languages as to the contexts that license bare nouns. In Gungbe (but not in Ewegbe, Essegbey p.c.) bare nouns can be interpreted as definite if they are contextually prominent and/or known to the discourse participants. As a way of illustration, consider the following context. Imagine a household with a cat called *Mus*. Speaker A has just noticed that *Mus* is in the garden trying to catch a fowl. In this situation, it is felicitous in Gungbe to utter either (3a) or (3b), though with a difference in information structure.

(3)	a.	Kpón!	Mús	jró	ná	wlé	kòkló.	[Gungbe]
		look,	Mus	want	PREP	catch	fowl	
		'Look! M	lus is tryi	ng to cat	ch a fowl	!'		
	b.	Kpón	àsé!	É	jró	ná	wlé	kòkló.
		look	cat	3SG	want	PREP	catch	fowl
		'Look at	the cat. It	t wants to	o catch a f	owl'		

Given the provided contexts, speaker A is not referring to an unknown cat, but precisely the cat living with them in their house, and which is known to them as Mus. Yet in this example, the bare noun phrase ase' 'cat' that substitutes for Mus occurs without a definite determiner. A second scenario involves a sick person going to a hospital where there is only one practising physician. In such places, most sick people get attended to by other health attendants such as nurses and health superintendants. The sick person who goes to such a hospital could therefore be asked the following question on his/her return:

(4)	Bé	à	món	dòtó	tò	dôn?	[Gungbe]
	Q	2SG	see	doctor	at	there	
	Did y	ou see th	ne doctor	there?			

Sentences (3) and (4) are evidence that, for Gungbe at least, it is not enough for speaker and addressee to know an entity for it to require a determiner. The specific facts about Gungbe together with the general facts in Kwa, as illustrated by the Ewegbe example in (2) are evidence that the Kwa languages generally allow determinerless noun phrases in contexts where Germanic and Romance languages will require a DP that includes a determiner.

These Kwa bare nouns may occur in various syntactic positions and can therefore be focused (5a), questioned (5b) or relativized (5c).

(5)	a.	àsé cat	wὲ FOC	Kàjá Kojo	zé take	hwèví fish	blébù whole	ná PREP	[Gungbe]
		'Kojo g	ave a who	ole fish to A	/THE C	AT!'			
	b.	àsé	tέ	wè	Kàjó	zé	hwèví	blébù	ná?
		cat	Q	FOC	Kojo	take	fish	whole	PREP
		'Which	cat did K	ojo give a v	whole fis	h to?'			
	c.	àsé	dě	Kàjá	zé	hwèví	blébù	ná	
		cat	REL	Kojo	take	fish	whole	PREP	
		'The ca	t which/th	nat Kojo ga	ve a who	le fish to?'			

It is worth noting in these examples too that both \dot{ase} 'cat' and the modified noun phrase *hwèví blébù* 'fish whole' occur as bare, in the sense that they do not embed a determiner. The same holds true of the relative head noun \dot{ase} in (5c) which is also determinerless. Following the literature on the syntax of such determinerless sequences (Longobardi 1994; Aboh 2004a), we can hypothesize that the Kwa bare noun phrases can occur in any syntactic positions and can include modifiers. As such, they behave as full DPs with non-overt determiners. The examples in (6) illustrate such bare nouns in possessives (6a), as object of prepositions (6b) or as independent answer (6c–d).

gbè
se

As is clear from these examples, such null noun phrases have no specifications as to definiteness, specificity or number (i.e., plurality). Accordingly, a Gungbe bare noun, for instance, can be interpreted as generic (singular or plural), definite, or indefinite depending on the context. This is illustrated by the sentences under (7).

(7)	a.	ùn	nyín	wán	ná	àsé						[Gungbe]
		1SG	COP	sentiment	PREP	cat						
		'I love	e cat(s) i	n general'								
	b.	ùn	jéyì	àxìmè	bò	ná	yì	хэ́	àsé			
		1SG	going	market	COORD	FUT	go	buy	cat			
		'I'm going to the market			to buy a cat	(or cats)'						
	c.	kpón	àsé	àjòtś!	Káká	n-ná	zé	làn	dó	távò	jí	
		look	cat	thief	as.soon.as	1SG-FUT	take	meat		table	on	
		é	lón	bò	zé	làn	lś	dù!				
		3SG jump COORD			take meat DET eat							
		'Look at this thief of a cat. As soon as I put the meat on the table, it jumped and									nd ate it'	

It therefore appears from this discussion that bare nouns in Gungbe can freely occur in all argument positions. With regard to the structural make-up of such bare nouns, most recent work on noun phrases in the Kwa literature have adopted the DP-hypothesis as discussed in Abney (1987), Szabolcsi's (1987, 1994), Longobardi (1994), and much related work. Under the assumption that Gbe languages are SVO (Clements 1972; Manfredi 1991, 1997; Aboh 2004a, b, among others), we can conclude from this discussion that a bare noun phrase in these languages (e.g., *àsé* in (3) and (4)) has the structure in (8).

(8)



2.3 Modified Nouns

The distribution of modifiers in these languages suggests that the position in (8) must be revised. As the reader may have noticed from previous examples (e.g., (5a), (7c)) a modified noun phrase exhibits the order N > modifying expression. I start with adjectives and demonstratives.

2.3.1 Noun–Adjective–Demonstrative

The category of adjectives has not been fully studied in these languages, but there is a consensus among linguists that adjectival elements come in two types: attributive versus predicative. While this distinction *per se* is very common across languages, the interesting fact about Kwa is that attributive adjectives are very few and often denote color, size, and shape, as indicated by the Gungbe examples in (8). As mentioned previously, the noun precedes the adjective, which in turn precedes the demonstrative.

(9)	a.	Àsé	yù	éhè	[Gungbe]
		cat	black	DEM	
		'This black cat'			
	b.	Àsé	kpèví	éhè	
		cat	small	DEM	
		'This small cat'			
	c.	Xó	lánbótó	éhè	
		room	round	DEM	
		'This round room'			

On the other hand, constructions that would be equivalent to predicative adjectival constructions in typologically different languages (e.g., Romance and Germanic) generally correspond to verbal phrases. I will refer to these as adjectival verb

constructions (cf. Wetzer 1996). Using Gungbe as illustration, contrast the example in (10a), which is comparable to those with an attributive adjective in (9), to (10b) which involves an adjectival verb.

(10)	a.	Àvún dog 'This big dog'	dàxó big	éhè DEM	[Gungbe]
	b.	Àvún dog 'This dog is big'	éhè DET	kló big	

The two 'adjectival' elements differ in distribution. While the attributive adjective occurs between the head noun and the demonstrative (10a), the predicative adjective follows the noun phrase including the head noun and the demonstrative (10b). As discussed in Aboh (2007), the two types of 'adjectival' expressions differ in a number of respects.

For instance, adjectival verbs combine with tense, aspect, and modal markers, just as any lexical verb.

(11)	a.	Àvún dog 'This dou	g will turi	éhè DEM big'	ná FUT	kló big	[Gungbe]
			-	U			
	b.	Àvún	éhè	nò	kló		
		dog	DEM	HAB	big		
		'This (ty	pe of) dog	g often tur	ns big'		
	c.	Àvún		éhè	sìgán	kló	
		dog		DEM	can	big	
		'This do	g may tur	n big'		2	

Both the adjectival verbs and lexical verbs allow predicate fronting with doubling for the purpose of focusing or relativization (see Aboh 2004a, 2006; Aboh and Dyakonova 2009; Ameka, this volume). (12a) represents a focused verb and (12b) a lexical verb.

(12)	a.	Kló	àvún	éhè	kló	tàùn	b.	Gbó	àvún	éhè	gbó	tàùn
		big	dog	DEM	big	very		bark	dog	DEM	bark	very
	'This dog has grown very BIG'							'This c	log really	BARKED	o'	

The examples in (13) illustrate predicate relativization also referred to as 'factive constructions' within the Kwa literature, see Collins (1994) and Aboh (2005a) for some discussion.

(13)	a.	Kló	dě	àvún	éhè	kló	kpácá	mì	[Gungbe]			
		big	REL	dog	DEM	big	surprise	1SG.ACC				
	'That this dog has grown (so) big surprised me'											
	b.	b. Gbó dễ àvún éhẻ gbó kpácá mì										
	bark REL DOG DEM bark surprise 1SG.ACC											
'That this dog really barked surprised me.'												

There is a clear difference between the $kl\delta$ -type elements which I refer to as adjectival verbs" and $dax\delta$ -type elements which I refer to as attributive adjectives. In order for the attributive adjectives to be used predicatively, they require a copula. We can see this in (14) where it is shown clearly that such adjectives cannot combine with a tense or aspect markers without a verbal linker

(14)	a.	Àvún dog	éhè DEM	*(dj) resemble	yù black	[Gungbe]			
		'This dog	is black'						
	b.	Àvún	éhè	ná	*(dì)	yù			
		dog	DEM	FUT	resemble	black			
		'This dog will turn black'							

Observe further that attributive adjectives do not allow predicate fronting with doubling. This is indicated by the ungrammatical example in (15a). Instead, predicate fronting in such contexts involves the verbal linker which fronts and leaves a copy inside the predicate as in (15b).

(15)	a.	*Yù Black	àvún dog	éhè DEM	dì resemble	yù black	[Gungbe]
		'This dog is	BLACK'				
	b.	dì	àvún	éhè	*(ďì)	yù	
		resemble	dog	DEM	resemble	black	
		'This dog is	BLACK'				

Another fact that distinguishes between attributive adjectives and adjectival verbs is that the latter reduplicate when used attributively. In such contexts, the reduplicated expression occurs in the same space as the attributive adjective, that is, between the modified noun and the determiner. This is indicated in (15).

That these reduplicated expressions and attributive adjectives encoding size, shape, color, etc. occur in the same space is further indicated by the fact that the examples under (17), where the adjective occurs to the right of the noun and demonstrative are ungrammatical.

(17)	a.	*Àvún dog	éhè DEM	<i>kí-kló</i> big-big	[Gungbe]
	b.	*Àvún dog	éhè DEM	yù black	

On the assumption that combinations with INFL elements (e.g., tense, aspect) or predicate fronting are diagnostics for predicate (or verbal) properties in Gbe (and Kwa languages in general), Aboh (2007) concluded that the element described in (10b) is an adjectival verb from which the *reduplicated attributive adjective* (RAA)

in (16) is derived. It is proposed there that the RAA is a predicate whose subject is the modified NP to its left. More precisely, RAA's are reduced relative clauses headed by the modified noun as represented in (18a). The determiner D selects a small clause FP, including an inflectional layer headed by I°. This I° takes as complement a one-place adjectival predicate (i.e., AP) headed by the adjectival verb whose unique argument is a bare NP introduced in [spec AP] by hypothesis. Comparing reduplication in these contexts to OV and OVV contexts (see Aboh 2004a, 2005b, 2009, chapter 3 this volume) it is further argued that reduplication is an inflectional device to license a null expletive that merges in the subject position of the predicate (i.e., [spec IP]) as a requirement of the EPP. The derivation is sketched in (18b) and (18c).

Without going into the details of this demonstration, what is relevant for this discussion is that N-AA sequences derive from a reduced relative clause. Consequently, reduplicated adjectival verbs have a different derivation than attributive adjectives that encode size, color, shape (e.g., 10a). With regard to these adjectives, it could be assumed, following Cinque (1994) and much related work that they first merge in the specifier of some relevant projection within the DP layer. Under this view, the relevant question now is why the Kwa noun-modifier sequence displays the mirror image of that of English. I postpone this question until Section 2.3.4, where I present a possible analysis for these sequences (see Aboh 2004a; Ajiboye 2005 for discussion).

2.3.2 Noun–Adjective–Numeral

As already suggested by previous paragraphs the noun head always precedes its modifiers in the Kwa languages. Though the languages may differ as to the sequencing of these modifiers (see below) the common order appears to be noun-adjective-numeral-demonstrative as indicated in (19) from Gungbe and from Yoruba (as discussed in Ajiboye 2005, the main source of this section).

(19)	a.	Àvớ	wéwé	àwè	[Gungbe]
	b.	Àṣọ	funfun	méjì	[Yoruba]
		cloth	white	two	
		'Two w	white cloth	s'	

In both languages, adjectives may cluster following a rigid hierarchy. In his discussion of Yoruba, Ajiboye (2005:16) observes that adjectives may cluster forming the hierarchical sequencing in (20), which appears to be the mirror image of English.

(20) Color > Size > Quality > Numeral

Some of the examples discussed by the author are given in (20).

(21)	a.	Ọwợ Hand	tẹ reach	olùkợ teacher		kékeré small	burúkú bad	yẹn DEM	[Yor	uba]		
		'That nast	That nasty small dark-in-complexion teacher is in trouble'									
	b.	Ọba á fún Gómìnà ní ẹṣin f king PART give governor PART horse w							ńlá big	dáradára nice	méjọ eight	
		'The king gave the governor eight nice big white horses'										

According to the author, some Yoruba speakers accept adjective sequencing that depart from the rigid order illustrated here. In addition, it is not clear what the variation is across Kwa, since items of color and size are usually interchangeable in most of the languages. The following pairs of examples from Gungbe, Ewegbe, and Akan illustrate this.

(22)	a.	Àxólú ná	ògán	òsó	dàxó	yù	dàgbè-dàgbè	àtòn	[Gungbe]
		king give	chief	horse	big	black	nice-nice	three	
		'The king g	gave the ch	nief three	big nice bl	ack hors	es'		
	a'.	Àxólú ná	ògán	òsó	yù	dàxó	dàgbè-dàgbè	àtòn	
		king give	chief	horse	black	big	nice-nice	three	
		'The king g	gave the ch	nief three	big nice bl	ack hors	es'		
	b.	Awu	yibə	sue	ma				[Ewegbe]
		Ataadee	tuntum	ketewa	no				[Akan]
		garment	black	small	DEM				
		'That small	black gar	ment'					
	b'.	Awu	sue	yibə	ma				[Ewegbe]
		Ataadee	ketewa	tuntum	no				[Akan]
		garment	black	small	DEM				
		'That small	black gar	ment'					

Setting aside issues of variation within and across Kwa, the main generalization here is that the ordering of modifiers within the noun phrase follows the pattern in (23a), where the sequence of adjectives may further display the ordering in (23b) or (23c).²

- (23) a. noun > adjective > numeral
 - b. color > size > quality (e.g., Yoruba, Gungbe, Ewegbe, Akan)
 - c. size > color > quality (e.g., Gungbe, Ewegbe, Akan)

More study is needed to understand the sequencing in (23b-c) and their scope properties.

 $^{^{2}}$ The reduplicated adjectives in these examples should not be confused with those discussed in Section 2.3.1, which have a predicative adjective as source. The ones presented here have no predicative adjective equivalent.

2.3.3 Noun–Adjective–Numeral–Demonstrative

Adding the demonstrative as well as number specification (i.e., plurality) to the sequence in (23a) creates an interesting variation between what I now refer to as the Yoruba-type languages and the Gbe-type languages. I begin with the former.

2.3.3.1 Noun–[Modifier]–Demonstrative Sequences in Yoruba

Yoruba has a proximate demonstrative *yit* 'this' (24a) and a distal demonstrative *yen* 'that' (24b). As indicated in (24a') and (24b'), these demonstratives can be marked for plurality just like English demonstratives. Note however that, unlike English, the number marking precedes the demonstrative morpheme (see also Bamgbose 1966).

(24)	a.	<u> </u>	yìí	a'.	<u> </u>	wòn-yìí
		child	DEM		child	PL-DEM
		'This ch	ild'		'These children'	
	b.	, Omo	yẹn	b'.	 <u></u>	wòn-yẹn
		child DEM			child	PL-DEM
		'That ch	nild'		'Those	children'

Number marking in Yoruba displays two patterns each of which is a variant of the number morpheme (*a*) $w \dot{q} n$. (*A*) $w \dot{q} n$ derives from the third person plural pronoun (*a*) $w \dot{q} n$.³ In this discussion I will follow Ajiboye (2005, chapter 6) in assuming that though the number marker and the third person plural pronoun are homophonous, they have different syntax and should be distinguished. The two number marking patterns relevant for our discussion here are presented in (25) where we observe that the full morpheme $aw \dot{q} n$ precedes the noun that it marks (25a), while the shorter form $w \dot{q} n$ – attaches to the demonstrative and, therefore, follows the noun (25b). Example (25c) further shows that the two number markers can co-occur within a single DP (Ajiboye 2005: 229).⁴

(25)	a.	Àwọ̀n PL 'Those y	yam	yẹn DEM
	b.	Işu yam 'Those y	wòn-yẹn PL-DEM ams'	
	c.	Àwọ̀n PL 'Those y	ișu yam ams'	wòn-yẹn PL-DEM

³See Agbedor (1996) and Aboh (2004a) on the discussion of pronouns in Gbe.

⁴Yoruba apparently patterns like Igbo in this respect. We thank Victor Manfredi for bringing this to our attention.

In his discussion of these facts, Ajiboye (2005: 229 ff) indicates that the variation in (25a–b) as well as the number concord in (25c) indicates that there are two loci for indicating number in Yoruba. Under the assumption that the demonstrative is a head that takes the noun phrase as complement, the author proposes that sequences such as (25a) derive as in (26) where the number marker is adjoined to NP creating NP_{PL} which pied-pipes to [spec DemP].



Following the same rationale, it is proposed that the sequence in (25b) derives as in (27). The only difference here is that the number marker is an affix on the demonstrative.

(27)



Under (26) and (27), one can suggest that number specification is achieved in Yoruba either by modifying the NP, a strategy that results in adjoining the number marker to NP or by adjoining the number affix to the demonstrative. Combining these two strategies produces the sequence in (25c) which is argued to derive as in (28).



While the structures in (26) to (28) generate the right linear order straightforwardly, the question arises whether there is any semantic distinction between these competing sequences. Further study is needed in this respect. In addition, the representations in (26) to (28) raise the question of variation across Kwa, that is, Yoruba-type languages compared with other Kwa languages, such as Gbe. In this regard, a logical possibility that comes to mind is that the affix $w \partial n$ is not attached to the demonstrative head as suggested by Ajiboye (2005), but rather heads its own number phrase as proposed in Aboh (2004a) for Gbe, in the light of Ritter (1991, 1992, 1995) and much related work. This number phrase then dominates the demonstrative phrase headed by the demonstrative. This would mean that the Yoruba DP is of the format in (29).



Let us slightly modify Ajiboye's (2005) assertion that the number marker awon adjoins to NP, by proposing that it merges as the specifier of some extended projection of NP, labeled here as FP. Under this proposal, we can derive the sequence Num > N > Dem as in (25a) by pied-piping FP (i.e., the projection containing the number marker and the NP) into [spec DemP], as illustrated in (30).



When NumP projects and is filled by the number marker, we derive the sequence Num > N > Num > Dem in (25c), as illustrated in (31). In this case, FP cyclically moves to [spec NumP].



Both derivations derive the right word order and there is at this stage of our knowledge of Kwa no empirical ground from distinguishing them from Ajiboye's (2005) derivations. A comparison with the Gungbe-type languages, to which I now turn may underscore the analysis in (30) and (31).

2.3.3.2 Noun-[Modifier]-Demonstrative Sequences in Gungbe

In the Gungbe-type languages, the demonstrative always follows the sequence of adjectives and numerals, but necessarily precedes the number marker, as in (32).

(32) Àvún wéwé àwè éhè lé [Gungbe]
dog white two DEM PL
'These two white dogs'

In Gengbe as well as other western Gbe languages (e.g., Ewegbe), the number marker is homophonous with the third person plural pronoun (just as in Yoruba).

(33)	Kwésí	kpó	àvún	wó,	wó	sí	jó	[Gengbe]
	Kwesi	see	dog	PL	3PL	run	go	
	'Kwesi a							

Yet, in these languages, unlike in Yoruba, the number marker can never occur in DP-initial position. Contrast the Yoruba example (33a) to the Gengbe and Gungbe examples (34b-c).⁵

(34)	a.	Àw <i>ò</i> n	ișu	yìí	[Yoruba]
		PL	yam	DEM	
		'These ya	ms'		
	b.	*Wo	ete	eya	[Gengbe]
		PL	yam	DEM	
	c.	*Lέ	tèví	éhè	[Gungbe]
		PL	yam	DEM	

Accordingly, sequences that include number-marked demonstratives are also excluded in these languages.

(35)	a.	*Wo	ete	eya	wo	[Gengbe]
		PL	yam	DEM	PL	
	b.	*Lέ	tèví	éhè	lé	[Gungbe]
		PL	yam	DEM	PL	

At this stage of the discussion, one could still think that these languages only differ from Yoruba with regard to DP-internal number marking relative to the demonstrative. The common factor would then be that the demonstrative and the number marker are linearly adjacent (e.g., recall the Yoruba number-marked demonstrative $\frac{\partial w \partial n}{\partial t} \frac{y}{t} \frac{1}{y} \frac{y}{t}$). This, however, is not the right characterization. Indeed, in some Gbe languages, the demonstrative and the number marker can be separated by a specificity/definite marker. This is the case with the element l_0 in Gungbe, which Aboh (2004a, b, and subsequent) treats as a specificity marker.⁶

(36)	Àvún	wéwé	àwè	éhè	15	lέ	[Gungbe]
	dog	white	two	DEM	DET	PL	
	'These tw	vo white do	ogs'				

⁵The Gbe languages do have expressions in which a plural pro-form precedes the numeral marker as in the following examples (see Essegbey 1993, for the discussion on Ewegbe).

(i)	a.	Ví	lè,	yé-mè		ènè	[Gungbe]
		child	Num	Num.Pro-	person	four	
		'The child	dren, two c	ren, two of them' wo-ame eve Num.Pro-person two			
	b.	Awu	wo-ame				
		Garment	Num.Pro-				
		'Two of t	he clothes'				

⁶ It is not clear at the moment whether Yoruba has a determiner of the Gungbe-type *ló*. However it has a postnominal particle $n\dot{a}\dot{a}$, which Ajiboye (2005: 201) analyses as saliency marker though its semantics and syntax are very similar to those of the Gungbe element *l* δ . More work is needed in order to identify clearly the semantic contributions of these particles to the DP they occur with.
On the basis of these facts, I reach the generalization that number is never marked on the noun in Yoruba-type or Gungbe-type languages. Instead, number is the property of a functional category Num that projects within the DP. In addition, Yoruba-type languages suggest that number can also be encoded as a modifier of the NP. In the languages where this happens, the modifier may co-occur with the category Num, yielding number concord as in (25c).⁷

Given the facts in (36) we are left with two questions to answer. First, how can we derive the modifier order that accounts for the fact that Kwa languages in general display the mirror image of English? Second, how can a theory of DP reconcile the facts observed in both Yoruba-type and Gungbe-type languages?

2.3.4 Noun–Adjective–Numeral–Demonstrative; Number and Definiteness/Specificity

With regard to the issue of the ordering of nominal modifiers Hawkins (1983: 2), building on Greenberg's (1966) seminal work, noted that languages tend to use modifying expressions "either consistently before or consistently after modified elements or heads". According to him, (37) illustrates the four major patterns found in languages, ignoring unattested orders (Hawkins 1983: 119):

(37)	A: 3 modifiers on the left and 0 on the right.
	Dem-Nral-Adj-N (e.g., Mandarin, English, Finnish, Hungarian).
	B: 2 modifiers on the left/1 on the right.(i) Dem–Nral–N–Adj (e.g., French, Italian).
	 C: 1 modifier on the left/2 on the right. (i) Dem–N–Adj–Nral (e.g., Kabardian, Warao). (ii) Nral–N–Adj–Dem (e.g., Basque, Maori, Welsh, Vietnamese, etc.).
	D: 0 modifier on the left/3 on the right. N–Adj–Nral–Dem (e.g., Selepet, Yoruba).
(N	noum Dom - domonstrativos Nrol - numerols Adi - odiostivo)

(N = noun; Dem = demonstrative; Nral = numeral; Adj = adjective) The above observations led Hawkins to reformulate Greenberg's (1966: 87) universal hypothesis with respect to word sequencing in Noun Phrases as follows:

When any or all of the modifiers (demonstrative, numeral, and descriptive adjective) precede the noun, they (i.e., those that do precede) are always found in that order. For those that follow, no predictions are made, though the most frequent order is the mirror-image of the order for preceding modifiers. In no case does the adjective precede the head when the demonstrative or numeral follows. (Hawkins 1983: 120–121)

⁷ In the Kwa languages which kept a residual noun class system number is marked on the noun (i.e., N). Therefore, Twi (Akan), for instance, expresses number both by means of a prefix (ia) or a suffix (ib), depending on the 'class' of the noun (Christaller 1964).

⁽i) a. ohéne 'a king' \rightarrow ahéne 'kings'

b. onùá 'a brother' \rightarrow anua-nom 'brothers'

This boils down to saying that there are two major patterns across languages: (A), where modifiers precede the noun (i.e., demonstrative–numeral–adjective–noun) and (D), where the modifiers follow. In the latter case, the preferred order is the mirror image of (A) that is, noun-adjective-numeral-demonstrative. As noticed by Hawkins himself, Yoruba (and the Kwa languages in general) fall in this category.

With regard to these two orderings, an interesting possibility that has already been explored in the literature (e.g., Hawkins 1983; Cinque 1994, 1996; Kayne 1994) is that D derives from A. Put differently, let us assume that (A) represents the universal underlying order from which B, C, and D derive. Following previous work on the DP and taking into account the empirical facts of the Gbe languages, we can propose that the structure in (38) is our basic DP structure (see Ritter 1991, 1992, 1995; Koopman 1993, 2000; Kinyalolo 1995; Agbedor 1994; Aboh 2002, 2004a; Ajiboye 2005).



In the description in (38) I remain agnostic as to whether nominal modifiers are maximal projections that merge in specifier positions of distinct functional projections (e.g., Cinque 1994, 1996 and much related work), or whether there is a variation such that some modifiers are XPs while others are X°s heading their own projection within the DP (e.g., Panagiotidis 2000). The important point for our discussion here is that the phrase containing the demonstrative dominates the one containing the numeral which itself dominates the phrase(s) containing the adjective(s). The latter can iterate as suggested by the facts presented in the preceding sections.

Starting with the underlying structure (38), I propose in Aboh (2004a, c) that the Gungbe surface word order (noun–numeral–demonstrative–determiner–number) derives from two types of movements: snowballing movement within the nominal inflectional domain, and cyclic movement to [spec NumP] and [spec DP].⁸ In a first step, snowballing movement targets the NP-complement and moves it to the left of adjective. The resulting noun–adjective sequence moves to the left of the numeral. Then the phrase noun–adjective–numeral moves to the left of the demonstrative to

⁸See also Cinque (2005) and references cited there.

form the phrase noun-adjective-numeral-demonstrative. In a second step, the whole cluster noun-adjective-numeral-demonstrative moves cyclically to [spec NumP] and [spec DP], giving rise to the word order noun-numeral-demonstrative-determiner-number manifested in (36) and represented as in (39).⁹



Setting aside the intricacies of this analysis, my main observation here has to do with the structure of the D-layer. As suggested in Aboh (2004a, b) the Kwa languages display empirical facts that support the so-called 'split-D' hypothesis. In such an approach, the D-system is comparable to the C-system within the clause and represents the nominal left periphery. On the other hand, modifiers pertain to the nominal inflectional domain, represented in structure (38) by FP_{INFL} (Szabolcsi 1987, 1994). With regard to the parallels between the clausal C and I and the nominal D and FP_{INFL} it has been observed in the literature that such snowballing movements (or roll-up structures) are typical of languages which are traditionally treated as SOV (cf. Kayne 1994; Cinque 1996 and references cited there). But assuming that Kayne's (1994) specifier-head-complement order is universal, the generalisation seems to be that the licensing conditions which trigger certain head (e.g., N-to-D)

(39)

⁹Alternatively, one could suggest that the Gungbe adjectives head their own projections within FP_{INFL} . The word order in (34) would therefore derive from NP movement to [spec FP_{Adj}], the specifier position of the functional projection headed by the adjective. Then, FP_{Adj} moves leftward to [spec FP_{Nral}], which in turn moves to [spec FP_{Dem}]. Finally FP_{Dem} as a whole moves cyclically to [spec NumP] and [spec DP]. While this analysis may look straightforward at first sight, it is undermined by the fact that most modifying expressions (e.g., adjectives and numerals) can be internally modified in Gungbe, suggesting that they are not heads but maximal projections (i.e., XPs).

movements in some languages are responsible for snowballing movement of the maximal projection including the head in other languages. Put another way, while heads may extract in some languages, their movement leads to generalized piedpiping in other languages (Aboh 2004b). If true, the difference between a language like Kikuyu, which manifests the order N–Dem–Nral–Adj (cf. Hawkins (1983)) and Gungbe which exhibits N–Adj–Nral–Dem would be that Kikuyu involves cyclical N-to-F_{INFL}-to-D, while Gungbe involves snowballing movement as suggested above. This amounts to saying that while snowballing movement in Kwa appears to be triggered by the licensing properties of F_{INFL} , pied-piping of FP_{INFL} to [spec NumP] and [spec DP] is comparable to IP-fronting and can therefore be equated to A'-movement within D. The latter movement, Aboh (2004a, c) claims is triggered by the need to check the features [±plural] and [±specific] under Num and D, respectively.

Assuming that this description is the right one, we can now reconcile the Yoruba data with the Gungbe ones by assuming (as in Ajiboye 2005) that the demonstrative in this language is a head that merges under F_{Dem} . If we put this hypothesis together with the idea that number in Yoruba can start out as a modifier within the extended projection of NP, and enter concord with Num in the left periphery, we then reach the characterization that sequences such as (40a) can be derived as in (40b).



What this description suggests is that the so-called snowballing movement is limited to below the demonstrative head in Yoruba. Ideally, we could reduce the variation between the Yoruba-type languages and the Gungbe-type languages to the category of the demonstrative, which appears to be a head in the former but a maximal projection in the latter. More study is needed before we reach any definite conclusion on this issue. But what matters for the following discussion is that number marking seems to never be affixal (in the technical sense) in both Gungbe-type and Yoruba-type languages. This would mean that within Kwa, only languages like Twi, which retained a residual noun class system and GTM languages which have an active system, have number inflection on the noun (see note 7). Several other issues arise that merit investigation: The conditions that regulate the distribution of bare nouns in Kwa, the internal syntax of such noun phrases and how they differ (or not) from bare noun languages (e.g., English) and other languages which exclude bare nouns (e.g., French), and finally the semantics and licensing conditions of the Kwa determiners.

In the context of this debate, one issue that has been discussed to some extent in the Kwa literature is that of relative clauses which I now describe.

2.4 Relative Clauses

A remarkable fact about the Kwa languages is that just as they possess bare nouns, they also allow relative clauses whose noun heads are not associated with a determiner. Consider the Yoruba and Gungbe examples in (41).

(41)	a.	Ère	tí	Kúnlé	ní	[Yoruba]
		statue	REL	Kunle	own	
		'The state	ue that Kun	le owns'		
	b.	Òxwé	dĕ	Súrù	xò	[Gungbe]
		house	REL	Suru	buy	
		'The hou	se that Suru			

As often reported in the literature (see Saah, this volume) Kwa relative clauses are mainly restrictive. With regard to the relative order of modifying expressions, it appears that the relative clause follows the demonstrative in the default case. Therefore, adding a relative clause to the sequence of modifiers in the Gungbe sentence (42a) yields the sentence in (42b), where the relative clause follows the nominal modifier leading to the sequence noun–[modifiers]–[relative clause]–deixis–number.

(42)	a.	Kòfí	wέ	yí	àsé	[yù	àwè	éhè]	15	lέ	[Gur	ngbe]	
		Kofi	FOC	take	cat	big	NRAL	DET	DET	is] NU	М		
		'Kofi	receiv	ed these t	wo bl	ack cats	,		[1			
	b.	Kòfí	wέ	yí	[àsé	yù	àwè	éhè	[dĕ	mí	xò]	ló	lέ]
		Kofi	FOC	receive	cat	black	two	DEM	that _[Rel]	1PL	buy	DET	NUM

'KOFI received these two black cats that we bought'

Though this is the order often reported in the literature, the relative clause can also precede the demonstrative as illustrated by the pairs in (43) for Yoruba.

(43)	a.	Ișu	tí	mọ	rà	yìí	[Yoruba, Victor Manfredi p.c.]
		yam	REL	1SG	buy	DEM	
		'This yam	which I bo	ught'			
	b.	Ișu	yìí	tí	mọ	rà	
		yam	DEM	REL	1SG	buy	
		'This yam	which I bo	ught'			

The same variation is found in Gungbe. Contrast example (42b) to that in (44).

(44)	Àsé	yù	[dĕ	mí	xò]	éhè	15	lé]
	cat	black	REL	1PL	buy	DEM	DET	NUM
	'This bla	ack cats that	t we bough	ıt'				

At this stage of the discussion, it is not clear what this variation relates to, given the apparent identical meaning of the two sequences. I therefore leave this issue for further research.

As the reader may have also noticed, another interesting aspect of the Kwa relative clauses is that they are sandwiched between the head noun and the determiners, leading to sequences, which in English for instance, would correspond to something like '*cat that we bought the*'. Various proposals have been put forth to account for relative clauses in Kwa in terms of adjunction or in the light of Kayne's (1994) complementation view (e.g., Déchaine and Filipovich 1985; Lewis 1985; Ameka 1991; Saah, this volume; Aboh 2002, 2005a). We will not go into the details of these proposals here and the reader is referred to the cited references.

Instead, I draw attention to one aspect of relative clauses, which has not received much attention, namely the similarity between this clause and what has been described as factive clauses.

In certain Kwa languages (e.g., Gungbe, Fongbe), where the head noun in what appears to be a relative clause occurs with a determiner, there is a semantic change thereby giving rise to a factive meaning that is translated as *the fact that* (Collins (1994; Aboh 2002, 2005a). This is shown by the difference in translation of (45) and (44):

(45)Àsé yù lś lέ [dĕ mí nyàn] vέ ná Kòfí [Gungbe] DET NUM cat black that 1PL chase hurt for Kofi 'The fact that we chased those black cats hurt Kofi' * 'The black cats that we chased hurt Kofi'

Example (46) further shows that factive clauses differ in meaning from relative constructions. This is because under a relative clause reading, the first part of the clause would mean that the soup that Kofi cooked was good, and the second part

would imply that the very same soup was not good, a clear contradiction (Collins 1994).

(46)	Núsónú	ló	[dĕ	Kòfí	dà]	nyón, àmón	núsónú	[Gungbe]
	soup	DET	that	Kofi	cook	good but	soup	
	15	kpàkpà	má	nyón				
	DET	itself	NEG	good				
	'The fact t	hat Kofi co	oked this	soup was	a good t	hing but the sou	p (itself) w	asn't good
	[it didn't ta	aste nice]'						

The existence of factive constructions in Kwa suggests that these languages have a kind of event relativization where the event head (or maybe a cognate object denoting event) is being extracted. This conforms with constructions in which the event head is fronted to a position immediately to the left of the relative element (here $d\tilde{z}$) leaving a copy inside the proposition. As example (47a) shows, the resulting sentence is also interpreted factively with some focus flavor attached to it.¹⁰ In addition, the ungrammatical sentence (47b) indicates that such constructions do not involve VP-fronting since the relativized verb excludes its internal argument.

(47)	a.	Nyàn	[dĕ	mí	nyàn	àsé	15	lé]	vέ	ná	Kòfí	[Gungbe]
		chase	that	1PL	chase	cat	DET	NUM	hurt	for	Kofi	
	'The fact that we chased the cats hurt Kofi'											
	b.	*[Nyàn	àsé	lś	lέ]	[dĕ	mí	nyàn]	vέ	ná	Kòfí	
		chase	cat	DET	NUM	that	1PL	catch	hurt	for	Kofi	
'The fact that we chased the cats hurt Kofi'												

If the relation between factive clauses and relative clauses is as straightforward as it appears from the surface, then there seems to be no obvious way to account for these facts in a theory of relative clauses as modifiers. Another question that obviously arises with regard to event factives is that of the categorial status of the fronted verbal element. A possibility explored in Collins (1994) is that it is a nominal. This is clearer in languages like Yoruba and Igbo where the fronted verb is reduplicated as it would be when nominalized. The example below is from Yoruba:

(48)Rié-rié ajá baba [Yoruba] tí 0 sonu dun re ninu dog that RP be.lost father his inside RED-see be.delicious 'The fact that he found the dog pleased his father'

Things are not so clear within the Gbe languages and I leave the matter for further research. I will now turn to another type of nominal construction: namely genitive or possessive constructions.

¹⁰Such structures are superficially similar to predicate cleft which also involve doubling of the verb, see Ameka, this volume.

2.5 Possessive Constructions and Adpositions

Two types of possessive constructions are often found in Kwa: Possessor–Possessum and Possessum–Possessor, with languages varying as to the expression of the possessive marker. In Gungbe, for instance, the two patterns allow two different possessive markers (see Ameka 1991; Essegbey 1994; Agbedor 1996 on Ewegbe, Ajiboye 2005 on Yoruba).

(49)	a.	Àsé	15	sín	tó	yù	15	[Gungbe]
		cat	Det _[deixis]	Poss	ear	black	Det _[deixis]	
			ck ear of th				[
	b.	Τó	yù	àsé	15	tón	15	
		ear	black	cat	Det _[deixis]	Poss	Det _[deixis]	
		'The bla						

A descriptive and theoretical question that arises here is the relation between these two patterns. Various possibilities come to mind but one that seems promising is that the pattern in (49b) is derived from (49a) through inversion. In this regard, pattern (49a) would correspond to Anglo-Saxon genitive as in *John's book*, while that in (49b) would be the Kwa equivalent of examples such as '*that book of John's* (see Kayne 1994; den Dikken 1998, 2006; Aboh 2002 for discussion). Assuming that the genitive markers are functional heads, an interesting pattern that arises here is that such heads precede their complement in some cases (e.g., 49a) but follow in others (49b).

This variation clearly manifests itself when it comes to adpositions, which I now briefly discuss. Kwa languages display two types of adpositions referred to here as P_1 and P_2 . The former includes elements that generally develop from verbs or predicative elements (e.g., relator, copula) and express source, direction or goal, while the latter mainly derive from nouns, and encode location. The distribution of these two adpositions varies in Kwa. In the Gbe languages, for instance, they circumvent the noun as illustrated in (50a). Examples (50b–c) show that the adpositions need not co-occur. The sequence of co-occurring adpositions in Gbe is represented in (50d).

(50)	a.	Kàjó	zé	àsé	15	dó	távò	15	jí	[Gungbe]
		Kojo	take	cat	Det _[deixis]	P ₁	table	DET _[deixis]	P_2	
		'Kojo j	put the cat				surface of th			
	b.	Àsé	ló	bíó	xà	15	mὲ			
		cat	DET _[deixis]	enter	basket	DET _[deixis]	P_2			
		'The ca	at entered th	he bask	et'					
	c.	Kàjó	zé	àsé	ló	xlán	mì			
		Kojo	take	cat	DET _[deixis]	P ₁	1SG.ACC			
		'Kojo :	sent me the							
	d.	$P_1 > D_1$	$P > P_2$							

Unlike the pattern in Gbe, some other Kwa languages allow the two adpositions to precede the noun. A case in point is Degema, spoken in Nigeria. As the following examples show, co-occurring adpositions in Degema display the sequence in (51c) (Kari 2004: 82).

(51)	a.	Qsamá	yọ	á-þó		mų́	ékún	útany	[Degema]
		shirt	Det _[deixis]	AGF	R.be	P ₁	$P_{2[top]}$	tree	
		'The shirt is			e'				
	b.	Miþúkán		úþí	yọ		mú	ívóm	ývay
		1SG.keep.A	SP	book	DET	leixis]	P ₁	P _{2[inside]}	house
		'I kept the l	book in th						
	c.	$P_1 > P_2 > DI$	2						

Table 2.1 Further indicates the differences between P_1 and P_2 .

	General meaning	Case assignment	Pied-piped P	Stranded P	, er o ur	Nominal origin
P ₁	Direction/path/goal	+	_	+	+	-
P ₂	Location	-	+	-	-	+

 Table 2.1
 Some distinguishing properties between P1 and P2

As this table shows, P_1 and P_2 contrast in every respect. In the Kwa literature, it is commonly assumed that P_1 's develop from verbs which grammaticalize into prepositions or case assigners (Ansre 1966; Fabb 1992; Lord 1993; Ameka 2003; Aboh et al to appear, Aboh 2005c, forthcoming). A supporting argument for this view is that P_1 surfaces in a similar position as the second verb in a serial verb construction. This is schematized in (52).

 (52) a. Instrument serial verb construction V₁ > DP > V₂ > DP (e.g., take knife cut bread)

 b. Beneficiary prepositional expression V > DP > P₁ > DP (e.g., give money to John)

 P_1 represents a small class of approximately eight elements across Gbe. In contrast, the status of P_2 has not yet been clarified. Most authors, however, agree that such elements derive from relational nouns, body-part nouns or landmark terms, and form a wider class than P_1 (Ameka 2003). The variation in (50d) and (51c) obviously represents an interesting syntactic puzzle that raises issues such as the category status of P_1 and P_2 . One analysis that has been explored in the literature with regard to the set of P_1 and P_2 has been to assume that the category P in the Kwa languages includes two adpositional elements of which only P_1 (i.e., the prenominal adposition) is an argument introducer and participates in case assignment. P_2 , on the other hand is mainly locational and does not play such a role. This conclusion suggests that case assignment per se is not a defining condition on the category P, or more precisely on adpositions (e.g., Ameka 2003).

Aboh (2005c, forthcoming) argued for a different view and proposes that complex spatial expressions as illustrated in (50d) and (51c) are two facets of the same underlying structure which itself relates to possessive constructions. Under this view, I suggest that P_1 , encoding direction/path/goal, selects a locative phrase (i.e., Ground), which appears a truncated (possessive) predicate phrase labeled here as IP.¹¹ The latter involves a DP that functions as *reference object* and represents the subject (i.e., the possessor), while the portion expressing location (i.e., the possessum) is a part-phrase (Talmy 2000: 196 ff).¹² This part-phrase is shown to be a bare noun phrase, functioning as complement of the possessive or predicate phrase (IP). The Gungbe data further show that the head of this noun phrase subsequently incorporates in the head of the predicate phrase I°, and surfaces as P_2 in spatial expressions. This would mean that P_2 represents the head of a bare NP functioning as part-phrase, which subsequently incorporates into the possessive inflection head I°. In the sequence *távò ló jí* "On top of the table" in (50a), for instance, P_2 derives from the noun (∂)*jí*, which means "above or sky". The proposed derivation results in to the sequence P_1 -DP- P_2 found in many Kwa, and illustrated in (53) for the Gungbe.

(53) $\left[\sum_{P \mid P} \left[\int_{P \mid} d\mathbf{0} \right] \left[\sum_{P \mid P} t_{ii} d\mathbf{0} \right] \right] \left[\int_{P \mid P} t_{ii} d\mathbf{0} \right] \left[$

This analysis is further corroborated by the fact that, in such contexts, P_2 lacks the noun class initial vowel — here the vowel o — encodes possessive semantics, and fails to assign case. The absence of this initial vowel is regarded as indication that the following noun phrase is a bare NP. This provides motivation for the incorporation of the head N into the inflectional I°. This, in turn, would explain the impossibility of P_2 to assign (accusative) case even though it may express genitive or location in some languages.

The proposed analysis extends to the Kwa languages with the sequence in (51c). In the Chadic languages where this sequence is also found, it appears that the complex P_1 - P_2 may precede a genitive marker, which in turn precedes the Ground or DP[reference object], as illustrated by the Zina Kotoko example in (54) (see Holmberg (2002) for Zina Kotoko, and Newman (2000), Jaggar (2001) for Hausa).

(54) Ná Ádàm fká fín má cə mafù dé [Zina Kotoko, Chadic] P_1 Ρ, POSS Ι saw Adam tree DEF 'I saw Adam in front of the tree'

¹¹For ease of discussion I refer to this structure as IP, but see Bowers (1993, 2001), Kayne (1994), den Dikken (1995, 1998, 2006) and much related work for discussion.

¹²Talmy (2000: 196 ff) argues that "a major group of space-characterizing linguistic forms makes appeal to a Ground object's having some form of asymmetry, or biasing in its structure. Either it has structurally distinct parts – parts that in themselves are distinguishable from one another and can form a basis for spatial discriminations – or it has some kind of unidirectionality". Under this characterization therefore, the Ground may be complex in the sense described in this paper, in that it involves a *Reference Object* whose part is used to localize the Figure.

Taking these facts into consideration, Aboh (forthcoming) proposes that the sequences $P_1-P_2-(Poss)-DP$ are derived by predicate head inversion: P_2 (i.e., the N that incorporates into I°) moves past the DP [reference object] dragging along a possessive inflection under I°, hence the $P_1-P_2-Poss-DP$ sequences. The Kwa and Chadic scenarios are represented in (55a) for Degema, and (55b) for Zina Kotoko.

(55) a.
$$[_{P1P}$$
 $[_{P1}$ m μ $[_{FP}$ $[_{F}$ ék un $[_{IP}$ $[_{DP}$ $utany]$ $[_{I^{o}}$ t_{ekun} $[_{NP}$ t_{ekun} $]]]]]]$
b. $[_{P1P}$ $[_{P1}$ m a $[_{FP}$ $[_{F}$ fk a -cə $[_{IP}$ $[_{DP}$ mafù dé] $[_{I^{o}}$ t_{fka} -ce $[_{NP}$ t_{fka} $]]]]]]$

This analysis actually extends to Germanic and Romance languages, for which reason Aboh (forthcoming) suggests that these languages behave like certain Kwa (e.g., Degema) and Chadic languages in involving movement of P_2 past the DP[reference object]. In some locative expressions, for instance, the so-called preposition (e.g., inside, beside, in front of, in English, or *à côté de* in French) is a complex element including P_1 and P_2 . The latter merges as lexical head of the part-phrase that incorporates into I° inside the possessive phrase and further moves past the DP[reference object]. Given that the possessive phrase embedding P_2 is selected by P_1 , the resulting P_1 – P_2 –(Poss)–DP sequence (e.g., beside/in front of the house) gives the wrong impression that some languages involve complex prepositions that are expressions of PP-shell structures (Holmberg 2002).

Under Aboh's typology of adpositions then both the predicative type P_1 and the nominal type P_2 are found in all languages, with the different scenarios being represented in (56).



From the perspective of grammaticalization, these cross-linguistic variations indicate that the fate of P_1 and P_2 can be understood by looking at their origin. Put differently, the fact that P_1 derives from verbs (via serial verb constructions) and P_2 derives from nouns (via possessive constructions) makes a number of predictions about their syntactic behavior, such as, their distribution and their capacity to assign case. Under the assumption that clausal structure and nominal structure are similar, an interesting parallel that arises is that the grammaticalization route for verbs to P_1 .

appears similar to that of nouns into P_2 . In both cases, a lexical head moves out of the lexical domain into the functional domain where it grammaticalizes as a functional item.

2.6 Conclusion

This chapter familiarizes the reader with certain aspects of the noun phrase in the Kwa languages. A major observation that I have made in this chapter is that even though the noun head precedes the modifiers and the determiners on the surface, it is reasonable to assume that these languages are underlyingly head initial. The consequence of this view is that the sequence of modifiers and the relative position of the noun with respect to the determiners derive from various movement operations that pied-pipe the noun phrase to the left of its modifiers and determiners. In the course of this discussion, I have also shown that the variation between the Gungbe-type languages, where the demonstrative is never marked for plurality and always occurs postnominally, and the Yoruba type languages, where the demonstrative shows plural morphology and may occur prenominally, or postnominally, or both, could be reduced to number concord where the noun phrase modified for number agrees with a number phrase headed by a number marker. While the number marker is found across Kwa, where it follows the demonstrative, the Yoruba data suggest that the contrast between the sequence demonstrative > number versus number > demonstrative boils down to demonstratives being a maximal projection in the former but a head that is stranded by its complement in the latter. Finally, it is shown that the two variants of possessive constructions found in these languages are comparable to those found in Germanic (e.g. English) where the possessor may precede or follow the possessor (due to predicate inversion). An aspect of Kwa noun phrase that I did not touch upon in this descriptive chapter is that of quantifiers, a rather poorly understood domain of these languages. The reader is referred to Essegbey (1993, 1994) for discussion.

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Chapter 3 General Properties of the Clause

Enoch, O. Aboh and James Essegbey

3.1 Introduction

The discussion in the previous chapters has shown that modifiers tend to follow the modified element, whereas functional elements such as determiners follow what appears to be their complement under generative analysis of the DP (e.g., Abney 1987; Szabolcsi 1987, 1994; Aboh 2002, 2004, 2005a; Ajiboye 2005, and much related work). Based on the distribution of these functional elements, one could suggest that Kwa languages are head-final languages. This is not without complication, however, since the basic word order in sentences is of the type SVO. In this chapter we discuss some general properties of the clause in Kwa languages. It is organized as follows: Section 3.2 presents the general properties of the INFL domain and shows that Kwa languages are analytic in the sense that they resort to free morphemes for marking tense, mood and aspect, where synthetic languages display inflectional morphology. Building on this, Section 3.3 tackles the question of VO versus OV alternation in these languages and shows how it relates to aspect specification. Section 3.4 discusses serial verb constructions which, on the surface, appear to be another domain where the object precedes a lexical verb. Section 3.5 introduces the issue of the so-called Inherent Complement Verbs (ICV), and Section 3.6 takes a brief look at discourse particles, which are very productive in Kwa. Section 3.7 concludes the chapter.

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3.2 Inflectional Morphology

As the reader will have remarked by now, Kwa languages are isolating languages of which some sub-families (e.g., Gbe) use mostly monosyllabic words. One distinguishing property of the languages is that they barely show inflectional morphology. As a consequence, lexical DPs are not inflected for case. This is shown in the Akan examples (1a–b). Examples (1c–d), also from Akan, show that pronouns do manifest case morphology.

(1)	a.	əkrá cat 'A cat has ca	á-kye PERF-catch ught a mouse'	akurá mouse		[Akan]
	b.	akurá mouse 'A mouse has	á-kye PERF-catch s caught a cat'	əkrá cat		
	c.	o- 3SG:NOM 'He sees the	hấ see child'	abofrá child	nó DET	
	d.	Abofrá dog 'The child se	nó DET es him'	hấ chase	no 1sg-ACC	/*ə 3SG:NOM

There is no overt gender specification on the head noun or pronouns (2a), even though certain common nouns and person names are specified for gender (2b).

- (2) a. É wlé mì [Gungbe] 3SG catch 1SG:ACC 'S/he caught me'
 - b. Tó = father [+masculine]; nò = mother [+feminine], Kòfi [male name], Àsíbá [female name]

Similarly, subject–verb agreement for person and number and finiteness specification are never overtly expressed on the verb or predicate head. Sentences (3) below and (1c) above show that the verb has the same form regardless of whether its subject is singular or plural.

(3) Wo hú krámán nó [Akan]
 3PL-NOM see dog DET
 'They see the dog'

Similarly, the Gungbe sentences in (4a-b) indicate that the same verb form occurs in both finite and non-finite clauses. In (4b), the embedded clause introduced by the preposition $n\dot{a}$ is a non-finite clause whose subject, an empty category (ec), is controlled by the subject of the matrix clause. Yet, the finite verb form nyan in (4a) is identical to the non-finite verb form in (4b).

(4) a. Ùn nyàn vé yì bà vé nyàn mì lékà wá [Gungbe] 1SG chase 3PL go and 3PL chase 1SG return come 'I chased them away and they chased me back'

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b.	Ùn _i	jró	[_{CP} ná	$\left[_{\text{IP}} \text{ec}_{i} \right]$	nyàn	yé	tón]]
			PREP				get.out
	'I wa	nt to cha	se them	out'			

Though this description might suggest that the Kwa languages are totally devoid of inflectional morphology, this is not entirely true for all the languages. Some, like the Ghana-Togo-Mountain (GTM) languages, have a noun class system and display subject–verb agreement, as indicated by the examples under (5).

(5)	a.	Ki-plukpá	ki -tsidį	ə-kplõ	nó	ábha	[Nyagbo]
		CM-book	AGR-be[upper surface]	CM-table	DET	top	
		'A book is on					
	b.	Bu -plukpá	bu -tsidi	ə-kplõ	nó	ábha	
		CM-book	AGR-be	CM-table	DET	top	

Similarly, Stewart (1997: 155) shows that even though Edo, spoken in Nigeria, does not show the type of subject–verb agreement found in Romance or Germanic languages, it does exhibit object agreement for number. In this language, the so-called *-lV* suffix encodes (among other things) number of the direct object. This is shown in the following minimal pair.

(6)	a.	Òzó	dé	èbè	nó!dè	[Edo]
		Ozo	buy	book	yesterday	
		'Ozo b				
	b.	Òzó	dé- lé	èbè	nó!dè	
		Ozo	buy-PL	book	yesterday	
		'Ozo b	ought boo	oks yeste	erday'	

Finally, it is possible that case marking or some other agreement contexts show tone (or prosodic) effects that are direct consequences of the syntax. For instance, as discussed in Chapter 1, Déchaine (2001) shows that inherent Low tone on a mono-syllabic Yoruba verb is suppressed before an accusative DP, while certain empty functional heads require a high tone. She then argues that Low tone drop is syntax-sensitive and signals the licensing of null functional heads. Additional studies of this sort could eventually show interactions between syntax and phonology in licensing case or some other agreement position that are comparable to classical syntax-morphology interactions discussed in the literature. Indeed, intriguing syntax and phonology interaction in various Kwa languages (e.g. the expression of negation in Abidji, chapter 1) suggest that there might be more to agreement patterns and the expression of grammatical functions in these languages than currently assumed.

3.2.1 Tense and Aspect Specifications

Given the absence of inflectional morphology in these languages, one may wonder how tense and aspect specifications are expressed. In most Kwa languages, these occur as free morphemes that intervene between the subject and the verb, or bound morphemes that generally attach to the verb but lack person and number distinctions. Before moving on to these markers, let us first step back and consider the bare verb form indicated in examples like (4a–b).

As the reader may note, a finite sentence where the verb is not marked with any tense, mood, or aspect marker is interpreted in the past. In this regard, it is important to mention that even though the translation of such verb forms in English requires the simple past form, the intended meaning is more a perfective one that more or less corresponds to French *passé composé* (or "factative" in terms of Welmers 1973). This is shown in (7) where the bare (perfective) verb occurs with an adverb meaning roughly 'right now'.

Àsé 15 (7)Kpón! wlé àiàkà 15 dìn trólóló dìn [Gungbe] look cat DET catch mouse DET now just now 'Look! The cat has caught the mouse just now'

Additional evidence supporting this description is that there is a difference in interpretation between bare eventive verbs and bare inchoative verbs. More specifically, while eventive verbs require a perfective interpretation, inchoative verbs are interpreted in present state by default. Contrast example (7) to that in (8).

(8)	Kofí	ſé	ŋkú	bia	[Ewegbe]
	К.	POSS	eye	become_red	
	'Kofi's e	ye is red'			

Although the default interpretation is present, past tense interpretation is also possible in cases where reference is to a situation that used to be true in the past. Consider the following example:

(9) Etsə fé égbea [Ewegbe] Kofi ŋkú bia gaké é-fu POSS 3SG-become_white Yesterday Kofi eye become_red but today 'Yesterday Kofi's eye was red but today it is white'

In such sentences, the tense specifications are provided by the adverbs *etso* 'yesterday' and *egbea* 'today', suggesting that the interpretation in (8) and (9) is aspectual rather than tense. This has led Manfredi (1991) to propose that these languages do not encode tense grammatically but rather derive tense specifications from the computation of Aspect (i.e., aktionsart) and Modality (e.g., irrealis). Manfredi's claim finds support in Ewegbe, which Essegbey (1999, 2008) argues lacks the category T. According to Essegbey, the element *a*, which is often treated as a future marker in descriptions of this language, better qualifies as a potential mood marker, that may be interpreted as encoding future in some contexts. Unlike Ewegbe, some other Gbe languages (e.g., Gungbe, Fongbe) do display a future marker that encodes definite future. In both of these languages, future tense is expressed by a preverbal marker *ná*. Consider the Gungbe minimal pair in (10) where the only difference between the future sentence (10b) and the perfective (10a) is the presence of the future marker in the former but not in the latter.

(10)	a.	Súrù	kù	mótò	cè	[Gungbe]						
		Suru	drive	car	1SG:POSS							
		'Suru drove my car'										
	b.	Súrù	ná	kù	mótò	cè						
		Suru	FUT	drive	car	1SG:POSS						
		'Suru v	vill drive	my car'								

Most Kwa languages encode aspect by means of specific morphemes which are either free or bound. This is illustrated by the Gungbe and Gengbe habitual markers in (11a–b) (Essegbey 1999, 2008; Kluge 2000; da Cruz 1995, 1997; Aboh 2004; Aboh and Nauze 2008; Ameka and Dakubu 2008).

(11)	a.	Súrù	nò	dù	lésì	gbáú	[Gungbe]					
		Suru	HAB	eat	rice	alot						
		'Suru (habitually) eats rice a lot'										
	b.	Kwájó	[Gengbe]									
		Kwajo	eat-HAB	rice	INT							
		'Kwajo (habitually) eats rice a lot'										

Observe from these examples that while the habitual marker is a free-standing word that occurs preverbally in Gungbe, it is an affix that attaches to the verb in Gengbe. Building on such facts Aboh (2004, 2009) proposes that the Gbe languages manifest V-to-Asp movement though this is not apparent in (11a). The argument goes as follows: In the Gbe languages, the verb must raise to Asp to be licensed for aspect. In the languages where the aspect marker is a free morpheme the verb cannot attach to it but must remain in a lower position. This produces S–Aspect–V–O order as in (11c). However, when the aspect marker is an affix, or when Asp has no morphological content, the verb raises as high as Asp where it attaches to it. This process may result in the orders S–V–Aspect–O as in Gengbe, or S–V–O. The latter order always obtains when no aspect marker is morphologically realized. These two orders are illustrated in (11d).



The reader is referred to Aboh (2004, 2009) for a detailed analysis of verb movement in these languages. What matters for the present discussion is that the absence of inflectional morphology should not be equated to lack of verb movement, contra what is often claimed in the literature (e.g., Vikner 1997 and references cited there). We now turn to negation.

3.2.2 Negation Across Kwa

Sentential negation across Kwa shows three major patterns: preverbal negation (12a), post-verbal or sentence-final negation (12b) or bi-partite negation (12c) (see also the previous Abidji example discussed in chapter 1 Agbedor 1993).

(12)	a.	Súrù	má	dù	nú		[Gungbe]
		Suru	NEG	eat	thing		
		'Suru di	d not eat	ť			
	b.	Súrù	dù	nú	á		[Fongbe]
		Suru	eat	thing	NEG		
		'Suru di	d not eat	ť			
	c.	Súrù	mú	dù	nú	ò	[Gengbe]
		Suru	NEG	eat	thing	NEG	
		'Suru di	d not eat	ť			

In contexts where the negation marker combines with tense and aspect markers, they may occur in the fixed order negation-tense-aspect as illustrated in Gungbe (13a). Alternative orders are presented by Akan and Ewegbe. In Akan, negation follows the perfective aspect marker (13b), while in Ewegbe it precedes the verb, which attaches to the habitual marker (13c). As discussed in previous paragraphs, these distributive facts bear on the issue of V-to-Asp movement in the Kwa languages.

(13)	a.	Súrù	má	ná	nò	dù	nú	[Gungbe]		
		Suru	NEG	FUT	HAB	eat	thing			
		'Suru v	vill not 1	ll not habitually eat'						
	b.	Kofí	a-n-kó					[Akan]		
		Kofi	PERF-	NEG-go						
		'Kofi d	id not g	0'						
	c.	Kofí	mé	yi-na	0			[Ewegbe]		
		Kofi	NEG	go-HAB	NEG					
		'Kofi d	oes not	usually go'						

What this description shows is that the projection that hosts the preverbal sentential negative marker (NegP) dominates the tense phrase (TP) in Gungbe and Ewegbe. Regarding Akan, if we assume that the *a*-morpheme expresses an Asp node, then one could assume under Manfredi (1991) and Essegbey (1999, 2008), that the aspect marker precedes the negation marker, which precedes the verb. This would raise the issue of a second (i.e., the lower) expression of negation (i.e., NegP₂) in the Kwa languages (see Zanuttini (1997)) which, in turn, relates to the issue of postverbal (i.e., sentence-final) negation in Kwa (13c). In terms of current comparative work, we could suggest that the postverbal or post-aspectual negation is to some extent similar to French *pas*, which also occurs postverbally, or to *nie* in Afrikaans (den Besten 1986; Bell 2004; Hagemeijer 2007), which realizes an apparent sentence-final position. As Aboh (this volume) argues on the basis of Gbe languages,

however, such sentence-final negative markers better qualify as left peripheral elements that end up to the right edge due to their scope properties.

3.2.3 The Expression of Modality

In addition to negation, tense, and aspect markers, Kwa languages also display various mood markers (see Ameka and Dakubu (2008) for discussion). The following Gungbe examples, illustrate some of the modal markers found in these languages. Sentence (14a) exemplifies weak deontic mood as opposed to example (14b) which indicates strong deontic mood (Palmer 1987). Finally sentence (14c) expresses probability or capacity.¹

(14)	a.	Súrù Suru	ní MOOD1		mótò car	cè 1SG:P	OSS	wá come	fí [Wea here	ak deontic] [Gungbe]
		Suru	should driv	e my car	nere					
	b.	Suru	d ó MOOD2 must drive		kù drive ere'	mótò car	cè 1SG:	POSS	wá come	fí [Strong deontic] here
	c.	Súrù Suru	sìgán MOOD2 can/may dr	kù drive	mótò car	cè 1SG:P	OSS		wá come	fí [(Prob)ability] here

These various mood markers are grouped here under two classes: $Mood_1$, which includes modals that precede tense (15a), and $Mood_2$ involving elements that follow (15b).

(15)	a.	Súrù	ní	má	kù	mótò	bíó	fí	bló [Weak deontic]	[Gungbe]
		Suru	MOOD1	NEG	drive	car	enter	here	NEG	
		'Suru	should not	drive i	n here'					
	b.	Súrù	má	ná	sìgán	kù	mótò	bíó	fí [Weak deontic]	
		C	NEC		MOODA	1.			1	
		Suru	NEG	FUT	MOOD2	drive	car	enter	nere	

Taking this distinction seriously, Aboh (2004, 2006); Aboh and Nauze (2008) suggest that elements of the type $Mood_1$ belong to the clausal left periphery, while elements of the type $Mood_2$ are expressions of distinct mood heads within the inflection system. For the time being, it is premature to generalize this conclusion over Kwa, but we hope to reach a better understanding of the expression of modality in these languages as new studies emerge.

¹This section is based on facts from Gungbe mainly, but see Bamgbose (1966) for some examples in Yoruba.

3.2.4 The Category Adverb

A domain that remains virtually unexplored in Kwa syntax is that of adverbs. Certain authors actually entertain the idea that African languages in general lack the category adverb, which, as one could propose for some Indo-European languages, is a positional variant of the category adjective: for instance, the distinction between English *slow* and *slowly* (e.g., Creissels 2003).² Under such views, the African languages under study here mainly distinguish between the categories verb and noun only, and resort to various strategies, including the use of ideophones (16) in contexts where other languages would use adverbs.

(16)	Súrù	tò	àvà	lέ	pépépé	[Gungbe]
	Suru	pile	cloth	NUMB	Ideophone	
	'Suru j	piled up				

Many of the adverbs in this class are reduplicated or triplicated, as (18) shows:

(17)	É	wà	àzón	ló	hànyànhànyàn	[Gungbe]
	3SG	do	work	DET	carelessly	
	'He di	d the w	ork carele	essly'		

We consider the view that African languages in general and Kwa languages in particular lack the category Adverb to be misleading.³ Indeed, one can identify two classes of adverbs in Kwa. The first type includes ideophones illustrated in (16) and (17) and adverbial phrases like those in (18) below. Note that these differ from ideophones which, as (17) shows, generally allows for reduplication and triplication.

(18)	a.	É	wà	àzón	ló	[bléún]	[Gungbe]
		3SG	do	work	DET	quickly	
		'He did th	e work q	uickly'			
	b.	É	fón	hàdòkpóló			
		3SG	do	immediately			
		'He stood	up imme	diately'			
	c.	Súrù	kplón	hàn	ló	gànjí	
		Suru	learn	song	DET	well	
		'Suru lear	ned the so	ong well'			

Adverbs of this first type (reduplicated and non-reduplicated alike) generally occur in the right periphery of the verb phrase (16–18). However, they may be fronted

³In Ewegbe, adverbs are derived from many attributive adjectives by suffixing e to the latter. Examples are *sesi* "hard" which becomes *sesie* "and *nyui* "good" which becomes *nyuie* "good". Consider the examples below

Edenyənu sesi ade	Крә аwи пуиі та	Wə dəa sesie	Kpo nyuie "Be careful"
he married a strong	Look at that nice	Do the work	(literally Look closely)
woman	garment	seriously	

Others are vi "small" versus vie "little", kpui "short" versus kpuie " shortly"

²This view also implies that these languages do not have a category Adjective proper.

under focus, as illustrated by *bléún* 'quickly' and *kédékédé* 'slowly' from Gungbe in (19a) and (19b) respectively:

(19)	a.	Hwécó	gán	ná	yró	Súrù	lé,	bléún	wè	é	lón	fón	[Gung	gbe]
		before	chief	FUT	call	Suru	PART,	quickly	FOC	3SG	jump	stand_up		
		'Suru s	tood up	QUICKLY ev	en before	the chie	ef had fi	nished calli	ng his 1	name'				
	b.	Àjòtó	bíó	xwégbè	dó	mí	jí,	kédékédé	wè	ùn	bàí	bò		
		thief	enter	house	PREP	1PL	on	slowly	FOC	1SG	make	COORD		
		zé	sò	cè	bò	dè	dòkpó	dó	jàhàn	mè	ni	à	mò	wèzún!
		take	gun	1SG:POSS	COORD	shoot	one	PREP	air	in	if	2SG	see	race
		'A tl	nief ent	ered our hou	se, and I s	lowly n	nanaged	to get my g	gun and	shot o	once in	the air. Yo	u shou	ld have
		seen	the rac	e that follow	/ed!'									

The second class of adverbs consists of (mostly monomorphemic) elements which occur in the space between the subject and the verb. In Gungbe, these elements precede aspect and modal markers but follow the tense marker.

(20)	Súrù	só	sígán	nò	nù	àmànsìn	éhè	gá	[Gungbe]
	Suru	also	can	HAB	drink	medicine	DEM	too	
	'Suru o	can also	take this	s medicin	ne too'				

The ungrammatical sentence (21) indicates that these adverbial elements, unlike those in the first class, are not subject to movement operations.

(21)	*só	wè	Súrù	sígán	nò	nù	àmànsìn	éhè	gá	[Gungbe]
	also	FOC	Suru	can	HAB	drink	medicine	DEM	too	
	'Suru	can ALSO	o take th	is medic	ine too'					

These distributive facts indicate that these 'middle field' adverbial elements pattern like aspect markers, which cannot undergo movement either. Compare the ungrammatical example (21) with the equally ungrammatical (22) which has a fronted habitual aspect marker.

(22)	*Nò	wè	Súrù	dà	lésì	[Gungbe]
	HAB	FOC	Suru	cook	rice	
	'Suru hai	BITUALLY	cooked rie	ce'		

Another difference between adverbs that occur at the right edge of the VP and the 'middle field' adverbs is that the former belong to an open class, and could be considered lexical categories, while the latter form a closed class, and could be considered functional items. Stewart (1997, 1998) adopts this view and shows that the 'middle field' adverbs are expressions of distinct functional projections within the inflection system. Given this view, it is interesting to note that these middle field adverbs do not compete for the same position and may co-occur, when no semantic restriction applies. An example is given in (23).

(23)	a.	Súrù	kà	tè	dà	lésì	[Gungbe]
		Suru	willingly	even	cook	rice	
		'Suru wil	lingly even c	ooked rice'			

b.	Súrù	tè	kò	dà	lésì
	Suru	even	already	cook	rice
	'Suru e	ven alreadv	cooked rice'		

What these examples show is that the Kwa languages have a rich inflectional domain that hosts various tense, mood, and aspect markers along with 'middle field' head-like adverbs which presumably head their own projections. Given Cinque's (1999) characterization of the middle field across languages, the question arises how the Kwa languages fit (or do not fit) in the cartographic theory of adverb placement and expressions of INFL.

Since Pollock (1989), an issue that immediately arises when discussing verb movement, adverb placement, and expressions of INFL, such as negation, aspect, and modality is that of word order alternations within the IP domain. We noted previously that the Kwa languages differ as to the placement of the verb and the aspect marker. Another often observed alternation is found in VO versus OV constructions, which we now turn to.

3.3 On VO versus OV Alternation in Kwa

Though most of the examples discussed thus far are of the type SVO, with TMA sometimes occurring between the subject and the verb, most Kwa languages also have constructions in which the object necessarily precedes the verb. As discussed in Manfredi (1997), Kwa OV sequences come in two types: free gerunds (24a), and auxiliated (or controlled) OV (24b).

(24)	a.	Ó	kợ	[ìwé	kì-kà]	[Yoruba, Manfredi 1997: 96]
		3SG	learn	book	NOM-read	
		'S/he le	earned the	art of rea	ading'	
	b.	Ó	kợ	[ìwé	è-kà]	
		3SG	learn	book	NOM-read	
		'S/he le	earned (ho	ow) to rea	d'	

Though there seems to be no structural distinction between the bracketed sequence in (24a) and that in (24b) these two alternatives appear to have different distribution.⁴ In Gungbe, for instance, the equivalent of (24a) can occur in all argument positions, may be fronted for focusing and may take a determiner (25).

(25)	a.	[Wé	xì-xíá]	nò	kplón	nú	mè	[Gungbe]
		book	RED-read	HAB	teach	thing	person	
		'Reading	g teaches you	ı sometl	ning'			
	b.	Métrù	kplón	[wé	xì-xíá]	yòkpó	lέ	
		teacher	teach	book	RED-read	child	NUMB	
'The teacher taught the children how to read'								

⁴This variation also translates into the different readings Manfredi assigns to the examples in (24).

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c.	[Wé	xì-xíá	15]	wè	é	yì	kplón	tò	wéxòmè
	book	RED-read	DET	FOC	3SG	go	learn	PREP	school
	'He lear	ned READING	at scho	ool'					

In addition such constructions in which a preposed object is followed by a reduplicated verb are very productive and appear to behave like nominals. (26) is a very short list of such phrases in Ewegbe. Therefore, NP–VV structures resemble English gerunds, hence the term free gerunds.

(26)	a.	ame ləlõ	'loving people'	[Ewegbe]
	b.	ha dzidzi	'singing a song'	
	c.	vu fofo	'beating drums'	
	d.	agbalẽ xexlẽ	'reading a book'	

Auxiliated or controlled OV sequences, however, superficially differ from free gerunds in that the nominalized transitive verb is not reduplicated and the bracketed sequence in (24b) generally occurs in the complement position of the Aux or control aspect verb. Consider, for instance, the following contrast:

(27)	a.	[ìwé	kì-kà]	-á	wù	mí	[Yoruba, Manfredi 1997: 96]
		book	NOM-read	-AGR	please	1SG	
		'I like	reading'				
	b.	*[ìwé	è-kà]	-á	wù	mí	
		book	NOM-read	-AGR	please	1SG	

Manfredi (1997: 96, footnote 20) concludes from this that auxiliated/controlled OV cannot occur in A positions, as opposed to free gerunds which can. Data from Gungbe support Manfredi's position. Thus (28b), which is similar to (27b), is also ungrammatical, even though as (28c) shows, the OV sequence can be fronted in a focus position (i.e., an A-bar position) for focus purposes:

(28)	a.	[wé letter 'Writing	kì-kàn] RED-write g pleases the chi	jró please ildren'	yòkpó child	lé NUMB		[Gungbe]
	b.	*[wé letter 'Writing	kàn write g pleases the chi	jí] PART ildren'	jró please	yðkpð child	lé NUMB	
	c.	[wé letter 'The chi	kàn write ildren started w	jí] PAR riting'	wè FOC	yòkpó child	lέ NUMB	jè start/begin

While free gerunds are comparable to nominals both with regard to their interpretation and their distribution, auxiliated/controlled OVs often correlate with aspect specifications such as progressive, inceptive, ingressive, etc. These morphosyntactic differences between free gerunds and auxiliated/controlled OV sequences have led to various proposals (e.g., Fabb 1992; Awóyalé 1997; Kinyalolo 1992, 1997; Manfredi 1997; Aboh 1998, 2003, 2004, 2007, 2009; Ameka and Kropp Dakubu (2008)). Two families of proposals have been made: one that assumes structural differences between free gerunds and auxiliated OV in terms of DP versus TP opposition, and one that proposes a unified analysis for both expressions. We refer to the former as the DP/TP analysis and to the latter as the unified analysis.

Without entering into the details of these analyses, the DP/TP analysis suggests that free gerunds are nominalized verbal predicates (i.e., DPs), while auxiliated OV sequences are clausal and represent a TP. According to Manfredi (1997: 91), for instance, if we assume a theory that dispenses with the feature $\pm V$ (e.g., Déchaine 1993) the element V is defined as a non-nominal. Accordingly, nominalized VPs can merge with a D to form a DP as illustrated in (29), where the object of V raises to [spec DP], due to case licensing, while the verb itself raises to D presumably for nominalization purposes.



In terms of Distributed Morphology, this view amounts to saying that verbal elements in Kwa are essentially roots that can be merged in various terminal nodes where they acquire distinguishing features that would correspond to what might be traditionally referred to as categorial features.

In contrast to the nominalized VPs auxiliated OV sequences, according to Manfredi (1997), involve a tense phrase (TP) that embeds an aspectual node expressed by the auxiliary or control aspect verb, which in turn embeds the VP as illustrated in (30a). Manfredi further proposes that the VO versus OV asymmetry found in Benue-Kwa is an indication that these languages manifest object shift. Starting from an underlying VO order, he argues that object shift is characterized by movement of the object into [spec AspP] where it interacts with aspectual scope interpretation. This behavior, which Manfredi characterises as scophobic, forces movement of the object from the verb's c-command domain to [spec AspP]. The verb itself raises to Asp, as in (30b). Unlike OV gerunds, object shift in auxiliated/controlled OV constructions is not case-driven. Instead, it derives from scophobia which Manfredi considers to be a more general principle. Under this analysis, one would account for Benue-Kwa languages which show no overt OV versus VO asymmetry by assuming that object shift in those languages is masked by subsequent movement of the verb to the left of the object (see also Fabb (1992), Kinyalolo (1992, 1997) for partially similar proposals).



In contrast to the above analysis, Aboh (1998, 2003, 2004, 2007, 2009) provides a unified analysis for free gerunds and auxiliated/controlled OV constructions. He notes that in addition to having a pre-verbal object, auxiliated/controlled OV constructions in Gbe may also manifest a clause-final grammatical morpheme. Two examples from Gungbe are given in (31).

(31)	a.	Yòkpó	lέ	jè	wé	kàn	*(jí)	[Gungbe]		
		Child	NUMB	start/begin	letter	write	PART			
		'The chil	The children started to write/writing'							
	b.	Yòkpó	lέ	yì	wé	kplón	*(gbé)			
		Child	NUMB	go	letter	learn	PART			
	'The children went (to school) to learn'									

While this property could be seen as distinguishing between auxiliated/controlled OV constructions and free gerunds, the difference is blurred by the fact that auxiliated/controlled OV sequences involving intransitive verbs in Gbe require verb reduplication, as shown in (32).

(32) Yòkpó lé jè hì-hòn *(jí) [Gungbe]
 Child NUMB start/begin RED-flee PART
 'The children started/begun to flee'

In addition, reduplication of a transitive verb is required when its object is fronted (33a) or pronominalized (33b).

(33)	a.	Wé	wè	yàkpó	lέ	jè	*(kì)kàn	jí	[Gungbe]
		letter	FOC	child	NUMB	start/begin	RED-write	PART	
		'The c	hildren s	started to	write/writ	ing'			
	b.	Wé	wè	yàkpó	lέ	yì	*(kpí)kplón	*(gbé)	[Gungbe]
		letter	FOC	child	NUMB	go	RED-learn	PART	
		'The c	hildren	went (to s	school) to	learn'			

Finally, in Gungbe, an aspect marker (i.e., prospective $n\dot{a}$) can intervene between the fronted object or a non-reduplicated verb as indicated in (34).

(34)	a.	Yàkpó	lέ	jè	wé	ná	kàn	jí		[Gungbe]
		child	NUMB	start/begin	letter	PROSP	write	PART		
		'The ch	ildren are	about to sta	rt writing	,				
	b.	Wé	wÈ	yòkpó	lέ	yì	ná	kplón	*(gbé)	[Gungbe]
		letter	FOC	child	NUMB	go	PROSP	learn	PART	
		'The children went (to school) to learn and are about to begin'								

Put together, these facts led Aboh (2005b, 2007, 2009) to argue that free gerunds and controlled/auxiliated OV sequences are two variants of the same structure. This analysis is based on the idea that verb reduplication is syntactically driven and is subject to EPP-licensing. The argumentation goes as follows: OV sequences involve the structure in (35a) where an aspect verb selects for a reduced clause involving an IP-domain represented by an aspect phrase sometimes realized by the prospective marker under Asp°. The latter selects VP as its complement and the whole AspP is embedded under a functional projection FP headed by the sentencefinal particle. It is further proposed that [spec AspP] functions as a subject of the predicate of this reduced structure and is therefore sanctioned by the EPP.

(35) a. $\ldots [A_{ASDP} Aux [FP [F Particle [ASDP [ASD ná [VP \dots]]]]]]$

Setting aside the canonical subject, it is proposed that, in simple OV sequences, the object raises to the subject position of the reduced clause to satisfy the EPP and the verb raises to Asp^o (if the latter is not already occupied by the aspect marker). AspP then raises to [spec FP], as illustrated in (35b–c) due to nominalization, or aspect delimitation.



When the object is extracted, cliticized or simply missing, a null expletive is merged that has to be licensed. This expletive is claimed to be licensed under spechead configuration either by the prospective marker under Asp^o, which qualifies as a proper INFL element, or else by the verb that has moved to Asp^o but must reduplicate as an INFL support for the null expletive. The derivations are represented in (36a).



In terms of this analysis, object fronting, verb reduplication, and prospective aspect marking serve the same EPP requirement in enabling the licensing of [spec AspP]. Accordingly, reduplication is syntactically driven. That these languages resort to reduplication could be seen as a consequence of the weak agreement morphology that they exhibit (for instance, compared to Bantu).

Free gerunds with OVV sequences can be accounted for on the basis of the same structure. For instance, the bracketed sequence in (37b) is derived from (37a) by assuming that the object does not front to [spec AspP] but rather to the edge of the reduced clause, i.e., [spec FP]. As was the case in the context of focus (or wh) extraction (33), a null expletive merges in [spec AspP] that is licensed under spechead configuration by the reduplicated verb moved to Asp^o. Since [spec FP] is filled, no pied-piping of the whole AspP can occur in these sequences, which then systematically lack the sentence-final particle found in OV sequences (Aboh 2005b).

(37)	a.	[Àzón wì-wà]	nò	dó	àwútù	mè	[Gungbe]
		work RED-do	HAB	plant	illness	person	
		'Working too m	uch/too r	nuch wor	k makes of	ne sick'	

b. $[_{FP} az dn [_{F} [_{AspP} Expl [_{Asp} wiwa [_{VP} \dots t_{wa} \dots t_{az dn}]]]]] n d d aw utu m e$

What this means is that both free gerunds and auxiliated/controlled OV constructions have the same underlying structure, but only differ as to the landing site of the fronted object: [spec FP] for the former versus [spec AspP] for the latter. In addition, verbal reduplication appears to be a syntactically motivated process that provides the language with an otherwise non-existent INFL morphology. Reduplication therefore serves to license a null expletive in [spec AspP] as an EPP-requirement.

If free gerunds are reducible to auxiliated/controlled OV constructions, then another question that immediately arises now is how to account for serial verb constructions, which represent another domain of Kwa where the object occurs between two verbal elements.

3.4 OV Sequences and the Structure of Serial Verb Constructions

Since Christaller (1875), it has been observed that Kwa languages display sequences of verb (phrases) that combine into a single clause. Westerman (1930: 126) describes the phenomenon in Ewegbe thus:

A peculiarity of Ewegbe is that we often find a row of verbs one after the other. The chief features of this are that all the verbs stand next to each other without being connected, that all have the same tense or mood, and that in the event of their having a common subject and object, these stand with the first, the others remaining bare: should a conjunction stand between two verbs, the subject and object must be repeated.

J. Stewart (1963) was the first to call such constructions the serial verb construction (SVC) when he described the phenomenon in Akan. Since then, various descriptions and theorizing of the SVC have appeared in the literature (e.g., Ansre 1966;

Agbedor (1994); Ameka (2005); Bamgbose 1974; Baker 1989; Manfredi 1991; Déchaine 1993; Tossa 1993, 1994; Da Cruz 1993, 1997; Collins 1997; Stewart 1998). Though there is no consensus among linguists as to the structural analysis of SVCs, most current studies build on Westerman's original definition and conceive SVCs as monoclauses involving a series of lexical verbs which share at least one argument, and are not conjoined by any overt coordinating morpheme. The following examples are from Gungbe:

(38)	a.	Súrù Suru	dà cook	lésì rice	dù eat		[Gungbe]
							- Ce
		Suru c	ooked ric	e, ale [1.	e., ne au	e the rice	after cooking it]'
	b.	Súrù	zé	àmì	cè	dà	lésì
		Suru	take	oil	my	cook	rice
		'Suru te	ook my o	il to cool	k rice [h	e cooked	rice with my oil]'
	c.	Súrù	hèn	lésì	cé	fíó	
		Suru	hold	rice	my	burn	
		'Suru b	urned my	rice'			

In the search for a proper analysis of SVCs, most authors have tried to capture the intuition of 'single event' reading. One attempt to delimit the phenomenon is Ameka (2006: 128–129) who provides the following as the defining properties of SVCs in Ewegbe:

- The VPs in the sequence are construed as occurring within the same temporal frame.
- The VPs share the same mood (e.g. imperative).
- The VPs can be formally marked for different aspect and modality categories.
- The individual verbs can function as independent verbs in simple clauses (in the same form).
- Same syntactic subject for all VPs in the series but expressed only once before VP1.
- Monoclausal construction.
- VPs cannot be formally independently negated.
- The verbs can be individually focused or questioned.

For Baker (1989), all the above properties reduce to a single defining condition: "internal argument sharing". Taking SVCs to be special types of complex predicates, he proposes that constructions such as (38a) are strong empirical evidence for doubly headed structures as in (39) where both verbs directly θ -mark the internal argument *lésì* 'rice'.

(39) [s Àsíbá [
$$_{I}$$
 [$_{VP}$ [$_{V}$ [dà $_{V1}$ lésì dù $_{V2}$]]]]]

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Assuming the projection principle, Baker (1989: 527) concludes that because "the object of V_1 is an immediate constituent of a V' projection of V_2 , V_2 must θ -mark it, just as any other verb must θ -mark its object. Thus, the Projection Principle predicts that *object sharing is not only possible in SVCs, but obligatory*."⁵ Under this characterization therefore, no object can appear after V_2 , and the latter cannot license an object pronoun coreferential with the first object (Baker 1989: 527). Similarly, Baker's analysis implies that UG embeds a 'serializing parameter' which distinguishes serializing languages (e.g., Gungbe) from non-serializing languages (e.g., English). Baker's view has guided a significant number of studies that have led to a better understanding of aspects of verb series.

Adopting the VP-shell hypothesis, Collins (1997, 2002) and much related work reformulate Baker's original "argument sharing hypothesis" in terms of control structure. Under this view, the sentence in (38a) is partially represented as in (40) where all arguments are symmetrically introduced to the left. The external argument is introduced by the light verb v (Chomsky 1995), while the direct object is introduced by V₁. The latter subsequently raises past the object and adjoins to v where it is licensed. On the other hand, [spec VP₂] hosts *pro*, which is controlled by the object of V₁. This control mechanism leads to direct-object-sharing (see also Da Cruz (1997), Stewart (1998)).



There is ample cross-linguistic evidence that the "argument sharing hypothesis" as understood in Baker (1989) cannot be maintained for all the relevant cases. One such type of evidence is that in serializing languages manner of motion verbs occur with directional verbs which can take complements. This obviously violates Baker's (1989) internal argument sharing. Consider the Gungbe sentence below:

(41) xè ló zrón bíó xò mè [Gungbe]
 bird DET fly enter room in
 'The bird flew into the room'

⁵The emphasis is ours.

Note that in (41) the two verbs do not share an internal argument.

Earlier accounts of SVCs have usually noted that there is a single expression of Tense/Aspect and Negation on one verb. While it is the case that in many languages it is often the first verb that takes these markers, there are some languages in which some markers can occur on subsequent verbs. An example is Ewegbe in which the habitual marker occurs on all the verbs, as the sentence below illustrates:

(42)	Kofi	da-na	mólu	du-na	[Ewegbe]
	Kofi	cook-HAB	rice	eat-HAB	
	'Kofi d	cooks rice and	eats'		

In languages like Akan and Baule, in addition to Tense/Aspect, Negation marking also occurs on all the verbs. Consider the following examples

(43)	Kofi	n-noá	bayere	n-ní	[Akan]
	Kofi	NEG-boil-HAB	yam	NEG-eat-HAB	
	'Kofi d	oesn't boil yam and	eat (habitu	ually)'	

The above data, not only undermine the "argument sharing hypothesis", but they also indicate that stacked VP-shells as often assumed in current studies of SVCs (e.g., Collins 1997 and much related work) cannot be adequate.

Facts of this nature have led Larson (this volume), to argue that the phenomenon in Baule is actually a paratactic construction with Pro-drop thereby accounting for the absence of subject marking on the non-initial verbs of the (covertly) coordinated structures. Considering that Baule is closely related to Akan, Larson's arguments apply equally well to it, suggesting that the language that started researchers on the quest for SVCs may not really possess the construction after all.

Given the above, we might want to ask whether the SVC phenomenon exists at all within Kwa or whether it does exist but is manifested in some languages only. In this regard, various proposals have been made in the literature that do accept the existence of the phenomenon but reject the "argument sharing hypothesis" (e.g., Manfredi 1991, 2005; Déchaine 1993, 1997; Veenstra 1995). In terms of Déchaine (1997), for instance, verb serialization arises as a consequence of event composition. Assuming the Single Argument Hypothesis, event composition arises whenever there is more than one internal argument in a structure. Accordingly, ditransitive structures necessarily imply event composition. From a syntactic point of view, event composition requires that every additional argument be adjoined to the VP. As a result, verb serialisation arises whenever the second argument is also a VP. In other words, verb serialisation is also an instance of adjoined argument, the only difference being that the adjoined element is a verb phrase.

An emerging question in the context of the Gbe languages, where the empirical facts would seem to support the existence of SVCs, is whether V_1 in the SVCs is a true lexical verb or whether it has lost certain lexical properties and behaves more like a functional element. Consider the following Gungbe example involving the verb $z\acute{e}$ 'take'. Example (44a) illustrates this verb used as main predicate of a sentence, while example (44b) shows this verb in an SVC.

(44)	a.	Sétù	zé	gbó	dàkpó	[Gungbe]
		Setu	take	goat	one	
		'Setu t	ook one	goat'		
	b.	Sétù	zé	àwájìjè	yí	yé
		Setu	take	joy	receive	3PL
		'Setu r	received	them with j	oy'	

Aboh (2003, 2009) argues that examples like (44b) indicate that V_1 does not assign a theta-role to the constituent that linearly follows it (i.e., 'joy'). He suggests that $z\acute{e}$ in such constructions is not lexical. Aboh's position is supported by data from Fongbe.

(45)	a.	Kàkú	só	jìví	ó	sέn	wàxúxú	ó	*(ná)	[Fongbe]
		Koku	take	knife	DET	cut	bread	DET	with	
		'Koku c	cut the b	bread with	the knife'					
	b.	Kòkú	só	àwájíjɛ	yí	yé	*(ná)			
		Koku	take	joy	receive	3PL	with			
		'Koku 1	received	them with	joy'					

It appears from these Fongbe examples that the constituent that immediately follows V_1 số 'take' is actually introduced by a preposition on the right edge (i.e., $n\dot{a}$). As the examples indicate, this preposition must be realized for the sentence to be grammatical. If V_1 in sentences like (45b) cannot assign a theta-role to the constituent following it, then this constitutes good evidence that SVCs do not always consist of a sequence of lexical verbs that combine into a monoclause. Drawing on this, Aboh (2003, 2009) argues that V_1 in SVCs better qualifies as a functional verb. According to his analysis, SVCs in general are comparable to restructuring constructions as discussed in Romance and Germanic (e.g., Wurmbrand 2001; Cinque 2004). This would mean that there is no real instance of serialization involving series of lexical verbs, and consequently, there is no serializing parameter (see also Manfredi (2005)).

This view is not uncontroversial though. Take-SVCs or instrumental-SVCs, as the examples in (44) and (45) tend to be characterized, constitute only a fraction of the SVC phenomenon. Based on the expression of complex motion in serializing languages, as illustrated by example (41) above where the V_1 is a manner verb, Essegbey and Ameka (2001) argue that both V_1 and V_2 are full verbs. Further research into the semantics of other verbs that occur in the V_1 position is needed to arrive at the definitive conclusion.

3.5 Inherent Complement Verbs

Even though less discussed than SVCs, inherent complement verbs (ICV) constitute another areal property of Kwa languages that challenges linguistic theory. The ICV has been defined as "a verb whose citation form is followed by a meaning-specifying complement (Nwachukwu 1987: 22). An example from Ewegbe (see Essegbey, this volume) is $f \tilde{u}$ which speakers find difficult to characterize without a complement. The two main complements $f \tilde{u}$ occurs with are du 'race/course' and tsi 'water'. The examples below show the resultant interpretations:

(46)	a.	Kofí	fú	du	[Ewegbe]
		Kofi	ICV	course	
		'Kofi ran.'			
	b.	Kofí	fú	tsi	
		Kofi	ICV	water	
		'Kofi swam.'			

Although discussions of ICVs tend to focus on verbs like fi which take what could be characterized as "semantically contentful" complements, languages which have this type of verb also tend to have verbs that obligatorily take either a cognate complements or "semantically light" complements. Examples of verbs with cognate complement and semantically light complement from Ewegbe are given in (47a) and (47b) respectively below:

(47)	a.	Kofi	fí	*(fi)	[Ewegbe]
		Kofi	steal	steal	
		'Kofi stole'			
	b.	Kofí	du	*(nú)	
		Kofi	eat	thing	
		'Kofi ate'			

The examples show that fi 'steal' and du 'eat' cannot occur without a complement in Ewegbe. However it is difficult to show how the cognate complement in (47a) or the semantically light complement in (47b) specify the meaning of either verb as per Nwachukwu's definition given above. What we have is rather a class of verbs that obligatorily occur with complements. These complements run the gamut from fully specified semantically, through cognate, to being semantically light. For this reason Essegbey (1999) proposes that the phenomenon be characterized instead as Obligatory Complement Verbs (OCVs).

One important thing about ICVs, as shown by the examples is that they express concepts which are expressed with the verb alone in languages like English. This raises the issue of what the status of the verb and complement are. For instance, one wonders whether the complement is a bare NP whose head subsequently incorporates in the verb (e.g., Baker 1988; Ihionu 1992, 1993; Hale and Keyser 1993) or whether it is a full DP that is licensed by the verb just as a normal direct object (e.g., Manfredi 1991; Essegbey 1999). Essegbey's (1999) reason for analyzing the complement as a full DP is because, among other things, it can be modified as well as pronominalized. This is shown by the examples below:

(48)	a.	Kofi	ſú	du	sésễ	ádé	[Ewegbe]
		Kofi	ICV	course	hard	DET	
		'Kofi r					

b. E-fú-i 3SG-ICV-3SG 'He ran it'

In (48a), the complement takes a modifying adjective as well as a specific determiner which translates as 'a certain'. When asked if Kofi had run a race, (48b) in which the complement is pronominalized was elicited. Pronominalization is clear evidence that the inherent complement is referential, which therefore serves as an argument against an analysis of the verb + complement as an idiom. Based on this and other types of evidence, Essegbey (1999, 2003) proposes that ICVs are not different from canonical transitive verbs. He makes similar claims for ditransitive ICVs in this volume, building on a proposal in Essegbey (2002). However, there are two properties of ICVs which suggest that the situation might be more nuanced.

Most Kwa languages have predicate focusing where the focused verb is fronted in sentence-initial position leaving a copy inside the proposition (see Ameka, this volume). In languages where the construction exists, ICVs which require meaningspecifying complements cannot be moved to sentence-initial position. In such cases, it is the complement which is moved to sentence-initial position in order to yield an event focus interpretation. Example (49a) from Gungbe shows that da 'cook', which has an obligatory complement, can be fronted, but it is the complement wèsù 'race' which specifies $d\delta$ in $d\delta$ wèsù 'run' that must be fronted:

(49)	a.	Đà	(wè)	Súrù	dà	lésì	gànjí		[Gungbe]
		cook	FOC	Suru	cook	rice	well		
		'Suru co	ooked ri	ce very v	vell'				
	b.	Wèsù		Súrù		són		ló	mè
		race	FOC	Suru	plant	P ₁	room	DET _[deixis]	P_2
		'Suru RA	an out fr	om the r	oom'				

Recall also from previous discussion on factive constructions in chapter 2 that Kwa languages display event relativization where the event head is fronted, leaving a copy inside the relative clause (50a). Here again, only the inherent object can be relativized to obtain a similar meaning in ICVs (50b).

(50)	a.	Đà	dĕ	Súrù	dà	lésì	15	nyón	gànj	í	[Gungbe]	
		cook	COMP _[Rel]	Suru	cook	rice	DET _[deixis]	good	well			
			'The fact that Suru COOKED the rice is a very good thing'									
	b.	Wèsù	dĕ	Súrù	dó	són	xò	ló	mè	nyón	gànjí	
		race	COMP _[Rel]	Suru	plant	P_1	room	DET _[deixis]	P_2	good	well	
	'It is a really good thing that Suru RUN out from the room'											

The above examples suggest that although ICVs have a lot in common with simple transitive constructions where V takes a DP-complement, there may be enough reason to distinguish their structure from that of the latter. Recent theoretical progress in the study of argument structure will certainly provide new insights into these matters.

3.6 Discourse Particles

We end this catalogue of Kwa features with an aspect of the grammars that provides robust empirical evidence for the nature of syntactic features which, until recently, were assumed to be mere expressions of pragmatics. Indeed, Kwa languages exhibit a wide range of discourse markers that encode, among other things, focus, topic, interrogative, insistence, discourse specificity. In the following examples, we observe that the focused and topicalized constituents appear to the left of a focus and topic marker.

(51)	a.	Lésì	15	yà	Súrù	dà	è	gànjí	[Gungbe]
		rice	DET _[deixis]	TOP	Suru	cook	3SG	well	
	'As for the rice, Suru cooked it very well'								
	b.	Lésì	15	wè	Súrù	dà		gànjí	
		rice	DET _[deixis]	FOC	Suru	cook		well	
'Suru cooked THE RICE very well'									

We pointed out in the previous section that Kwa languages also allow for a verb focus structure in which the verb is fronted. The languages differ with regard to whether the focused verb occurs in its bare form, or is nominalized, as the following examples show.

(52)	a.	N-kyerɛw NOM-write 'Writing I do'	na FOC	me-kyerew 1SG-HAB-write			[Akan]
	b.	∫o-∫o- RED-hit 'Beating s/he	é FOC beat him	wo 3SG /her'	∫o- hit	é 3SG	[Ewegbe]
	c.	Ò-tué PREF-greet 'It is greeting	Ozo Ozo that Ozo	tuè greet greeted me'	mwè 1SG		[Edo]

These structures have led to various syntactic approaches which analyze the clause-internal copy as a resumptive verb (Koopman 1984), a cognate object denoting event (Manfredi 1993) or as a non-deleted copy of the fronted element (Nunes 2004; Kandybowicz 2006). Alternatively, Aboh and Dyakonova (2009) propose that the two verbal tokens are heads of two distinct chains that are formed in parallel.

With regard to the distribution of the discourse markers themselves, two types are found in some Kwa languages: those that occur in a space between the complementizer and the subject (e.g., focus and topic in Gungbe), and those that occur to the right periphery (e.g., the low tone question marker, the specificity marker $l\delta$, and the mark of surprise/insistence $m\delta n$). The two types are illustrated in the embedded clauses in (53) and (54) respectively.

(53) Un sè dò Súrù yà lésì ló wè é dà gànjí [Gungbe] 1SG hear COMP Suru TOP rice DET_[deixis] FOC 3SG cook well 'I heard that as for Suru, he cooked the rice really well'
(54)	a.	Súrù	dà	lésì	15	gànj î ?	[Gungbe]
		Suru	cook	rice	DET _[deixis]	well.INTER	
		'Did Su	ıru cook	rice wel	1'		
	b.	Đé	Súrù	wá	ló	nyón	gànjí
		as	Suru	came	DET _[deixis]	good	really
		'It is re	ally a go	ood thing	g that Suru ca	me as expected (or presupposed)'
	c.	Súrù	dà	lésì	15	món!	
		Suru	cook	rice	DET _[deixis]	PART	
		'Suru c	ooked th		inexpectedly)	!'	

In many Kwa languages, both types of discourse markers form a paradigm and may co-occur under proper pragmatic conditions. In Gungbe for instance, left peripheral and right peripheral markers may co-occur to the right edge. In such cases, the left peripheral markers realize the mirror image of their fixed order within the left periphery. Consider the following example where the Gungbe topic and focus markers co-occur in a yes–no question triggered by the sentence-final low tone.

(55)	Súrù	dà	lésì	15	wè	yầ?	[Gungbe]
	Suru	cook	rice	DET	FOC	TOP.INTER	
	'DID SURU COOK THE RICE as expected?'						

Observe from this example that while the focus marker linearly follows the topic marker in sentences like (53), it precedes the topic marker in (55). Data of this sort led has Aboh (2004, this volume) to suggest that the two types of discourse markers found in Kwa are both expressions of the left periphery which differ only as to their scope properties. Under this view, Kwa languages have scope taking discourse markers which may occur to the left or to the right depending on whether they have scope over a constituent inside the clause or the whole clause. Another group of discourse markers occurs to the right only because they scope over the whole clause. The unifying factor behind all these markers is that they attract the element under their scope to the position immediately to their left. This analysis implies that in languages where such scope taking discourse particles do not require fronting of the proposition they scope over, they will occur sentence-initially. A language that might lend some support to this view is Yoruba where a number of discourse particles occur in sentence-initial position. This is illustrated by the yes–no question marker $s\acute{e}$ (see Bamgboşe (1966) for discussion on other similar particles).

 (56) şé- işé mîi wà [Yoruba, Adapted from Bamgboşe 1966: 53]
Part.work other exist 'Is there another job?'

3.7 Conclusion

This chapter, together with Chapters 1 and 2, provide the reader with a bird's-eye view of the syntax of the Kwa languages. Though these languages are characterized as analytic, various aspects of their grammars (e.g., the VP, IP, and CP domains)

indicate that they involve rather complex structures that highlight the interaction between functional and lexical categories. As such, the study of these languages could provide a solid empirical ground for a theory of functional categories that in turn could feed into the theory of clause structure.

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Chapter 4 The Non-agreeing Subject Resumptive Pronoun in Yoruba¹

Oluseye Adesola

4.1 Introduction

Languages vary with respect to whether and how they use resumptive pronouns. They can be classified into three groups (Merchant 2004). Languages that do not show case alternations on wh-operators (e.g. Irish, Welsh, and Hebrew) use more resumptive pronouns than languages which sometimes show case alternations in wh-operators (e.g. Greek, Romanian, and Bulgarian). Furthermore, languages that always show case alternations on wh-operators (e.g. German, Russian, and Czech) do not use resumptive pronouns at all. If this classification is correct, Yoruba belongs to the first group in that it does not show case alternations on wh-operators. It uses resumptive pronouns so much to the extent that its use contributes to the absence of weak crossover effects in the language in movement derived constructions.² Yoruba has two types of resumptive pronouns – the agreeing and the non-agreeing resumptive pronoun does not agree in number and person with their antecedents (1).⁴ A non-agreeing resumptive pronoun does not agree in number and person with its antecedent (2). Whereas, the Yoruba

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²See Adesola (2005), Section 2.5 for more on this.

³Neither the agreeing nor the non-agreeing pronoun is sensitive to islands in Yoruba. For example, the non-agreeing resumptive pronoun can occur in wh-island as in (i).

⁽i) Adé. ni mo bèèrè pé kî ni ó, rà С Ade be Ι ask what he buy 'It was Ade that I asked what he bought'

⁴This is derived by a sort of null operator movement. However there are no reconstruction effects in Yoruba. See Adesola (2005), Section 3.3.4.

agreeing resumptive pronouns can occur in subject and object positions, the nonagreeing resumptive pronoun can only occur in the subject position.⁵

(1)	a.	[Àìna	á àti Q	lá] _i	ni	Adé	ń	nà	léhìn	ti	Òjó	bębę	fún	wọn _i
		Aina	and O	la	be	Ade	PROG	beat	after	COMP	Ojo	plead	for	3p
		'Aina	a and (Ola we	ere th	ne peop	ple who A	Ade bea	at after	Ojo had j	pleaded	l for the	m'	
	b.	[Àìna	á àti Q	lá],	ni	Adé	n	nà	léhìn	ti	Òjó	bębeę	fún	un,
		Aina	and O	la	be	Ade	PROG	beat	after	COMP	Ojo	plead	for	3s
(2)	a.	Ģlá	ni	NO	Ø	ó	ra	ișu						
		Ola	be		С	3s	buy	yam						
		'It w	as Ola	who	boug	ht yan	ns'							
	b.	Qlá	àti,	Adé	ni	[N	NO, Ø	[_т о́	[t;	[_{vp} ra	ișu]]]]			
		Ola	•	Ade		Cr	C	3s	VI I	buy	yam			
		'It w	as Ola	and A	Ade v	vho bo	ought yan	ns'		-	-			

Whereas, the pattern in (1) is common in languages that use resumptive pronouns, the pattern in (2) is not. Indeed, Yoruba is one of the very few languages that have a (non-agreeing) subject resumptive pronoun (see Boeckx 2003). Therefore, our goal in this chapter is to account for the occurrence of the non-agreeing resumptive pronoun in Yoruba. Here, I claim that it is inserted for EPP purposes. In essence, the reason why the non-agreeing subject "resumptive" pronoun ó is required in Yoruba is because a null operator cannot satisfy the EPP requirement of T. Thus, the inability of T to attract the null operator into its Spec position forces the insertion of an expletive pronoun in the subject position, to satisfy the EPP requirement of T. A consequence of this insertion process is that the subject resumptive pronoun is not required to agree in Phi-features with the external antecedent as is evident in (2). I conclude that the non-agreeing resumptive pronoun is derived by null operator movement⁶ (following Adesola 2005).

This chapter is organized as follows. Section 4.2 gives an overview of the accounts on resumptive constructions in the literature. In Section 4.3, I discuss the Yoruba non-agreeing subject resumptive pronoun. I discuss the possibility of agreeing subject resumptive pronouns in Yoruba in Section 4.4. Section 4.5 is the conclusion.

4.2 An Overview of Resumptive Constructions

I will start this section with a brief summary of what researchers have reported in the literature on resumptive constructions, after which I will give some examples of the analyses on the non-agreeing resumptive pronoun in Yoruba. Most of the researchers who have worked on resumptive constructions (including Permultter 1972, Borer 1984, Shlonsky 1992, Fox 1994, Pesetskey 1997, 1998, 1999, Aoun et al. 2001, Ntelitheos 2002, MCcloskey, 2002, and Boeckx 2003 among others) are interested in

⁵The occurrence of resumptive pronouns in the subject position in Kwa languages seems to be an areal feature of West African languages and has been part of the theoretical discussion within modern linguistics for more than two decades. (cf. Saah, this volume).

⁶See Adesola (2005) for the motivations for null operator movement in Yoruba.

questions relating to wh-movement, parasitic gaps, relativization and other related phenomena. They have expressed divergent views on how best to analyze resumptive pronouns. While some researchers (e.g. Borer 1984) argue that resumptive pronouns are not derived by movement, others, (e.g. Aoun et al. 2001), claim that some resumptive pronouns are derived by movement while some are not. Suner (1998) takes a position similar to Chomsky (1982) where resumptive pronouns are introduced or inserted at the PF. For Boeckx (2003) the occurrence of resumptive pronouns is due to a sub-extraction process, which strands the resumptive pronoun after its complement NP has been moved. Added to these diverse proposals, the distribution of resumptive pronouns is not the same across languages. For example, Safir (1986:685) notes that relative pronouns in English license resumptive pronouns in contrast to interrogative pronouns. Even in languages that allow resumptive pronouns relatively freely, there is no cross-linguistically uniform pattern. For example, while a gap and a resumptive pronoun can alternate freely in some languages (e.g. Hebrew⁷ (Boeckx 2003)) a resumptive pronoun is obligatory in all non-quantificational A-bar dependencies in some other languages (e.g. Greek (Tsimpli 1997)). The analyses proposed in the above references have been on both the agreeing and non-agreeing resumptive pronouns.

Some researchers concerned specifically with Yoruba have also made references to the occurrence of the non-agreeing subject resumptive pronoun δ . For Pulleyblank (1986) and Carstens (1986) the occurrence of non-agreeing subject resumptive pronouns is due to the necessity to avoid an ECP violation when the subject is moved to SpecCP in wh-movement and focus constructions. In the analysis proposed in Adewole (1998), the occurrence of the subject non-agreeing resumptive pronoun is traceable to the fact that clitics are allowed to have a number (feature) mismatch with their antecedents in some languages. Dechaine (1993) concludes that the δ is the same High Tone Syllable (HTS) that marks non-future tense in Yoruba.⁸ In a related work, Awobuluyi (1999) notes that σ is not a pronoun either in a derived or a non-derived structure in the language. His analysis is based on the parallelism that he draws between δ and the so-called High Tone Syllable (HTS). He concludes that δ is simply a High Tone Syllable wherever it occurs in Yoruba (3). The HTS is a sort of adverb according to his analysis. His analysis suggests that δ is an adverb in (3b).

(3)	a.	Súle	e	ra	àga	
		Sule	HTS	buy	chair	
		'Sule bo	ought a chair	.,		
	b.	Súlè	ni	ó	ra	àga
		Sule	be	HTS	buy	chair
		'It was	Sule who bo	ught a c	hair'	
	c.	Àga	ni	Súlè	rà	_

⁷Although, see Sharvit (1999:591). She reports that only a trace/gap is allowed in questions with quantifiers. A resumptive pronoun is not allowed there.

- (i) Olú àti Adé ni ó màa lo sí Íbàdàn ní òla
 - Olu and Ade be 3s will go to Ibadan at tomorrow

'Olu and Ade would be the ones that would go to Ibadan tomorrow'

⁸The fact that $\mathbf{\acute{o}}$ can co-occur with a future tense marker as in (i) below suggests that $\mathbf{\acute{o}}$ is not the non-future tense marker HTS.

chair be Sule buy 'It was a chair that Sule bought'

An implication of this, as shown in his paper, is that the subject position is similar to the object position in movement constructions, because, movements from both positions leave a gap (3b and 3c) contrary to the more usual analysis. Awobuluyi also claims that the subject position is always empty whenever a third person singular pronoun is used in the language as in (4)

(4) Ø ó Ø tètè dé 10. ó sì HTS HTS and quickly arrive go For: 'he went and he came back quickly'

Awobuluyi's analysis is (partially) compatible with my proposal in the sense that he argues that \dot{o} is not a pronoun in focus and wh-question constructions. However, his conclusion about the status of \dot{o} in such configurations is different from mine. Although his analysis looks promising, there are at least two reasons why it might not be optimal: one reason is empirical; the other is theoretical. First, the \dot{o} that occurs in (4) above and sentences like (5) below is the same third person singular pronoun. If it were just the high tone syllable as stipulated by Awobuluyi then (6), a counterpart of (4), in which I use a second person singular pronoun, should be acceptable in the language contrary to fact.

(5)	Ta who	ni be	ó 3SG	ra buy	àga chair			
	'who bou	ught a cha	air'					
(6)	* 0	ó	lọ,	0	ó	sì	tètè	dé
	You	HTS	go	you	HTS	and	quickly	arrive
	For: 'Yo	u went ar	nd you can	ne back q	uickly'			

In the present work, I will provide a unified analysis for the occurrence of \dot{o} in examples such as (3), (4), and (5).

Secondly; whereas, the problem of homonymy might becloud our understanding of the various occurrences of δ in Yoruba, it is not convincing that there is a motivation for Yoruba to violate the Extended Projection Principle only when a third person singular pronoun is to be used in the language as in Awobuluyi's analysis (4). I assume that δ is a subject third person singular pronoun in all its occurrences in (4). It could also be an expletive as in (5). It contributes the third person pronoun reading to the meaning of the sentence. It also satisfies the EPP requirement of T. In all, the true status of δ in wh-movement and focus constructions would be very clear once we situate its occurrence within the broader nature of what UG allows in languages with null operator movement.

In sum, a closer look at the divergent views and claims made in the above cited works shows that none of them captures the occurrence of the non-agreeing resumptive pronoun in Yoruba perfectly. In this chapter, I propose that the reason why Yoruba uses a default pronoun δ in the subject position is because a null operator cannot satisfy the EPP requirement of T. So, the clitic δ is not truly a resumptive pronoun. This suggests that the occurrence of the subject expletive pronouns in the

language is another consequence of the type of movement that is used to derive wh-questions and focus constructions in the language, namely Null Operator Movement (see Adesola 2005, 2006 for more on this), but see Aboh (1998), Awoyale (1997), Dekydtspotter (1992), Manfredi and Oyelaran (2000), Owolabi (1987), and Yusuf (1990) for a different approach. I discuss the derivation of the non-agreeing subject resumptive pronoun in the next section.

4.3 The Non-agreeing Subject Resumptive Pronoun

Languages use different strategies in subject extraction: non-agreement, restrictions on the form of the complementizer of the clause containing the subject (e.g. that-t effect in English), clausal pied-piping, and resumption (see Boeckx 2003, Richards 1997). I would say that Yoruba uses the last option: resumption.⁹ Some of the other languages, which use subject resumptive pronouns include Swedish (Engdahl 1985) and (Vata Koopman and Sportiche 1986), which use resumptive pronouns only in the subject position. Basically, a resumptive pronoun is obligatory whenever a subject (wh-)phrase or focused NP is moved in Yoruba (Yusuf 1995:74).

(7)	a.	Ta _i	ni	NO	Ø	ó	t _i	ra	ìwé
		who	be		С	3SG		buy	book
		'who bought the b							
	b.	[Adé ati Olú] _i	ni	NO	Ø	ó	t _i	ra	ìwé
		Ade and Olu	be		С	3SG		buy	book
'It was Ade and Olu who bought books'									

A pure gap is impossible in subject extraction in Yoruba. Thus, the examples in (8) are excluded. (This is similar to what Shlonsky (1992) reports for Palestinian Arabic.)

(8)	a.	*Ta _i	ni	NO	Ø	——i	ra	ìwé
		who	be	-			buy	book
	b.	*[Adé and Olú] _i	ni	NO	Ø	——-i	ra	ìwé
		Ade and Olu	be		С		buy	book
'Ade and Olu are the people who bought books'								

The fact that the examples in (7) are acceptable while those in (8) are not, shows that Yoruba is not like German where it has been reported that resumptive pronouns are never more acceptable than gaps (Alexopoulou and Keller 2003). A comparison of the person and number features of the resumptive pronouns in (7a) and (7b) shows that Phi-feature agreement is not required between the subject resumptive pronoun and its external antecedent. In (7a), the number feature of the resumptive pronoun is singular as is the number feature of its external antecedent – *Ta*. In (7b) however, the number feature of the resumptive pronoun is singular while the number feature of its external antecedent – *Adé ati Olú* – is plural. This is a feature mismatch.

⁹See Section 4.4 below for examples.

Two questions might be asked on the paradigm in (7) and (8):

- (9) a. Why is the subject resumptive pronoun required in Yoruba (in clear contrast with other languages)?
 - b. Why can (person/number) agreement fail between the resumptive pronoun and its external antecedent in (7b)?

I attend to the first question first. Here, I propose that the reason why a gap is not allowed in the subject position is derived from the type of movement that has taken place in the structure. Yoruba wh-questions are formed through null operator movement. Like movement in general, subject null operator movement is triggered by two features: the EPP requirement of the attracting probe and the corresponding feature that needs to be checked on the goal (Chomsky 1995). An A-bar chain is formed when a null operator moves to SpecCP. This has some consequences for syntax. For example, it has been known since Stowell (1987) and subsequent related work that null operator movement behaves in a way that is different from overt operator movement. Null operator extractions from the subject position yield unacceptable gaps (10a) (for example, in "as clause" (Stowell 1988)). The unacceptable example in (10a) contrasts with (10c) where the null operator moves from an object position (Stowell 1988). In the present system, we can conclude that the reason (10a) is excluded is because the null operator cannot satisfy the EPP requirement of the T. Thus, (10a) contrasts with (10b) where an overt wh-phrase is moved.

- (10) a. *John owns the gun, as shows/indicates that he is guilty
 - b. John owns the gun, which shows/indicates that he is guilty
 - c. Bill is a liar, as Mary already knows -

The unacceptability of sentences such as (10a) led Stowell (1988:10) to the generalization in (11).

(11) A null CP operator must be governed by a lexical [+V] head at D-structure.

This suggests that what is missing in the examples in (8) (Yoruba) and (10a) (English) is a kind of government for the subject trace of the null operator. This is a sort of ECP requirement.¹⁰ While examining related data, Browning (1987:255) suggests that a null operator cannot be a proper antecedent governor.¹¹ In related but somewhat different work, Rizzi (1990:60) concludes that the reason why some languages use resumptive pronoun in a subject position is because of

¹⁰Chomsky (1982:250) defines the Empty Category Principle (ECP) as in (i).

⁽i) The Empty Category Principle (ECP):

 $[[]_{\alpha} e]$ must be properly governed

¹¹She supposes though that the sentences with a subject trace of an infinitival or ECM clause would be less deviant than those with a subject trace in a complementizerless tensed clause. This is because, according to her (1987:276), tense plays an important role in the acceptability of sentences involving the trace of a null operator.

the requirement in (12). Unlike the accounts given by Stowell and Browning, Rizzi does not link the unacceptability of examples such as (8) and (10a) above (in which the presence of an illicit trace in the subject position yields unacceptability) to any properties of the null operator movement. Traces are licensed as defined in Rizzi (1990:60).

(12) A trace must be head governed.

For languages that use subject resumptive pronouns, he claims that the INFL is too low to head govern the subject trace in the relevant way while the COMP is inert for government in such languages.

The proposals made by Stowell (1988), Browning (1987) and Rizzi (1990) point toward an ECP analysis for subject resumptive pronouns.¹² If they are right, their assumptions confirm the proposal of Carstens (1986) on why Yoruba uses the subject resumptive pronoun.

Carstens (1986) and Pulleyblank (1986) argue that the reason why Yoruba must use a subject resumptive pronoun is because antecedent government is not available for the trace of the moved element. Koopman and Sportiche (1986) also gave an ECP analysis for corresponding data in Vata. These proposals look very attractive given our understanding of the UG then. However, the reasons why antecedent government was unavailable in the subject position remain obscure in those analyses.

In the present work, I assume that the unacceptability of the example in (10a) derives from the type of movement that takes place in the example: null operator movement. The null operator cannot be attracted to SpecTP to satisfy the EPP.¹³

It has been suggested in the literature (Chomsky 1995 among many others) that certain functional heads – notably T – require a specifier (/subject). This is known as the EPP requirement. Put another way, EPP is the structural requirement that certain configurations should have a subject (Lasnik 2001). Suppose then that a null operator cannot satisfy the EPP requirement of T. Languages that have another way of doing subject extraction could move the wh-phrase overtly as in (10b) while the languages like Yoruba, which have only null operator movement, use an expletive pronoun to satisfy the EPP. This assumption follows from the generalization in (13).

(13) A null operator cannot satisfy the EPP.

¹²The ECP has been reanalyzed in term of *the freezing principle* in Rizzi (2004:11)

⁽i) The Freezing Principle:

A phrase meeting a criterion is frozen in place.

The idea is that the subject position is filled by a noun phrase in order to satisfy the subject criterion (that is, the EPP). Thus, the NP cannot be moved out of the subject position. (I think that this assumption would not account for the reported cases of ECP violations in non-subject positions.) ¹³This fact could be related to what has been reported for Icelandic in which phrases with no phonological contents cannot satisfy the EPP (Holmberg 2000; Holmberg and Hroarsdottir 2002).

The nature of (13) becomes clearer in light of the Minimalist Program. Movement happens only as a last resort. A goal α can be attracted by a probe β if and only if moving α would lead to the satisfaction of either some morphological requirement of α or β which could not be satisfied otherwise. Suppose that the feature that the probe T requires in a potential goal is the D-feature as proposed in Chomsky (1995: 232).

Thus, the Extended Projection Principle (EPP) plausibly reduces to a strong D-feature of I ...

Suppose further that a null operator does not have a D-feature. It follows that, T cannot attract a null operator to the SpecTP because such movement would violate last resort, no morphological requirements are being satisfied. We can conclude then that (13) is derived from the UG principle in (14) plus Last Resort.

(14) A null operator does not have a D-feature.

The inability of T to attract the null operator to its Spec would necessitate accommodating another process to satisfy the EPP requirement of T, leading to the occurrence of an expletive pronoun in the subject position in Yoruba.

Broadly speaking, there are two plausible ways to account for the occurrence of the non-agreeing "resumptive" pronoun (analyzed here as an expletive pronoun) in the language. One way is to assume that the pronoun is derived by movement, in which case the SpecTP serves as an intermediate landing site for the moved null operator. Under this assumption, the resumptive pronoun is like a pronounced trace of the moved phrase (see 7b). The second option is to assume that the expletive pronoun is derived by direct merge to satisfy the EPP requirement of T (see 7a).

(7)	a.	Ta	ni	NO	Ø	ó	t,	ra	ìwé	
		who	be	-	С	3SG		buy	book	
		'who bought the books?'								
	b.	[Adé àti Olú] _i	é àti Olú], ni NO, \emptyset ó,				t,	ra	ìwé	
		Ade and Olu	Olu be C 3SG b						book	
		'It was Ade and Olu who bought books.'								

I consider the two hypotheses in brief below. I assume that each of them involves null operator movement and that the so-called focus marker *ni* is in fact a predicate head because it is verbal. Also, I assume that the phrase in the specifier position of the predicate head is base generated. (See Adesola 2005 for more on these.)

4.3.1 Hypothesis I: The Non-agreeing Subject Resumptive Pronoun Is Derived by Movement

One of the two possible ways to derive (7) is to assume that SpecTP is indeed an intermediate landing site for the null operator on its way from SpecvP to SpecCP. Under this possibility, we could say that the reason why there is a feature mismatch

between the resumptive pronoun and the null operator as in (7b) is because of a partial deletion of the trace of the null operator, such that only the features that are minimally needed for convergence are preserved in the SpecTP in (7b). The base generated external antecedent in (7b) - [Adé àti Olú] - does not bind the resumptive pronoun, since their features do not match perfectly. Base on this hypothesis, the derivation of (7a and b) would proceed as in (15). Here and in the subsequent examples and structures, OP = operator feature, ø-feature = number and person, FOC = focus feature, EPP = Extended Projected Principle, <math>[u] = uninterpretable, [i] = interpretable, wh = wh-phrase feature, sg./singular = singular, pl./plural = plural, and 3^{rd} = third person.



4.3.2 Hypothesis II: The Non-agreeing Subject Resumptive Pronoun Is Derived by External Merge

The second possible way to derive the examples in (7) is for the null operator to skip SpecTP entirely on its way from SpecvP to Spec CP. Under this hypothesis, SpecTP would be empty and the EPP requirement of T will force the insertion of an expletive pronoun. The (base generated) external antecedent R-binds the null operator directly and by transitivity R-binds the trace of the null operator (which is i-bound by the null operator) in SpecvP. The null operator is not co-indexed with the expletive pronoun at all. The derivation would proceed as in (16). No part of the A-bar chain is pronounced, on this view.



The two derivations in (15) and (16) seem to be plausible. However there is no obvious language internal evidence in support of the derivation in (15). In contrast, it is possible to find some language internal support and probably some cross-linguistic support for the derivation in (16). I turn to this in the next subsection.

4.3.2.1 Language Internal Support for Hypothesis II

4.3.2.1.1 Expletive Constructions

Support for the expletive pronoun insertion advocated in hypothesis II can be found by comparing it with uncontroversial expletive constructions in the language. In (16), the insertion of an expletive pronoun is more like what is attested in the regular expletive constructions in the language. Consider (17) which involves a "raising" verb $j\rho$ 'seem'.

(17)	Ó	jọ	pé	Olú	ti	ní	ìyàwó
	It	resemble	that	Olu	ASP	have	wife
	'It a	ppears that C					

In (17), the expletive pronoun ϕ is inserted to satisfy the EPP requirement of T. This is done by merge rather than by move. The expletive pronoun performs the same function in the following examples (18).

(18)	a.	Ó	jọ	pé	ebi	ń	pa	Adé
		it	resemble	that	hunger	PROG	kill	Ade
		'It see	ms that Ade i	s hungry'				
	b.	Ó	jọ	pé	òjò	ń	rò	nîta
		it	resemble	that	rain	PROG	soft	at-outside
'It seems to be raining outside'								

Note that the expletive pronoun seen in (16)–(18) is identical to the so-called "resumptive" pronoun in (19). On this hypothesis, the \dot{o} in (19) is derived by merge after the null operator has skipped the SpecTP on its way to SpecCP.

(19)	Ta _i	ni	NO	ó	t _i	ra	ișu
	who	be		3SG		buy	yam
	'who	bought	yams'				

This expletive insertion strategy explains why the element in SpecTP does not agree in \emptyset features (person and number) with the null operator in SPECCP, which is bound by the c-commanding external antecedent as in (20).

(20) $\begin{bmatrix} P_{\text{redP}} & [\text{Olú ati Adé]}_i & \text{ni } \begin{bmatrix} P_{\text{CP}}NO_i & [P_{\text{IP}} & \text{o} & \text{t}_i & \text{ta işu}] \end{bmatrix} \\ & [iFOC, i\emptyset(3^{\text{rd}}, \text{PL})] & [iFOC, i\emptyset(3^{\text{rd}}, \text{PL})] & [3\text{rd}, \text{SG}] & [iFOC, i\emptyset(3^{\text{rd}}, \text{PL})] \end{bmatrix}$ 'It was Olu and Ade who sold yams'

Similarly, all cases in which the subject resumptive pronoun does not agree in the person feature with the null operator as in (21) through (24) can also be explained with the expletive insertion strategy.

(21)	Èmi _i I	ni be	NO _i		ό _i 3SG	ra buy	àpo bag	1st i	Person Antecedent
	1 was	s the on	e who t	ought	a bag				
(22)	a.	Àwa _i we 'We w	ni be vere the		$D_i \otimes$		ό _i 3SG ht a bag'	ra buy	àpò bag
	b.	*Àwa	ni	NO	D _i Ø		wón,	ra	àpò
		we	be		1		3PL	buy	bag
for 'We were the people who bought a bag'									
(23)	Ìwọ _i		NO_i	Ø		ra	1	2nd	Person Antecedent
	you	be	.ho hou	aht a l	3SG	buy	bag		
	n wa	s you w	no bou	ignt a t	bag				
(24)	a.	Èyin,	ni	NO	ø	i	ó,	ra	àpo
		2PL	be		1		3SG	buy	bag
		'You v	vere the	ones	who bo	ught	a bag'		
	b.	*Èyiı	n _i ni	N	0 _i 4	Ø	wọn _i	ra	àpò

2PL be 3PL buy bag 'You were the ones who bought a bag'

Note that the uncontroversial expletive δ that is seen in expletive constructions is also invariant and does not depend on (for example) the person /number feature of the embedded subject:

(25)	a.	Ó	jo	pé	Olú	ni	owó	lówó		
		3SG	resemble	that	Olu	have	money	in-hand		
		'It see	ms that Olu i	s rich'						
	b.	Ó	jọ	pe	Olú	àti	Adé	ni	owó	lówó
		3SG	resemble	that	Olu	and	Ade	have	money	in-hand
		'It see	ms that Olu a	and Ade	are ric	h'				

The sentence becomes unacceptable if the form of ó changes to agree with the number feature of the embedded subject.

(26)	*Wón	jọ	pe	Olu′	àti	Adé	ni′	owó	lówó
	3PL	resemble	that	Olu	and	Ade	have	money	in-hand
	for: 'it appears that Olu and Ade are rich'								

This is parallel to the expletive δ that is found in the subject positions in focus constructions and local subject wh-movement constructions.

Further language internal support for the expletive insertion hypothesis can be found if we explore the expletive constructions in the language a little more. Therefore, in the next sub-section, I will discuss copy-raising constructions in Yoruba.

4.3.2.1.2 Copy Raising

The example in (27a) is derived by raising [Adé àti Olú] from the SpecTP of the embedded clause into the SpecTP of the higher clause just as (27b) and (27c) are derived. These come from the same underlying source as the regular expletive constructions exemplified in the preceding subsection. The only difference is that the subject for the higher clause is derived via movement instead of by external merge as in the basic expletive construction in (25a).¹⁴ The embedded NP raises to the matrix clause to satisfy the EPP requirement of the higher clause.

(27)	a.	[Adé àti Olú] _i	jọ	pé	wón _i	ní	owó
		Ade and Olu	resemble	that	3PL	have	money

¹⁴For example, the basic expletive construction in (i) is derivationally related to the copy raising example in (ii)

(i)	ó 3sg 'It ap	jọ resemble pears that ra		rain		rọ̀ fall		(derived sentence) outside
(ii)	rain	jọ resemble appears to	that	3sg	PROG	rọ̀ fall	nîta outside	(derived sentence)

'Ade and Olu seem to be rich'

b.	òjò _i	jọ	pé	ó	ń	rò	nîta		
	rain	resemble	that	3SG	PROG	Fall	outsid	e	
	'Rain appears to be falling outside'								
c.	ebi	jọ	pé	ó	'n	ра	Adé	nî	Àárọ
	hunger	resemble	that	3SG	PROG	kill	Ade	at	morning
	'Hunger seems to be affecting Ade in the morning'								

In (27a), the NP: [Adé àti Olú] undergoes A-movement from the SpecvP, through the SpecTP of the lower clause to the SpecTP of the higher clause for EPP purposes. The derivation of (27a) would proceed as in (28). The same process derives (27b) and (27c). The latter are interesting because they are idiomatic. For example, the NP *ebi* 'hunger' that is raised in (27c) does not refer to the physical appearance of an object.

It is important to note that when an NP is raised from the subject position as in (28) Phi-feature agreement is required between the resumptive pronoun and its c-commanding antecedent. This is because the NP actually lands at the SpecTP of the lower clause to satisfy the EPP requirement of T. Agreement is thus required between the resumptive pronoun and its antecedent. This explains why (29) in which the resumptive pronoun does not agree in Phi-feature with its antecedent is excluded.



Suppose that partial deletion existed in Yoruba as implied by hypothesis I, then it could apply to the middle link of the A-chain in (28), to give (29).

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(29)	*[Adé	àti	Olú] _i	jọ	pé	ó	t _i	ni	owó
	[\$(3 rd , PL)]				[\$(3 rd , PL)]		[\$\phi(3 rd , PL)]		
	Ade	and	Olu	resemble	that	they		have	money
	for: 'Ade and	Olu se	eem to b	be rich'					

But (29) is bad. This shows that the language does not allow feature deletion. In contrast, suppose null operator cannot check EPP features (as in hypothesis II). That does not apply to Raising – no null operator. So, this theory predicts correctly that the two subject pronouns will be different. We can conclude therefore, that the expletive pronoun is inserted for EPP purposes in (3). This is because the null operator cannot be attracted to SpecTP to satisfy the EPP requirement of T. Furthermore, an expletive is not inserted in (29) – it is not even in the numeration -since the trace of the moved NP can satisfy the EPP requirement of T. This means that the null operator does not bind the expletive subject in the derivation in (15), otherwise feature mismatch would not have been allowed.

The phenomenon that I have described with the examples in (27a) through (27c) involves a type of argument movement that is known as copy-raising in the literature (Roger 1974). Copy-raising is different from the regular raising constructions in some non-trivial ways. The moved NP in the regular raising construction moves from a thematic position that does not have case into a non-thematic position which has case. See (30). In contrast, the NP that moves in copy-raising constructions moves from SpecvP into a argument position that has case (that is, lower SpecTP) before it moves to the matrix SpecTP (that is, higher SpecTP) (31).

- (30) Peter seems to be in trouble
- (31) Peter seems like he is in trouble

The name "copy-raising" is derived from the fact that the moved NP in a copyraising construction leaves a pronominal copy in its extraction site. It must be the closest possible NP that could be moved in line with the predictions of the MLC. Copy-raising is characterized in general terms in (32).

(32) Copy Raising:

a construction in which some constituent appears in a non-thematic position with it's A-position occupied by a pronominal copy.

(cf. Potsdam and Runner 2001, following Roger 1974)

Copy-raising is not peculiar to Yoruba and English. It has been reported in many other languages. This suggests that it is not an uncommon phenomenon in languages. I give examples from two additional languages – Igbo and Haitian Creole – below.

(33)	Ézè _i	dI	ḿ	kà	O _i	hŨ-rŨ	Adá	Igbo (Ura 1998)
	Eze	seems	to-me	COMP	he	see-ASP	Ada	
	'Eze se	ems to me	e like he	saw Ada'				

(34) Jan sanble li pati Haitian Creole Déprez (1992)

John seems he leaves

For all the four languages exemplified here, the moving NP raises from the SpecTP of a tensed clause. This is clearly at odds with the *Tensed S Condition* (Chomsky 1973) as redefined in Potsdam and Runner (2001), which bars Argument movement from a tensed clause.

(35) Tensed S Condition

A-movement is impossible from a tensed clause (Potsdam and Runner 2001).

There is no doubt that the Tensed S condition is not respected in copy-raising. Simply put, the construction shows that the effect of the Tensed S Condition is not a principle of UG to say the least.

Another way of stating this theoretical concern with respect to copy-raising is by considering the nature of the A-chain that it forms which appears to have more than one case.¹⁵ Déprez (1992) attempts to address this issue by claiming that the pronominal copy that the moved NP is said to leave in the extraction site is not part of the A-chain. According to her analysis, *Jan* is base generated in (an embedded) Spec₂ as the subject of something similar to a small clause. She notes that the pronominal copy *li* is a predicate variable that transforms the small clause into a one place predicate which assigns its external theta role to *Jan*. Thus the embedded tensed clause is the predicate of *Jan*. *Jan* receives theta in its base position but it has to raise to SpecTP of the higher clause for case. This is much like what happens in regular raising constructions. In that sense (37) is derived from (36).

(36)	[[e]	sanble	[_{sc} Jan	[_{PRED}	li	pati]]]
		seems	John		he	leaves
(37)	[Jan _i	sanble	[_{sc} t _i	[_{PRED}	li	pati]]]
	John	seems			he	leaves

This looks like a promising account. However, Deprez's account does not extend to the Yoruba facts described above. For example it is impossible to reconcile the small clause account for copy-raising with the fact that the lower clause in Yoruba could have a different tense from the matrix clause (38). This is not expected if it were a small clause.

(38)	[Adé àti Olu]i	jọ	pé	wón _i	yóò	nĭ	owó
	Ade and Olu	resemble	that	3PL	will	have	money
	'Ade and Olu se	em like they	will bec	ome rich'			

The non-agreeing resumptive pronoun is not allowed in such configuration:

(39)	* [Adé ati	Olú] _i	jọ	pé	ó _i	yóò	ni′	owó
	Ade and	Olu	resemble	that	3SG	will	have	money

¹⁵I assume that this is not a problem. It is possible for example that a nominative case can be checked more than once.

Thus we can conclude that the pronominal copy is part of the A-chain formed in copy-raising. It is a realization of the nominative case of the moved NP. So, real resumptive pronouns completely agree with their antecedents in Phi-features. This implies that, the "expletive" pronoun found in instances of subject extraction in Yoruba is not a true resumptive.

4.3.2.2 Cross-Linguistic Support for Hypothesis II

In this subsection, I will provide some cross-linguistic evidence to show that a null operator lacks a D-feature in all languages. This would in turn support our hypothesis II, which seeks to explain the occurrence of the subject expletive pronoun as an item that is necessarily inserted for EPP purposes. I will provide a few examples from two unrelated languages: English and Edo. I start with English.

As we noted above, it has been reported in English for example that null operator movement from the subject position is illicit. This explains why the example in (41) is bad.

(40) John owns the gun, which shows/indicates that he is guilty.

(41) *John owns the gun, as – shows/indicates that he is guilty.

Browning (1987) notes that a null operator is (probably) a PRO in an A-bar position. If this is correct, it predicts that the unacceptability of the example in which a null operator is moved from the subject position in English (41) could be replicated for PRO in A-position. This prediction is borne out. Baltin (1995) reports that attracting PRO to SpecTP for EPP purposes is also deficient – in control related sentences – in English.

(42) The children tried to PRO all stay up late

(43) * The children tried all PRO to stay up late

This confirms that there is a D-feature deficiency in PRO, alias the null operator.

Having shown that the inability of a null operator to satisfy the EPP requirement of T is not peculiar to Yoruba, the remaining issue is to show that the insertion of an expletive pronoun in cases when a null operator skips the SpecTP is not peculiar to Yoruba. We can find supporting data in Edo (Uyi Stewart, personal communication). Edo patterns exactly like Yoruba in the relevant respects.

(44)	a.	*Ozo	ore		gbe	Uyi	ewe		
		Ozo	be		kill	Uyi	goat		
	b.	Ozo	ore		gbe	Uyi	ewe		
		Ozo	be	3SG	kill	Uyi	goat		
		'It was (Ozo who	killed Uyi	's goat'				
	c.	Ozo	kere	Osagie	ore	<i>o</i>	gbe	Uyi	ewe
		Ozo	and	Osagie	be	3SG	kill	Uyi	goat
		'It was (Dzo and	Osagie wh	o killed U	Jyi's goa	ıt		

The example in (44b) suggests that the inserted expletive pronoun: ϕ is not required to agree in Phi-features with its external antecedent. Indeed, the expletive pronoun that is used for EPP purposes in (44b) and (44c) is the same item that is used in the regular expletive constructions in the language.

(45)	Ņ	rho	vbe	(*ibare)
	3SG	rain	Loc	outside
	'It is ra			

It is not a coincidence that we have observed exactly the same pattern in Yoruba. These data show that our analysis is on the right track. Therefore, we can conclude in favor of hypothesis II that if a null operator cannot satisfy the EPP then there is no need for the null operator to land in the SpecTP in Yoruba. This is why it skips SpecTP on its way from SpecvP to Spec CP in the derivation in (15). Since there is no other way to do an A-bar movement from the subject position other than through a null operator movement in Yoruba, the derivation is fixed by inserting an expletive pronoun to satisfy the EPP requirement of T.

Let us give a quick recap. I have shown in this section that the reason why the non-agreeing resumptive pronoun occurs in the subject position in Yoruba is because the null operator cannot be attracted to SpecTP. The reason why it cannot be attracted is because it cannot satisfy the EPP since it lacks the necessary feature (that is, D-feature) for satisfying the EPP. Thus it would be uneconomical to move a null operator to SpecTP. This explains why null operator movement from the subject position is unacceptable in languages like Danish, Icelandic, Edo, and Yoruba among others. In all the languages an alternative derivation has to be provided.

We could then ask if only a non-agreeing resumptive pronoun is allowed in Yoruba. I attend to that question in the next subsection.

4.4 Agreeing Subject Resumptive Pronouns

It is not impossible to find an agreeing resumptive pronoun in subject position in Yoruba.¹⁶ This is especially possible if we consider focus constructions in the language. The following are examples of cases where a subject resumptive pronoun can agree with its external antecedent in Phi-features.

¹⁶This means that both the agreeing and non-agreeing resumptive pronouns are possible in the subject position (even in embedded subject positions). Either ó or *wón* is good in the embedded subject position in (i). The same is true in the relative clause in (ii). Gaps are not allowed in any of the examples.

⁽i) Olú Adé Òjó pé ati ni o/wón so ra işu Olu Ade Ojo and be say that they buy yams 'It was Ollu and Ade that Ojo said bought some yams'

⁽ii) Àwon obìnrin ti Olú rò pé ó/wọn ti lọ sí Boston kò tíí kúrò ni New York. They woman that Olu think that they ASP go to Boston NEG leave PRT New York 'The women who Olu thinks that they have gone to Boston are still in New York.'

(46)	a.	Èmi	ni	то	ra	àpò	1st Person
		1SG	be	1SG	buy	bag	
		'I was the	one who boy	ught a bag'			
	b.	Àwa	ni	а	ra	àpò	
		1PL	be	1PL	buy	bag	
		'We were t	he people w	ho bought a	bag'		
(47)	a.	Ìwọ	ni	0	ra	àpò	2 nd Person
		2SG	be	2SG	buy	bag	
		'it was you	ı who bough	it a bag'			
	b.	Ęyin	ni	ę	ra	àpò	
		2PL	be	2PL	buy	bag	
		'You were	the ones wh	io bought a b	ag'		
(48)	a.	Òun	ni	ó	ra	àpò	3 rd Person
		3SG	be	3SG	buy	bag	
		'It was hin	n who bougł	nt a bag'			
	b.	Àwọn	ni	wọn	ra	àpò	
		they	be	they	buy	bag	
		'They were	e the people	who bought	a bag'		

Thus we can conclude that there are two possible structures for movement from the subject position in Yoruba. When the moving subject undergoes null operator movement, it skips the SpecTP necessitating the insertion of an expletive pronoun for EPP. On the other hand when feature movement applies the lower copy has full features and can satisfy EPP in the usual way. (Both the head and the tail of the chain are pronounced in this kind of feature movement. See Pesetsky 2000 for more on it.) The derivation for this would look like (49). This can be compared with (50), which is the null operator movement derivation, which we have seen several times.



'It was Olu and Ade who bought yams'



Thus the derivation of the agreeing subject resumptive pronoun is slightly different from the derivation of the non-agreeing resumptive pronoun because of the types of movement involved in each case: feature movement for the agreeing resumptive pronouns and null operator movement for the non-agreeing resumptive pronouns.¹⁷

Richards (1998) provides a somewhat different analysis for the non-agreeing resumptive pronoun. Consider (51)

(51)	Та	ni	ó	ń	korin
	Who	be	3SG	PROG	sing
	'Who i	s singing	g?'		

According to Richards' analysis, the formal feature in SpecvP divides into two: [ø] and [wh]. The [ø-feature] moves to check the [ø] in SpecIP while the [wh-feature]

¹⁷The fact that the non-agreeing resumptive pronoun is more commonly used in that position suggests to us that null operator movement is preferred to feature movement.

moves to check the wh-feature in SpecCP. Each of them is pronounced because they are strong features. The subject ø-feature chain is headed by the resumptive pronoun while the wh-feature chain is headed by the wh-phrase. The derivation proceeds in the following manner:

(52) the formal feature in SpecvP splits into two: $[\phi]$ and [wh]



(53) the [\u03c6] feature moves to Spec IP



(54) The [wh] feature moves to Spec CP



The basic assumption of Richards' analysis is compatible with the analysis that we have proposed in this chapter. The two analyses are only different in the ways in which they are executed. The main advantage of my analysis is that my account for the agreeing resumptive pronouns in A-bar movement also captures how the agreeing resumptive pronouns are derived in A-movement (that is, in copy-raising) without any modification. In the feature splitting approach, Richards does not discuss why agreement is enforced in cases like (49) above that involve the agreeing resumptive pronouns.

4.5 Conclusion

In this chapter, I have made a careful exploration of the occurrence of the nonagreeing subject resumptive pronoun in Yoruba. I compared the facts of Yoruba with what is attested in other languages. I have shown in this chapter that the reason why an expletive pronoun is inserted in subject position in Yoruba is because (the trace of) the null operator cannot satisfy the EPP requirement of T.¹⁸

- (i) Ta_i ni NO_i Ø òun_i nìkan ra ìwé who be C he alone buy book 'who bought a book alone'
- (ii) *Ta_i ni NO_i Ø <u>__i</u> nìkan ra ìwé who be C alone buy book

¹⁸ Up till now, we have been illustrating all our claims with weak resumptive pronouns. This does not mean that Yoruba does not have strong resumptive pronouns. An example of this is the 3rd person singular strong resumptive pronoun as in (i). (ii) is also out because of the gap.

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The relevant question then would be – why does Yoruba allow both the weak and strong subject resumptive pronouns? The possibility of the weak and the strong subject resumptive pronouns in Yoruba posses some challenge to the theories of pronoun complementarity (competition) (Safir 2004). For example, the weak resumptive pronoun is expected to out-compete the strong pronoun when both of them are available given the weak pronoun competition scale/hierarchy. Indeed, the only thing that might tease them apart is if the interpretations of (iii) and (iv) are different. As of now this is not obvious. The only thing that we can say is that there is a possibility of an intervention effect of the *'adverb/modifier': nikan* 'alone' on the occurrence of the strong pronoun. It seems that it connotes some sense of comparison. However, the same is possible if the adverb is used with the weak pronoun. Consider (iii) and (iv).

- (iii) Ta_i ni NO_i \emptyset ϕ_i nìkan ra ìwé mẹta who be C he alone buy book three 'who bought three books alone'
- (iv) Ta_i ni NO_i Ø òun_i nìkan ra ìwé meta who be C he alone buy book three 'who bought three books alone'

Note though that, an adverb/modifier is always required with the strong pronoun whenever it is used as a resumptive. This contrasts with the weak pronoun with which a co-occurrence with the 'adverb' is optional. Also, structurally, nì*kan* could be analyzed as a modifier for the strong pronoun ∂un in the above sentences. Indeed, nì*kan* can be moved with ∂un for focusing in Yoruba. In contrast, nì*kan* cannot be analyzed as a modifier of the weak pronoun in (iii).

(v) òun nìkan ni Sọlá ríníọjà

he alone be Sola see at market

'It was only him that Sola saw at the market.'

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Chapter 5 Relative Clauses in Akan

Kofi K. Saah

5.1 Introduction

Relative clauses are embedded/subordinate clauses that typically serve as noun modifiers within an NP structure. Givon (2001, II: 175) defines relative clauses as "clause-size modifiers embedded in the noun phrase". Semantically, a relative clause may be characterised as a clause that "incorporates, as one of its terms, a nominal which is co-referential with a nominal outside of the clause" (Downing 1978: 378, cited in Timm 1988: 79). Whether viewed syntactically or semantically, the typical relative clause usually consists of an initial NP (the antecedent or head) followed by the modifying clause. Together, they make up one complex NP, which can perform any of the grammatical functions in a sentence such as subject and object.

In this paper, I examine the nature, formation and function of relative clauses in Akan. I also discuss the noun phrase (NP) positions which are accessible to relativization, the morpheme or particle that introduces the clause, and the type(s) of NPs that may serve as the heads of relative clauses. In addition, I discuss the issue of restrictive and non-restrictive relative clauses; I propose that the basic relative clause has restrictive uses only. However, Akan uses an extraposed relative clause for "appositive" purposes. The rest of the paper is organised as follows: Section 5.2 deals with issues pertaining to the formation of relative clauses and Section 5.3 deals with the various NP positions that are accessible for relativization. In Section 5.4, I discuss the issue of restrictive and non-restrictive clauses, while in Sections 5.5-5.7, I deal with the types of NPs that can be heads of relative clauses respectively. Section 5.8 is the conclusion.

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5.2 Relative Clause Formation in Akan

Relative clauses in Akan typically have the structure in (1):¹

(1) a.	[_{IP} Me-hu-u [_{NP}	obáá [_{CP}	áà [_{IP}	Kofi	wáré-e	no]	nó]]].					
	1SG-see-PST	woman	REL	K.	marry-PST	3SG	CD					
	"I saw the wom	"I saw the woman whom Kofi married."										
b.	[_{IP} [_{NP} əbáá]	[_{cP} áà	[_{IP} อ-พส์	iré-e	Kofi]	nó]	fi	Aburi].				
	Woman	REL	3SG-m	arry-PST	К.	CD	be.from	A.				
	"The woman who married Kofi is from Aburi."											

These examples exhibit the salient morpho-syntactic properties of Akan relative clauses. In (1a) the object of the verb hu "to see" is made up of an initial NP (the antecedent or the head) followed by an embedded clause. This NP + Relative Clause structure functions as the object of the sentence. In (1b) the NP + Relative Clause structure functions as the subject of the sentence. In either case, the antecedent NP occurs on the left periphery of the clause and is followed by the relative clause marker $\dot{a}a$. The relative marker is then followed by a complement IP that is in turn followed by no "that", which is the same as the definite determiner in Akan. No is discussed in Section 5.2. Inside the complement IP in (1a) is the resumptive pronoun no "him/her" which is co-referential with the head NP and agrees with it in number. It occupies the canonical position of the relativized element (i.e., the object position in this case). In (1b) it is the subject position in the relative clause that is relativized, and we see a subject resumptive pronoun a 's/he' in the subject position in the complement clause. The case of the pronoun, therefore, is indicative of the position of the relativized item within the relative clause itself.

The two examples show that Akan relative clauses have the following salient features:

- i. A head/antecedent NP
- ii. An obligatory relative clause marker áà
- iii. A resumptive pronoun in the relativized position
- iv. A clause-final determiner

The examples also reveal that relative clauses are post-nominal in Akan (as in English). This contrasts with languages like Afar (Lowland East Cushitic, Watters 2000: 226), Basque and German (Tallerman 1998: 84–85) as well as Japanese and Turkish (Payne 1997:326) in which the relative clause may precede

¹The following abbreviations have been used: Ak. = Akuapem; As. = Asante; CD. = clausal determiner; CONS. = consecutive marker; DEF. = definite determiner; Fa. = Fante; FM. = focus marker; INANIM. = inanimate; INDEF. = indefinite determiner; PL. = plural; PERF. = perfect aspect; POSS. = possessive; PRES. = present tense; PROG. = progressive aspect; PST. = past tense; REL. = relative complementizer; SG. = singular person.

the head noun; or those like Bambara in which the head noun appears "inside the relative clause itself" (Tallerman 1998).

In the subsequent sections, I discuss the features of relative clauses listed in (i) to (iv) and indicate their significance in the formation of Akan relative clauses.

5.2.1 The Relative Complementizer

Languages differ in the kind of elements that introduce the relative clause, and sometimes the exact nature of these elements is not clear-cut. English, for example, uses "case-marked" relative pronouns which "are derived historically from case-marked interrogative pronouns such as who, whom, when, etc." (Givón 1993: 126). Timm (1988) shows that a particle, *a*, is used both as a relative pronoun and as a complementizer in Breton.

Akan uses a particle \dot{aa} (said with a falling tone) to mark the beginning of the relative clause.² As shown in the examples in (1), this particle comes after the head NP and it selects a sentence/clause as its complement. I will analyse it as a relative complementizer (REL. COMP) for the following reasons: first, it does not occur anywhere else in Akan, neither is it utilised for any other purpose (for instance, as a personal pronoun or an interrogative pronoun), as is the case of the so-called relative pronouns in English, which are also used in interrogatives. Second, there is no person, number, gender or case agreement between this relative complementizer and the head noun. In other words, no matter the nature or type of the head NP, the complementizer is always the same. The relative complementizer is compulsory in Akan. When deleted, the sentence is rendered ungrammatical. This is shown in (2) below:

(2) *[_{NP} M-máá_i [_{IP} Kofi sómá-a won_i] nó_{NP}]] á-!bá.
PL-woman K send-PST 3PL CD PERF-come
"The women whom Kofi sent have come."

This is unlike the situation in a language like English where sometimes the relative pronoun can be dropped in cases involving 'object extraction' without affecting the grammaticality of the construction.

Yoruba appears to be like Akan in that it uses an invariant form $t\dot{t}$, which is glossed "which" (Awobuluyi 1977) or "that" (Bamgbósé 1992) to introduce relative clauses irrespective of the features of the constituent being relativized. It occurs in sentences like (3):

²The relative complementizer is represented by the letter *a* in Akan orthography but I will follow Schachter (1973:23) in representing it as $\dot{a}\dot{a}$ to reflect its actual phonetic realization. This has the added advantage of distinguishing this particle from other particles in the language that are also represented in the orthography by the letter *a*.

Yoruba (3) Olè tí

3)	Ole	ti	ode	pa	ga	
	Thief	which	guard	kill	be.tall	
	"The thic	ef whom t	he guard	killed w	as tall."	(Awobuluyi 1977, ex.1)

Theoretically, one could postulate that languages of the world may be divided into those like English and German, which use relative pronouns, and those like Akan and Yoruba, which use relative complementizers to introduce relative clauses.

This section shows that Akan has an invariant relative clause complementizer whose function is to introduce the relative clause. Working in tandem with a clause-final determiner (see Section 5.2), it distinguishes the relative clause from other main clauses, which Akan relative clauses resemble as a result of the use of the resumptive pronoun strategy (see Section 5.3).

5.2.2 Relative Clauses and Determiners

In this section, I discuss two main issues. The first is that the head of the relative clause can occur with or without a determiner. The second issue is that the relative clause terminates with a determiner. Two demonstrative elements occur in the position of the clause-final determiner, and their semantics has to be compatible with the determiner that modifies the head, if there is any.

Determiners in Akan include the following: (i) *no* "the". *No* is specific/definite and its use indicates that the entity to which the NP refers is away from the speaker/ place of utterance in time and space (i.e. it is 'distal'); (ii) yi "this" is also specific/ definite. It contrasts with *no* in that it is used for entities that are proximate in time or space to the speaker or the place of the utterance (i.e. it is 'proximal'); (iii) *bi* "a (certain)" is specific but it is neither definite nor proximal. Others are the locative determiners *ha* "here" and *hə* "there" which are proximal and non-proximal respectively.

Now consider the following examples:

(4)	a.	[_{NP} [_{NP} Abofrá]	[_{CP} áà [_{IP} Kofi	hú-u	no]]	nó]]	á-!bá
		Child	REL K.	see-PST	3SG	CD	PERF-come
		"The child whom Kofi	saw has come."				
	b.	[_{NP} [_{NP} Abofrá nó]	[_{CP} áà [_{IP} Kofi	hú-u	nó]]	no]]	á-!ba
		Child DEF	REL K.	see-PST	3SG	CD	PERF-come
		"The child whom Kofi	saw has come."				

In (4a), the head of the relative clause is a bare noun NP (i.e., it is not modified by a determiner) but at the end of the clause is the definite determiner $n\delta$ "the". In (4b), the definite determiner $n\delta$ modifies the head NP, and a determiner that has the same form is found at the end of the clause. When an antecedent occurs without a determiner, it yields generic reference <u>if</u> the verb takes the future tense. This is shown by the translation of the sentence below:

(5)	Abofrá	áà	ə-bé-kó	hó	nó	bé-yaré
	Child	REL	3SG-FUT-go	there	DEF	FUT-be-sick
	"The child	who will g	o there will fall ill	(= any child	1)."	

Without a future tense on the verb, however, the difference in meaning between a relative clause containing an antecedent which has a determiner and one which doesn't have a determiner is collapsed. Consider the examples below:

(6)	a.	Abofrá	áà	əkó-ə		hó	nó	bé-yar	5	
		Child	REL	3SG-go-	-PST	there	CD	FUT-b	e-sick	
		"The child	l who we	nt there w	ill fall i	11"				
		(Reference	e here is t	re is to a child who has already been mentioned)						
	b.	Abofrá	nó	áà	ə-kó-ə		hó	nó	bé-yaré	
		Child	DEF	REL	3SG-g	o-PST	there	CD	FUT-be-sick	
		"The child	l who we	nt there w	ill fall i/	11"				
		(Reference	e here is t	o a child	who has	already b	been men	tioned)		

There is no generic/specific opposition between (6a) and (5) as one would expect. Instead, with the action depicted by the verb in the relative clause in the past, it is assumed that both the speaker and the listener are aware of the particular participant involved in the action.

As I have already pointed out, the relative clause itself is modified by a determiner. This determiner, which is obligatory,³ occurs at the end of the clause. Elsewhere, (Saah 1994: 154), I note that it is not surprising that it takes a determiner considering that the NP + relative clause structure is one complex NP. Note however, that only the proximal and distal demonstratives can occur in the clause final position. Illustrations of the clause-final determiner are provided below:

(7) a.	[_{IP} [_{NP} əbáá]	[_{CP} áà	[_{Ip} ə-wáré-	e	Kofi]-]	*(nó)	fi	Aburi]		
	Woman	REL	3SG-marry-PST		К.	CD	be.from.	A.		
	"The woman who married Kofi is from Aburi."									
b.	p. $[_{IP} [_{NP} \text{obáá}] [_{CP} \text{áà} [_{In} \text{o-wáré-e} Kofi]-] *(yi) fi$									
	Woman	REL	3SG-marry-PST	К.	CD	be.from.		A.		
	"The woman who married Kofi is from Aburi."									
	"This woman who married Kofi is from Aburi."									

The asterisk before the demonstratives in parenthesis in (7a) and (7b) is meant to capture the fact that they are not optional. The examples show that the obligatoriness of the determiner is irrespective of whether the head NP occurs with a determiner or not.

Many Kwa languages behave like Akan in having a clause final determiner. Consider the example below from Fon discussed by Lefebvre (1992):

(8)	a.	Nyənu _i	[de	Kəku	xɛlɛ	xwe	t	ວ]	Э
		Woman	that	Koku	show	house		DET	CD
		'The won	The woman (to) whom Koku showed the house'						

³There is an exception, namely extraposed relative clauses. These are discussed in Section 4.2.

b.	Xwe _i	[de	Kəku	xɛlɛ	t _i	Asiba]	Э
	House	that	Koku	show		Asiba	CD
	'The ho	use that	Koku sh	owed Asi	iba'		
	(Lefebvi	re 1993	: 410, ex.	37c & 3	8c) ⁴		

In (8a) the relative clause ends with two elements that are glossed DET and "C[lausal] D[eterminer]". The DET modifies the noun *nyonu* 'woman' which has been extracted to the head position of the relative clause, leaving its determiner 'stranded'. The clausal determiner, according to Lefebvre is used to "express event deixis" (p. 410) and that its presence is assumed to indicate old or known information. The determiners at the end of Akan relative clauses perform a similar function although, as shown by examples (7a) and (7b), they also express deictic information.

As several of the above examples show, it is possible to have a determiner modifying the head NP at the same time as the clause-final determiner modifies the clause. When that happens their semantics must not conflict with each other. Consider the following examples:

(9)	a.	Abofrá	nó	áà	Kofi	re-somá	no	nó	n-yé
		Child	DEF	REL	К.	PROG-send	3SG	CD	NEG-be_good
		"The child	l whom	Kofi is	sending	g is bad/not goo	od."		
	b.	Abofrá	yî	áà	Kofi	re-somá	no	yî	ε-n-yέ
		Child	DEF	REL	K.	PROG-send	3SG	CD	3SG-NEG-be_good
				ı Kofi is	sendin	g is bad/not go	od."		
	c.	*Abofrá	nó	áà	Kofi	re-somá	no	yî	ε-n-yέ
		Child	DEF	REL	К.	PROG-send	3SG	CD	3SG-NEG-be_good
	d.	*Abofrá	yî	áà	Kofi	re-somá	no	nó	ε-n-yέ
		Child	DEF	REL	К.	PROG-send	3SG	CD	3SG-NEG-be_good

In (9a) the head NP is modified by the definite determiner $n\delta$ 'the' while the relative clause is modified by the distal determiner, which is also definite. In (9b), on the other hand, both the head NP and the clause are modified by the proximal determiner yi 'this'. But as (9c) and (9d) indicate, the use of yi and $n\delta$ (one for the head NP and another for the entire relative clause) in the same construction is unacceptable. The reason for this is simple: the determiners are contrastive in their semantics and therefore incompatible in the same structure of modification. While $n\delta$ indicates that the referent is spatially distant from the speaker, yi gives the opposite interpretation. As a result of this, the two cannot modify the head NP and the whole complex NP at the same time.

The above is not meant to say that determiners that modify both the head noun and the relative clause should have the same form; they can be different as long as they have compatible semantics. For example, it is possible to have the non-definite determiner bi modify the head noun while the distal demonstrative modifies the clause. This is shown below:

⁴Tone marks in the original have been omitted here due to problems with my word processor.

(10)	[Káa	<u>bí</u>	áà	Kofi	de	bá-a	há	<u>nó]</u>	yε	Toyota
	Car	INDEF	REL	К.	TAKE	come-PST	here	CD	be	Toyota
	"The c	ar that Kof	i brough	t here is	a Toyota					

Sentence (10) is felicitous in a situation where the speaker did not know the make of the car initially but later found out that it was a Toyota. The reason for the acceptability of this sentence is that bi is non-determinate with regards to deixis. As such, the distal semantics of the clause-final determiner does not clash with its meaning.

Keenan (1985: 150) writes: "relative pronouns are commonly related to demonstratives, interrogatives, or both. In [German, relative pronouns] are identical to the definite article, which itself still functions independently as a demonstrative pronoun." The situation in German is comparable to that of Ewegbe, another Kwa language, where the element that introduces the relative clause *si* is derived from the proximal demonstrative *sia* 'this'.

(11)	a.		atukpá bottle		ná-m give-1SG				
		"Give me this bottle"							
	b.	Tsố	atukpá	si	le	kplõ-a	dzî	lá	ná-m
		Take	bottle	REL	be-located	table-DEF	top	CD	give-1SG
		"Give	me the bot	ttle whic	h is on the tab	ole".			

The relative complementizer *si* in (11b) is grammaticalized and, therefore, has no deictic meaning. However, the relation between the two forms is clear. Note that the relative clause in Ewegbe also has a clause-final determiner. This determiner, like the one in Fongbe discussed earlier, is the definite article. The above shows that although a demonstrative element occurs in the relative clause in German, Ewe, and Akan, it functions differently in the three languages: it functions as a relative pronoun in German, a grammaticalized and invariant relative complementizer in Ewegbe, and a clause-final determiner in Akan. In sum, Akan and Ewe are alike in having a definite element in the clause-final position of their relative clauses while Ewe and German are alike in having a demonstrative element introduce their relative clauses.

5.2.3 Relative Clauses and Resumptive Pronouns

Maxwell (1979), Tallerman (1998), and Payne (1997) show that one of the strategies employed in the formation of relative clauses in some of the world's languages is to leave a pronominal copy of the head NP in the relativization site. Languages such as Tuki (Biloa 1989); Welsh, Irish, Hebrew (Sells 1987); Breton (Timm 1988); Hausa (Schachter 1973) use this strategy as a means "to recall the referent in the position where it should have been" (Sigurd 1989: 107). Comparing the use of resumptive pronouns in Hausa and Akan relative clauses, Schachter (1973: 23) states that "the relativization rules of Hausa, like those of Akan, provide that a special pronoun
replaces the NP within the underlying sentence which corresponds to the antecedent. In Hausa, however, the NP is sometimes deleted rather than pronominalized". Unlike Hausa, the resumptive pronoun in Akan relative clauses is obligatory. However, it is realised as null or overt depending on whether its antecedent is inanimate or animate.

Apart from using the resumptive pronouns to indicate the relativization site within the relative clause, the languages cited here are said to use this strategy to repair Subjacency violations in the Principles and Parameters (Chomsky 1981) and later versions of that theory. However, as I have argued elsewhere (Saah 1992, 1994), this is not the case for Akan because there, resumptive pronouns are found even in direct object position where extraction can take place without subjacency violations. This is best demonstrated with examples involving animate NPs, since they are the ones that require overt resumptive pronouns. The examples in (12) show that a resumptive pronoun must be present in the canonical position that the head occupies in the relative clause:

(12)	a.	[_{NP} Əbáá _i	[_{CP} áà	[_{IP} ə _i -túrú	ne	bá]	nó]]	te	Takoradi	
		Woman	REL	3SG.carry	3SG.POSS	child	CD	live	Τ.	
		"The wom	an carry	ying her baby	y lives in Tak	oradi."				
	b.	[_{NP} Əbáá _i	[_{cp} áà	[_{IP} me-nim	no _i]	nó]]]	fi	Takoradi		
		Woman	REL	1SG-know	3SG	CD	come.from	Т.		
		"The wom	The woman whom I know comes from Takoradi."							
	c.	*[_{NP} Əbáá _i	[_{CP} áà	[_{IP} **-túrú	ne	bá]	nó]]	te	Takoradi	
		Woman	REL	carry	3SG.POSS	child	CD	live	Т.	
		"The wom	an carry	ying her baby	y lives in Tak	oradi."				
	d.	*[_{NP} Əbáá _i	[_{CP} áà	[_{IP} me-nim	**-]	nó]]	fi		Takoradi	
		Woman	REL	1SG-know		CD	come.from		Т.	
		"The woman whom I know comes from Takoradi."								

The omission of the resumptive pronoun renders the sentences ill-formed as shown in (12c,d). The double asterisks plus a dash (**-) marks the position where the resumptive pronouns should be in these examples.

Now consider the following set of examples with inanimate NPs:

(13)	a.	[_{NP} Ataadé	[áà	[_{IP} Amma	páme-e	Ø]	nó] _{NP}]	yε	fε					
		Dress	REL	А.	sew-PST	3SG-INANIM	CD	be	beautiful					
		"The dress	"The dress that Amma sewed is beautiful."											
	b.	[_{NP} Ataadé	$\left[\sum_{NP} Ataadé \left[\acute{a} \dot{a} \right]_{NP} \varepsilon - hy \acute{\epsilon} Amma no no \left[\sum_{NP} \right] y \varepsilon f \varepsilon$											
		Dress	Dress REL 3SG-wear A. CD be beautiful											
		"The dress that Amma is wearing is beautiful."												

In the above examples, the relativized NP has inanimate reference and the facts regarding the resumptive pronouns are different from what we saw in the discussion of the examples in (12). The object resumptive pronoun in (13a) is null as indicated by the symbol \emptyset . In other words, the pronoun has no phonetic content, but it is understood to be there and it is interpreted as "it (inanimate)". Note that the resumptive pronoun is overt in the subject position in (13b) in the form of ε "it (inanimate)," it cannot be null. This is a classic case of subject–object asymmetry.

The use of overt and null (resumptive) pronouns in Akan in object position has been discussed extensively in Saah (1992, 1994). These works show that the choice

of a null or overt object (resumptive) pronoun is mainly driven by an animacy condition. The object (resumptive) pronoun is obligatorily overt if its referent is animate, but covert (i.e., null) if its referent is inanimate. The resumptive pronoun strategy is employed in the formation of relative clauses, content questions, topicalized and focused sentences. The presence of these resumptive pronouns (either in subject or object position) argues for a non-movement analysis of the structures in which they occur.

This stance finds support in Haegeman (1994) who cites examples from Zribi-Hertz (1984) to show that the resumptive pronoun strategy (what Givón 1993: 133 calls the "anaphoric pronoun strategy") is used in "popular' French" and non-standard English. Commenting on the English example: *the man who_i John saw him_i*, she asserts that "given that the pronoun occupies its base-position, we must conclude that the wh-element must be base-generated in [Spec, CP], i.e. it does not move to that position" (Haegeman 1994: 409–410). This is exactly my position with regards to the analysis of Akan relative clauses (and other structures which employ the resumptive pronoun strategy). This runs contrary to Kayne (1994), for instance, who argues that relative clauses derive from structures where the relativized noun undergoes A'-movmenent.

In summary, this section shows that unlike languages such as English, where relative clauses are said to be "missing one argument, the one that is co-referential with the head noun" (Givón 2001, II: 180), Akan relative clauses do not have such missing arguments or gaps. There is always a resumptive pronoun (overt or null) in the relativization site. In effect, 'deletion under co-reference' or what is sometimes referred to as the 'gap strategy' is not a choice available in the formation of Akan relative clauses.

5.3 The NP Accessibility Hierarchy

One of the issues involved in the study of relative clauses in the world's languages revolves around the issue of the possible noun phrase positions that can be relativized. To capture the availability of noun phrase argument positions for relative clause formation, writers such as Keenan and Comrie (1977), Maxwell (1979), Comrie (1981) have formulated the NP Accessibility Hierarchy (NPAH). I will examine a simplified version of this hierarchy as found in Comrie (1981: 149) in relation to Akan. The hierarchy is formulated as follows:

 (14) NP Accessibility Hierarchy Subject > Direct Object > Non-Direct Object > Possessor, Where ">" means "is more accessible than".
(Comrie 1981:149)

The intuition underlying this implicational scale is that if a language can form relative clauses on a given position on the hierarchy, then it can form relative clauses on all positions higher on the hierarchy, (i.e., to the left). The scale shows that subjects are easier to relativize than the other NP positions and that languages that have a relativization strategy can relativize on all subjects. If a language can relativize on non-direct objects, then it can relativize on direct objects and subjects and so on. To test the predictive powers of the NPAH, consider the following Akan examples:

Subject	<u>t</u>									
(15) a.	[_{NP} Papá	nó	[_{CP}	áà [$_{\rm IP}~$ ∂ -	tó-ə	aduané	má-a	abofrá	nó]]]	no
	Man	DEF	REL	3SG- bu	y-PST	food	give-PST	child	DEF	CD
	"The man	who boug	ght food	l for the	child"					
Direct	<u>Object</u>									
b.	[_{NP} Aduané	nó	[_{ср} áà [_{гр}	papá	nó	tó	Ø	má-a	abofrá	
	Food	DEF	REL	man	DEF	buy	3SG.INANIM	give-PST	child	
	no]]]	nó								
	DEF	CD								
	"The food	that the n	nan bou	ight for t	he child	,,,				
Non-Di	irect object									
c.	[_{NP} Maamé	nó	[_{CP} áà	[_{IP} papá	nó	má-a	<u>no</u>	aduane]]]	nó	
	Woman	DEF	REL	man	DEF	give-PST	3SG			
	"The woma	an to who	m the	man gave	food"					
Possess	sor									
d.	[_{NP} Maamé	nó	[_{CP} áà	[_{IP} papá	no	tó-ə	<u>n'</u>	aduané	má-a	
	Woman	DEF	REL	man	DEF	buy-PST	3SG.POSS	food	give-P	ST
	abofrá	nó]]]	nó							
	child	DEF	CD							
	"The woma	an whose	food th	ne man b	ought for	the child	."			
Non-Di	irect object (Locative)								
e.	[_{NP} Baabî	[_{CP} áà [_{IP}	papá	nó	tó-ə	aduané	Ø			
	Place	REL	man	DEF	buy-PST	food	3SG.INANIM			
	má-a	abofrá	nó]]]	nó						
	give-PST	child	DEF	CD						
	"The place	where th	e man	bought fo	ood for the	e child"				
Tempor	ral adjunct									
f.	[_{NP} Béré [_{CP}	áà [_{IP}	papá	nó	tó-ə	aduané	má-a	abofrá	nó]]]	nó
	Time	REL	man	DEF	buy-PST	food	give-PST	child	DEF	CD
	"The time	that the m	1an bou	ight food	for the ch	ild"				

As the underlined constituents in the examples in (15) clearly demonstrate, Akan can relativize on all of the available (non)argument positions. Another way of stating this is that in Akan, relative clauses can "be embedded in the NPs" (Givón 1993: 121) that occupy any of the different syntactic positions listed in (15a–f).

Apart from indicating the positions within the relative clause that can be relativised, these examples also reveal an interesting fact about the clauses: even when the relative clause terminates in an NP that is modified by a determiner, the clausal determiner must still occur. Thus all the examples that end with the NP *abofrá nó* "the child" have the clausal determiner *no*, creating structures in which two determiners of the same kind occur one after the other. While the first *no* belongs to the NP *abofrá no* "the child", the other belongs to the whole NP+relative clause structure.

a 1 · . .

5.3.1 Restrictive Versus Non-restrictive Relative Clauses

A distinction is usually made between restrictive relative clauses (RRCs) "considered proto-typical of relative clauses" (Givón 1993: 107) and non-restrictive relative clauses (NRRCs), which are sometimes referred to as appositive relative clauses. Givón (1993) asserts that restrictive relative clauses are the most common in the world's languages and the same is true of Akan as well. While there is an 'aboutness' relationship between either type of relative clause and its head NP, the two differ as to their semantic interpretations and their syntactic relationship in the sentence. Comrie (1981: 136) gives the following essentially semantic characterisation of the relative clause, which goes to show the role that a RRC plays:

A relative clause then consists necessarily of a head and a restricting clause. The head in itself has certain potential range of referents, but the restricting clause restricts this set by giving a proposition that must be true of the actual referents of the over-all construction.

The term "restricting clause" in the above definition is significant. The definition is silent on NRRCs, implying that Comrie does not make that kind of distinction. Perlmutter and Soames (1979: 267–268), on the other hand, make a formal distinction between the two main kinds of relative clauses based on their semantic import:

A restrictive clause restricts predication to the class of individuals specified in the relative clause. An appositive relative clause does not. When the clause is appositive, the predication is made of all those individuals specified by the head NP; it is further asserted that this set of individuals is the same set of individuals specified by the relative clause.

In English, the two types of relative clauses differ in both their morphosyntax and semantics. Phonologically, non-restrictive relative clauses are "pronounced with a comma intonation, i.e., with pauses after the head and the relative clause. Restrictives do not have this comma intonation" (Comrie 1981: 267). This can be seen in the following English examples:

- (16) a. Students, who study hard, do well in their exams.
 - b. Students who study hard do well in their exams.

(16a) has a non-restrictive relative clause as indicated by the commas. In the spoken language, there will be pauses after the head noun and after the relative clause. Fabb (1990: 57) also asserts that "an RR[C] modifies its host, while an NRR[C] does not", and that the NRRC, "has no syntactic relation to its host/ante-cedent". This, basically, shares Perlmutter and Soames's definition of the two types of clauses. Semantically, there is a difference between the two types of relative clauses. (16a), with the appositive clause, is to be interpreted thus: *All students study hard and all students do well in their exams*. But the restrictive relative in (16b) forces a different reading/interpretation of the sentence. The sentence can be paraphrased as: *Only those students who study hard pass their exams*. On this interpretation, predication is restricted or narrowed to only those students specified in the relative clause, that is, those who study hard.

It is difficult to tease apart a formal distinction between restrictive and nonrestrictive relative clauses in Akan in the examples discussed so far. There is no 'comma' intonation or any other syntactic or phonological device that is used to indicate such a distinction between them. It seems that Akan and, most probably all the Kwa languages, only use the type of relative clause being discussed here as restrictive relatives. This would validate Watters' (2000:225) assertion that the distinction between restrictive and non-restrictive relative clauses "is generally not marked in African languages." The closest we can come to an appositive reading of relative clauses is when they are extraposed. Such structures are discussed in Section 5.3.2.

5.3.2 Extraposed Relative Clauses

The prototypical NP + relative clause structure is the one in which the head NP and the relative clause are contiguous. There are however, structures in which the two are separated. Consider the following examples from the Bible in Twi:

(17)	a.	Əbarîmá	bî	[áà	ne	díń	de	Nyamékye]	nó	tená-a	ase	
		Man	INDEF	REL	3SG.POSS	name	be_called N.		CD	sit-PST	under	
		"There live	ed a man	whose 1	name was N	yameky	/ɛ."					
	b.	Əbarîmá	bî	tená-a	ase	[áà	ne		díń	de	Nyamékyɛ]	
		Man	INDEF	sit-PST	under	REL	3SG.POSS		name	be.called	N.	
		"There live	ed a man	whose 1	name was N	yameky	/ɛ."					
	c.	*Əbarîma	nó	tená-a	ase	[áà	ne		dîń	de	Nyamékye]	
		Man	DEF	sit-PST	under	REL	3SG.POSS		name	be.called	N.	
		"There live	ed a man	whose 1	name was N	yameky	/ɛ."					
	d.	*Əbarîma	bî	[áà	ne	dín	de		Nyamékye]	nó	téna-a ase	
		Man	INDEF	REL	3SG.POSS	name	be.called		N.	CD	sit-PST unde	r
		"There live	ed a man	whose 1	name was N	yameky	/ɛ."					

(17a) contains the prototypical relative clause structure in which the head NP and the relative clause are contiguous. In (17b), however, the head NP and the relative clause are non-contiguous; they are separated from each other by the verb phrase *tenáa ase* "lived". The relative clause can be said to have undergone 'extraposition' or 'dislocation.' Extraposed relative clauses can be found in English (Givón 1993, 2001; McCawley 1998; Kayne 1994) and Breton (Timm 1988).⁵

The extraposed relative clause in (17b) has 'appositive' or 'non-restrictive' reading. It gives additional information about the head NP, and does not restrict predication to a particular individual. It can therefore be viewed as a "presentative device" which "typically introduces a new participant into the discourse" (Givon 1993:149; 2001, II: 209). Notice that the definite determiner *no* "the" is not possible as a modifier of the head NP of the extraposed relative clause (as shown in 17c). It is the indefi-

⁵The following are examples of extraposed relative clauses in English:

i. A man came in yesterday who lost his wallet. (Givon 2001:207, ex. 80b).

ii. Something just happened that you should know about. (Kayne 1994:117, ex. 1).

nite determiner *bi* "a certain" that is used to introduce new information. In other words, it is used to introduce an individual or an entity into the discourse for the first time. These structures are prevalent in Akan folktales, especially when a participant is being introduced into the narrative for the very first time. The new participant is usually introduced "as the subject of" the Akan equivalents of the verbs like "live", "be", "appear", "come in", and "enter" (Givon 1993).

Another interesting thing about the extraposed relative clause is that contrary to what has been stated in Section 5.2, it does not end with a clause-final determiner as (17d) shows. This is not surprising since it introduces new information.

5.4 Types of NPs that can be Heads

The kinds of NPs that can or cannot be the heads/antecedents of relative clauses are also discussed in the literature. Perlmutter and Soames (1979: 268), for example, state that proper names and definite NPs "cannot be heads of restrictive clauses" because proper names "refer to specific individuals. Thus when the head NP of a relative clause is a proper name, it picks out the subject of predication, leaving no role for a restrictive clause to play".

In Akan and Ewe, however, it is possible for both definite/specific NPs and proper names to occur as heads/antecedents of relative clauses. The examples we have considered in the previous section involve definite/specific NPs so an example with a proper nouns will suffice here:

(18)	a.	Me-re-bó	nnwóḿ	yî	á-ma	[[Kwesi Mensah	áà	
		1SG-PROG-play	song	DEF	CONS-give	KM	REL	
		ə-fi	Nsaba]	nó].				
		3SG-come.from	Ν	CD				
		'I'm playing this s	ong for the	e Kwesi	Mensah who c	comes from Nsaba.'		
	b.	Kofi	Ameko	si	tsó	Anloga	lá	vá
		Kofi	Ameko	REL	come.from	Anloga	TP	come
		'The Kofi Ameko	who comes	s from A	Anloga has con	ne'		

In the above examples, a proper name occurs as the antecedent of the relative clause. (18a) is the kind of thing one often hears on radio request shows. Though the names refer to specific individuals, the relative clauses do provide additional information about the head. One could suppose that the proper nouns behave like generic nominals that require further specification in Akan, Ewe, and, possibly, all Kwa languages.

5.5 Relative Clauses without Overt Complementizers

In some of the world's languages, it is possible to have relative clauses that do not have NP antecedents. These are referred to in the literature as 'headless' relative clauses (Givón 2001) because they are not preceded by any head NPs. They include the following examples from English:

(19)

a. *What* I saw was ugly.b. *Where* he stood was near the curb.

(Givon, 2001:207, ex. 76e & 76f)

Sentences (19a & 19b) involve structures in which the relative pronouns occur in initial position followed by the relative clause. Akan has structures that resemble such 'headless' relative clauses as shown in the following examples:

(20)	a.	Nea	[ə-kớ	nsú]	na	ə-bó		ahiná.
		Person (that)	3SG-go	water	FM	3SG-br	eak.PRES	pot
		"(The one) wh	ho fetches wa	ter breaks the	pot."			
	b.	Dec/nea	[wó-gyîná]	nó	n-yέ			
		Place:that	2SG-stand	CD	NEG-be.g	ood		
		"(The place) v	where you're	standing is no	ot safe."			
	c.	Dec/nea	[wó-dé	má-a	me]	nó]		sua.
		Thing:that	2SG-TAKE	give.PST	1SG	CD		be.small
		"What you ga	we me is small	11."				
	d.	*Deɛ/nea	áà	[wó-de	má-a	me]	nó	sua.
		Thing (that)	REL	2SG-TAKE	give-PST	1SG	CD	be.small.PRES
		"What you ga	we me is small	11."				

In these examples, there is an initial element (in bold) followed by a complement clause without the relative complementizer \dot{aa} . This is contrary to what we stated in Section 5.1 that the relative complementizer is obligatory in Akan. The explanation for this phenomenon can be found in the semantics of the head items. These clauses are always introduced by items like dee(As.)/nea(Ak.)/dzaa (Fa.) "the thing that"/"the person that"/ "the place that", etc., as can be seen in the examples in (20).

I suggest that the morphemes dec/nea/dzaa are portmanteau morphemes that encapsulate the meanings of the antecedent NP and the relative complementizer. That is to say, dec is composed of $adec + \dot{a}a$ 'thing+ Relative' in the Asante dialect, *nea* is composed of $oni + \dot{a}a$ 'one + Relative, in the Akuapem dialect, while dzaais composed of $adze + \dot{a}a$ 'thing + Relative' in the Fante dialect. They are therefore different dialectal forms of the same morpheme. These forms have grammaticalized and, therefore, could mean "the person that", "the place that" and "the thing that" as shown in (20a, b, c) respectively. Their referents are recoverable from the discourse; either from what has already been said in the preceding utterances or from the discourse topic.

The sentences in (20) exist side-by-side with those in (21):

(21)	a.	Onîpá/oni	áà	ə-kó	nsú	na	ə-bó	ahiná			
		Person	REL	3SG-go	water	FM	3SG-break	pot			
		"The perso	n who	fetches water break	ks the pot."						
	b.	Baabî	áà	wó-gyîná	nó	n-yέ					
		Place	REL	2SG-stand.PRES	CD	NEG	-be.good				
		"Where yo	u are s	tanding is not good	l/safe".						
	c.	$Ade(\epsilon)$	áà	wó-dé	má-a	me	nó	a-sá			
		Thing	REL	2SG.TAKE	give-PST	1SG	CD	CONS-finish			
		"The thing that you gave me is finished."/"What you gave me is finished."									

In these examples, $onip \dot{a} \dot{a}/oni \dot{a} \dot{a}$ "the person that", $baabi/bea \dot{a}$ "the place that" and $ad\dot{e}(\dot{\epsilon}) \dot{a} \dot{a}$ or $adz\dot{e} \dot{a} \dot{a}$ "the thing that" substitute for $de\epsilon/nea/dzaa$. It is therefore correct to assume that the structures in (20) are relative clauses and that they are paraphrases of those in (21).

The structures in (20) differ from the 'normal' relative clauses because of the absence of an overt relative complementizer. Insertion of the complementizer in such structures will render them ungrammatical as shown in (20d). This is not surprising because, as I have stated already, the complementizer is fused with the head in these examples. These Akan examples are not radically different from the English 'headless relatives' in which a relative pronoun is followed by a relative clause with no antecedent NP.

5.6 Stacking of Relative Clauses

In this section, I show that it is possible for one antecedent NP to be followed or modified by two or more relative clauses. In other words, relative clauses may be stacked within the same sentence. Consider the following examples from the Bible in Twi:

(22)	a.	Osuáni	bî	wə	hó	áà	ne		dîń	de		Timoteo	
		Student	INDEF	be-located	there	REL	3SGI	POSS	name	be-call	led	Т.	
		áà	ο-уέ	Yúdani	báá	bî	áà	ə-gyé		die		ba	
		REL	3SG-be	Jew	woma	n INDEF	REL	3SG-1	receive	eat		son	
		"A certain d	isciple was	there, name	d Timo	theus, the s	son of	a cert	ain womar	n, which	n was a	Jewess, and	l
		believed	1"										
		(A	cts 16:1, E	nglish transl	ation fi	om KJV)							
	b.	əbéá	nó	áà	n	e	đỉń		de	Lidia	áà	ə-tóń	tám
		woman	DEF	REL	3	SG.POSS	name	;	be.called	L.	REL	3SG-sell	cloth
		kəkəś	áà	o-firi	Т	iatira	kuróv	W	mú	áà	ə-fɛré		
		purple	REL	3SG-come.	from T		city		in	REL	3SG-b	e.shy	
		Nyankópən	té-e										
		God	hear-PST										
		"The womar	n named Ly	dia, who sold	l purple	(cloth), wa	us of th	ne city	of Thyatira	a, and w	orshipp/	ed God, hea	rd"

"The woman named Lydia, who sold purple (cloth), was of the city of Thyatira, and worshipped God, heard..." (Acts 16:4, modified with definite determiner on woman)

The examples in (22) show instances of a single NP modified by a series of relative clauses that are stacked together. The sentence in (22a) is interesting in another respect. Apart from having one head NP *osuáni bi* "a certain disciple" that is modified by a series of two relative clauses, we find that the head is not immediately followed by the first relative clause. Instead, the two are separated by the locative VP *wo hó* 'was there'. Not only that, we find that the relative clause *áà ogyé dié* "who believed" is nested in another relative clause: *áà oyɛ Yúdanî báá bi* áà ogyé dié *bá* "who was the son of a certain Jewish woman who believed". The nested clause has its own head, *Yúdanî báá bî* "a Jewish woman" which is different from the head of the other clauses (Timotheus). The stacking of relative clauses abounds in the Akan (Twi) version of the Bible as shown in the examples in (22). It is also prevalent in everyday speech. Akan is not unique in allowing the stacking of relative clauses. McCawley (1998) and Kayne (1994) show that this possibility exists in English as the following example shows:

(23) The theory of light that Newton proposed that everyone laughed at was more accurate than the one that met with instant acceptance. (McCawley, 1998:382, ex. 3c)

In this sentence, the NP "theory of light" is the antecedent for the relative clauses "that Newton proposed" and "that everyone laughed at".

I am not sure of the theoretical significance of the ability to stack relative clauses by Akan and English other than the fact that it is another demonstration of recursion in syntax. With the addition of each relative clause, the individual, entity or state of affairs being referred to is made more and more unique.

5.7 Summary

The study has shown that Akan does not utilise relative pronouns in the relativization process, instead, it uses an invariant relative complementizer to introduce the relative clause. The relative clause may end with a determiner, and, where the head NP also has a determiner, the two must be the same. The relative complementizer and the clause-final determiner serve to delineate the beginning and end of the relative clause. It is not in all cases, however, that the relative clause terminates with a determiner.

It has also been shown that in Akan, it is always the case that a resumptive or anaphoric pronoun is retained in the relativization site and that this pronoun may be null or overt in object position depending on whether the head has inanimate or animate reference. Almost all argument positions in Akan can be relativized except the possessum in a possessive construction and that it is possible for specific/definite NPs as well as proper names to be the antecedents of relative clauses. The language has been shown to allow the stacking and extraposition of relative clauses.

While Akan relative clauses are essentially restrictive in nature, extraposed relative clauses have been shown to be non-restrictive in their semantics and that they are normally used as a presentative device for introducing new participants into the discourse.

Though a few examples have been cited from some Kwa languages, notably, Ewe, Fongbe and Yoruba for comparison, a more detailed study needs to be done to give a better cross-linguistic picture of relative clause formation in Kwa.

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Chapter 6 C-Type Negation Markers on the Right Edge

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6.1 Introduction

Since Jespersen's (1917) seminal analysis of sentence negation, typological studies on the expression of negation suggest that sentence negation is encoded cross-linguistically pre-verbally, post-verbally or both pre-verbally and post-verbally.¹ Following Pollock's (1989) split-I hypothesis whereby negation is expressed within a negative projection NegP, Ouhalla (1990: 191) accounts for such typological variation as follows:²

Variation among languages is restricted to whether both or either of the two elements of NegP (i.e, [spec NegP] and Neg°) is realised lexically. In languages like Turkish and Berber the head is realised lexically while the specifier is realised as an empty operator. In languages like German, Swedish and Colloquial French it is the specifier, which is realised lexically, while the head is realised as an abstract morpheme. Finally, in languages like standard French both the head and the specifier are realised lexically.

Given this description, it appears that the distinction between pre- versus post-verbal negation across languages, can be reduced to the specifier versus head, or precisely X° versus XP distinction and the possible interaction of these elements with V-to-I movement (e.g., Pollock 1989). This approach has been successfully argued for in the literature and it has been proposed that, in languages with simultaneous pre- and post-negation marking (e.g., the French *ne...pas*), the negative adverbial either

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²See Pollock (1989), Belletti (1990), Haegeman (1995), and Zanuttini (1997) for various proposals as to the positionning of NegP with regard to TP.

occurs in [spec NegP] in overt syntax or must raise there in covert syntax (i.e., at LF). The motivation for this raising analysis is given in terms of the Neg-Criterion, which requires that at the appropriate level of representation, a Neg-Operator be in a spechead relation with a Neg-head, and vice versa (Haegeman 1995).³

Alternatively, Zanuttini (1997) proposes a multiple NegP within IP that allows a fine-grained characterization of pre- versus post-verbal negative markers. In her approach, pre-verbal negative markers fall in two classes: those that can negate a clause by themselves (class 1), and those that cannot (class 2). Zanuttini further proposes that elements of class 1 head NegP1, which projects higher than the projection hosting the subject clitics (e.g., AgrsP) while elements of class 2 originate from a lower NegP2 projection, which they head, but must move to a pre-verbal position due to their clitic nature. On the other hand, post-verbal negative markers fall into different classes depending on their scope and discourse properties. For instance, Zanuttini shows that the Romance post-verbal negative particles can be characterized as those that negate a proposition that is assumed in discourse versus those that negate a pragmatic neutral proposition. This distinction allows the author to further show that distinct types of post-verbal negative particles target distinct positions in the clause. Under Zanuttini (1997), most of these elements are adverbial negative particles, that is, maximal projections targeting a specifier position, even though some may further develop into heads.⁴

Even though the unique NegP hypothesis (Pollock 1989; Haegeman 1995) and the multiple NegP hypothesis (Zanuttini 1997) have different implications as to the categorical status of negative particles as well as the characterisation of clause structure, both approaches assume that the expression of pre- and/or post-verbal negation is a property of INFL, that is the middle field.⁵ In this view, variations across languages reduce to what portion(s) of INFL may be activated by the expression of negation. These analyses appear compatible with the common acceptation of the terms pre- or post-verbal position, as referring to some INFL-related position before or after the finite verb.

This paper presents new data from the Gbe languages and shows that these languages exhibit bi-partite negation involving pre-verbal and post-verbal marking.⁶ The pre-verbal negative marker precedes tense, while the post-verbal one must occur to the right edge (i.e., sentence-finally) where it clusters with clause-typing morphemes. Assuming the accounts discussed previously (e.g., Pollock 1989; Ouhalla 1990; Zanuttini 1997), this distribution raises the question of the categorical status of negative particles in these languages, as well as their structural positions in the clause. The question arises whether the Gbe pre- and post-verbal negation markers are all properties of INFL as one could suggest along the lines of Zanuttini (1997). The following sections try to answer this question.

³See also Rizzi (1990, 1996) for the discussion on the Wh-criterion.

⁴See Zanuttini's brief discussion (p. 78) of the Piedmontese -nu negative enclitic that must cooccur with the pre-verbal particle *n*.

⁵See Zeijlstra (2004) for an alternative.

⁶Gbe languages are a sub-group of the West African Kwa languages (Capo 1991).

Section 6.2 presents basic features of the clause structure in Gbe as well as word order variations that are relevant for the discussion. Section 6.3 discusses the three strategies of marking negation across Gbe. It presents the syntactic and discourse-pragmatic properties of the negative particles in these languages. The conclusion reached there is that the pre- and post-verbal negative particles are functional heads. Building on this, Section 6.4 compares two competing analyses for the structural position of these negative heads. The conclusion there is that the pre-verbal negative markers head a NegP that dominates TP, while the post-verbal negative particles better qualify as functional heads within the complementizer system (e.g., C-type elements). This would mean that these elements are property of the clausal left periphery where they head a designated projection that encodes negative features (e.g., Progovac 1993; Laka 1990; Roussou 2000). I further propose that these elements end up in the right periphery because, like other Gbe left peripheral markers, they require proposition fronting whereby the embedded proposition raises to the specifier position of the attracting head. Section 6.5 concludes the paper.

6.2 The Gbe I- and C-Systems

This section discusses general properties of the inflection and complementizer systems (henceforth I-system and C-system) in Gbe. Following previous work, I assume that these languages are of the type SVO, even though they manifest VO versus OV alternations, in addition to certain properties (e.g., NP-Det order) that are often interpreted as evidence for a base OV order (see the introductory chapter). I will not be concerned with these alternations here and I refer the interested reader to chapters 1 to 3 of this volume, Aboh (2004a, 2009) and references cited there for a detailed discussion.

6.2.1 The I-System

Like most Kwa, the Gbe languages manifest hardly any inflectional morphology. In the clausal domain, for instance, the verb almost never bears affixes that may reflect tense, aspect or mood specification.⁷ Similarly, the Gbe languages do not express subject–verb agreement and the verb always displays a bare form, whether it occurs in a finite or non-finite clause, as illustrated in (1a–b), or whether the subject is plural or singular as shown in (1b–c).⁸

⁷This is with the exception of the habitual marker, which is suffixed on the verb in certain Western Gbe languages (e.g., Ewe). In the Eastern Gbe languages (e.g., Gungbe), however, the habitual marker is a free morpheme that precedes the verb as in example (2b) above, see chapters 1 to 3, Essegbey (1999), Aboh (2004a) for discussion.

⁸Similarly, the Gbe languages show case morphology on pronouns only, and there is no gender specification (except in certain personal names), see Aboh (2004a) and references cited there.

(1)	a.	Àxólú	jró	ná	yí	àyígbà	cè
		king	want	for	take	plot	my
		'The king/governme	nt wants to take	my plot'			
	b.	Àxólú	xó	àyígbà	cè		
		king	buy	plot	my		
		'The king/governme	nt bought my pl	ot'			
	c.	Àxólú-zón-wàtó-lé	xò	àyígbà	cè	lέ	kpó
		king work doer-PL	buy	plot	my	PL	all
		'Civil servants bough	nt all my plots'				

Tense and aspect specifications are encoded by free morphemes that occur between the subject and the verb (but see note 7). In the following Gungbe sentences, the element $n\dot{a}$ encodes future (2a), $n\dot{a}$ expresses habitual aspect (2b), and $t\dot{a}$ manifests progressive (2c). In Gbe languages of the Gungbe type (e.g., Fongbe) these markers may co-occur as (2d) shows.

- (2) a. Àxólú ná ví àyígbà cè FUT take 1SG-POSS king plot 'The king/government will take my plot' b. Àxólú nó ví àyígbà cè HAB take plot king 1SG-POSS 'The king often takes my plot [i.e., he does it on a regular basis, plot after plot]' c. Àxólú tò àyígbà cè vî PROG plot 1SG-POSS take-NR king
 - 'The king/government is taking my plot (away)' [i.e. I'm being dispossessed of my land]
 - d. Àxólú ná nò tò àyígbà cè yî bò ùn ná nò àbé wè? king FUT HAB PROG plot 1SG-POSS take-NR and 1SG FUT remain silent FOC 'So, the king/government will be taking my plot (away) regularly and I shall remain silent?'

The following sentences indicate that PPs (3a) and adverbs (3b) follow the verb in VO sequences and in OV constructions (3c).

(3)	a.	Òtògán	dà	xó	[gànjí]	[tò	yòvótòmé]		
		President	talk	word	well	in	Europe		
		'The Presid	lent spoke w	ell in Eur	ope [i.e.,	he gav	e a good spee	ch]'	
	b.	Òtògán	mítàn	gbέ	xó	dþ	[tàùn]	[tò	yòvótòmé]
		President	1PL-POSS	refuse	word	say	openly	in	Europe
		bò	lékà	wá	xwé				
		COORD	return	come	home				
		'The preside	ent refused to	speak ope	enly in Eu	ope an	d came back h	ome [i	.e., he refrained
		from speaki	ng openly]'						

The distribution of adverbs with regard to other adjuncts is rather intricate because adverbs may precede or follow other adjuncts in post-verbal position. Consider the contrast in (4).

(4)	a.	Òtògán	hòn	bléún	són	tò	15	mè				
		President	flee	quickly	from	country	DET	in				
		'The Presid	lent qu	ickly fled f	from the co	untry'						
	b.	Òtògán	hòn	són	tò	15	mè	bléún				
		President	flee	from	country	DET	in	quickly				
		'The President fled from the country quickly'										

Such word order variations are arguably related to the scope properties of the adverbs, but I will not discuss such facts here because they do not bear on the present discussion. Instead, I will take it that the data in (2) through (4) suggest that Gbe manifest the sequencing in (5), where adverbs and adjuncts occur in post-verbal position.⁹

(5) Subject > Tense> Habitual > Progressive $(XP_{lobiect}) > V > (XP_{lobiect}) > Adverb > Adjunct$

Building on Tenny (1987), Pollock (1989), Cinque (1999), among others, this paper assumes that the Gbe tense and aspect markers head their own projections within the I-system. For the sake of the discussion, I further assume that nominative and accusative cases are properties of dedicated heads within the I-system whose specifiers host the case-specified elements (Chomsky 1993, 1995). Granted Sportiche's (1988) VP-internal subject hypothesis, this would mean that the subject must raise out of the VP to a position that is located to the left of the tense marker. In a similar vein, I propose that the distribution of the object (i.e., VO versus OV) results from the interaction between object shift and verb movement. Starting from VO order, this suggests that the object must raise in a specifier position higher than the position targeted by the head in OV sequences (see Aboh (2004a, 2005, 2009) for a detailed discussion).

6.2.2 The C-System in Gungbe

Rizzi (1997) proposes that the complementizer system (i.e., C) consists of a series of distinct slots that host fronted elements, such as, focus and topic, as schematized in (6).¹⁰

(6) Force_[Interrogative, exclamative, declarative] > Topic >Focus > Topic > Finiteness_[mood, tense]

In terms of this approach, Force and Finiteness delimit the complementizer system upward and downward. Force encodes illocutionary force, such as, exclamative,

(i) Kòfí má ná gbź nò sà àvlántò
Kofi NEG FUT at.least HAB sell banana.plantain
'Kofi will not at least get to selling banana plantain'

 $^{^{9}}$ In addition to these post-verbal adverbs, Gungbe also manifests a restricted number of pre-verbal adverbs (e.g., tè 'even', só 'again', gbé 'at least') which follow negation, but intervene between the tense marker and the habitual marker.

¹⁰ Rizzi (1997) assumes that Topic is recursive but not Focus. But see Poletto (2000), Aboh (2004a).

or declarative specifications, and therefore links the sentence to the discourse. On the other hand, Finiteness encodes tense, mood or inflectional specifications that match those of the embedded proposition. Rizzi further proposes that the topic-focus articulation projects between these two left peripheral borderlines. Aboh (2004a,b, 2006) shows that the Gbe (Kwa) languages provide empirical evidence for this analysis. As the sentence in (7) indicates, these languages display discrete free morphemes, ya and wb, which mark topic and focus constituents, respectively. Note also that such marked constituents always occur in a space between the complementizer db 'that', which can be argued to realize Force, and the injunctive/ subjunctive marker ni, which is located under Fin.¹¹

(7)Ùn dà Kòfí, ná wè dà yà lésì, wè $\left[\prod_{\mu} \acute{e}_{\mu} \right]$ ní yì xò t_i] PREP 2SG that Kofi TOP rice FOC 3SG INJ 1sg say go buy 'I told you that, as for Kofi, he should buy RICE

Aboh (2004a,b, 2006) proposes that these markers head distinct functional projections within the C-system as illustrated by representation (8).

(8) $\left[\sum_{\text{ForceP}} \left[\sum_{\text{ForceP}} d \hat{a} \left[\sum_{\text{TopP}} y \hat{a} \left[\sum_{\text{FocP}} w \hat{a} \left[\sum_{\text{FocP}} n \hat{a} \dots \left[VP \right] \right] \right] \right] \right] \right] \right]$

This representation is compatible with the observation that the topic and focus markers occur in the left periphery when they take scope over a constituent that is attracted from inside the clause. The attracted topic or focus element moves to the relevant specifier position (i.e., [spec TopP] or [spec FocP]) to check its topic or focus features.

The following sentences show that these markers may also occur to the right edge when they take scope over the proposition. The sentences under (9), where the focus and topic markers occur to the right edge, illustrate such constructions. Example (9b) can be an answer to a question like (9a), and may indicate that the speaker is exasperated by the informant's constant questions about where s/he went. The question in (9c), however, could be asked by a mother who told her children to buy the rice from Gukome for snack and expects them to have done so by the time she utters the question. Note that, in this case, the content of the proposition is in topic. As a result, the whole proposition is topicalized, and the topic marker surfaces to the right edge where it is affected by the floating low tone that encodes yes—no question in Gungbe. In this regard, this sentence combines two successive strategies: clause topicalization and yes—no question formation.

(9)	a.	Fíté Where 'Where	FOC	2SG	2		
	b.	Ùn 1sg				Gúkómè Gukome	wè! FOC
		0	0	5		M GUKOME!	

¹¹ See also Paoli (2001) where it is shown that Italian has two types of *che*, one that realises Force and one that realises Fin.

6 C-Type Negation Markers on the Right Edge

c. Mì vì xà lésì Gúkómè tàn vä? 2PL go buv rice Gukome POSS TOP-INTER 'Did you go to buy the rice from Gukome [as expected]?'

At this stage of the discussion, the descriptive generalization seems to be that the Gungbe left peripheral markers may occur to the left or right edges depending on their scope properties. Put differently, I propose that elements that occur to the left edge take scope over a constituent that is attracted from within the proposition to the relevant specifier position, as indicated in (10a). Right edge elements, however, take scope over the proposition as a whole. The latter is therefore attracted to the relevant specifier position within the complementizer system, in a sort of predicate fronting, as shown in (10b–c).

(10) a. Constituent Topic and focus



b. Proposition Topic



c. Proposition Focus



This would mean that even though the topic and focus markers may surface to the right edge (10b–c), they first merge within the left periphery (Aboh 2002, 2004a,b, 2006).

Additional support for this view comes from data involving the so-called clausal determiner. In Gbe, this marker is generally homophonous with the nominal specificity marker (e.g., l_3 in Gungbe, or δ in Fongbe), and typically occurs to the right edge, where it indicates that the information being conveyed is pre-established in discourse and/or specific (Lefebvre 1998; Lefebvre and Brousseau 2002; Larson 2003; Aboh 2004a).¹² Example (11) illustrates the clausal determiner in Fongbe and Gungbe, respectively.

¹²The approach advocated in Aboh (2004a,b) and here significantly differs from the one proposed in Lefebvre (1998) and Larson (2003).

(11)	a.	[[É	Kòfí	hòn]	ó]	vέ	nú	yé	[Fongbe]
	b.	[[Đe	Kòfí	hòn]	15]	vέ	ná	yé	[Gungbe]
		as	Kofi	flee	Det _{CL}	hurt	for	3pl	
		'As K	ofi fled	[instead	of waitir	ng] hurt t	hem.'		

Similarly, the Gbe languages display a right edge yes—no question marker that surfaces sentence-finally. A case in point is the Gungbe sentence-final floating low tone encoded here as an additional stroke [] on the final syllable, or the particle \hat{a} in Fongbe.

(12)	a.	Kòfí	dù	nû?	[Gungbe]	
		Kofi	eat	thing-INTER		
		'Did K	Kofi eat	t?'		
	b.	Kòfí	dù	nú	à?	[Fongbe]
		Kofi	eat	thing	INTER	
		'Did K	Kofi eat	t?'		

Following Aboh (2004a,b), I assume that the low tone in Gungbe derives from an existing question particle (of the Fongbe-type) that got deleted as the language evolved. Be it so, a common property of the clausal determiner, the yes–no question particle as well as the topic and focus markers that occur to the right edge (10b–c) is that they take scope over the proposition. We can further assume that these features (i.e., interrogative, and event specificity) are typical properties of the left periphery where they head distinct projections SpfP and InterP, respectively (Aboh 2004a,b). This would mean that, in addition to common C-type elements (i.e., focus, topic) which may occur to the left or to the right depending on their scope properties, the Gbe languages also involve other C-type markers that must occur to the right edge because they always take scope over the proposition. Put another way, the clausal determiner and the interrogative marker, force movement of the proposition (i.e., FinP) to their specifier positions, as schematized in (13).



As to the question of the precise structural position of these two markers within the C-system, pieces of evidence that the representation in (13) is adequate come from the fact that the Gungbe C-type markers may co-occur in clause final position where they display the fixed order: clausal determiner >focus > topic > Interrogative,

as in (14a). Note that this sequencing exhibits the mirror image of the structural hierarchy proposed in (8) repeated here as (14b).

(14)a. Đe ùn dà dà **[Kòfí** ní hòn] 15 wὲ và DET_{CI} FOC as 1SG say that Kofi INJ flee TOP-INTER 'Is it because I said that Kofi should run away?'

b.
$$\left[\sum_{\text{ForceP}} \left[\sum_{\text{Force}} d \hat{\partial} \left[\sum_{\text{TopP}} \left[\sum_{\text{Top}} y \hat{a} \left[\sum_{\text{FocP}} \left[\sum_{\text{Foc}} w \hat{c} \left[\sum_{\text{FinP}} \left[\sum_{\text{Fin}} n i \dots \left[VP \right] \right] \right] \right] \right] \right] \right] \right]$$

Starting from (14b), let us therefore assume that such surface reordering as in (14a) is indicative of snowballing movement (Aboh 2004a,b). That is, the successive piedpiping of bigger chunks, where the *ní*-proposition FinP moves to specifier of the event specific phrase [spec SpfP]. The phrase SpfP then moves to [spec FocP] for focusing, followed by pied-piping of the focus phrase FocP to [spec TopP]. Finally, TopP, which embeds FocP containing the phrase that has been pied-piped into its specifier, moves to [spec InterP] as represented in (15a). While accounting for the word order, this analysis suggests that the mirror image in (14a) can be interpreted as evidence for underlying head-complement structures of the type InterP> TopP> FocP> SpfP> FinP, as illustrated in (15b).

(15) a. [Force^o $d_{\mathcal{J}}$ [Inter^o \otimes [Top^P [Top^o yà [Foc^P [Foc^o wê [Spf^P [Spf^o lb[FinP ní]]]]]]]]]



(15) b. $\left[\int_{\text{ForceP}} \left[\int_{\text{Force}} d\hat{\boldsymbol{\beta}} \right]_{\text{InterP}} \left[\int_{\text{InterP}} v\hat{\boldsymbol{\lambda}} \left[\int_{\text{ForP}} v\hat{\boldsymbol{\lambda}} v \right] \right] \right] \right] \right] \right] \right]$

If this is the right characterization of the Gbe clausal left and right peripheries, one may wonder whether this analysis extends to all elements that occur to the right edge in these languages. This question obviously relates to the distribution of sentential negative particles in Gbe, which occur to the right edge. The following sections take a closer look at these particles across Gbe and propose that they are components of the clausal left periphery.

6.3 Negation across Gbe

Gbe languages express sentential negation in three ways: (i) with a pre-verbal particle, (ii) with either a pre-verbal or right edge particle, and (iii) with simultaneous occurrence of a pre-verbal and a right edge negative particle.

6.3.1 Pre-verbal Negation

The Gungbe-type languages fall in class (i) because they express sentential negation by means of a pre-verbal marker $m\dot{a}$, only. This marker, which is superficially comparable to the French negation *ne* or Italian *non*, occurs in a fixed position immediately to the left of the future marker (16a), but follows the injunctive marker, which we assume to merge under Fin (16b), see Section 6.2.2.

(16)	a.	Kàjó	má	ná	xò	kátìkátì	15					
		Kojo	NEG	FUT	buy	kite	DET					
		'Kojo will not buy the kite'										
	b.	Kàjó	ní	má	xà	kátìkátì	lś	blô				
		Kojo	INJ	FUT	buy	kite	DET	anymore				
		'Kojo s	should r	not buy	the spe	cific kite a	gain'					

The Gungbe data in (16a–b) suggest that the pre-verbal negative particle occurs in a space between FinP to the left and TP to the right. Following Pollock (1989), Haegeman (1995), Zanuttini (1997), Aboh (2004a) among others, I assume that this pre-verbal negative marker heads a Neg phrase (NegP) that projects between FinP and TP as represented in (16c).

(16) c. $\dots \left[_{\operatorname{FinP}}\left[_{\operatorname{Fin}^{\circ}}\operatorname{n\acute{n}}\left[_{\operatorname{NegP}}\left[_{\operatorname{Neg}^{\circ}}\operatorname{m\acute{a}}\left[_{\operatorname{TP}}\left[_{\operatorname{T}^{\circ}}\operatorname{n\acute{a}}\ldots\left[_{\operatorname{VP}}\ldots\right]\right]\right]\right]\right]\right]$

Pieces of evidence that the pre-verbal negative marker is indeed a head, come from the fact that it may merge with clitic pronouns (e.g., 1sg), as shown in (17). Note the tone change in the vowel \check{a} , which arguably derives from a combination of the high tone of the negative particle and the preceding low tone of the deleted first person singular pronoun $\hat{u}n$.

(17)	Ùn	dà	ná	Séná	dà	mă	sìgán	wá
	1SG	say	PREP	Sena	that	1SG-NEG	can	come
	'I told	l Sena	that I co					

Similarly, the pre-verbal negative particle can merge with the future marker $n\dot{a}$, giving rise to the form $m\dot{a}\dot{a}$, as in (18). Here the change in tone, associated with vowel lengthening, may derive from the combination of the high tone of the negative particle and that of the future marker.¹³

Ùn (18)dà ná Séná dà à máá yì Kútànù égbè PREP Sena that 1SG sav 2SG NEG-FUT go Cotonou today 'I told Sena that you will not go to Cotonou today'

¹³These facts are to some extent reminiscent of the English colloquial form ain't, which combines an auxiliary and the contracted negation head n't (see Haegeman 1995).

Finally, the pre-verbal negative marker can merge with both the first person clitic pronoun and the following future marker as shown in (19a). Sentence (19b) indicates that this process may also happen in embedded contexts.

(19)	a.		EG-FUT ot go to (U	Kútànù Cotonou today'	égbè today				
	b.	1SG	dð say Sena that l	ná PREP will not	Séná Sena t go to Coto		màá 1SG-NEG-FUT ay'	yì go	Kútờnù Cotonou	égbè today

As often assumed in the literature, such a merging process is typical of functional heads (e.g., clitics, determiners, auxes). Accordingly, I interpret these facts as empirical support for the analysis of the Gungbe pre-verbal negative marker as head of NegP. Given that this pre-verbal marker displays similar morpho-syntactic properties across Gbe, I further conclude that the pre-verbal negative marker is a head that merges under Neg across Gbe (see also Agbedor 1993; Lefebvre 1998; Kluge 2000; Lefebvre and Brousseau 2002; Aboh 2004a and references cited there for a similar approach).

6.3.2 Pre-verbal and/or Right Edge Negation

The Fongbe-type languages fall into class (ii) because they express sentential negation optionally by a pre-verbal marker or a right edge marker. Sentence (20a) instantiates the pre-verbal marker, which is identical to the Gungbe marker $m\dot{a}$, while (20b) illustrates the right edge negative marker \ddot{a} (da Cruz 1993).

(20)	a.	Kòkú	má	ná	xà	àsón	ś	[Fongbe]		
		Koku	NEG	FUT	buy	crab	DET			
		'Koku will not buy the crab'								
	b.	Kòkú	ná	xò	àsón	б	ă			
		Koku	FUT	buy	crab	DET	NEG			
		'Koku v	will not	buy the	crab'					

The Fongbe pre-verbal and right edge negation markers never co-occur in main clauses, but they may in *if*-constructions. Observe the contrast in (21).

(21)	a.	*Kòkú	má	xà	àsón	5	ă				
		Koku	NEG	buy	crab	DET	NEG				
	b.	Ní	Kòkú	má	xò	àsón	ó	ă,	é	ná	yì
		if	Koku	NEG	buy	crab	DET	NEG	3SG	FUT	go
		ʻIf Koku	did not b	uy the cr	ab, he w	ill leave	,				

It is not clear to me what excludes structures such as (21a) in Fongbe, given that the same sequencing is found in some embedded contexts in Fongbe, and more generally in other Gbe languages such as Gengbe and Ewegbe (see Section 6.3.3). Put differently, the appropriate explanation for the ungrammaticality of (21a) cannot be that the two markers compete for the same position in syntax. This would contradict the gram-

matical example (21b), which suggests that the two negation markers target distinct positions in the clause structure. I conclude from this apparent paradox that the Gbe languages involve two distinct positions for encoding negation: one before the verb and one to the right edge. In addition, I propose that the incompatibility of the two negative markers in certain main clauses derive from mood specifications to be discussed in Section 6.4. For the present discussion, however, the realization of the Fongbe preverbal and right edge negative particles as individual sentence negation markers (20) and their simultaneous occurrence in sentences like (21b) indicate that Gbe languages display negative concord. This is shown by example (21b), which encodes single sentential negation. The Ewegbe-type languages, where sentential negation requires the presence of the pre-verbal and the right edge negative particles further confirm this.

6.3.3 Pre-verbal and Right Edge Negation

The Ewegbe-type languages (e.g., Gengbe, Ewegbe) belong to class (iii): sentential negation necessitates the simultaneous occurrence of the pre-verbal negative marker and the right edge negative marker, as shown in (22a) (see Houngues (1997)). The ungrammatical sentences (22b–c) indicate that, unlike the Fongbe-type languages, none of these markers can be omitted.

(22)	a.	Kòfí	mú	dù	nú	ò	[Gengbe]
		Kofi	NEG	eat	thing	NEG	
		'Kofi die	d not eat	,			
	b.	* Kòfí	mú	dù	nú		
		Kofi	NEG	eat	thing	NEG	
		'Kofi die	d not eat	,			
	c.	*Kòfí		dù	nú	ò	
		Kofi		eat	thing	NEG	
		'Kofi wi	ll not ea	ť			

I return to the discussion on the categorial status of the right edge negation in Section 6.4. At this stage of the discussion, it appears that the descriptive generalization is that the Gbe languages display bi-partite negation even though the languages may differ as to which of these two positions is overtly realized. This possibility is empirically supported by Kluge (2000) who shows that, in most Gbe, the pre-verbal negation marker involves the bilabial nasal sound /m/ associated with a vowel (i.e., a, u, ε). This marker always occurs in a fixed position between the injunctive marker and the tense marker as suggested previously. On the other hand the right edge negative particle always consists of a vowel (e.g., a, o, ϑ).

While all Gbe languages display the pre-verbal negative marker, even though the languages may differ as to the contexts where this element surfaces, not all Gbe languages show reflexes of the right edge negative particle.¹⁴ Given that the pre-verbal negation marker can negate a sentence by itself, I assume that it heads NegP, which is underlyingly present in all Gbe languages. I further propose that NegP dominates TP, as suggested in (16) repeated here as (23) (Agbedor 1993; Laka 1990; Progovac 1993; Haegeman 1995; Zanuttini 1997; Aboh 2004a).

(23) $\dots \left[_{\text{FinP}} \left[_{\text{Fin}^{\circ}} \text{ nf} \left[_{\text{NegP}} \left[_{\text{Neg}^{\circ}} \text{ mf} \left[_{\text{TP}} \left[_{\text{T}^{\circ}} \text{ nf} \dots \left[_{\text{VP}} \dots \right]\right]\right]\right]\right]\right]$

If we follow this line of reasoning, it appears that the same hypothesis could be made of the right edge negation on the basis of the Fongbe facts discussed previously. The discussion there shows that, when it occurs in matrix clauses, the Fongbe right edge negative particle functions as single sentential negation. Put differently, the Fongbe right edge negative particle can negate a sentence on its own. This possibility clearly raises two questions: (i) the presence or absence of a null pre-verbal negative particle in such constructions, that is, how NegP, which I assume to be present in all Gbe is licensed, and (ii) the categorial status of the right edge marker, as well as its structural position.¹⁵ Before I come back to these questions in Section 6.4, let us first consider the issue of the exact surface position of the right edge negative marker.

6.3.4 The Distribution of Right Edge Negation in Gbe

Previous discussion indicates that the Gbe languages exhibit a word order that could be indicative of the hierarchy in (5), which I now refine under (24). In terms of this sequencing, the pre-verbal negative marker heads NegP, which in turn precedes tense (i.e., TP).

(24) Subject > Negation > Tense> Habitual > Progressive $(XP_{[object]}) > V > (XP_{[object]}) > Adverb > Adjunct$

This sequencing is partial, however, because it does not provide any room for the right edge negative particle, which tends to close off the sentence in both Fongbe-type and Ewegbe-type languages. The following paragraphs try to locate this negative marker more precisely in the sequence by looking at its interaction with negative quantifiers, and its distribution with regard to adverbs, adjuncts, and clause-typing morphemes, which occur to the right edge in Gbe.

6.3.4.1 The Right Edge Negation in Matrix Clauses

As is the case in many languages, the Gbe negative particles may license negative quantifiers in subject and object positions (25). In this regard, Agbedor (1993) shows that the Ewegbe negative quantifier $(ad\acute{e})$ -k\acute{e}, whether it marks the subject or

¹⁴Recall that Gungbe does not have a right edge negative marker.

¹⁵ An additional question here is whether the sentence-final negative marker is present in all Gbe. The discussion in Section 6.4 suggests so.

the object, may co-occur with the pre-verbal and right edge negative particle. This is shown by the examples under (25a-b).¹⁶

(25)	a.	Náné-ké something-NQ 'There is nothing		àgbà-á plate-DET e'	mè in	ò NEG	[Ewegbe]
	b.	Áma Ama 'Ama didn't buy	mé-flè NEG-buy anything'	náné-ké something-NQ	ò NEG		(Agbedor 1993: 122)

According to Agbedor (1993), the negative quantifiers in these examples involve a quantifier and a negative polarity particle $-k\dot{e}$ whose presence is contingent on that of the sentential pre-verbal and right edge negative particles $m\dot{e}...\dot{o}$. This is illustrated by the ungrammatical sentences under (26), which lack the sentential negative particles.

(26)	a.	*Náné-ké something-NQ	1		mè in	[Ewegbe]
		'There is nothing				
	b.	*Áma	flè náné-ké			
		Ama	buy	something-NQ		
		'Ama bought not	hing'		(Agbedor 1993: 122)	

These facts further confirm the status of the Gbe languages as negative concord languages. In these constructions too, the Ewegbe second sentential negative particle ∂ must occur to the right edge of the clause. This position is fixed and follows a sequence of adjuncts as shown in (27a–b). The example (27c) further indicates that the order right edge negative > adjunct is prohibited.

(27)	a.	Kòfí	mé-xlẽ	àgbàlẽ	nyuie	lè	xò-á	mè	ò	[Ewegbe]
		Kofi	NEG-read	book	well	LOC	room-DET	in	NEG	
		'Kofi did r	ot read a bo	ook well in th	ie room'					
	b.	Kòfí	mé-do	le	xò-á	mè	kábá	ò		
		Kofi	NEG-exit	LOC	room-DET	in	quickly	NEG		
		'Kofi didn	't get out of	the room qu	ickly'					
	c.	*Kòfí	mé-do	le	xò-á	mè	ò	kábá		
		Kofi	NEG-exit	PREP	room-DET	in	NEG	quickly		

In addition, the serial verb constructions under (28) indicate that the right edge negative particle comes last (i.e. after the second VP) in such realizations too.

(28)	a.	Kòfí	mé-tsó	àgbàle -á	[yi	xò-á	mè]	ò	[Ewegbe]			
		Kofi	NEG-take	book-DET	go	room-DET	in	NEG				
	'Kofi did not take the book into the room quickly'											
	b.			àgbàlẽ -á		[yi	xò-à	mè]				
		Kofi	NEG-take	book-DET	NEG	go	room-DET	in				

¹⁶Agbedor (1993) further suggests that this negative quantifier marks nouns (or NPs) only.

At first sight, one may conclude from these facts that the Gbe right edge negative particle occurs sentence-finally (i.e., following adjuncts and serialized VPs). But this is a wrong characterization because this particle can cluster with other clause-typing markers (e.g., question marker, topic marker) to the right edge. In such cases, the right edge negative particle ∂ may precede other discourse-particles, such as, the question marker or the topic marker.

(29)	a.	Kofi	mé- xlẽ NEG-read Kofi read a b	àgbàlẽ book ook?'	ò-à? NEG-INTER	[Ewegbe]	
	b.	Né If	Kòfí Kofi	mé- xlẽ NEG-read	àgbàlè book	ò NEG	lá TOP
			11011		e., as you/we kr		101

I therefore conclude that the right edge negative particle does not realize sentence-final position, but some position linearly preceding the topic and interrogative markers (30), which Aboh (2004a,b) analyzed as functional heads within the C-system.

 $(30) \quad Subject > Negation > Tense> Habitual > Progressive (XP_{[object]}) > V > (XP_{[object]}) > (Adverb) > Adjunct > (Adverb) > Negation > Question...Topic$

The next section discusses the distribution of the right edge negative particle in embedded or conjoined clauses.

6.3.4.2 The Distribution of Right Edge Negation in Complex Clauses

The data discussed thus far mainly deal with matrix clauses and lead to the description under (31), with regard to the expression of sentential negation in Gbe:

(31)	a.		Subject	Neg _{mál}	V		(Gungbe)
	b.			Neg _[má]	V		
	c.				V	Neg	(Fongbe)
	d.	Ní	Subject	Neg _[má]	V	Neg	
	e.			$\operatorname{Neg}_{[má]}$		Neg _[ò]	(Ewegbe, Gengbe)

This description indicates that the Ewegbe-type languages always require the right edge negative particle in negative sentences, while the Fongbe-type languages only allow this particle in certain well-defined contexts (e.g., declaratives, *if*-constructions). Building on this, one may conclude that the Gbe languages that manifest bi-partite negation require a right edge negative particle per clause. This would mean that in declarative embedded clauses, for instance, these languages should manifest two tokens of the right edge negative particle, one in the matrix clause and one in the embedded clause. This prediction is not borne out, however, because only one right edge negative particle is required per sentence.

Consider, for instance, the embedded affirmative sentence in (32a). The following example (32b) indicates that a negative counterpart of (32a), with scope over the matrix

clause, can only be expressed by means of a pre-verbal negative particle in the matrix clause being associated with a right edge negative marker at the end of the embedded clause. The ungrammatical example (32c) shows that a right edge negative particle cannot occur at the right edge of the matrix clause (i.e., after the matrix verb) as one would expect following the description of sentential negation discussed previously.

(32)	a.	Kofi Kofi 'Kofi sa	say	that	Asiba Asiba ill come'	FUT	va come		
	b.	Kofi Kofi 'Kofi di	me NEG idn't say	say	be that siba will	Asiba		va come	o NEG
	c.	*Kofi Kofi	me NEG	gblə say	o NEG	be that	Asiba Asiba	a FUT	va come

Similarly, the negative counterpart of (32a) with scope on the embedded verb requires the realization of the pre-verbal and the right edge negative particles in the embedded clause.

(33)	Kofi	gblə	be	Asiba	ma-a	va	0
	Kofi	say	that	Asiba	NEG-FUT	come	NEG
	'Kofi s	aid that	Asiba v	vill not co	ome'		

A negative complex sentence with negation on both the matrix and the embedded clause requires one pre-verbal marker in each clause, but only one right edge marker occurs at the right edge of the embedded clause. The ungrammatical sentences (34b–c) indicate that the sentence cannot contain two right edge negative markers, regardless of whether each marker targets a separate clause or whether they all occur at the right edge of the embedded clause.

(34)	a.	Kofi	NEG	say	that	ma -a NEG-FUT ne'		o NEG	
	b.	*Kofi Kofi		0		Asiba Asiba	ma -a NEG-FUT	va come	0 NEG
	c.	*Kofi Kofi	me NEG	0	be that	ma-a NEG-FUT	va come	0 NEG	0 NEG

The situation in conjoined clauses is a bit different. The following paragraphs discuss two types of conjunctions in Ewegbe: he 'then' and ye 'and'.¹⁷ He has the particularity that it requires a null subject in the dependent clause that is bound by the subject of the matrix clause, as in (35a). *Ye*, on the other hand, requires an overt subject that may or may not be co-referential to the subject of the first conjunct (35b).

¹⁷These translations are approximations.

(35)	a.	Kofi _i	du	nu	he	<subject></subject>	klə	agban
		Kofi	eat	thing	then	-	wash	dish
		'Kofi at	te then	washed	the dish	es'		
	b.	Kofi _i	du	nu	ye	e _i /Asiba	klə	agban
		Kofi	eat	thing	then	3SG/Asiba	wash	dish
		'Kofi at	te and	he/Asiba	washed	the dishes'		

The contrast between *he* and *ye* suggests that the former is a subordinator, while the latter better qualifies as a proposition coordinating conjunction. This observation is underscored by the fact that *he*-constructions and *ye*-constructions behave differently with regard to negation. In the case of *he*, sentence negation requires the pre-verbal negation marker in the matrix clause and a right edge negation marker that must close off the embedded clause (36a). Recall from example (32b) that similar facts arise with embedded clauses introduced by *be* 'that'. As mentioned previously (see 32c, 34b–c), the right edge negation cannot follow the matrix clause (36b). This is so even if the right edge negative marker of the matrix clause is doubled by another one at the end of the embedded clause, as in (36c).

(36)	a.	Kofi _i Kofi 'Kofi di	me NEG d not eat	du eat then wa	nu thing ashed the	he then dishes'	ec _i	klə wash	agban dish	0 NEG	
	b.	*Kofi _i Kofi	me NEG	du eat	nu thing	o NEG	he then	ec _i	klə wash	agban dish	
		Kofi di	d not eat	then wa	ashed the	dishes					
	c.	*Kofi _i Kofi 'Kofi di	me NEG d not eat	du eat then wa	nu thing ashed the	o NEG dishes'	he then	ec _i	klə wash	agban dish	o NEG

Similarly, the matrix pre-verbal negation marker may not be doubled by a pre-verbal negation in the embedded clause followed by right edge negation.

(37)	*Kofi	me	du	nu	he	ec	me	klə	agban	0
	Kofi	NEG	eat	thing	then	NEG	wash	dish	NEG	
	'Kofi did	not eat	then H	e did not	t wash th	he dishes'				

This is different from the situation described for embedded clauses introduced by *be*, the Ewegbe equivalent of 'that', as the grammatical example (34a) shows. A possible explanation for this asymmetry could be that *he* introduces a truncated structure (say TP) that does not include the NegP headed by the pre-verbal negative marker.¹⁸ Be it so, the important point here is that such embedding cannot involve two right edge negative markers contrary to what one may expect.

The situation is quite different when it comes to the sentence coordinators *ye* 'and'. Being a real sentence coordinator, *ye* conjuncts two independent sentences

¹⁸I thank F. Ameka for bringing this possibility to my attention.

as in (35b) repeated here as (38a). Accordingly, sentence negation can be realized independently in each conjunct (38b-c) or simultaneously in both conjuncts (38d).

(38)	a.	Kofi _i Kofi 'Kofi a	du eat ate and I	nu thing he/Asib		e¦Asiba 3SG/Asiba d the dishes'	klə wash	agban dish				
	b.	Kofi Kofi	me NEG	du eat	nu thing	o NEG	ye and	Asiba Asiba	klə wash	agban dish		
		'Kofi d	lid not e		0	washed the di	shes'					
	c.	Kofi	du	nu	ye	Asiba	me	klə	agban	0		
		Kofi	eat	thing	and	Asiba	NEG	wash	dish	NEG		
		'Kofi a	ate and	Asiba d	id not w	ash the dishe	es'					
	d.	Kofi	me	du	nu	0	ye	Asiba	me	klə	agban	0
		Kofi	NEG	eat	thing	NEG	and	Asiba	NEG	wash	dish	NEG
		'Kofi d	lid not e	eat, and	Asiba d	lid not wash	the dishe	s'				

It is worth noticing that unlike embedded contexts, sentence coordination requires that the two sentential negative particles be realized in each conjunct. A similar situation arises in adjunct clauses, such as, *Ne*-constructions (i.e., the Ewegbe equivalent of English if-constructions) illustrated by (39a). As the examples under (39b–d) show the main clause and the adjunct clause can be negated individually or simultaneously.

(39)	a.	Ne If	Kofi Kofi	du eat	nu thing	la, TOP	Asiba Asiba	la MOOD	klə wash	agban dish			
		ʻIf K	Kofi eats, A	siba wi	ll wash	the di	shes'						
	b.	Ne	Kofi	me	du	nu	0	la,	Asiba	la	klə	agban	
		If	Kofi	NEG	eat	thing	NEG	TOP	Asiba	MOOD	wash	dish	
		ʻIf K	Kofi does n	ot eat, A	Asiba v	vill was	h the dish	nes'					
	c.	Ne	Kofi	du	nu	la,	Asiba	ma	klə	agban	0		
		If	Kofi	eat	thing	TOP	Asiba	NEG-MOOD	wash	dish	NEG		
		'If/v	when Kofi e	eats, As	iba wil	l not w	ash the di	shes'					
	d.	Ne	Kofi	me	du	nu	0	la,	Asiba	ma	klə	agban	0
		If	Kofi	NEG	eat	thing	NEG	TOP	Asiba	NEG-MOOD	wash	dish	NEG
		'If/v	when Kofi d	does no	t eat, A	siba wi	ill not wa	sh the dishes'					

The data discussed thus far indicate that only one right edge negation particle is allowed in embedded contexts. This particle necessarily occurs in the most embedded clause, as schematized in (40a). Representation (40b) further indicates that in non-embedded contexts, where two or more independent clauses are connected (e.g., by coordination or adjunction), each clause can be negated on its own and may involve the right edge negative particle.

What the contrast in (40) suggests is that long distance negative concord in these languages holds in case of embedding only. Adjuncts and coordinate structures are islands for negative concord (Haegeman 1995). This paper focuses on situation such as the one under (40a) where only one right edge negative particle is allowed, and suggests that they are not genuine instances of long distance negative concord. The proposed analysis carries over structures such as (40b).

6.4 Right Edge Negation: an I-Type or C-Type Element?

Let us step back and consider again the hypothesis that the pre-verbal negation heads a NegP that dominates TP, as proposed in Section 6.3. Starting from that angle, two possible analyses arise as to the exact position of the right edge negation particle.

Following Zanuttini (1997) and subsequent work, one could propose that the right edge negative particle heads a NegP in a lower position within the aspect domain but higher than the VP. This implies that this negative particle surfaces to the right edge due to movement operations.

The second hypothesis would be to assume that, like other Gbe right peripheral markers, the right edge negative particle belongs to the C-domain. This would mean that the right edge negative particle heads a NegP that projects within the C-system, but surfaces to the right edge due to predicate fronting. A type of movement that I have shown in Section 6.2 is typical of the Gbe clause-typing morphemes (e.g., question marker), and other C-type elements such as the focus marker and the topic marker. In what follows, I consider each hypothesis in turn and propose that the analysis of the right edge negative particles as C-type elements captures better the Gbe facts. I start with an analysis along the lines of Zanuttini (1997).

6.4.1 The Right Edge Negation is an I-Type Element

A possible implementation of Zanuttini's (1997) multiple NegPs hypothesis that would accommodate the Gbe facts could be that the Gbe pre-verbal negative markers $m\dot{a}/m\dot{u}$ are expressions of the negative head Neg° that takes TP as complement. Given that the right edge negative elements \ddot{a}/∂ may negate a proposition on its own, as shown by the Fongbe data, we can further propose that they head a second NegP that projects within the aspect domain. The Gbe phrase structure therefore includes two negative projections above and below TP, each headed by a negative particle (41).

(41)
$$\operatorname{NegP1}_{[m \acute{a}/m \acute{u}]} > TP > ... \operatorname{NegP2}_{[\breve{a}/\breve{o}]} ... > AspP... > VP$$

Under this approach, the differences between the Gbe languages reduces to whether a language realizes NegP1 or NegP2 morphologically, as is the case in Gungbe and Fongbe, or both simultaneously as shown for Gengbe, Ewegbe, and Fongbe (in some contexts). Building on the hierarchy in (41), I further propose that

the negative particle heading NegP2 occurs sentence-finally due to pied-piping of AspP to [spec NegP2] as represented in (42), where this movement can be motivated by the Neg-Criterion.¹⁹



6.4.1.1 Fongbe and Santome

Hagemeijer (2004, 2007) adopted a similar analysis for discontinuous negation in Santome. Sentence negation in Santome shares significant morphosyntactic features with sentence negation in the Gbe languages. I reproduce a few relevant examples here, but the interested reader is referred to Hagemeijer's own work for a careful and detailed discussion (see also Bell (2004)).

Santome sentence negation may involve discontinuous negative markers including pre-verbal particles, such as *nalnantalnaxi*, and a right edge element *fa*.

(43) a.	Bô 2SG 'You we	2	tava nansê Tns born n yet either.	also	fa. NEG2			
b.	3SG		ka ASP gnize the pla	bila turn ace where the		place		sa nê fa . be in-3SG NEG2
c.	Oze Today 'Today I		n 1SG ance anymo	nanta(n) not-anymore re.'	ka Asp	dansa dance	fa. NEG2	

According to Hagemeijer (2004, 2007) the pre-verbal negation particles *naxi*, *na*, and *natan* are mutually exclusive, they typically occur between the subject and the verb, and they license N-words as well as negative quantifiers (whether subjects or displaced constituents). These properties lead the author to conclude that the pre-verbal negative particles are heads. They compete for the same position Neg, above T, where they encode sentence negation.

The right edge negative particle fa always occurs after all the material inside the verb phrase. Like in Gbe, however, it precedes C-type or sentence-discourse markers, such as the emphatic particle \hat{o} .

(44)	Sun	na	tôlô	fa	ô!
	He	NEG1	silly	NEG2	EMPH
	'He (formal) is not silly!	,			

¹⁹ This view implies that [spec NegP1] contains a null negative operator.

In embedded contexts, Santome negation involves a pre-verbal negative particle in the matrix clause, followed by a single negative marker (i.e., fa) to the right edge (45a). Interestingly, sentence (45b) where the embedded clause has been fronted indicates that the right edge negation fa in (45a) actually belongs to the matrix clause since it cannot be pied-piped with the embedded clause.

(45)	a.	Ome Man					ê 3SG		a kunhadu bô s brother-in-law		fa . NEG2
		'That m	an did	idn't say he's your brother-in-law.'							
	b.	Kuma that 'That he	3SG	is	brothe	du bô, er-in-law Poss w, the man di	man	SP	na NEG1	fla say	fa . NEG2

The following data on simultaneous negation within the matrix and embedded clause further supports this observation. In example (46), both the matrix and embedded clauses involve a pre-verbal negative marker, but only one right edge negative particle is allowed in the sentence. Since the right edge particle is associated with the matrix clause, this example further indicates that doubling of right edge *fa* is prohibited.

fla fa (*fa) (46)Ome se na kuma ê na sa kunhadu bô SP NEG1 say that 3SG NEG is brother-in-la POSS NEG2 NEG2 man 'That man didn't say he isn't your brother-in-law.'

While one fa only seems to be allowed in contexts of complementation, this constraint does not extend to contexts involving coordination. An example is given in (47) which shows that each independent proposition involves the pre-verbal and clause-final negation particles.

(47)	Kaso	se	na	tê	ôpê	fa,	na	tê	mon	fa,
	dog	SP	NEG1	have	leg	NEG2	NEG1	have	forefoot	NEG2
	na	tê	dentxi	fa,	maji	ê	ka	mode	pasa.	
	NEG1	have	tooth	NEG2	but	3SG	ASP	bite	surpass	
	'That dog	g doesn'	t have bac	kfeet, or	forefee	et or teeth	, but it h	as a mea	n bite.'	

These data are quite similar to those of the Gbe languages discussed previously. In his account for the Santome data, Hagemeijer (2004, 2007) proposes the derivation in (48) where the Santome negative particles head two negative phrases NegP1 and NegP2 above and below TP respectively. In this analysis, the right edge negative *fa* triggers pied-piping of the aspect phrase into its specifier [spec NegP2].

(48) $\left[\operatorname{NegP1}\left[\operatorname{Neg1} \mathbf{na} \left[\operatorname{TP}\left[\operatorname{NegP2}\left[\operatorname{Neg2} \mathbf{fa} \left[\operatorname{AspP}\left[\operatorname{VP} \dots\right]\right]\right]\right]\right]\right]\right]$



6.4.1.2 Clause-Typing and Negation in Fongbe and Santome

While this derivation produces the right word order in both Gbe and Santome, it is not clear though why in languages like Fongbe where the negative particles normally exclude each other, they do co-occur under special left peripheral conditions. Recall from the Fongbe examples under (21) – repeated here as (49) – that the pre-verbal marker $m\dot{a}$ and the right edge negation marker \ddot{a} never co-occur in main clauses but in *if*-constructions only.

(49)	a.	*Kòkú	má	xò	àsón	ó	ă				
		Koku	NEG1	buy	crab	DET	NEG				
	b.	Ní	Kòkú	má	xò	àsón	ó	ă,	é	ná	yì
		if	Koku	NEG1	buy	crab	DET	NEG	3SG	FUT	go
	'If Koku did not buy the crab, he will leave'										

Put differently, double negation in Fongbe is subject to left peripheral conditions, namely conditional. Hagemeijer (2004, 2007) describes similar interactions between C-type properties and the right edge negative particle in Santome. The discussion shows that constructions involving some mood specifications (e.g., evidentials) may lack the right edge negative particle.

(50) Kwidadu pa manjinga se ku n sa ku ê na subli mu for aggressive-person PRT REL 1SG be careful with 3SG NEG1 go-up me 'Be careful that the aggressive person in me doesn't take over'

Negative interrogative sentences may also lack Neg2 as illustrated in (51).

(51) Kloson na ka dwê sun an? Heart NEG1 ASP hurt you Inter 'Doesn't your heart ache?'

Crucially, the presence of Neg2 in interrogative sentences implies that the speaker expects a negative answer to the question. This is additional piece of evidence that modality controls the right edge negation marker in Santome.

(52)	Bô	na	bê	nadaxi	di	bisu	ni	kabêsa	mu	fa?
	2SG	NEG	see	nothing	of	animal	on	head	my	NEG2
	'Haven't you seen any animal on my head?'									

Finally, Neg2 is absent in exclamatives.

(53)	Ê	na	pô	nganha	posta	se!		
	3SG	NEG1	can	win	bet	PRT		
	'No way could he win that bet!'							

The Fongbe data in (49) and the Santome examples in (50) through (53) therefore indicate that there is an interaction between C-type properties such as interrogative

or exclamative force and Neg2. The right characterization therefore is that Neg1 is compatible with all clause-types and does not have any selectional property, while Neg2 occurs in specific clause-types only. Under the proposed analysis in (42) and (48) such interaction can be understood as an instance of long-distance Agree between some C-type functional head and Neg2. This is counter-intuitive, though, since this Agree relation doesn't affect the higher negative particle under Neg1 that intervenes between the C-type particles and NegP2. Put another way, I propose that the interaction between Neg2 and C-type specifications is possible because Neg2 is actually a component of the C-system. The next section develops this analysis.

6.4.2 The Right Edge Negative Particle belongs to C

In this section, I turn to the second possible hypothesis that the pre-verbal negative marker and the right edge one belong to two distinct systems: they head functional projections within the inflectional system, and the complementizer system, respectively. Put differently, the pre-verbal negation $m\dot{a}/m\dot{u}$ belongs to the inflectional domain where it interacts with tense, INFL-related modality, and aspect. The right edge negative elements \ddot{a}/∂ , however, express a negative head, labeled as Neg°_[C], located within the complementizer system. Like the C-type markers discussed in Section 6.2.2, these negative markers occur to the right edge because they take wide scope over the proposition, which is fronted to their specifier positions. Put differently, Neg°_[C] attracts in its specifier, the proposition containing the narrow scope taking pre-verbal negative $m\dot{a}/m\dot{u}$, as shown in (54). With regard to discourse-semantics, I propose that such negative particles are expressions of speech act modality (Laka 1990; Ouhalla 1993; Progovac 1993; Roussou 2000).



Under this approach, the difference between the Fongbe-type languages which display discontinuous negation and the Gungbe-type languages, which involve the preverbal negative marker only reduces to the absence of a morphologically realized C-type negative particle in the latter. Put another way, just as the C-system involves FinP that encodes finiteness features that match those of the I-system, I argue that the C-system also includes a negative head that expresses negative clause-typing even though the latter might not be overtly realized cross-linguistically.

6.4.2.1 The Position of Neg°_[C] within C

Under this hypothesis, an immediate question that arises is that of the exact position of the negative projection within the C-system. To answer this question, let's go back to the representation of the left periphery in Gbe as proposed in (15b) and repeated here for convenience.

In discussing the Gbe left periphery, I suggested in Section 6.2 that certain Gbe constructions involve roll-up structures whereby the proposition is fronted to the specifier of the relevant C-type marker. This would be the case in example (14a) repeated here as (56a) derived as in (56b) by successive pied-piping of bigger chunks, where the *ni*-proposition FinP moves to the specifier of the event specific phrase [spec SpfP]. The phrase SpfP then moves to [spec FocP] for focusing, followed by pied-piping of the focus phrase (FocP) to [spec TopP]. Finally, TopP, which embeds FocP containing the phrase that has been pied-piped into its specifier, moves to [spec InterP] (Aboh 2004a,b). This analysis is compatible with the fact that, in such roll-up structures, the C-type markers realize the mirror image of the structural hierarchy proposed in (55a).

(56)a. Đe ùn dà dà [Kòfí ní hòn] 15 wÈ yà ` as 1SG say that Kofi INJ flee DET_{CL} FOC TOP-INTER 'Is is because I said that Kofi should run away?'

 $b. \quad \left[\mathsf{ForceP} \left[\mathsf{Force}^\circ d \mathcal{J} \left[\mathsf{InterP} \left[\mathsf{InterP} \left[\mathsf{TopP} \left[\mathsf{Top}^\circ \ y \dot{a} \left[\mathsf{FocP} \left[\mathsf{Foc}^\circ \ w \dot{\epsilon} \left[\mathsf{SpfP} \left[\mathsf{Spf}^\circ \ l \mathcal{J} \left[\mathsf{FinP} \ n i \ l \right] \\$



With this in mind, let us now consider the distribution of the Fongbe right edge negative marker with regard to the yes–no question marker. Lefebvre and Brousseau (2002) reports that the Fongbe right edge negative marker must precede the focus marker, which in turn precedes the yes–no question marker as in (57).

(57)	É	dù	nú	ă	wè	à?	[Fongbe]		
	3SG	eat	thing	NEG2	FOC	INTER			
	'Is it that s/he has not eaten?'					[Lefebvre and Brousseau 2002: 135, 48:			

Under the structure in (56b), the fact that negation precedes focus, which in turn precedes the question marker in (57), indicates that the negative marker realizes a position lower than FocP. Put differently, the C-type negation marker heads a projection that is situated between FocP and FinP, as represented in (58a). Accordingly, sentence (57) is derived as in (58b), where the C-type negative marker is licensed in a spec-head configuration that requires movement of FinP to [spec NegP] as in (58b). (58) a. $\left[\sum_{\text{ForceP}} \left[\sum_{\text{ForceP}} \left[\sum_{\text{InterP}} \left[\sum_{\text{InterP}} \left[\sum_{\text{InterP}} \left[\sum_{\text{TopP}} \left[\sum_{\text{TopP}} \left[\sum_{\text{FocP}} \left[\sum_{\text{FocP}} \left[\sum_{\text{NegP}} \left[\sum_{\text{NegP}} \left[\sum_{\text{FinP}} \left$

 $b. \quad \left[\mathsf{Force}^\circ \, d \, \dot{\mathfrak{I}} \left[\mathsf{Inter}^P \left[\mathsf{Inter}^\circ \, \dot{\mathfrak{a}} \left[\mathsf{Top}^P \left[\mathsf{Top}^\circ \, \dot{\mathfrak{a}} j i \left[\mathsf{Foc}^P \left[\mathsf{Foc}^\circ \, w \dot{\boldsymbol{\epsilon}} \left[\mathsf{Neg}^P \left[\mathsf{Neg}^\circ \, \breve{\mathfrak{a}} \left[\mathsf{Fin}^P \, XP \right] \\ \left[\mathsf{Inter}^\circ \, \dot{\mathfrak{a}} \left[\mathsf{Top}^P \left[\mathsf{Top}^\circ \, \dot{\mathfrak{a}} j i \left[\mathsf{Foc}^P \left[\mathsf{Foc}^\circ \, w \dot{\boldsymbol{\epsilon}} \left[\mathsf{Neg}^\circ \, \breve{\mathfrak{a}} \left[\mathsf{Fin}^P \, XP \right] \\ \left[\mathsf{Inter}^\circ \, \dot{\mathfrak{a}} \left[\mathsf{Top}^\circ \, \dot{\mathfrak{a}} j i \left[\mathsf{Foc}^\circ \, w \dot{\boldsymbol{\epsilon}} \left[\mathsf{Neg}^\circ \, \breve{\mathfrak{a}} \left[\mathsf{Fin}^P \, XP \right] \\ \left[\mathsf{Inter}^\circ \, \dot{\mathfrak{a}} \left[\mathsf{Top}^\circ \, \mathsf{Inter}^\circ \, \mathsf{A} \left[\mathsf{Top}^\circ \, \mathsf{A} \left[\mathsf{Inter}^\circ \, \mathsf{A} \left[\mathsf{Top}^\circ \, \mathsf{A} \left[\mathsf{Inter}^\circ \, \mathsf{A$



Under this approach, the C-type negative marker takes scope over the pre-verbal $m\dot{a}/m\dot{u}$ negative marker contained in the proposition under spec-head relation. This explains the contrast in the following Fongbe examples. According to Avolonto (p.c.), the bracketed clause is within the scope of the Fongbe negative morpheme \dot{a} in sentence (59a) but not in (59b).

- (59) a. Kòfí yì $\begin{bmatrix} F_{\text{ForceP}} & [\text{de ún dò nú wè ó]} \end{bmatrix} \begin{bmatrix} N_{\text{NegP}} & \tilde{a} & [F_{\text{FinP}} & t_{(\text{de ún dò nú wè ó]}} \end{bmatrix} \end{bmatrix} \end{bmatrix}$ Kofi leave as/that 1sg say Prep 2sg Det Neg₂ 'Kofi left as I didn't tell you'
 - b. $[_{ForceP} [_{NegP} [K\delta ff yi] [_{Neg^{\circ}} \check{a}] [_{FinP} t_{[K\delta ff yi]}] [dé ún dð nú wè <math>\dot{a}$] Kofi leave Neg₂ as 1sg say Prep 2sg Det_{CL} 'Kofi didn't leave as I told you'

As suggested by the proposed representation, the C-type negative marker belongs to the C domain of the embedded clause in (59a), but not in (59b) where it is related to the matrix clause, and the subordinate clause is presumably an adjunct. In both cases, the proposition containing the pre-verbal negation $m \dot{a}/m \dot{u}$ has been moved to the specifier of the C-type negative marker.

The typology of negation across Gbe therefore suggests that the Gungbe-type languages overtly manifest I-type negation, only. In this case the pre-verbal *málmú* negative particle has scope over VP. Given that the C-type negation is not overtly expressed (but may represent some null negative element), the pre-verbal negation is interpreted as sentential negation by default.

In the Gengbe-type languages, however, discontinuous negation leads to obligatory negative concord, that is, the simultaneous realization of C-type and I-type negation to encode single sentential negation. Obligatory negative concord here is a clear manifestation of the intimate link between C and I with respect to negation (Rizzi 1990, 1997; Haegeman 1995).

In the Fongbe-type languages, sentential negation is optionally determined by C-type or I-type negation. Notice, though, that our analysis predicts that the negation marker whether in C or I will always have scope over the embedded VP, a fact that

reduces to the Gungbe situation. That sentential negation is optionally expressed by the C-type or I-type negation in Fongbe also corroborates with the fact that negative concord is achieved in specific configurations only. Recall from previous discussion that simultaneous occurrence of the pre-verbal negative particle $m\dot{a}$ and the right edge particle is limited to *if*-constructions, that is, conditional, only. A reasonable conclusion here is that in such constructions, the conditional particle ni '*if*' occurs within C where it licenses the clause-typing negative marker \ddot{a} . Building on this and on previous discussion on the distribution of right edge negation in both Fongbe and Santome, I further propose that the clause-typing negation in C determines the nature of the pre-verbal negation within the I-system. The next section discusses empirical and theoretical implications of this hypothesis.

6.4.2.2 On some Empirical and Theoretical Implications of the Category Neg°_[C]

The hypothesis that C involves negative specifications is not new and has already been argued for in the literature by several authors (e.g., Laka 1990; Ouhalla 1993; Progovac 1993; Roussou 2000). Building on these studies, the conclusion that we reach in previous sections is that the Gbe right edge negative particles are negative clause-typing morphemes. This hypothesis is empirically supported by data from the Gbe languages as well as from Santome, where it appears that the right edge negative particle, but not the middle field pre-verbal one, interacts with clause-typing specifications, such as, declarative force and interrogative force.

While this behavior is blurred in languages where the pre-verbal and the right edge negative particles must be realized simultaneously, it appears neatly in languages like Fongbe or Santome where the two negative particles may be realized independently. In this regard, a unifying property of the right edge negative particle in Fongbe and Santome is that they encode the speaker's point of view with respect to the proposition. This was briefly mentioned with regard to the Santome example (52).

With regard to Fongbe, Lefebvre and Brousseau (2002: 128) report that "while the [pre-verbal] marker *mà* appears to negate the content of a proposition in much the same way as English *not* does (e.g., *John has not arrived*), ă appears to express the speaker's disagreement with the content of the proposition (e.g., *It is not the case that John has arrived*)."²⁰ It therefore follows from this characterization that, in Fongbe and Santome, the so-called right edge negative particles encode what has been referred to as Evidentiality in the literature. If this is true, then it seems natural

 $^{^{20}}$ Lefebvre and Brousseau (2002) further show that \check{a} forms a paradigm with other clause-typing markers (e.g., the marker of insistence) with which it is in complementary distribution. If mutual exclusion is taken to be piece of evidence for competition for a unique position, then these facts provide additional empirical support for the view that the sentence-final negative particle is a C-type element.
that these evidential negative markers pertain to the left periphery where they interact with speech act modality, such as, declarative and interrogative force (see Rizzi 1997; Cinque 1999). While anchoring the proposition in discourse, the C-system also expresses the speaker's attitude as well as her/his judgment or comment about the content of the proposition (see Palmer (1987)).

A direct consequence of the proposed description is that the C-type negative expression determines under c-command the I-type negation. Fongbe offers empirical support to this view. In addition to the pre-verbal sentential negation $m\dot{a}$ and the right edge negation \dot{a} , Fongbe involves another negation marker $k\dot{u}n$ that occurs pre-verbally and competes with $m\dot{a}$ for the same position. The pre-verbal sentence negation $k\dot{u}n$ is limited in its distribution, however. For, instance, it cannot occur by itself, hence the contrast in (60).

(60)	a.	Àsíbá	má	yì	àxìmè
		Asiba	NEG1	go	market
		'Asiba di	d not go to	the m	arket'
	b.	*Àsíbá	kún	yì	àxìmè
		Asiba	kún	go	market
		'Asiba di	d not go to	the m	arket'

Kún cannot occur in interrogative sentence, unlike the pre-verbal sentence negation má.

(61)	a.	Μέ	wè	à	má	tùn	ă?		
		who	FOC	2SG	NEG1	know	NEG2		
		'Who didn't you know?'							
	b.	*Μέ	wè	à	kún	tùn	ă?		
		who	FOC	2SG	NEG1	know	NEG2		
		'Who didn't you know?'							

Kún, cannot occur in imperative (62a-a'), and subjunctive clauses (62b-b'), unlike má.

(62)	a.	Má	wá	ó					
		Neg1	come	Insistence pa	rticle				
		'Don't d	come'						
	a'	*Kún	wá	ó					
		Neg1	come	Insistence pa	Insistence particle				
		'Don't o	come'						
	b.	É	jró	nú	à	ní	má	wá	ó
		3SG	want	for	2SG	INJ	NEG1	come	Insistence particle
		'He wis	hes that y	you don't com	e'				
	b'	*É	jró	nú	à	ní	kún	wá	ó
		3SG	want	for	2SG	INJ	kún	come	Insistence particle
		'He wis	hes that y	you don't com	e'				

The data under (62) point to the fact, shown in example (63), that the pre-verbal sentence negation $m\dot{a}$ can co-occur with various right edge discourse-related particles, such as, the insistence particle \dot{o} or the negative-like particles $n\dot{\epsilon}$ and $g\dot{\epsilon}$.²¹

(63)	a.	Àsíbá	má	wá	nέ
		Asiba	NEG1	come	PRT
		'Asiba di	d not come	e (really)'	
	b.	Àsíbá	má	wá	gέ
		Asiba	NEG1	come	PRT
		'Asiba di	n) come'		

Unlike $m\dot{a}$, the pre-verbal sentence negative $k\dot{u}n$ only occurs with the insistence particle \dot{o} .

(64)Àsíbá tùn dà Márí kún wá *(ó) Asiba know that Mari NEG come Insistence particle 'Asiba knew that Mary did not come'

In Fongbe, as in other Gbe languages, the discussed discourse particles form a paradigm such that elements that fall within the same class exclude each other. This is the case for the particles \check{a} (61), \acute{o} (62), (64), $n\acute{e}$ (63a), and $g\acute{e}$ (63b), which are all mutually exclusive. According to Lefebvre and Brousseau (2002), the right edge particle \acute{o} mainly occurs in negative contexts and entails that the speaker and the hearer disagree. Therefore, \acute{o} generally occurs in negative contexts as in (62a) and (64), or in affirmative imperative constructions (65), which imply a disagreement between the speaker and the hearer.

(65) Wa ó ! come Insistence particle 'Come'

We therefore reach the characterization that, while the right edge negative particle \check{a} encodes the speaker's disagreement with the content of the proposition, the particle δ expresses the speaker's disagreement with the hearer.

At this stage, I have nothing to offer as to the semantics and syntax of the preverbal sentence negative $k \dot{u} n$ and its interaction with right edge discourse-particles, and I hope to return to this issue in future work. What matters for the present discussion, though, is that these Fongbe data suggest that there is a dependency relation between the right edge discourse-particles and the pre-verbal sentence negation: the former determines (or selects) the latter. I therefore conclude that the Fongbe particles \check{a} and \acute{o} are evidential negative markers that realize the left periphery. While \check{a} selects for the pre-verbal negative marker $m \acute{a}$, only, the particle \acute{o} selects both $m \acute{a}$ and $k \acute{u} n$.

Taking this to be the right characterisation, I conjecture that the uniqueness of the right edge evidential negative as illustrated in Section 6.4.1, appears a semantic

²¹Not much is known about the semantic and syntactic properties of these discourse-related particles.

constraint on the expression of evidentiality rather than a syntactic one (or else a phonetic ban on two homophonous elements as it is sometimes proposed Lefebvre and Brousseau 2002; Hagemeijer, 2004, 2007). The exclusion of two evidential markers of the same type (though referring to different participants) in a single sentence is similar to the ban on two foci in a single sentence that has been observed in various languages (e.g., Rizzi 1997). Cross-linguistic evidence seems to support this view. Studies on Quechua, for instance, show that this language involves a series of evidential suffixes that interact with speech act modality as well as other C-type specifications (e.g., focus, question, negation) see Cole (1982), Lefebvre and Muysken (1988), Muysken (1995), Weber (1989), for discussion.

6.5 Conclusion and Further Questions

This paper shows that the Gbe languages involve both a pre-verbal and right edge position for encoding sentential negation. Following the literature, I propose that the pre-verbal negation head a negative phrase (NegP) within the inflection domain. On the other hand, the right edge negative elements are modal elements belonging to the complementizer where they encode (negative) evidentiality. Like other left peripheral markers in Gbe, these negative markers surface to the right edge because they take wide scope over the proposition. Put differently, Neg°_[C] attracts in its specifier, the proposed analysis of negative sentences as peripheral modal elements leads to a fine characterization of the architecture of complementizer system and sheds a new light on the interactions between the C-system and the INFL-system.

The analysis proposed here raises a number of comparative issues that are worth considering and I hope to turn to these in future work. Indeed, the proposed derivations with massive pied-piping recall Nkemnji (1995) discussion of the syntax of Nweh, a grassfield Bantu language. In this language too, certain right peripheral markers (e.g., yes-no question marker) parallel with the Gbe right peripheral markers in forcing leftward movement of their complements. These facts obviously open a new comparative perspective within Niger-Congo that may help us understand the variations across languages of this family. Similarly the question arises how these facts relate to languages with no right peripheral negative markers (e.g., English, French). In this regard, some constructions that may be of some relevance to this comparative approach are sentences like "if only they hadn't come to the office" where 'only' seems to have a speaker-oriented meaning that is not available in its quantifier usage. The question therefore arises to what extent such constructions are amenable to those found in Gbe with bi-partite negation. Finally, given that the usage of right edge (discourse) particles is commonly found in other analytic languages (e.g., Sinitic) it appears that contrasting the Kwa facts to those found in those languages may have significant impact on our characterization of seemingly unrelated phenomena with regard to clause-type and negation across typologically different languages.²²

²²I thank Richard Kayne for bringing these issues to my attention.

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Chapter 7 Information Packaging Constructions in Kwa: Micro-variation and Typology

Felix K. Ameka

7.1 Introduction

Grammars of natural languages offer their speakers various constructional possibilities to express the same basic informational content. The different possibilities tend to correlate with the statuses speakers assign to component parts of the information unit that expresses the basic information content (see e.g. Valduvi and Engdahl 1996; Gundel and Fretheim 2002, 2004; Ward 2004). Kwa¹ language grammars are no exception. They offer morpho-lexical, prosodic, syntactic constructions for representing similar propositional content which differ only in the way in which the information is structured. Even though Kwa languages are not prototypical "topic prominent" (Li and Thompson 1976) or "focus prominent" (Kiss 1998) languages, information packaging is an area that is quite well elaborated in their grammars. (See studies of topicalising and/or focusing devices in some of the individual languages: Timyan 1975 on Anyi; Dakubu 1992, 2005 on Ga; Boadi 1974, 1990; Bearth 1999a; Saah 1998 on Akan; Ameka 1990, 1991 on Ewe, 1992 on Ewe and Akan; Aboh 1998, 2004, 2007 on Gun (Gbe) and Bisang and Somaiya 2000; Bamgbose 2000, 2001; Somaiya and Bisang 2004 on Yoruba among others.)

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¹The term Kwa here corresponds to "Old Kwa" that is, languages belonging to Western Benue-Congo and New Kwa in the current classification of Niger-Congo languages see Williamson and Blench 2000. Examples are drawn from the following languages:

Tano languages: Attié (Ivory Coast), Anyi (Ivory Coast), Akan (Ghana); Ga-Dangme: Ga (Ghana)

Gbe languages: Ewe (Ghana, Togo, Benin), Fon (Benin), Gun (Benin)

Ghana-Togo-Mountain languages: Na-Togo: Lelemi (Ghana), Sɛkpele/Likpe (Ghana); Ka-Togo: Tuwuli (Ghana)

This chapter discusses information packaging in Kwa languages with special attention to focus constructions.² Section 7.2 outlines clause structure and the positions for indicating information statuses of clausal constituents. The subsequent sections are devoted to focusing devices and constructions: Section 7.3 looks at unmarked focus and in-situ focus. Section 7.4 presents the syntax of constituent or term focus structures. In Section 7.5, we discuss the different types of predicate focus, including focusing of predicative adjectives and verb focus. Section 7.6 concentrates on strategies employed in the languages for focussing out of complex phrases like possessive and postpositional phrases. Section 7.7 looks at other specific constructions for information packaging such as topic-comment only constructions and inferential constructions. Section 7.8 is a summary and conclusion of the common patterns and variation among the Kwa languages in this domain.

7.2 Clause Positions

In all Kwa languages, it can be argued that various positions in the left periphery or pre-core position of the clause are used for special purposes. Schematically, a somewhat expanded clause can be represented with the relevant positions and some indications of their functions as follows (see Table 7.1):

(Left) periphe	ry		Core	(Right) periphery		
(Frame Topic)	(Focus)	(Contrastive Topic)	Subject Verb		(Object)	(X)
Background information	Most salient information	Not about anything else	Grammati- calised topic Saying some- thing about participant		Unmarke	d focus

Table 7.1 Clause positions in Kwa

²The following abbreviations have been used:

^{1 =} first person, 2 = second person, 3 = third person, ANAPH = anaphoric proform, ALL = allative preposition, AGR = agreement, CM = Class marker, CNJ = conjunction, COM = comitative, COMP = complementiser, COP = copula, CQ = content question marker, DEF = definiteness marker, DEIC = deictic marker, DEP = dependent verb marker, DET = determiner, DETRANS = detransitive marker, DIST = distal, EMPH = emphatic utterance final particle, FOC = focus marker, aFOC = term (argument) focus marker, pFOC = predicate focus marker, HAB = habitual, ID = identifier, INDEF = indefiniteness marker, INV = invariable pronoun, ITIVE = itive directional marker, LOC = locative preposition, NEG = negative, NOM = nominaliser, NPRES = non-present, PAST = past, PERF = perfect, PL = plural, POSS = possessive marker, POSSPRO = possessed pronoun, POT = potential, PRES = present, PRIV = privative, PROG = progressive, PROSP = prospective, PROX = proximal, Q = question marker, QUOT = quotative, RED = reduplicative, SCR = subject cross-reference, SG = singular, TOP = topic marker, TM = terminal marker, VENT = ventive.

The core clause in the Kwa languages is represented by an SV(O)(O) X string. The example in (1) from Ga taken from Dakubu (2005) is an exponent of such a structure where two positions in the left periphery are filled. In example (2) from Ewe all three positions are filled.

	Topic		Focus		[Subj	-Verb Object]			
(1)	Mí	!έ,	shìká	nì	è-hấ		!mí		
Ga	1SG	TOP	money	FOC	3SG-g	give	1SG		
	'As for me, he gave me money'								
(2)	le	nyatefé	me		lá,	dzódágbe-é	nye	ya	me-vá
Ewe	LOC	truth	containing	g.region	TOP	Monday-aFOC	1SG	as.for	1SG-come
	'In truth, MONDAY I (in contrast to some others) came'								

The first position is for background information topic, i.e., information that should be kept in mind for the interpretation of the rest of the utterance (Chafe 1976). This topic can refer to an entity, as in (1), or a setting-temporal (3a, b, c), condition, location etc. Syntactically, such constituents may be expounded by words, including connectors as in (3a), or phrases, as in (1) and (3b) or by clauses, as in (3c). These topics provide the frame for the assertion, or the question contained in the rest of the clause. In some cases there is an anaphoric element in the rest of the clause indicating a relationship between the two parts of the clause, as in (1). This initial constituent tends to form an intonation phrase, and is marked off from the rest of the clause by a prosodic break, a pause. In addition, such a constituent is marked by a dedicated morpheme glossed TOP in the examples.

(3)	a.	Émegbé	lá,	mía-fo	nu	le	e-ŋú-a	
Ewe		afterwards	TOP	1PL-strike	mouth	LOC	3SG-side-Q	
		'Afterwards, shall we talk about it?'						
	b.	kan	no	wo-twe	manso,	afei	wəa-ye	biako
Akan		formerly	TOP	3PL-pull	matter	now	3PL-do	one
		'Formerly t	hey we	re at variance	e, now the	y agree	,	
		(Christaller	(1875)	1964: 150 §	250)			
	c.	Wò-bá !	á, é	-jè	kpò			
Ga		1PL-come	ГОР 3	SG.PERF-lea	ave out			
	'When we came he had gone out'							

In the Kwa languages, the dedicated morphemes for marking the background information topics are in a heterosemic relation with determiners, either definiteness markers as in Ga (Dakubu 1992) or Ewe and Gbe languages more generally (e.g. Ameka (1990), Aboh (2004)) or they relate to demonstratives as in Akan, i.e., *no* 'TOP' is in a heterosemic relation with the distal demonstrative *no* 'that' and the third person singular pronoun. *Yi* 'TOP' is heterosemically related to the proximal demonstrative *yi* 'this'. Christaller (1875) suggests the following conditions for the use of topic marking *no* and *yi*: If the event in the dependent clause is in progress at the time the main event occurred, the dependent clause ends in *yi*. By contrast, *no* marks dependent clauses whose events occurred in the past or are certain to occur in the future. Consider the examples in (4).

(4)	a.	wo-a-nya		a-ba	yi	tra	ase	
Akan:		[2SG-PERF-all	ready	PERF-come	TOP	sit	down FKA]	
		'As you have c	'As you have come now sit down' (example from Christaller (1875))					
	b.	o-dur	hə	no	ə-kə-to-o	dε	aberwa	
Akan		3SG-reached	there	TOP	3SG-ITIVE-	COMP	old.woman	
					meet-PAST			
		bi	tsena	gya	ho			
		INDEF	sit	fire	around			
		'When he got there, he met an old woman sitting by a fire.' (Osam 1990: 47)						

As (1) and (2) above show, structures involving such background topic constructions co-occur with focused constituents as well as contrastive topics. Each of the three positions in the left periphery are systematically different from one another. These differences are summarised in Table 7.2. Some of the features invoked

	Frame topic	Focus	Contrastive topic
Sequence	Precedes focus (if there is one)	Immediately adjacent to the Subject and follows topic (if there is one)	Precedes the sub- ject position and immediately after the Focus position
Syntactic category that fills the	Connectors	Verb; (predicative adjective)	Verb; (predicative adjective)
slot	Phrase (NP, AP, PrepP)	Phrase (NP, AP)	Phrase (NP, AP)
Number per clause	Clause Multiple	Only one per clause	One per clause (?)
Prosody	It is followed by a prosodic break (pause)	It is not followed by a prosodic break (pause)	It is not followed by a prosodic break (pause)
Speech act distinctions in the rest of the clause	The topic can be followed by any speech act including a question in the rest of the clause	The core of the clause cannot be a (content) question, but can be under the scope of propositional questions	The core of the clause cannot be a (content) question, but can be under the scope of propositional questions
Markers	Typically in heter- osemic relation with definiteness or deictic markers	Relations with narrative connectors, copulas etc.	Scope particles (even, also, too, very/self etc.)
Yoruba	ni (optional)	ni (obligatory)	
Gun	ya	Wε	
Ewe	(l)á	(y)é	
Akan	no, yi,	nà	
Likpe (Sekpele)	(l)á; phrase final vowel lengthening	No marking	

 Table 7.2
 Positions in the left periphery compared

here are inspired by discussions in Cinque (1990), as discussed in Rizzi (1997), van Valin and La Polla (1997); and for their application to Yoruba, see Somaiya and Bisang (2004).

Given that the Kwa languages have distinct structural positions for topic and focus, they could be said to be "discourse configurational languages" following the intuitive characterisation of Kiss (1995: 6). According to her

The properties on the basis of which a language is categorised as discourse configurational are ... the following:

- A. The (discourse-) semantic function 'topic', serving to foreground a specific individual that something will be predicated about (not necessarily identical with the grammatical subject), is expressed through a particular structural relation (in other words, it is associated with a particular structural position).
- B. The (discourse-) semantic function 'focus', expressing identification, is realized through a particular structural relation (that is by movement into a particular structural position).

In fact, Kiss cites Akan and Yoruba as such discourse configurational languages. And in terms of having designated structural positions for the topic and focus constituents, the Kwa languages are indeed discourse configurational. The properties of the focus position in these and other Kwa languages will become clearer as we discuss the realization of focus in the rest of the chapter.

7.3 Focusing Devices

Focus has been defined in various ways in the literature. The 1967 definition of Halliday is instructive:

Information focus "involves the selection within each information unit of a certain element or elements as points of prominence within the message ... Information focus reflects the speaker's decision as to where the main burden of the message lies ... Information focus is one kind of emphasis, that whereby the speaker marks out a part which may be the whole of a message block as that which he wishes to be interpreted as informative." (Halliday 1967: 202 ff).

It is compatible with several other definitions (see e.g. Dik 1978, 1997; Dik et al. 1981; Jong 1981; Watters 1979; Lambrecht 1994; van Valin and La Polla 1997; Caron 1998, 2000; see Butler 2005 for a survey of the treatment of focus in functional theories). Dik (1997)'s definition like Halliday's emphasises the interactional aspect of focus:

The focal information in a linguistic expression is that information which is relatively the most important or salient in the given communicative setting, and considered by S[peaker] to be most essential for A[ddressee] to integrate into his pragmatic information (Dik 1997: 326).

This kind of focal information can augment the addressee's pragmatic information or replace part of it. What is salient may involve a contrast: a specification of what is salient in contrast to other possibilities. Salience may also involve "newness" but focal information need not be entirely new since it may be part of negotiated information for the interlocutors. As Bearth (1999b: 150) comments, "for a number of languages, the basic correlate of focus appears to be the controversial status of an instantiation, not its newness." In other words, the most salient information among different possibilities is selected. This characterisation applies to contexts of focalising in the Kwa languages.

Different languages employ different means for the formal expression of focus. Thus focus may be signalled prosodically by stress as is the case in English, or pitch accent as in the Kwa language Tuwuli, as we shall see below. That is, prosodic prominence is assigned to the constituent that bears information focus. Some languages express focus morphologically by means of special morphemes and particles. A majority of the Kwa languages such as Ewe, Ga and Akan employ such morphemes, as noted earlier. Languages, however, seldom use only morphological means to signal focal information (cf. Gundel 1977, 1988; Givón 1991). Special syntactic constructions such as cleft sentences as well as those that involve permutation of constituent order are also used to indicate focus.

Focus constructions in Kwa languages usually involve the positioning of the focused constituent in a pre-core slot in the clause. In addition, this fronted element is usually marked by a dedicated morpheme described as a focus marker. Such structures have been called ex-situ constructions. Some focus constructions are also in-situ. That is, those clauses in which the focused constituent is not placed in clause initial position but remains in its default position in the clause.

7.3.1 In-Situ Focus

In Kwa languages such an element can be unmarked, as in the Gbe languages or in Yoruba; or it may be marked by pitch-accent or tone as in Tuwuli, or it may be marked by a focus-marking morpheme as in Akan (Bearth 1999a).

Duthie (1996) points out that in a pragmatically neutral declarative utterance in Ewe, the most salient information can be argued to occur at the end of the utterance, i.e., realised as the object or adjunct as the case may be, without any other signal to indicate its information status. Similarly, a constituent that represents the answer to a content question, even though it carries focal information may remain in its default position and not receive any marking as being in focus. Consider the following children's rhyme of a series of question and answer pairs where the answers have the basic SVO constituent order.

(5)	a.	Də	le	mía	wù-ú		
Ewe		Stomach	be.at:PRES	1PL	kill-PROG		
		'We are hungry'					
	b.	Nú-ka	mía-du				
		Thing-CQ	1PL-eat				
		'What shall we eat?'					
	c.	Mía-du	káfa				
		1PL-eat	maize.dumpling				
		'We shall eat maiz	e dumpling'				

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d.	Káfa	mé-dí-é	fo	0
	maize.dumpling	NEG-satiate-HAB	belly	NEG
	'Maize dumpling d	oes not fill one's stomach'		
e.	Mía-du	konkoté		
	1PL-eat	dried.cassava.flour.dumpling		
	'We shall eat konke	ote'		

The utterance in (5b) is a question in which the question word is in focus and is placed in the focus position in the clause. It is however not marked by the focus particle since its default function is that of grammatical object (see below). In (5c) we have an answer to the question and the salient information here is what is to be eaten, namely, $k\dot{a}fa$ 'maize dumpling'. This is thus in focus. However, it occurs in its default position in the clause and not in the clause initial focus position. This is a case of in-situ focus. In Ewe, such elements are not marked in any special way, as far as we know. Similarly, in (5e) an alternative food is mentioned. This is the salient information and hence in focus – a replacive kind of focus, yet it occurs in its default position in the clause and not in the dedicated clause initial focus position. In all these cases, the communicative context makes it clear that the items are in focus, but they do not receive any special marking.

In other Kwa languages, such elements that are in focus in their default position may also be marked either prosodically or morphologically. Tuwuli, a Ghana-Togo-Mountain language, marks some clausal constituents for focus in their default position by pitch accent. Harley (2005: 398 ff) notes that a constituent marked by pitch accent has a distinctly raised tonal contour, particularly on any high-toned syllables. The acoustic intensity of such a syllable may also be increased. Furthermore, the tonal contour of neighbouring constituents may be suppressed to additionally high-light the focussed constituent. Indeed for some constituents, pitch accent may be the only way to signal that they are in focus in certain contexts, e.g. when particular tense aspect values block the use of, say, auxiliary focus.

In Akan, on the other hand, the morphological focus marker *na* 'FOC' can be used to mark a focussed constituent that occurs in its default position. Bearth (1999a) argues that marked in-situ focus in Akan has a specific discourse function of being explanatory. One of the examples he gives is the following dialogue (see Bearth 1999a: 260):

(6)	A:	Kòfí	á-bá	déda				
Akan:		NAME	PERF-come	already				
		'Kofi has	'Kofi has already come'					
	B:	Àánè	ə-dè	káà	nà	è-bá-à-è-é		
		Yes	3SG-take	car	FOC	3SG-come-PAST-DETTRANS-TM		
		'Yes, he came by CAR' (Explains why he is already here)						

Bearth (2004) notes that such in-situ focus structures have a low text frequency, suggesting that the preferred focussing strategy is that of adjoining the focussed constituent to the left of the clause. He distinguishes between in-situ and pre-core focus slot in terms of countervalue, i.e., where one element is asserted at the expense of the other (Bearth 1999a: 261, 2005).

In-situ focus in Kwa languages can thus be unmarked or marked morphologically or prosodically. There may be particular motivations for employing in-situ focus in specific contexts, structural constraints as in Tuwuli or communicative reasons as in the Akan example above.

Contrasting in-situ and marked focus structures in Yoruba, Somaiya and Bisang (2004) suggest that the use of one or the other construction depends on the presence or absence of "preconstruction". They explain that: "If there is a preconstructed set of potential entities from which the speaker has to select the one or more entities which actually hold(s) for a particular context, the argument with focussed ni will be used." (Somaiya and Bisang 2004: 6). For the use of in-situ focus or the unmarked structure they suggest that "[I]f there is no preconstruction, i.e. if the speaker just provides the information asked for by supplying the appropriate entity the unmarked construction with the focus in-situ will be selected." (Somaiya and Bisang 2004: 6). Thus even though the question in (7a) can be answered either by (7b) or (7c) the conditions of use are different:

(7) Yoruba:	a.	Kí what 'What did y	lo FOC:2SG you buy?'	rà? buy	
	b.	Mo 1SG 'I bought cl	ra buy	așọ clothes	
	с.	așọ clothes 'CLOTHES	ni FOC I bought'	mo 1SG	rà buy

An indication of the difference between the marked and the unmarked constructions is that (7b) can be felicitously continued with 'and I bought shoes as well'. However such a continuation is not felicitous with (7c). This is partly because while (7b) is just filling in the information that has been asked for, in (7c), the item 'clothes' belongs to a set of entities known to the interlocutors, and the speaker exhaustively identifies the relevant member from the set. There is thus a difference between unmarked in-situ constructions and ex-situ constructions, to which we turn in the next section.

7.4 Marked Focus Constructions

By marked focus constructions, I mean those structures that involve distinct and dedicated morpho-syntactic mechanisms for indicating that a constituent is in focus. We consider, in particular, the so-called ex-situ constructions and examine the strategies employed for marking focus on the individual clausal constituents across the Kwa languages.

The prosodic properties of focus constructions and of information packaging constructions generally in the Kwa languages are not very well understood. The descriptions in this domain are woefully sparse. Nevertheless, there are indications that there are specific prosodic signals associated with focus constructions: either to the constituent in focus or to the out-of-focus part, or to the focus particle itself (see for example Tamminga 2005 and Jannedy and Fiedler 2006 on Ewe, and see Ahoua and Leben 1997 on the Tano languages). As early as 1974, Boadi pointed out that in Akan the register of a focus clause construction is raised. More recently, Dakubu (2005) shows that the tones of some of the constituents in the Akan focus construction in comparison to those in the unmarked clause undergo some changes. For instance, the verb in the focus construction in example (8b) changes from Low in the unmarked clause (8a) to Rising.³ For other studies on the tonal phenomena in Akan focus constructions see e.g. Bearth (1999b) and Ofori and Osam (2006).

(8) Akan:	a.	Mè-bà-à 1SG-come- 'I came her		há here					
	b.	Mé	C	nà	mè-bá- à		há		
		1SG		FOC	1SG-come-PA	AST	here		
		'I came her	e'						
(9)	a.	Adò		mà-à	mè	sìká			
Akan:		NAME		give-PAST	1SG	money			
		'Addo gave me money'							
	b.	Mé	nà	Ádò	má-à	mè	sìká		
		1SG	FOC	NAME.	give-PAST	1SG	money		
		'Addo gave	me mon	ey.'					

In contrast to the dearth of studies on the prosody of focus constructions there are numerous studies on the morpho-syntactic properties of these constructions in the Kwa languages. In the subsequent sections we discuss the similarities and the variation across the Kwa languages in the morpho-syntactic coding of focus constructions. The discussion is organised around the grammatical functions of the clausal constituents that are marked for focus: Subject focus (Section 7.4.1), Object focus (Section 7.4.2), Indirect (or Second) object focus (Section 7.4.3), Adjunct focus (Section 7.4.4). Predicate focus is discussed in Section 7.5.

7.4.1 Subject Focus Constructions

Cross-linguistically, there is an asymmetry between clauses in which the subject argument is in focus and those in which a non-subject argument is in focus. In the Kwa languages this asymmetry manifests itself in a number of ways, although there is some variation among the individual languages with respect to some of the parameters.

³There is similarly a tonal change of the Subject nominal in (9b) compared to its form in (9a). But this tonal change is not distinctive for the focus construction, as the change of the verb is. The change in the tone of the subject also occurs in contrastive topic structures (see Section 7.2).

In all the languages that have a dedicated focus marker, a subject argument that is in focus must be obligatorily marked by this particle. The languages differ as to whether such a focussed subject argument is placed in the focus position in the left periphery or occurs in its default position in the clause. Similarly the languages differ as to whether a focussed subject is recapitulated in the rest of the clause by an anaphoric pronoun. In Ewe, the focussed subject argument occurs in its default position and is obligatorily marked by the focus particle $(y)\acute{e}$ 'aFOC'.

 (10) mamá-é ná ga Kofí le así-me
 Ewe Grandmother-aFOC give money Kofi LOC market-containing.region 'GRANDMA gave money to Kofi in the market.'

In other Kwa languages such as Ga, Akan, Attié and Yoruba the subject argument is recapitulated in its default position by an anaphoric pronoun. In Ga (see Dakubu 2005), however, many speakers prefer not to have such a resumptive pronoun at the site of the subject if the focussed subject argument is expressed as a pronoun. In the case of pronominal subject arguments being in focus, the independent pronominal form is used. In this case, unlike for non-pronominal subject arguments in focus (see 11b), the focus marker *ni* is optional, as in (12b). However, in those instantiations of the construction where the particle is present, as in (12c), the focussed pronominal argument can be recapitulated in the default subject position in the rest of the clause (examples from Dakubu 2005).

(11)	a.	Tèté	jwà	pĺć!té		
Ga:		NAME	break	plate		
		'Tettey bro	oke the plat	te'		
	b.	Nominal S	Subject Foc	us; obligato	ry particle.	, optional resumptive pronoun
		Tèté	*(nì)	(è-)jwà	pĺć!té	
		NAME	FOC	3SG-breal	k plate	
		'Tettey (no	ot another p	person) brok	e the plate	,
(12)	a.	È-nà	yòó	!έ		
Ga:		3SG-see	woman	DEF		
		'She saw th	ne woman'			
	b.	Pronomina	l Subject fo	ocus; no part	ticle, no re	sumptive pronoun
		Lè	nà	yòó	!é	
		3SG	see	woman	DEF	
		'HE saw th	e woman'			
	c.	Pronomina	l Subject fo	ocus; particle	e present, i	resumptive pronoun optional
		Lè	nì	(è-)nà	yòó	!ɛ
		3SG	FOC	3SG-see	woman	DEF
		'HE saw th	e woman'			

In Yoruba also, a subject argument in focus is marked obligatorily by the focus particle ni. Additionally, an anaphoric pronoun occurs in the default subject position in the rest of the syntagm as illustrated in (13).

(13)	Ayò	ni	ó	fọ	àwo
Yoruba:	NAME	FOC	3SG	wash	cloth
	'AYO washe	ed the cloth	es' (Somai	ya and Bisa	ang 2004: 4, translation modified FKA)

In some of the Ghana-Togo Mountain languages such as Lɛlɛmi (Buem) (Allan 1973; Fiedler and Schwarz 2007), Tuwuli (Harley 2005) and Likpe (Sɛkpɛlé) (Ameka 2004a) subject focus is signalled by the use of verbal prefixes (which in some languages like Likpe could be considered cross-reference markers) which are sensitive to tense distinctions. The relevant forms could be described as occurring in pragmatically marked and dependent constructions. Interestingly, the verbal marking is the only signal in these languages that the subject is in focus or is within the scope of focus. This is the case even in Lɛlɛmi (Buem), which has a term focus marking particle *na* but which is not used in subject focus constructions, let alone Likpe and Tuwuli which do not have any term focus marking particles as such. Sentence (14a) below from Likpe is a pragmatically neutral utterance, whereas (14b) is pragmatically marked in that the subject argument is in focus. The only difference, as can be gleaned from the examples, is in the cross-reference marker on the verb. Such systems of verbal marking have been dubbed auxiliary focus (Hyman and Watters 1984).

(14)	a.	o-saní	á-má	ə-tákə.n.ko	u-sió	á-má
Likpe:		CM-man	AGR-DET	SCR-follow	CM-woman	AGR-DET
		'The man f	followed the w	oman'		
	b.	o-saní	á-má	li-tákə.n.ko	u-sió	á-má
Likpe:		CM-man	AGR-DET	DEP:PAST-follow	CM-woman	AGR-DET

Content question words select the same series of verbal prefixes (see examples in (15)). Notice that the distinction between the prefixes n- and lV- is in temporal interpretation⁴.

(15)	a.	bé	di-bə́	
Likpe:		what	DEP:PAST-	come
		'What hap	pened?'	
	b.	se	kópu	n-tákə
		where	cup	DEP:PRES-be.on
		'Where is	the cup?'	

When the subject argument is marked for focus, the scope of the focus can be narrowly interpreted as in the examples given so far; or it can be widely interpreted. In the latter case the scope of focus is then over the whole clause (sentence focus). Thus an answer to a "What happened?" question, which will be understood to be asking for an all-new information, usually contains a focus marked Subject argument. The utterances in (16) are to be interpreted as responses to a 'What happened?" question. In (16a) from Tuwuli, the form of the verb prefix shows that the subject is in focus; in (16b), from Ewe, the subject argument is marked with the term focus marker:

(16)	a.	Renata	(*lɛ-)ny ^a	fəfe	а
Tuwuli:		NAME	NPSubjFoc-eat	rice	DET
		'RENATA ATE THE RIC	CE' (Harley 2005)		
	b.	deví-á-wó-é	gba	ze-a	
Ewe:		child-DEF-PL-aFOC	break	pot-DEF	
		'THE CHILDREN BROKE TH	he pot'		

⁴In likpe [1] and [d] are allophones and are in free variation. The Likpe data are from my own field notes.

To recapitulate, Subject focus constructions in Kwa languages involve an obligatory marking in the clause. This may be signalled by the (term) focus marker in the language as in Ga, Ewe, Akan, Yoruba etc; or by the use of dedicated verbal prefixes as in the case of some of the central and northern Ghana-Togo Mountain languages such as Likpe and Tuwuli. Many of the languages have an anaphoric pronoun in the default subject position to refer to the focussed subject argument which occurs in the left adjacent focus position. In Ewe, however, the focussed subject argument occurs in the default subject position and is marked by the focus marker. In the next section we turn to Object focus constructions where a similar variation among the Kwa languages manifests itself.

7.4.2 Object Focus Constructions

When the argument that has the grammatical function of object is placed in the focus position in the clause, it can be marked with a focus particle. In Yoruba (17b) and, (for some speakers) the Gbe languages, such a constituent must be obligatorily marked by the term focus particle. In a majority of cases however, the focus marker is optional, as the examples from Ga and Attié below (17a, c) show. In almost all the Kwa languages there is a gap in the default object position in the rest of the clause as these examples from Ga, Yoruba and Attie illustrate:

(17)	a.	Kòfì	(nì)	è-yí		
Ga		NAME	(FOC)	3SG-beat		
		'KOFI he b	eat'			
	b.	așọ	ni	mo	rà	
Yoruba:		clothes	FOC	1SG	buy	
		'CLOTHES	I bought'			
	c.	ăpétè	ô	(mm̀)	ò	bōkà
Attié:		orphan	DEF	(FOC)	3SG:PAST	help:PAST
		'THE ORPI	HAN he help	oed'		
		(Bogny 200	5: 26, glosse	s and translatio	n modified FKA)

In Akan, by contrast, an animate object argument that is in focus must be represented in the default position, as the following question and answer pair illustrate.

(18)	a.	hena	na	Kofi	huu	no	wə	fie	hə	
Akan:		who	FOC	NAME	see:PAST	3SG	loc	house	DEIC	
	'WHO did Kofi see in the house?' (Saah 1988: 25 ex 32b, translation modified)									
	b.	Kwame	na	Kofi	huu	no	wə	fie	hə	
Akan:		NAME	FOC	NAME	see:PAST	3SG	LOC	house	DEIC	
	'KWAME Kofi met in the house.' (Saah 1988: 26 ex 34b, translation modified)									
(19)	;	ame-ka-é		Kofí	kpó	le	afé-á		me	
Ewe:]	person-CQ	-aFOC	NAME	E see	LOC	house-	DEF	containing.region	
		'WHO did	Kofi se	e in the h	ouse?'					

When I compared Akan structures of the kind in (18) with equivalent structures in Ewe, as in (19) (see Ameka 1992), I attributed the difference in the use of the anaphoric pronoun in Akan and the gap strategy in Ewe to the null object parameter in Akan. In Akan, inanimate pronominal objects are realised as null (see e.g. Saah 1992). However, this may not be the whole story since Ga also exhibits the inanimate null object behaviour (see e.g. Dakubu 2005), yet Ga, as we saw above, also leaves a gap when an animate object is fronted for focus. Further research is needed to uncover the motivation for this peculiar behaviour in Akan.

7.4.3 Second Object Focus

The languages vary with respect to how a preposed second object argument in focus positions is referred to in its default position in the clause. In Ga, (examples from Dakubu 2005), an anaphoric pronoun occurs in the default second object position that agrees with the focussed argument. Compare (20b) and (20c):

(20)	a.	E-tsģģ	nùú	!é	shí!á	!á			
Ga:		3SG-show	man	DEF	house	DEF			
		'He showed	the man	the hous	e.'				
	b.	. Indirect Object focus (Singular):							
		Nùú	È	nì	è-ts à ź	*(lɛ)	sh!á	!á	
		man	DEF	FOC	3SG-show	(3SG)	house	DEF	
		'THE MAN	he show	ed him tl	he house.'				
	c.	Indirect Obje	ect Focus	s (Plural)	:				
		Ηἑ	lí	nì	è-tsò ś	àmè	shí!á	!á	
		man.PL	DEF	FOC	3SG-show	3PL	house	DEF	
		'THE MEN	he showe	ed them	the house.' (transla	tion modi	fied)		

The use of the anaphoric pronoun in the default position in the Ga clause of the indirect object that is fronted for focus applies across the board to animate (20b, c) and inanimate NPs (21) as well.

(21)	Mà	á	nì	è-bà	*(lÈ)	wó!ý
Ga:	town	DEF	FOC	3SG-do	3SG	deity

However, in Ga impersonal constructions, there is no pronoun used in the default position of the fronted indirect object, as illustrated in (22).

(22)	Nùú	È	(nî)	à-tsộ ố	shí!á	!á
Ga	:man	DEF	FOC	IMPERS-show	house	DEF
	'The man	e.'				

In Ewe, a focused second object also binds a gap, but this gap may optionally be filled by an invariable pronoun whose underlying form is *-i*. The focus marker is optional. I call it an invariable pronoun because it does not agree in number or person with the fronted second object in whose default position it occurs in

the clause. In both (23b) and (23c) the focussed constituents have plural referents yet the same form of the pronoun is used as for the singular referent constituent in (23a).

(23)	a.	nye-é	mamá	ná	ga-(i⁄*-m)			
Ewe:		1SG-aFOC	grandmother	give	money-INV/-1S	G		
		'I Grandma gave	e money'					
	b.	deví	má-wó-é	me-ná	də-(i/*wó)			
		child	DEM-PL-aFOC	1SG-give	work-INV/3PL			
		'THOSE CHILDREN I gave work to'						
	c.	mia-wó-é	núfiálá	xlõ	nú-i	/ * mi		
		2PL-PL-aFOC	teacher	advise	thing-INV	/2PL		
		'YOU the teacher advised'						

In Ga, it is possible to front-shift the two objects in a double object construction together as a unit for focus, as in (24), which is based on (21), see Dakubu (2005). This is not possible in Ewe. I am not aware of such a strategy being available in any of the other Kwa languages,

(24)	Nùú	!é	shî!á	á	nì	è-tsàź	
Ga:	Man	DEF	house	DEF	FOC	3SG-show	
	'He showed THE MAN THE HOUSE'						

Note that there is no pronoun to recapitulate the indirect object in the rest of the clause as one would have expected. This is a piece of evidence that the two objects are treated as a single unit.

7.4.4 Adjunct Focus Constructions

In all the Kwa languages, as far as we know, adverbs and nominals in adjunct function can be placed in the clause initial focus position and optionally marked for focus. There is no element that occurs in the default adjunct position referring to such a constituent in the rest of the clause. In (25a), from Akan, a temporal noun is in focus while in (25b), also from Akan, a nominalised verbal expression functioning as an adverbial is in focus. There is no marker in the default post-verbal adjunct position to refer back to such a term.

(25)	a.	nera	na	me-ba-a	ha				
Akan:		yesterday	FOC	ISG-come-PAST	here				
		'YESTERI	YESTERDAY I came here' (Boadi 1974: 6, translation modified FKA)						
	b.	anigyeso	na	me-nam	ba-a	ha			
		happily	FOC	1SG-pass:PAST	come-PAST	here			
		'HAPPILY I came here.' (Boadi 1974: 36, translation modified FKA)							

Similarly, adverbs such as the manner term d_2d_2 'slowly' in Ewe can also be focused. A gap is left in the default post-verbal adjunct position in the clause.

(26)	dədəədə-é	wó-da-a	kpé	wò-bí-ná			
Ewe:	Slowly-aFOC	3PL-boil-HAB	stone	3SG-cook-HAB			
	'Slowly stones are boiled and they get cooked'						

The complements of prepositions in prepositional phrases functioning in adjunct position can be focused in ex-situ constructions in some of the Kwa languages. The languages vary with respect to whether a class of prepositions can be recognised in them (see e.g. Aboh et al. in press, Ameka 2003 and references therein). The presence of a distinct prepositional class in the Gbe languages has been established without doubt (see e.g. Lefebvre and Brousseau 2002 on Fon). I will illustrate the focus issues in this domain from one of these, Ewe. In Ewe, a prepositional object can be fronted for focus. It is optionally marked with the focus particle. Depending on the semantic relation the complement has, it may bind a gap as in (27a), i.e., stranded, or it may be referred to in the default position by an invariable pronoun, as in (27c). As the unacceptability of (27b) indicates, prepositional phrases as a whole cannot be preposed for focus, i.e. not pied-piped. Prepositions by themselves can also not be focussed either.

(27)	a.	asi	me-é	mamá	ná	ga	Kofí	le	(*i)
Ewe:		market	containing.	grandma	give	money	NAME	at	3SG
			region-aFOC						
		'IN THE M	IARKET Grandma	a gave money to K	ofi'				
	b.	*le	asi	me-é	mamá	ná	ga	Kofi	í
		at	market	containing.	grandma	give	money	NAN	МE
				region-aFOC					
	c.	də.srõ.ví	má-wó-é	afénə	lá	wə	dzre	kplí	-*(i)
		apprentice	DIST-PL-aFOC	mistress	DEF	do	quarrel	with	-INV
	'THOSE APPRENTICES the mistress quarrelled with'								
	d.	*atí	sia-é	Kofí	wu	da	lá	kplí	-(i)
		stick	PROX-aFOC	NAME	kill	snake	DEF	with	-3SG

The preposition kplé 'with' (or its alternant kpli that occurs before pronouns) is used to express comitative and instrumental thematic relations. However, comitative prepositional objects and instrumental prepositional objects behave differently under focus. The instrumental prepositional objects cannot be fronted and focused as the ungrammaticality of (27d) testifies. A comitative object, as shown in (27c), unlike the locative prepositional object in (27a), obligatorily requires a resumptive pronoun to fill its gap. Furthermore, when an allative prepositional complement is focussed, a clause final alternate form of the preposition is left stranded in its default position, as the contrast between (28a) and (28b) illustrates.

(28)	a.	nyónu-a	gé	dé	xə	má	me			
Ewe:		woman-DEF	drop	ALL	building	DIST	contain	ing.region		
		'The woman e	'The woman entered that room'							
	b.	xə	má	me-é	nyónu-a	gé	dó/	*dé		
		building	DIST	containing.	woman-DEF	drop	ALL	ALL		
	region-aFOC									
'THAT ROOM the woman entered'										

Similar alternations in form for prepositions have been reported for Fon as well (Lefebvre and Brousseau 2002). Thus semantic relations between the head and the complement impinge on information packaging strategies employed within the clause.

7.4.5 Clause Final Marking of Ex-Situ Focus Constructions

One of the features of focus constructions noted for both Ga and Akan, but which does not occur in Ewe, for example, is that a definiteness marker signals the end of the out-of-focus part in an ex-situ focus construction. The use of the definiteness marker in this context is non-obligatory in both languages, as illustrated in (29).

(29)	a.	mé	nà	mè-bá-à	há	(nó)		
Akan:		1SG	FOC	1SG-come-PAST	here	(DEF)		
		'I came here'						
	b.	Kòfi	(nì)	è-yî	(!ć)			
Ga:		NAME	(FOC)	3SG-beat	DEF			
		'He indee	d beat Kof	fi'				

Dakubu (2005) suggests that in both Ga and Akan the definiteness marker in the out-of-focus domain affirms the reality of the event expressed (see also Boadi 1974 for a motivation of the Akan on grounds of previous mention in discourse). The exact motivation for this kind of marking needs further investigation (Fiedler and Schwarz 2005). This feature of out-of-focus construction is one area where they are related to relative clauses in both Ga and Akan (cf. Schachter 1973). This is because like background information topics, determiners also mark the boundaries of relative clauses in both Ga and Akan is that in the latter there is a matching of determiners on the nominal head of relative clauses and the marker at the end (see Saah this volume for Akan and Dakubu (2005) on Ga). This indicates that the use of the determiners in the relative clause is partly grammatically controlled. The use in focus constructions is more dependent on discourse-pragmatic factors.

7.4.6 Summary

In the preceding sections we have seen the variety of strategies employed in the Kwa languages to focus a term constituent in a clause. In all the languages a constituent in subject function can be focussed. The languages differ with respect to the obligatoriness of the focus marker on such a constituent and with respect to whether a pronominal marker occurs in the default subject position in the clause. All the

Language	Subject	Object	Second object	Adjunct
Akan	Yes	Yes (if animate)	Yes (if animate)	No
Ewe	No	No	Yes, invariable pronoun (optional)	No
Ga	Yes (optional)	No	Yes, anaphoric pronoun	No
Yoruba	Yes	No	?	No

 Table 7.3 Resumptive pronoun strategies

languages can also have an ex-situ (direct) object focus construction. In all the languages except Akan there is no pronominal marker in the default object position in the clause to refer to such a preposed focussed constituent. Such a constituent may be marked by the focus marker (if any), but the languages differ as to how obligatory such a marking is. It is obligatory in Akan but optional for many speakers of Gbe, Ga and Yoruba.

Indirect or Second Objects can also be focussed and here in almost all the languages a marker can be left in the default position of such an object. The languages differ as to whether such a marker is an invariable form, as in Ewe, or an anaphoric form as in Ga or Akan. Significantly, in Ga both the direct and the indirect object can be treated as a unit and preposed for focus. In such a construction there is no pronominal recapitulation in the default position in the rest of the clause. There is no representation of a preposed focussed nominal or adverbial adjunct constituent in the default post-verbal position in the rest of the clause. Table 7.3 summarises the facts concerning the marking of a focussed constituent in its default position in the clause in four of the languages.

It has also been demonstrated here that the semantic relations that a prepositional object holds with its prepositional head in Ewe, for instance, affects the strategies of pronominal recapitulation in the default position in the clause. Further research is needed to see how far such a condition applies in the other Kwa languages.

7.5 Predicate Focus Constructions

Kwa languages have distinct morpho-syntactic mechanisms for signalling predicate focus (Ameka 1992; Hyman and Watters 1984; Bearth 1999b). There are two strategies involving verb forms: in one case, a copy of the verb is fronted and marked with a focus particle. In the other type, a nominalised form of the verb is placed in core clause initial position and marked with a focus particle. Another distinct strategy involves using a particle which occurs in predicate initial position. This strategy is employed in Ewe. There is variation among the languages with respect to the manifestation of the verb copy strategy and we discuss this first.

7.5.1 Verb Copy Strategies

In many of the Kwa languages, verb focus is expressed by placing a copy of the verb in the clause initial focus position. In some languages such as Ga (see example (30a)) the focus marker is optional. In others such as Gungbe (example (30b)) and the Ewe dialects in which this strategy is employed, the focus marker is unacceptable. The main verb with all its markings appears in its default position in the rest of the clause. Consider the following examples:

(30)	a.	gbó	(!ní)	é!-gbó.			
Ga:		die	(FOC)	3SG.PERF-die			
		'DIE H	e has died	' (Dakubu 2005, fi	ee transl	ation mod	lified FKA)
	b.	gba	(*wê)	sêna	gba	xwe	lô
Gungbe:		build	FOC	NAME	build	house	DEF
			O Sena bui lified FKA	lt the house' (Abo	h 1998, 1	free transl	ation

In Logba (Ikpana), a Ghana-Togo Mountain language, the left periphery pre-subject position does not seem to be used for verb focus. In verb focus constructions, a copy of the verb is placed in what might be called predicate initial position, after the Subject position but before the verb word with the cross reference of the subject and other TAM markers (see Dorvlo 2006, and the examples in (31)).

(31)	a.	Basic SVO clause						
		Tumpa	o-blí	u-tsá	nù			
Logba:		bottle	3SG-break	CM-room	containing.	region		
		'The bottle breaks in the room'						
	b.	Verb focus constru-	Jerb focus construction					
		Tumpa	blí	o-blí	u-tsá	nú		
		bottle	break	3SG-break	CM-room	containing.region		
		'The bottle BROK	E in the room	,				
	c.	Object focus constr	ruction					
		E-bitsi-ε	ka	Setə	ə-lá			
Logba:		CM-child-DET	FOC	NAME	3SG-beat			
		'Seto beat THE CHILD'						

One would have expected the verb copy to occur before the Subject *tumpa* 'bottle' in example (31b), just as a focussed object occurs before the subject, as in (31c). This is the reason we suggest that there are two focus positions in the Logba clause: one adjacent to the Subject position for term focus, and the other adjacent to the predicate, i.e. before the verb, for verb focus. Both positions cannot be filled in a single clause.

In some of the languages, disyllabic verbs employ a slightly different verb copying strategy. In Attié (see (32a)) and also in Kpelegbe (32b), a dialect of Ewe, when a disyllabic verb is in focus it is only the first syllable that is copied and placed in the clause initial focus position:

(32)	a.	bō	mā	àdú	bōkà	mĝ		
Attie:		Verb	FOC	NAME	help	1SG		
'Adu truly helped me' (Bogny 2005: 29)								
	b.	tsá	wò-tsáká	gali				
Kpele:		Verb	3SG-mix	farine de manioc				
'He did mix gari' (Chris Collins p.c.)								

This is probably possible in these languages because disyllabic verbs are historically composed of either verb compounds or compounds of verb and nominal complements. The first syllable of the disyllabic forms would be the item that was a verb originally. So it is not the nominal part that is moved.

7.5.2 Nominalised Verb Strategy

A common strategy for verb and VP focus is for a nominalised form of the verb or VP to be placed in the pre-core clause focus position. In the languages that have a focus marker, the nominalised verb in the focus position is optionally marked with it. The languages use various nominalisation processes available in the individual languages for this purpose. Thus Ga suffixes a nominaliser as in (33b), while Akan uses a nominalising prefix, as in (33a). Ewe uses reduplication (33d) while Likpe uses the nominal class derivation for gerunds, as in (33c). A language such as Ga and Gungbe employ both the bare verb copy and the nominalised verb strategies, while others such as Likpe seem to have only the nominalisation strategy. Ewe uses a particle strategy in addition to the nominalisation strategy, as we shall see below.

(33)	a.	n-kyerew	na	me-kyerew					
Akan:		NOM-write	FOC	ISG-HAB.write					
		'Writing I do' (Boadi	1974: 38)						
	b.	sèlè-m	(nì)	è-sèlè.					
Ga:		swim-NOM	(FOC)	3SG-swim					
		'Swam he did' (Dakubu (2005), free translation modified FKA).							
	c.	ba-am-míni	ka-mó	bə-nyîmi	kε				
Likpe:		3PL-NEG-swallow	CM-rice	NOM-chew	ANAPH				
		'You do not swallow	rice; you CH	EW it'					
	d.	fo- fo-é	wò-fo	deví-á					
Ewe:		RED-hit-aFOC	3SG-hit	child-DEF					
		'BEATING he beat th	e child', i.e.,	'He gave the child	a				
		THOROUGH BE.	ATING'						

As the translations of some of the examples indicate, such verb focus constructions tend to be used in contrastive contexts or to express intensity of the event denoted by the verb. For instance the difference between the Ewe sentence involving nominalised verb focus in (33d) above, and its synonymous counterpart in (34d) below, is that the former signals the intense and exhaustive nature of the action of beating while the latter asserts that indeed the child was beaten.

7.5.3 The Predicate Focus Marker in Ewe

The verb copy strategy for predicate focus, as pointed out above, is limited to certain Ewe dialects only. The pan-dialectal strategy for predicate focus is through the use of the predicate focus marker de 'pFOC'.⁵ The predicate focus construction involving the predicate focus marker may be schematically represented as:

(Z) dePRO V Y

Z is the initial element in the sentence and Y is the rest of the predication. Consider these examples:

(34)	a.	devî-wó child	de PL	wó-fé-ná pFOC 3PL-j	play-HAB			
		'Children	do play'					
	b.	etsə	lá,	de	mie-le	fə-fá	gé	kábá
		tomorrow	TOP	pFOC	2PL-be. at:PRES	RED-wake	PROSP	early
		'Tomorrow	, you will get up	early'				
	c.	de	me-dɛ	mé-nyé	de	me-me-e	0	
		pFOC	1SG-cook:3SG		pFOC		NEG	
				COP		3SG		
		'I cooked i	t, it is not that I r	oasted it'				
	d.	de	wò-fo	deví-á				
		pFOC	3SG-hit	child-DEF				
		'He did be	at the child'					

The initial element may be the subject of the clause realised as a full NP as in (34a). In this case there is no pause between the subject and the focused predication. Such a subject is recapitulated in the focussed predication by an appropriate pronoun. The preceding constituent may be a topic constituent marked by a background topic marker such as $l\dot{a}$ or $d\dot{e}$ as in (34b). There is usually a pause between this topic constituent and the predication marked by the pFOC. In such structures it could be argued that the focus marker introduces the comment on the topic. In other cases, there is no such initial topic or subject NP as in (34c) and (34d). Such clauses may be described as comment only structures. Note that even in such cases the subject within the pFOC's scope is realised as a pronominal whose referent can be understood from the actual discourse context. Moreover the fact that the subject in the predication focussed constituent is realised as a subject pronominal clitic and not as the independent form of the pronoun indicates that it is out-of-focus. When such predication focus constructions are used in answer to questions, they are responses to questions like 'What happened (to X)?' or 'What did X do?' where X stands for the topic of conversation and hence it is the rest of the predication which is in focus. The domain of the predicate focus is a clause. As example (34c) above shows two focussed

⁵The Ewe predicate focus marker has affinities with an emphatic propositional question introducer and a counterfactual conditional marker (see Ameka 1998). The connections between these functions can be easily established on the basis of typological polysemy.

predications can be juxtaposed or linked in a sentence. Further piece of evidence that the scope of the predicate focus marker is over a predicate in a clause is that it can occur only once in an Serial Verb Construction (SVC) and always at its predicate initial position. Its scope seems to be over the whole clause. This suggests that the scope of the marker is not restricted to that of the verb but to the whole predicate. For example,

(35)	Áma	de	wò-da	fufu	du
	А.	pFOC	3SG-cook	fufu	eat
	'Ama d				

We will see in the next section that individual verbs in a serial verb construction can be focussed using verb focussing strategies in many Kwa languages.

7.5.4 Verb Focus in Serial Verb Constructions

Verbs in a Serial Verb Construction (SVC) are co-dependent on each other semantically and syntactically. As such one would not have expected that individual verbs or VPs in a series can be focused. In fact this has been cited in the literature as a possible defining feature of SVCs (cf. Aikhenvald 2006). In the Kwa languages, however verbs and VPs which are components of an SVC can be individually or collectively focused. However, the languages differ in which components of the SVC they allow to be focused. In both Yoruba (Lawal 1993) and Fon (Lefebvre and Brousseau 2002) the initial verb in an SVC may be focused as shown in (36b) and (37b) based on (36a) and (37a) respectively (see Ameka 2005 for further discussion).

(36)	a.	0		sáré	lo	ilé				
Yoruba:		He		ran	go	home				
		'He ran	home	,						
	b.	Sísáré		ló	sáré	lo	ilé			
		Running	g	FOC:he	ran	go	home			
		'Runnin	g hon	ne is what	t he di	d' (Law	al 1993:	90)		
(37)	a.	Kòkú	só	àsón	ó	yi	axi	mὲ		
Fon:		NAME	take	crab	DEF	go	market	in		
		'Koku b	rough	t the crab	to the	e marke	ť			
	b.	Só	wὲ	Kòkú	só	àsón	ó	yi	axi	mè
		take	it.s	Koku	take	crab	DEF	go	market	in
		'It is bri	nging	the crab	to the	market	that Kok	u did	l' (as opp	osed to
		e.g. s	selling	g it) (Lefe	bvre a	and Bro	usseau 20	002: 4	407 ex 24	4a)6

⁶I have maintained the glosses and translations in the sources in these examples. For instance, the form wè glossed by Lefebvre and Brousseau as 'it.is' should in fact be glossed as FOC. I would also have translated a sentence like (37b) as 'TAKE Koku took the crab to the market' rather than as a cleft construction. It is also not clear to me that this construction is necessarily contrastive in its import as the comment by the authors suggest.

Note that in Yoruba, a nominalised form of the verb derived by reduplication, is fronted and marked for focus. In Fon, on the other hand, a copy of the verb is fronted and focus marked.

For the second verb in an SVC, there is some variation. In Yoruba it is not possible to focus on the second verb alone as illustrated in (38).

(38)	*lílo	ló	sáré	lo	ilé
Yoruba:	Going	FOC-he	ran	go	home

In Fon also, focusing of the second V(P) as in (39) is judged to be acceptable by some speakers and rejected by others:

(39)ok/* Yiwè Kàkú sź àsốn á vi axi mὲ Fon: go.it.is Koku take crab DEF go market in 'It is bringing the crab to the market that Koku did' (as opposed to e.g. selling it) (Lefebvre and Brousseau 2002: 407 ex 24b)

While Fon speakers seem to be divided on the acceptability or otherwise of focusing of the second verb alone in an SVC, there seems to be unanimity among them with regard to the total unacceptability of structures in which both verbs in an SVC are fronted for focus as the unacceptability of (40) illustrates.

(40)	*	só	yi	wè	Kàkú	só	àsón	ó	yi	axi	mè
Fon:		take	go	it.is	Koku	take	crab	DEF	go	market	in

By contrast, while the second verb alone cannot be focused in an SVC in Yoruba, it is acceptable to focus both verbs and VPs. This is done by nominalising the complex predicate. If the complex predicate is made up of two verbs, the first one is reduplicated and the second is adjoined to the reduplicated form, as in (41a). If there are two VPs a similar process of nominalisation is used: In (41b), the first VP is made up of just a verb which is nominalised by reduplication and the second VP as a whole is adjoined to it. This derived structure is placed in clause initial position for focus.

(41)	a.	Sísáré	lo	ló	sáré	lo	ilé	
Yoruba:		Running	go	FOC-he	ran	go	home	
		'Running	home	e is what h	e did'			
	b.	Sísáré	Sísáré lo ilé ló				lo	ilé
		Running	go	home	FOC-he	ran	go	home
		'Running home is what he did'						

Perhaps the difference between Yoruba and Fon with respect to the possibility of focusing of verbs in an SVC relates to the contrast in strategies for verb focusing in both languages. Yoruba employs nominalisation and it is therefore possible to nominalise the verbs or the predicate as a whole. Fon, on the other hand, uses verb copy which, it would appear, is a strategy that does not favour focusing of both verbs in an SVC.

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7.5.5 Predicative Adjective Focus in Akan

Akan seems to have a class of predicative adjectives which may also be fronted and focussed as the sentences in (42) illustrate. There might be such an adjective left in the default position in the rest of the clause, i.e. after the predicator $y\varepsilon$ 'COP' or a gap is left in the default position. Compare (42a) and (42b):

(42)a. fε na ε-νε fε FOC 3SG-COP beautiful beautiful 'It is BEAUTIFUL' (Boadi 1974: 37 ex 43) fɛ b. na ε-γε FOC 3SG-COP beautiful 'It is BEAUTIFUL' (Boadi 1974: 12)

Information on other languages about the focussing of predicative adjectives is not available. Of course one would only expect this in languages that have predicative adjectives. In Ewe, as well as Likpe, there are no predicative adjectives hence no predicative adjective focussing construction.

7.6 Complex Phrases and Focus Strategies

Extraction and focussing out of complex NPs have long been known to be constrained in various ways across languages (Ross 1967). The Kwa languages display different degrees of tolerance with respect to the possibility of focussing on a possessor or a possessum. For instance, Ewe does not allow the focusing of either the possessor or the possessum. Ga, on the other hand, allows the focusing of either constituent of a possessive phrase. Example (43) illustrates the possibilities in Ewe. The object possessive phrase in (43a) below may be fronted and focus-marked as shown in (43b), but neither the possessor (43c) nor the possessum (43d) of the same possessive phrase can be fronted and focused in Ewe:

(43)	a.	Akú	gba	Afúá	fé	ze
Ewe:		NAME	break	NAME	POSS	pot
		'Aku broke Afu	a's pot'			
	b.	Afúá	fé	ze-é	Akú	gba
		NAME	POSS	pot-aFOC	NAME	break
		'Afua's pot Aku	broke			
	c.	* Afúá-é	Akú	gba	é-fé	ze
		NAME-aFOC	NAME	break	3SG-POSS	pot
	d.	* ze-é	Akú	gba	Afúá	tə
		pot-aFOC	NAME	break	NAME	POSSPRO
		* Afúá-é NAME-aFOC * ze-é	Akú NAME Akú	break gba	3SG-POSS Afúá	pot tə

Note that not even the recapitulation of the possessor or the possessum in the default positions makes the sentences in (43c) and (43d) acceptable. One can interpret in context the scope of the focus on a possessive NP as pertaining only to the possessor or to the possessum, but there is no formal means of signalling this. This is one context where there can be a mismatch between the pragmatic scope and the syntactic scope of the focus marker in Ewe.

According to Dakubu (2005) when the possessor is placed in the focus position, a resumptive pronoun has to occur in its default position, as shown in (44b). It is also possible to focus the possessum alone. In this case a gap is left in its default position, leaving the possessor stranded in the phrase (see (44c)).

(44)	a.	Tèté	jù	nùú	è	Shìká				
Ga:		NAME	steal	man	DEF	money				
		'Tettey s	tole the	man's m	oney'					
	b.	Nùú	È	(nì)	Tèté	jù	*(è-)Shìká			
		man	DEF	(FOC)	NAME	steal	3SG-money			
		'THE M	THE MAN Tettey stole his money'							
	c.	Shìká	à	(nì)	Tèté	jù	nùú	έ		
		money	DEF	(FOC)	NAME	steal	man	DEF		
		'THE M	ONEY	Tettey sto	le the man's					
	d.	Nùú	È	shìká	(nì)	Tèté	jù			
		man	DEF	money	(FOC)	NAME	steal			
		'THE M	AN's M	IONEY T	ettey stole'					

When it comes to heads of Postpositional phrases, i.e., the postpositions, however, the Kwa languages seem to follow a uniform pattern: The postposition cannot be focused. Recall that prepositions (in Ewe) can also not be focussed. We can conclude that adpositions in these languages cannot be focussed by themselves. Entire postpositional phrases can be focussed, but the languages differ again in how far the dependent NP in such phrases can be extracted by themselves. In Ga such a dependent NP can be in focus, and like a possessor in a possessive NP a pronoun occurs in its default position in the clause (see examples in (45)), whereas in Ewe, this is not possible (see (46)).

(45)	a.	Tètè	tèe	Kòfi	ŋòə
Ga	:	NAME	go	NAME	area
		'Tettey w	ent to k	Kofi'	

b.	Kòfi	ní	Т	ÈtÈ		tèe		*(è)-ŋòə
	NAME	(FOC)) N	AME	2	go		3SG-area
	"KOFI Te	ttey we	ent to"	,				
c.	Kòfi ŋòə		n	ì		Tètè		tèe.
	NAME	area	(1	FOC)		NAME	3	go
'TO KOFI Tette		[Tettey	went	,				
d.	*ŋòə	nì	Т	ètè		tèe		Kòfi
	area	FOC	N	AME	1	go		NAME
a.	Ámá		dze		Ko	fí	gbå	5
	NAME		conta	nct	NA	ME	pla	ce
	'Ama lodg	ged at k	Kofi's	place	,			
b.	Kofí		gbó-e	Ś	Án	ná	dze	2
	NAME		place	•	NA	ME	cor	ntact
	'KOFI'S I	PLACE	Ama	lodg	ed a	ť		
c.	* Kofí-é		Ámá		dze	;	(é)	-gbó
	NAME-aF	OC	NAM	1E	cor	tact	350	G-place
d.	* gbó-é		Ámá		dze	;	Ko	fí
	place-aFO	С	NAM	1E	cor	tact	NA	ME
	c. d. a. b.	NAME "KOFI Te c. Kòfi NAME 'TO KOFI d. *ŋòo area a. Ámá NAME 'Ama lodg b. Kofí NAME 'KOFI'S H c. * Kofí-é NAME-aF d. *gbó-é	 NAME (FOC), "KOFI Tettey we' Kòfi ŋòo NAME area 'TO KOFI Tettey area FOC ámá NAME 'Ama lodged at F Kofí NAME 'KOFI'S PLACE * Kofí-é NAME-aFOC 	 NAME (FOC) N "KOFI Tettey went to" c. Kòfi ŋòo n NAME area (I 'TO KOFI Tettey went d. *ŋòo nì T area FOC N a. Ámá dze NAME conta 'Ama lodged at Kofi's b. Kofí gbó- NAME place 'KOFI'S PLACE Ama c. * Kofí-é Ámá NAME-aFOC NAM d. * gbó-é Ámá 	 NAME (FOC) NAME "KOFI Tettey went to" c. Kòfi ŋòɔ nì NAME area (FOC) 'TO KOFI Tettey went' d. *ŋòɔ nì Tètè area FOC NAME a. Ámá dze NAME contact 'Ama lodged at Kofi's place b. Kofí gbó-é NAME place 'KOFI'S PLACE Ama lodge c. * Kofí-é Ámá NAME-aFOC NAME d. * gbó-é Ámá 	 NAME (FOC) NAME "KOFI Tettey went to" c. Kòfi ŋòɔ nì NAME area (FOC) 'TO KOFI Tettey went' d. *ŋòɔ nì Tètè area FOC NAME a. Ámá dze Kot NAME contact NA 'Ama lodged at Kofi's place' b. Kofí gbó-é Ám NAME place NA 'KOFI'S PLACE Ama lodged a c. * Kofí-é Ámá dze NAME contact NA 	 NAME (FOC) NAME go "KOFI Tettey went to" c. Kòfi ŋòo nì Tètè NAME area (FOC) NAME 'TO KOFI Tettey went' d. *ŋòo nì Tètè tèe area FOC NAME go a. Ámá dze Kofí NAME contact NAME 'Ama lodged at Kofi's place' b. Kofí gbó-é Ámá NAME place NAME 'KOFI'S PLACE Ama lodged at' c. * Kofí-é Ámá dze NAME contact d. Kofí-é Ámá dze 	 NAME (FOC) NAME go "KOFI Tettey went to" c. Kòfi ŋòo nì Tètè NAME area (FOC) NAME 'TO KOFI Tettey went' d. *ŋòo nì Tètè tèe area FOC NAME go a. Ámá dze Kofí gbö NAME contact NAME pla 'Ama lodged at Kofi's place' b. Kofí gbó-é Ámá dze NAME place NAME con 'KOFI'S PLACE Ama lodged at' c. * Kofí-é Ámá dze (é) NAME-aFOC NAME contact 3SU d. * gbó-é Ámá dze Kofi

Even though the possessum in a Ga possessive construction can be focussed by fronting (44c), a postposition occupying a similar structural position cannot be focused (45d). This confirms the view that postpositions are distinct from possessed heads in a possessive construction.

7.7 More Information Packaging Constructions

We turn now to various grammatical constructions that we find in the Kwa languages which are used to express various discourse semantic notions. We briefly examine topic and comment only constructions (Section 7.7.1), contrastive topic structures involving scope particles (Section 7.7.2), cleft constructions (Section 7.7.3) and end with a subcategory of focus concerning inferential gap repair (Section 7.7.4). The presence of these structures in the various languages gives further evidence of their discourse configurationality.

7.7.1 Topic and Comment Only Constructions

Many of the Kwa languages dispose of a construction made up of an NP topic, marked by a scene setting topic marker such as $l\dot{a}$ 'TOP' (Ewe) or *no* 'TOP' (Akan) and a comment NP marked by a focus marker. In Ewe and Ga such a comment NP is marked by the same marker as for term focus structures, the clitic (*y*)é 'aFOC' in Ewe or the particle *ni* 'FOC' in Ga. In Akan, on the other hand, there is a distinct form *a*, which is probably related to the focus marker *na* 'FOC', which is used in

such a topic and comment construction. It is obligatory for the comment constituents in these constructions to be marked by an overt form. The topic phrase, however, need not be overtly marked. That is, the topic marker is optional in this construction. The comment phrase can also be a plain or a negative cleft construction.

(47)	a.	xõ-lõ	ma-tekpő	lá,	auli-é
Ewe:		friend	PRIV-tested	TOP	abyss-aFOC
		'An untest	ted friend (is) an	abyss'	
	b.	nyónu	lá,	ŋkú-é	
		woman	TOP	eye-aFOC	
		'A woman	ı (is) an eye'	(Nyən	ni (1980): 25)

In Ewe, such structures may be elaborated upon by another full clause. In other words, a topic-comment only construction can function within larger structures as in the saying in (48).

(48)		núnyá	(lá)	adidó-é		asî	mé-tu-ne	0.
Ewe:		knowledge,	TOP	baobab-	aFOC	hand	NEG-reach-HAB:3SG	NEG
		'Knowledge	is lik	e) a baob	ab tree	, it can	not be embraced'	
(49)	a.	Kòolòó	!έ,	òkpàŋź	!ní			
Ga:		Animal	TOP	horse	FOC			
		'The animal	, it's a	horse'				
	b.	Yòómó	!έ,	shíá	ònúkj	pá	!ní	
		old.woman	TOP	house	elder		FOC	
		The old wor	nan, sh	e's careta	ker of	the ho	use.	
(50)		əbarima	no	əsəfo-a		/*na		
Akan:		man	TOP	pastor-F	OC	FOC		
		'That man, I	he is sc	ort of a pa	stor'			

As the translation of the Akan sentence strives to depict, there is a derogatory attitudinal meaning component associated with such topic and comment only utterances in that language, which as far as I know is not present in Ga or Ewe. Akan, as pointed out earlier, is also distinct in using a marker different from the focus marker for comments in such constructions. Incidentally, this is the form used to mark a focus-only term constituent as well, such as can occur in presentational or identificational contexts. Thus the answer to a question like 'Who/What is it?' can just be answered with the simple utterance in (51). Note that the marker is the same as in the topic-comment only structures in (50).

(51)	Me-a
Akan	1SG-FOC
	'It's me'

By contrast, the other languages just use the term focus markers in such structures as illustrated in (52).

(52)	a.	òkpàŋá	!ní
Ga:		horse	FOC
		'it's a horse'	

b. ŋkú-é Ewe: eye-aFOC It's an eye'

In these constructions too, we see that the languages have some similarities but there are also differences. We turn in the next section to contrastive topics which tend to be marked by operators that are known in the Kwa languages as intensifiers but which are, from a cross-linguistic perspective, more like focus particles or scope particles.

7.7.2 Contrastive Topics

The subject function in the Kwa languages seems to have a grammaticalised topic status. When the participants fulfilling such a role in the languages are emphasised or used as contrastive topics, they tend to be modified by scope particles which trigger other modulations in the rest of the clause. The scope particles used in this function form part of a larger class of elements that are called intensifiers in the grammars of these languages (see e.g. Duthie 1996 on Ewe). These items occur in three structural positions: first as the last element in the NP where they have scope over the NP; second in adjunct position in the clause where they have scope over the VP, and finally they can occur as clause final particles where they modify the clause. The subset of these intensifiers that are used to signal contrastive topic in Ewe include $h\hat{a}$ 'also, too', ya 'as for', $k \Delta t \hat{a}$ 'all', boy 'rather' $k \omega r \Delta a$ 'even' and $y \omega t \Delta s'$ 'very'. For Ewe, if the emphasised subject or contrastive topic is first or second person, it is recapitulated on the verb with the appropriate pronominal clitic (see the examples in (53)).

(53)	a.	vegbe-tó-wó-é	nye	hấ	me-nyé	
Ewe:		Ewe-NOM-PL-aFOC	1SG	also	1SG-COP	
		'An Ewe, I too I am' (heard in conversation 1996)				
	b.	deví-á-wó	hấ	fó		
		child-DEF-PL	also	wake.up		
		'The children too are fine'				

The structures related to speech act participants make it clear that, in Ewe, contrastive topics marked by scope properties can occur in a position between the focus and the subject positions. Interestingly, such contrastive topics can also occur in the scene setting topic position. Thus a variant of (53a) is given in (54) in which the contrastive topic constituent occurs in the scene setting topic position and before the focus constituent.

(54)	nye	hấ	vegbe-tó-wó-é	me-nyé
Ewe:	1SG	also	Ewe-NOM-PL-aFOC	1SG-COP
	'I too an	Ewe I am'		

Akan also has distinct contrastive topic constructions which, according to Boadi (1974: 6) have a specific intonation pattern (see also Ofori and Osam (2006) for distinction between *na*-focus constructions and contrastive topic constructions marked by *dee* which I gloss as 'as for' in Akan). Unlike Ewe where these constructions are restricted to nominals, in Akan nominals (55a, b) and (56a), verbs (56b), (predicative) adjectives (57) and adverbs can represent the constituent that is contrastively topicalised. For the predicates, verbs and adjectives, one could say that a copy of the form in the sentence is preposed and emphasised. Adjectives sometimes behave like Adverbs which do not have a coreferential form in the rest of the clause. (The \uparrow arrows indicate register raising.)

(55) Akan:	a.	me 1SG	nso too	me-ba-a 1SG-com	e-PAST	ha here		
			came h				(Boad	i 1974: 54)
	b.	me	ankas			ha		
		1SG			ome-PAST	here		
		ʻI mys	elf cam	e here'			(Boadi	1974: 54)
(56)	a.	me	deɛ		me-ba-a		ha	nera
Akan:		1SG	as.for		1SG-come-	PAST	here	yesterday
		'I cam	e here y	/esterday ↑	' (Boadi 1974	4:6)		
	b.	ba	0	leε	me-ba-a		ha	nɛra
		come	8	as.for	1SG-come-	PAST	here	yesterday
		' I CA	ME her	e yesterday	/ ↑'		(Boa	di 1974: 6)
	c.	ha	deɛ		me-ba-a		nɛra	
		here	as.for		1SG-come-	PAST	yesterday	
		'I cam	e HERI	E yesterday	^,		(Boad	di 1974: 6)
	d.	nera	(leε	me-ba-a		ha	
		yester	day a	as.for	1SG-come-	PAST	here	
		'I cam	e here	YESTERD	AY ↑'		(Boad	li 1974: 6)
(57)	fε		deɛ	ε-уε	(fɛ)			
Akan:		tiful		3SG-be	. ,			
		'It is BEAUTIFUL [↑] '					(Boad	li 1974: 12)

A similar range of intensifiers across the languages serve to highlight contrastive topics. In Akan these forms include $de\epsilon$ 'as for', *mpo* 'even', *ara* 'only, itself', *mmom* 'on the other hand', *nso* 'too', *ankasa* 'self', as is evident from the examples in (55) to (57). The items are similar to those mentioned for Ewe above. Detailed studies of the forms in these languages are needed, especially an investigation into how contrastive topics signalled by these markers are related to focus constructions in the individual languages. A further question is whether a distinct clause position has to be recognised for each of the languages for contrastive topics. We suggested above that this may be the case in Ewe where the immediately left adjoining position to the subject is for contrastive topics and the focus position is immediately to the left of it followed by the scene-setting topic position which is immediately to its left.

7.7.3 Cleft Constructions

The Kwa languages have cleft constructions which are distinct from focus constructions (see Ameka 1992). It has been hypothesised by some that the present-day focus constructions in the Kwa languages may have been grammaticalised from cleft constructions (see e.g. Heine and Reh 1983). Such a view has hampered the proper understanding of the relationship between clefts and focus in these languages. The main relationship between the focus constructions and the cleft constructions is that the constituents which fall within the scope of a cleft construction are typically focus marked. The languages have several different types of cleft constructions. Ewe, for instance, has a plain and a negative cleft (see below), a conditional, a temporal as well as reason clefts.

(58)	a.	Plain cleft: X (aF0	C) wò-ny	é Y 'X it is Y'			
Ewe:		nú- é wò-n	yé me-l	e m	ià fiá-ḿ		
		thing aFOC 3SG-	COP 1SG-	be.at:PRES 2P	L teach-PR	OG	
		'Something it is I	am teachir	ig you'			
	b.	Negative cleft with	h argument	focus			
		mé-nyé bo	oso-wó ka	p-é le	tə.m	ne o	
		3SG:NEG-COP w	hale-PL or		t:PRES rive	r NEG	
		'It is not only what	les that are	e in a river.' (N	yəmi 1980:	: 14)	
	c.	Negative cleft with	h predicate	focus			
		mé-nyé	dè	me-gbé	bé	nye	mâ-ŋlə
		3SG:NEG-COP	pFOC	1SG-refuse	COMP	1SG	NEG:POT-write
		aqbalẽ	ná	wò	0		
		letter	to	2SG	NEG		
		'It is not that I hav	refused	to write a lette	r to you'		

In Ewe, the signal for the plain cleft – $w\partial$ -nyé 'it is' – is positioned after the focused constituent, while that of the negative cleft and for the other types of clefts is placed at clause initial position and before the focused constituent. In Akan also, the indicator of both the plain and negative clefts occurs clause initially and before the constituent in its scope, as the examples in (59) illustrate.

(59)	a.	Plain Cleft				
		ε-уε	mé	na	me-bá-a-é	
Akan:		3SG-COP	1SG	FOC	1SG-come-PAST	
		'It was I who came' (Boadi 1974: 52; morphemic breaks added FKA)				
	b.	Negative cleft				
		ε-n-yέ	mé	na	me-bá-a-é	
		3SG-NEG-COP	1SG	FOC	1SG-come-PAST	
		'It was not I who c	ame' (B	loadi 197	74: 52; morphemic breaks added FKA)	

Should the copula phrase in these cleft sentences be deleted, we would be left with structures that are just normal term focus or predicate focus constructions. This is the attractiveness for many of the idea that the focus constructions are derived from or are

cleft constructions. However, from a functional typological point of view the two construction types are distinct and the one need not be derived from the other, although they are clearly related: the constituent that is in the scope of the cleft is in focus and, in the Kwa languages, are clearly marked by designated focus markers.

7.7.4 Inferential Constructions

Bearth (1999a) has convincingly argued that inferential utterances which provide explanations for apparent incoherence in interactional discourse are a type of focus constructions. He shows for Akan that some of the non-prototypical uses of focus marking serve as an inferential gap repair mechanism prompted by perceived incoherence in discourse. The claim is that since focus markers typically highlight the prominence of a constituent in a given discourse context, sentences which fill a perceived inferential gap in discourse processing are frequently marked as focal constituents. Consider the following dialogue from Bearth (1999a: 260) cited earlier as example (6).

(60)	a.	Kòfí	á-bá	déda			
Akan:		NAME	PERF-come	already			
		'Kofi has	already come'				
	b.	Àánè	ə-dè	káà	nà	ὲ-bá-à-è-έ	
		Yes	3SG-take	car	FOC	3SG-come-PAST-DETTRANS-TM	
		'Yes, he came by CAR' (Explains why he is already here)					

Harley (2005) shows that the inferential gap repair mechanism in Tuwuli is a cleft construction of the form *ade* 'COP' (*ke* 'PRO' (ma (with)) ... *a* 'Identifier'. As the following examples, together with their specified discourse context make clear, the clauses marked specially are those that serve to minimise speaker–hearer asymmetries in inference-processing in discourse. Such clauses are mostly explanations.

(61) Context: I didn't want anyone to use it ... a. ade (ke (mo)) m-boe foe n-do nε ətsetse kame а COP PRO with 1SG:put:inside LOC Tuwuli: 1SG-take 3SG basket inside ID 'and so I took it and put it in a basket' b. Context: I went to see him, but he wasn't in ... (ke (mo)) n-dzakũ а ade COP PRO with 1SG-leave ID 'and so I left'

According to Harley (2005) a statement introduced by *ade* (ke (ma)) helps to maximise the coherence of the immediately preceding section of discourse. Because of this, such statements are used to present the concluding state of affairs in narrative.

Another Kwa language, Likpe, uses yet another strategy for marking inferential utterances, that is, utterances that provide explanations for apparent discourse incoherence, namely an utterance final emphatic particle. In Likpe utterances that terminate in the particle $n\dot{\epsilon}$ which, for want of a better term, I gloss as 'EMPH' also tend to be used to mark the concluding statements of a narrative. For instance, a segment of the narration of the history of the Likpe people ends with a sentence which terminates in this particle to say that is the information I can give about churches and schooling (see 62). After this another topic was talked about.

(62)m.fo tsvá-a mo-fo bó-te a-ka-té nya Likpe: CNI here also-TOP 1SG-can CM-know IMPERF-give 15 onanto tíki kú sikúu éto əsúə nέ LOC God school EMPH word COM POSS skin 'And here too, (what) I know and can tell about religion and the school'

It is also used towards the end of folktales that provide an explanation for why some states of affairs exist. For instance, the sentence in (63) is taken from a tale about why the skunk is smelly, the immediately preceding context is also provided.

(63)	The rotten corpse began to disintegrate and poured on him with a bad stench.						
	nya-mfo	eso	o-kpô	wá	baa-kpó	ke-ní	
Likpe:	ANAPH-this	because.of	CM-mouse	3SG	3PL:HAB-call	CM-skunk	
	laa-nyí	kpitikpiti	nέ				
	DEP:HAB-smell	IDEO	EMPH				
	'Because of this, the mouse that is called skunk smells terribly'						

The particle also occurs at the ends of sayings and proverbs that provide explanations of some natural conditions (see (64)). For instance in the same tale about why the skunk smells, the moral of the tale is that no one should live just in his or her own small world and not participate in social and communal activities. This is reinforced and supported by two sayings the first is: one finger does not gather ashes. The second and the final move in the tale is the proverb in (64a) which terminates in the particle.

(64) a.	ú-bubu-yíbí	nkə-ə	lá		o-kpé	lá wə ł	oə-tsyúə
Likpe:	CM-broom-stick	QUOT-TOP	LOC		3SG-be.in	LOC 3SG	CMPL-some
	ntí-i	nya	woa-ke		a-lé	nέ	
	middle-TOP	and	3SG:HA	B-fine	d CM- strengtl	h EMPH	
	'The broom stick	says that wh	hen he is	among	g his people, th	hen he finds	strength'
b.	ka-ka o-sám	ı lé-la-a		mfo	wəə-tákə	le-ba	né
Likpe:	CM-place CM-	sheep DEP-w	ant-TOP	there	3SG:HAB- be	e.on CM-spo	ot EMPH
'THE PLACE a sheep likes, there he puts a spot' ⁷							

This proverb explains why the sheep is spotted and hence has the inferential gap repair particle attached to it.

⁷In his collection of Sɛkpɛlé proverbs, E. Okyerefo translates this utterance as 'A sheep bears a spot where it likes'. (Proverbs 2).
The marker $n\acute{e}$ used in Likpe in inferential utterances is not related to a constituent focus marker. As already mentioned, Likpe does not have any such overt marker. It is only partially similar to the copula ni which is used in cleft constructions. But the form must be the same one that gets used in presentational and identificational sentences of the kind shown in (65). Even here, it could be argued that it is used to explain that the item being presented is real. Hence it could be seen as an inferential utterance, since it is working on a presupposition that the gold being presented is not real.

(65)	Context: interlocutors disputing whether th						
	metal is	metal is real gold or not and one says					
	se	kosaté	nέ				
	ANAPH	very	EMPH				
	'It (=gold) is real'						

Presentational and identificational utterances are a kind of focus so it makes sense that such a marker is used in inferential utterances which are also a type of focus.

Inferential gap repair as a subcategory of focus is signalled in the Kwa languages using at least three mechanisms, as far as we know now: marking the constituent (in-situ) with the dedicated focus marker as in Akan; using a cleft construction, as in Tuwuli, or using an emphatic utterance final particle for the purpose, as in Likpe. More careful studies of how inferential gaps are repaired in more of the languages in conversational discourse are needed.

7.8 Conclusion

The fore-going is a survey of information packaging constructions with special attention to focussing strategies, constructions and mechanisms that are available in the Kwa languages. It is argued that there are distinct clause positions for the signalling of frame topics, focus and contrastive topics in the left periphery of the Kwa clause. There are distinct forms for marking the information statuses of units that occur in these clausal positions. The positions could also be seen as positions for grammatical constructions in the larger clausal construction. Dedicated information packaging constructions also abound in the Kwa languages such as topic-comment structures, cleft constructions and in some of the languages being discourse configurational languages, as defined by Kiss (1995).

Attention has been drawn to two features of the Kwa languages in this domain that need further investigation: auxiliary focus and inferential gap repair. Until very recently, Kwa languages have not been mentioned as languages that have auxiliary focus. However, evidence form the Ghana Togo Mountain languages confirms without doubt that these languages have these forms. What is striking about auxiliary focus in these languages is that their use is dependent on whether the subject of the clause is in focus or is within the scope of focus. Such a determining factor has not been noted hitherto (see Hyman and Watters 1984; Frajzyngier 2004; Ameka 2004a; Fiedler and Schwarz 2007; Harley 2005). The markers of auxiliary focus are also used in pragmatically dependent clauses such as relative clauses reechoing the connections between focus and relativisation, especially subject relatives in this case (Schachter 1973).

Curiously enough even though the Kwa languages have several focus constructions, these are not always used in introducing new topics into discourse. Typically such topics are introduced using existential constructions as in (66a) or ordinary verbal clauses such as the Ewe formula for introducing characters in folk tales in (66b).

(66)	a.	du	ádé	nə	anyí	gba-dé-gbe				
Ewe:		town	INDEF	be.at:NPRES	ground	day-INDEF-day				
		'A tov	'A town once existed'							
	b.	Introd	ucing cha	racters in folk ta	ales					
		gli	tsó	vuu	vá	dze	yiyi	dzî		
		tale	rise	long	VENT	contact	spider	upper.surface		
'Tale moved for a looong time and landed on Spider'										

There is no doubt that information packaging is a richly elaborated function in the Kwa languages. This in itself is not surprising given the preoccupation in these cultures with oratorical performance (see Ameka 2004b). The structural properties of these information packaging constructions are fairly well understood by now. What we need are more studies of the prosody of the information packaging constructions beyond the impressionistic views we have now. Moreover, we need further studies of the various constructions in discourse, which should yield more fine-grained semantic analysis of the forms. The account of the structures here, it is hoped, provides a starting point for such other investigations.

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Chapter 8 Inherent Complement Verbs and the Basic Double Object Construction in Gbe

James Essegbey

8.1 Introduction

In the Gbe languages, the kinds of verbs that take two complements fall into two classes. The first class contains only three verbs namely, $n\dot{a}$ 'give', $fi\dot{a}$ 'teach, show' and $bi\dot{a}$ 'ask'. The second class which is larger is made up of verbs that have been referred to as inherent complement verbs (ICVs) (Nwachukwu 1985, 1987; Avolonto 1995; Essegbey 1999; *inter alia*). An example of this verb is da 'cause an object to move away'. The two classes are distinguished by the fact that the object position of the three-verb class is variable while that of the ICVs is not. Sentences (1a) to (1d) are illustrations of both verbs occurring with two complements: (examples in this chapter, unless otherwise indicated, are from Ewegbe)

1a.	Kosi	ná	ga	Ami ¹
	Kosi	give	money	Ami
	'Kosi gave	money to	Ami'	
1b.	Kosi	ná	Ami	ga
	Kofi	give	Ami	money
	'Kosi gave	Ami mon	ey'	
1c.	Kosi	da	kpé	Ami
	Kosi	ICV	stone	Ami
	'Kosi threw	v a stone a	ıt Ami'	
1d.	*Kosi	da	Ami kpé	
	Kosi	ICV	Ami stone	
	'Kosi threv	v a stone a	ıt Ami'	

J. Essegbey

¹High tone is marked with the acute accent while non-high tones are left unmarked. The following abbreviations are used in glossing: 1 = first person, 2 = second person, 3 = third person, AUX = auxiliary, DEF = definite, DOC = double object construction, FOC = focus, HAB = habitual, LOG = logophoric pronoun, MOD = modal, NEG = negation, PERF = perfective, PL = plural, POSS = possessive, PRES = present, PROG = progressive, PRT = particle, RED = reduplication, SG = singular, SPECI = specific, SUBJV = subjunctive, TP = terminal particle.

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All the sentences have two complements in postverbal position, neither of which is marked with an overt case or adposition. A construction like (1b) in other languages has been referred to in the literature as the double object construction (DOC) (Barss and Lasnik 1986; Jackendoff 1990; Lefebvre 1993; *inter alia*) or the ditransitive construction (Goldberg 1995; Osam 1996). While (1a) and its equivalent and related languages has been uncontroversially analysed as a DOC (cf. Amuzu 1993; Saetherø 1993; Collins 1993 for Ewegbe, Lefebvre 1993 for Fon, Manfredi 1991 for Igbo), not everyone considers (1c) thus. For instance, Avolonto (1995) argues that the Fongbe equivalent of the verb and immediate postverbal complement of such constructions constitute a lexical category hence the construction is monotransitive.

The behaviour of verbs in the three-verb class raises the question as to which of the constructions is the basic DOC in Ewegbe. In this paper I argue that (1a) is the basic DOC in Ewegbe and, for that matter, the Gbe languages. I argue further that (1c) is also a DOC, and that it is the behaviour of this class of verbs that supports my claim that (1a) is the basic DOC. I show that this analysis not only captures important generalizations in the Gbe languages, but it also throws light on a class of verbs that has been described as disjunctive morphemes in other Kwa languages like Akan (Osam 1996). A construction containing the same class of verbs has been treated as a DOC in Emai (Schaefer and Egbokare 2005). The paper is organised as follows: in Section 8.2 I discuss the properties of the internal arguments in the canonical DOC. I show that while the position of both arguments is variable, the Theme displays more of the characteristics of objecthood. Section 8.3 looks at the properties of inherent complement verbs (ICVs). I show that with the exception of word order, the complements of these verbs behave just like their canonical counterparts. I therefore argue that the constructions containing the two types of verbs are one and the same. In Section 8.4, I show that my analysis accounts for some so-called discontinuous verbs which occur in related Kwa languages like Akan but not in the Gbe languages. Section 8.5 concludes the paper.

8.2 The Canonical DOC

Saetherø (1993) identifies three verbs as belonging to the class of canonical DOC verbs in Ewe. These are $n\dot{a}$ 'give', $fi\dot{a}$ 'teach/show' and $bi\dot{a}$ 'ask'. These verbs display properties which might be characterised as symmetric object properties (cf. Bresnan and Moshi 1993; Marantz 1993, inter alia). That is to say that both their complements possess similar object properties. In the next two subsections, I discuss these properties.

8.2.1 Symmetric Properties

The symmetric properties are variable word order and its concomitant effect on quantifier scope relations. I begin with a consideration of the word order.

8.2.1.1 Word Order

The occurrence of an argument in immediate postverbal position in the unmarked clause has been taken to be an objecthood property (cf. Hualde 1989). As I have already shown with examples (1a) and (1b), either the entity that is given (i.e. Theme) or the entity to whom something is given (i.e. Recipient) can occur in this position. This is the form attested in many languages, including English, in which word order is significant. Note that in neither (1a) nor (1b) is any of the complements marked with an adposition. Interestingly, the word order alternation affects quantifier scope relations, as I show in the next subsection.

8.2.1.2 Quantifier Scope

It might be argued that the two constructions have the same underlying structure. However, relations of scope show that this is not the case. Irrespective of which argument occurs in first object position, if it happens to be a quantified expression, it will have scope over the second object where the latter is pronominal. This is illustrated below:

2a.	Kosí	fiá	amesíáme	é-fé	fóto			
	Kosi	show	everyone	[3SG-POSS	photograph]			
	'Kosi showed everybody his photograph.'							
b.	Kosí	fiá	fóto	desíáde	é-delá			
	Kosi	show	[photograph	every]	3SG-taker			

In (2a), the quantified expression in the first object position instantiates the Recipient, and the sentence means that Kosi showed each person (x), x's photograph.² The Recipient, therefore, has scope over the Theme which occurs in second object position. The situation is reversed in (5b) where the Theme is the quantified expression and occurs in first object position. This sentence means that Kosi showed every photograph (x) to the one who took (x). Thus, in this case, it is the Theme which has scope over the Recipient. It is clear, therefore, that the quantifier scope relations are established by the order of the arguments and not by the nature of the arguments themselves (i.e. whether they are Recipient or Theme). This is made all the more evident by the fact that when the pronominal precedes the quantified expression, the latter cannot have scope over it, as illustrated below:

3a.	Kosí	fiá	é-fé	fóto	amesíáme			
	Kosi	show	3SG-POSS	photograph	everyone			
	'Kosi, showed his, photograph to everyone,'							
b.	Kosí	fiá	é-delá	fóto	desíáde			
	Kosi	show	3SG-taker	photograph	every			
'Kosi showed every, photograph to the one who took it,.'								

²It could also mean Kosi showed his own photograph to everybody, but that interpretation does not concern us here.

(3a) and (3b) are similar to (2a) and (2b) respectively with the only difference that the order of the two objects has been changed. Yet, (3a) cannot mean that Kosi allowed each person (x) to see x's photograph, as (2a) does³ and (3b) does not mean that Kosi allowed each person (x) to see the photograph that (x) took. In some other languages, the relations remain the same even when the object positions are changed. For example, Marantz (1993) discusses data from Albanian which show that the equivalent of sentences (2a) and (3a) have the same interpretation. He therefore concludes that both sentences have the same underlying structure in which the Recipient dominates the Theme. The contrasts between examples (2) and (3) suggest that one cannot posit the same underlying structure for the complements in Ewegbe.

In sum, either the Theme or the Recipient of $n\dot{a}$ 'give', $fi\dot{a}$ 'show' and bia 'ask' can occur in first object position and have scope over the other. Both properties have been referred to as object properties, so we can, following discussions in Bresnan and Moshi (1993), *inter alia*, refer to them as symmetric object properties, since they are shared properties. Yet, while sharing the above properties, there are other properties which only one of the arguments possesses. I refer to these as asymmetric properties.

8.2.2 Asymmetric Properties

The properties which do not apply to both complements are preposing in the progressive and nominalization, the *nya*-construction, and pronominalization. These are discussed in turn.

8.2.2.1 Object Preposing

In the Gbe languages, the object is preposed when the construction is the progressive, and the prospective, in which case it has an auxiliary (cf. Fabb 1992; Aboh 2004 but see Ameka and Dakubu (2008) for arguments that *le* is not an auxiliary). In the DOC, only the Theme argument is preposed, as shown below:

4a.	Kosí	le	ga	ná-ḿ	Amí				
	Kosi	AUX:PRES	money	give-PROG	Ami				
	'Kosi is giving money to Ami.'								
b.	??Kosí	le	Amí	ná-ḿ	ga				
	Kosi	AUX:PRES	Ami	give-PROG	money				
'Kosi is giving Ami money.'									

(4b), where the Recipient object is preposed, is found by speakers to be highly odd. The same restriction applies to nominalization which I turn to in the next subsection.

³Lefebvre (1993) claims that this interpretation is available in Fon.

8.2.2.2 Nominalization

Nominalization is the process whereby a complement is preposed and the verb reduplicated. As far as the DOC is concerned, only the Theme object can be preposed:

5a.	Kosí	fé	ga	ná-ná	Amí			
	Kosi	POSS	money	RED-give	Ami			
	'Kosi's giving money to Ami'.							
b.	*Kosí	fé	Amí	ná-ná	ga			
	Kosi	POSS	Ami	RED-give	money			
	*'Kosi's giving Ami money.'							

(5b), where the Recipient is preposed and the Theme left in object position, is completely unacceptable. Thus, the complement preposing criterion, either when the clause contains an auxiliary or when it is nominalised, applies only to the Theme.

While preposing of the Themes might suggest that they are being loosely incorporated into the verb (Jane Simpson, personal communication), this is not the case since the arguments can be focused. This is illustrated by (6b) below:

6a.	Amí-é	Kosí	ná	ga-e				
	Ami-FOC	Kosi	give	money-3SG				
	'It was Ami Kosi gave money.'							
b.	Ga-é	Kosí	ná	Amí				
	Money-FOC	Kosi	give	Ami				
	'It is money that Kosi gave Ami.'							

We see here that it is not only the Recipient which can be focussed but the Theme as well. I take this to be evidence that the Theme complements are not incorporated into the verb.

8.2.2.3 The nyá-Construction

The $ny\dot{a}$ -construction is syntactically similar to the passive in English because the unmarked object of the clause is realised as the subject, the verb takes the modal $ny\dot{a}$ and the logical subject is optionally adjoined to the clause. Of the two post-verbal arguments, only the Theme is realised as the subject of this clause, as illustrated below:

7a.	Ga	nyá	ná-ná ⁴	Amí	ná	Kosí		
	money	MOD	give-HAB	Ami	for	Kosi		
	'Kosi likes giving money to Ami.'							
b.	*Amí	nyá	ná-ná	ga	ná	Kosí		
	Ami	MOD	give-HAB	money	for	Kosi		

⁴The presence of the habitual morpheme is due to the fact that the subject of this construction is non-specific.

Thus far, I have shown that such properties as preposing in a clause containing an auxiliary or in a nominalization, as well as occurrence in the subject position of the $ny\dot{a}$ -construction select only the Theme, and not the Recipient. These properties are structural and can, therefore, be considered to be direct-object properties. The next properties I turn to are more related to the packaging of information.

8.2.3 Information Packaging in the Double Object Construction

There are two related restrictions on the Theme argument in the double object construction. The first relates to pronominalization while the second relates to the definite article.

8.2.3.1 Pronominalization

The restriction on the pronominalization criterion applies differently to the two verbs which occur in the canonical DOC: the Theme of $n\dot{a}$ 'give' cannot be pronominalized at all while that of $fi\dot{a}$ 'show' can only be pronominalized if the Recipient is definite. This is illustrated below:

8a.	*Kosi	ná-e	Amí	
	Kosi	give-3SG	Ami	
	'Kosi gav	ve it to Ami.'		
b.	Kosí	fiá	wó	deví
	Kosi	show	3PL	child
	'Kosi sho	wed a child to	them.'	
	*'Kosi sł	nowed them to	a child.'	
c.	Kosí	fiá	wó	Amí
	Kosi	show	3PL	Ami
	'Kosi sho	wed them to A	Ami.'	

Sentence (9) below has a non-ambiguous meaning in which the pronoun in second object position is treated as the Recipient only:

9.	Kosí	ná	nyənúvi	ádé-e
	Kosi	give	girl	SPECI-3SG
	'Kosi ga			

This sentence only describes the situation in which Kosi gives a girl's hand in marriage to a man. The interpretation in which something is given to a girl, which makes the non-definite object to be the Theme, is not acceptable. Note that it is only on the rejected interpretation that the pronoun in the second object position would instantiate Theme. In order to introduce a pronominal Theme with $n\dot{a}$ 'give', a 'take' serial verb construction (SVC) is used. This is provided below:

 Kosí tsó-e ná Amí Kosi take-3SG give Ami 'Kosi gave it to Ami.' The above discussion shows that the Theme argument in the canonical DOC cannot be pronominalized. This restriction is related to a restriction on definiteness to which I now turn.

8.2.3.2 Definiteness Restriction

The definiteness restriction is similar to that of pronominalization: the Theme cannot occur with the definite article where the Recipient is non-definite.⁵ This is illustrated below:

11a.	*Kosí	ná	ga	lá	nyónuví
	Kosi	give	money	DEF	girl
	'Kosi gav	ve the mo	ney to a girl.	,	
b.	*Kosí	ná	nyónuví	ga	lá
	Kosi	give	girl	money	DEF
	'Kosi gav	ve the mo	ney to a girl.	,	
c.	Kosí	ná	ga	lá	nyónuví-á
	Kosi	give	money	DEF	girl-DEF
	'Kosi gav	ve the mo	ney to the gi	rl.'	
d.	Kosí	ná	ga	nyónuví-á	
	Kosi	give	money	girl-DEF	
	'Kosi gav	ve money	to the girl.'		

The unacceptability of sentences (11a, b) shows that the definiteness constraint on the Theme is not dependent on the position of the object. That is to say whether it occurs in immediate-postverbal position or second-object position, there is a restriction on the definiteness of the Theme. (11c) shows that the construction is more acceptable when both Theme and Recipient are definite. I should point out here that speakers of the Anlo dialect are divided on the acceptability of (11c). A number of speakers, including me, find the use of the definite determiner on the Theme to be only marginally acceptable. However, an equal number of speakers find it to be acceptable. Moreover, inland speakers do not appear to have any problem with it. Collins (1993) discusses examples in Kpelegbe which suggest that they are acceptable in that dialect too.⁶ Sentence (11d) shows that the Theme can be non-definite when the Recipient is definite. Where the Theme is definite but the Recipient is not, a 'take' serial verb construction is used. Thus (12) below is the more acceptable way to represent (11a, b):

12.	Kosi	tsó	ga	lá	ná	nyənuví	ádé
	Kosi	take	money	DEF	give	girl	SPECI
	'Kosi gave the money to a certain girl.'						

⁵The same restriction applies in Fon as well. Lefebvre's (1993) account is that it is the argument which is affected which can take this form.

⁶In Collins' examples (e.g. ex 27a on page 20), the Goal is a proper name.

Note that it is the same construction that is used when the Theme is pronominalized (cf. example (10)). The difference between the pronominalization criterion and the definiteness criterion is that there is no absolute restriction on the Theme of $n\dot{a}$ 'give' in all dialects. The important thing, however, is that there is a restriction on definiteness that suggests an asymmetry between the Theme and Recipients. We can state a generalization here which takes the dialectal differences in acceptability into account: there is a restriction on the Theme occurring with the definite article which does not apply to the Recipient. Definiteness is therefore an asymmetric property for the two arguments.

8.2.4 Summary

The above discussion shows that despite the variable word order and its concomitant quantifier scope relations, there is a fundamental asymmetry in the properties of the arguments which occur as complements in the DOC. This is summarized in Table 8.1.

As I stated above, definiteness is not an objecthood property. Instead, it shows how information relating to two postverbal complements is organized. By contrast, such properties as object preposing and ability to occur in subject position in the *nyá*-construction which are syntactic properties apply to the Theme argument only. It is only the ability to occur in immediate postverbal position that applies to the Recipient as well. Considering this, we can conclude that the basic double object construction is the one where the Theme functions as the first object.

8.2.5 Cross-Linguistic Look at Definiteness Restrictions

The definiteness restrictions discussed above occur in other languages as well. One such language is Akan, another Kwa language for which it has been reported that there are several verbs whose Theme cannot be definite at all in the DOC (cf. Stewart (1963) and Osam (1996), Saah and Eze (1997)). The following sentences are taken from Osam (1996):

	Theme	Recipient
1. Occurrence in immediate-postverbal position	Yes	Yes
2. Object Preposing	Yes	No
3. Nominalization	Yes	No
4. Subject of Nyá-construction	Yes	No
5. Unrestricted pronominalization	No	Yes
6. Unrestricted choice of definite article	No	Yes

 Table 8.1 Properties of internal arguments in the canonical DOC

13a.	Kofi	ma-a	abofrá	nó	akókó	
	Kofi	make-PST	child	DEF	fowl	
	'Kofi ga	ave the child a	fowl'			
b	*Kofi	ma-a	abofrá	nó	akókó	nó
	Kofi	give-PST	child	DEF	fowl	DEF
'Kofi gave the child the fowl'						

Note that Akan differs from Ewegbe in that the recipient occurs in immediatepostverbal position only. This means that the Theme of the DOC can only occur in second-object position. According to Osam, in order to have a definite Theme, an SVC is used. Thus an acceptable way to render (13b) is (14) below:

14.	Kofi	de	akókó	nó	ma-a	abofra	nó
	Kofi	take	fowl	DEF	give-PST	child	DEF
	'Kofi gave the fowl to the child'						

Sentence (14) is similar to the construction used in Ewegbe to introduce a definite Theme in a DOC.

Similar restrictions have been reported for other languages. For instance, Beckman (1996) discusses differences in acceptability of the following English sentences:

- 15a. The nurse brought a doctor a patient
- b. The nurse brought the doctor a patient
- c. The nurse brought the doctor the patient
- d. ?The nurse brought a doctor the patient

Beckman notes that although (15d) is not ungrammatical, it strikes most native English speakers as odd and problematic. Ransom (1977) also notes that sentences with a definite Theme NP, as the one below, can be odd:

16. ??They feed a lion these lambs

Sentence (16) is supposed to be odd because the Theme is definite while the Recipient is indefinite. The situation in English is similar to what was observed in Ewegbe, in that the Theme can be definite as long as the Recipient also is. It is when the Recipient is indefinite that the Theme must also remain thus. Note that this restriction does not apply to the paraphrase equivalent in which the Recipient is introduced by a preposition. Thus (17) below in which the Theme is definite but the Recipient is not is perfectly acceptable:

17. John gave the pen to a boy

Goldberg (2002:332) comments on this difference thus: "In both so-called *to* and *for* ditransitives, for example, the recipient argument tends to be shorter in length and already given in discourse, as compared to either prepositional paraphrase". Thus, the restriction on the Theme of a DOC is a crosslinguistic phenomenon (cf. Essegbey 2003).

In sum, there is a cross-linguistic discourse restriction on the Theme argument in DOCs. This argument is usually the new information and, therefore, is realised as indefinite. By contrast, the Recipient is the given information and, hence, definite. The manifestation of the restriction, however, differs from language to language. In the Kwa languages like Ewegbe and Akan, the restriction is stricter in the sense that the Theme arguments of some verbs are not allowed to be definite at all. In other languages like English, and in the case of a few verbs in Ewegbe and Akan, the Theme is allowed to be definite, provided the Recipient also is. In the next section, I show that with the exception of word order, inherent complement verbs (ICVs) behave exactly like canonical DOC verbs.

8.3 Inherent Complement Verbs

The ICV has been defined as a verb whose citation form is followed by a meaningspecifying complement. Intuitively, one can think of the Ewegbe word $f\dot{u}$ whose meaning is difficult to establish without an inherent complement (IC). An instance of the verb and its IC is provided below:

Kofí fú tsi
 Kofi ICV water
 'Kofi swam'

As the example shows (most) ICVs and their complements express concepts that are expressed by a verb alone in languages like English. The tendency has therefore been to analyse them as constituting a lexical item. As I showed in example (1b) which is repeated below as (19), ICVs can also occur with two complements.

19.	Kosî	da	tú	Amî
	Kosi	"move"	gun	Ami
	'Kosi s	hot at Ami'		

Note that in this case too, the verb and complement express the concept which is expressed with the simple verb 'to shoot' in English. As a result, there has been the tendency to analyse (19) as a monotransitive construction rather than a DOC. In other words, Ami is analysed as a direct object, and not a second object (cf. Avolonto 1995). However, I show in this section that with the exception of word order, the properties of this construction are the same as those of the canonical construction in Ewegbe.

8.3.1 Word Order

Unlike the canonical DOC, the ICV DOC has a fixed word order in which the Theme occurs in the immediate postverbal position. I illustrated this with sentence (1c) and (1d). Sentences (20a) and (20b) also illustrate a similar difference:

20a.	Kofí	da	kó	Komi			
	Kofi	ICV	fist	Komi			
	'Kofi dealt a blow to Komi.'						
b.	*Kofí	da	Komi	kó			
	Kofi	ICV	Komi	fist			
	'Kofi dealt a blow to Komi.'						

In the case of one ICV, $d\dot{e}$ 'put', it looks on the surface as if the argument positions can be interchanged. What really happens, however, (as can be seen from the translations), is that the item that occurs in immediate postverbal position is always taken to be the Theme. This is illustrated below:

21a.	Kosi	dé	tsi	blí
	Kosi	ICV	water	maize
	'Kosi wa	tered mai	ze (lit. Kos	si put water on maize).'
b.	Kosí	dé	blí	tsi
	Kosi	ICV	maize	water
	'Kosi put	maize in	water'	
22a.	Kosí	dé	dze	detsí
	Kosi	ICV	salt	soup
	'Kosi put	salt in th	e soup'	
b.	*Kosí	dé	detsí	dze
	Kosi	ICV	soup	salt

The final sentence is unacceptable even for describing the situation where soup is poured on salt. Avolonto (1995) considers this lack of alternation in Fon to be evidence that the construction is not a true DOC and rather, that the verb plus complement constitute a lexical item. This position is only justified when one assumes *a-priori* that the DOC must have the Theme is second-object position. I have already shown why this position is not tenable. I now turn to the properties that ICVs share with canonical DOCs.

8.3.2 Object Preposing

When the construction contains an auxiliary, only the Theme can be preposed. The second complement, which is the Goal argument, must remain in postverbal position. The sentences below illustrate this:

23a.	Kofí	le	kó	da- ḿ	Komi		
	Kofi	AUX:PRES	fist	ICV-PROG	Komi		
'Kofi is throwing a blow/blows at Komi.'							
b.	*Kosi	le	Komi	da-ḿ	kó		
	Kosi	AUX:PRES	Komi	ICV-PROG	fist		
'Kosi is throwing a blow/blows at Komi.'							

8.3.3 Nominalization

In addition to preposing in a clause containing an auxiliary, only the Theme can be preposed when the verb phrase is nominalized:

24a.	Kό	da-da	Komi	mé-nyó	0			
	Fist	RED-ICV	Komi	NEG-be_good	NEG			
	'Throwing a blow at Komi is not good.'							
b.	*Komi	dada	kó	mé-nyó	0			
	Komi	RED-ICV	fist	NEG-be_good	NEG			
'Throwing a blow at Komi is not good.'								

Note that, as I stated for the canonical DOC, the fact that the Theme can be preposed is not an indication that it is loosely incorporated into the verb. Analysts are most often tempted to make such a claim for these verbs because the concept expressed by the verb and complement are expressed by the verb alone in English. However, these complements, like those of the canonical DOC verbs, can be individually focussed:

25a.	Kó-é	Kosí	da	Komi	
	Fist-FOC	Kosi	ICV	Komi	
	'Kosi threw <u>a b</u>	olow at Ko	omi.'		
b.	Tsi-é	Kosí	dé	blí	(cf. 24a)
	Water-FOC	Kosi	ICV	maize	
	'Kosi put water	on maize	e.'		
c.	Blí-é	Kosí	dé	tsi	(cf. 24b)
	Maize-FOC	Kosi	ICV	water	
	'Kosi put <u>maiz</u>	<u>e</u> in water	.'		

Considering that incorporated elements cannot be independently focussed, the above sentences show that the ICV construction is not one of incorporation. Instead, the complements are syntactically independent

8.3.4 Nyá-Construction

Just like the canonical DOC, only the Theme of the ICV counterparts can be the subject of the *nyá*-construction, as I illustrate below:

26a.	Kó	nyá	da-na	Komi	ná	Kofí			
	Fist	MOD	ICV-HAB	Komi	to/for	Kofi			
	'Kofi likes thowing blows at Komi.'								
b.	*Komi	nyá	da-na	kə	ná	Kofí			
	Komi	MOD	ICV-HAB	fist	to/for	Kofi			
'Kofi likes thowing blows at Komi.'									

8.3.5 Pronominalization

The Theme behaves similarly to $n\dot{a}$ 'give' in the canonical DOC in that it cannot be pronominalized. By contrast the Goal, like the Recipient in the canonical DOC, can be freely pronominalized (cf. Amuzu 1993). This is illustrated below:

27a.	*Kofí	da-e	xeví-á				
	Kofi	ICV-3SG	bird-DEF				
	'Kofi threw it at the bird.'						
b.	Kofí	da	kpé-e				
	Kofi	ICV	stone-3SG				
	'Kofi threw a stone at him/her/it.'						

In order to introduce a pronominalized Theme, the 'take' serial verb construction is used:

28.	Kofí	tsó-e	da	xeví-á
	Kofi	take-3SG	ICV	bird-DEF
	'Kofi thre			

This is similar to examples (8) and (12).

8.3.6 Definiteness Restriction

Finally the Theme in this construction, like the one in the canonical DOC cannot be realised as a definite noun phrase unless the Goal argument is also definite. The Goal, on the other hand, is not subject to this restriction. This is illustrated below:

29a.	*Kofí	da	kpé- <i>á</i>	deví
	Kofi	ICV	stone-DEF	child
	'Kofi thr	ew the sto	one at a child.'	
b.	Kofí	da	kpé	deví-á
	Kofi	ICV	stone	child-DEF
	'Kofi thr	ew a ston	e at the child.'	
c.	Kofí	da	kpé-á	deví-á
	Kofi	ICV	stone-DEF	child-DEF
	'Kofi thr	ew the sto	one at the child.	,

(29c) shows that the Theme can take a definite article when the Location is definite.

8.3.7 Summary

The above facts concerning ICs which occur in first object position and the Goal arguments which occur as second object are summed up in the Table 8.2 (compare it to Table 8.1 in Section 1.4).

	IC as theme	Goal
1. Immediate post-verbal position	Yes	No
2. Object preposing	Yes	No
3. Nominalization	Yes	No
4. Subject of Nya construction	Yes	No
5. Prominalization	No	Yes
6. Unrestricted use of definite article	No	Yes

Table 8.2 ICV object properties

It can be observed that, with the exception of word order and its concomitant quantifier scope relation which does not apply here, the above table is very similar to the asymmetry table for the DOC (pronominalization of the Theme is not allowed for ICVs but is allowed for one of the canonical DOC verbs). Considering the above parallels we can conclude that ICVs with double complements constitute DOCs, and that sentences (1a) and (c), repeated below as (30a) and (30b) respectively, constitute the basic DOC in Ewegbe:

30a.	Kosî	ná	ga	Amî			
	Kosi	give	money	Ami			
	'Kosi g	ave money t	to Ami'				
b.	Kosi	da	kpé	Amî			
	Kosi	"move"	stone	Ami			
	'Kosi t	'Kosi three a stone at Ami'					

In the next section, I show that this account explains the phenomenon of so-called disjunctive morphemes in Akan.

8.4 Beyond Gbe

I have shown that ICVs with double complements behave just like canonical DOCs. I have therefore argued that constructions in which ICVs occur with two complements should also be analysed as DOCs. In this section I show that such an account obviates the need to posit discontinuous verbs in a language like Akan. Furthermore it provides a unified account for Akan and Emai, a Benue-Congo language spoken in Nigeria.

Osam (1996) refers to some verb-and-complement sequences as discontinuous verbs. In other words, he treats both the verb and the complement as constituting a single lexical item. Examples are $bo \dots du\dot{a}$ 'curse', $bo \dots b\dot{o}s\dot{a}$ 'give a loan' and yi... $ay\dot{e}$ 'praise'. Note that the verb and complement in the first and third examples are translated with a simple verb in English. As such, they can be treated as ICVs. Osam refers to them as discontinuous verbs because when they take an extra complement, the complement comes in between the verb and inherent complement. This is shown by sentence (31) below:

31.	Abénáá	yi-i	Onyamé	ayέ
	Abenaa	ICV-PST	God	praise
	'Abena pi	raised God'		

This raises the question why the inherent complement of ICVs in Akan does not come immediately after the verb the way it does in Ewegbe. We have already observed that the DOC in Akan is similar to that in English in that the Recipient occurs immediately after the verb while the Theme occurs in second-object position (see example (13a)). In fact, words like bo occur as simple verbs and are translated as 'hit'. Thus if we ignored the fact that both verb and sequence have a simple-verb translational equivalent in English, we could rather capture expressions like bo X duá as literally 'hit X with a curse'. According to this position, such expressions would be instantiations of the DOC in Akan. One would then expect the restrictions that are placed on the Theme argument of the canonical DOC in Akan to apply to these inherent complements.

The above position is supported by the fact that most of the so-called discontinuous verbs occur with their inherent complements alone without taking an additional complement. Examples are provided below:

32a.	Enné	deɛ	Kofi	á-yi		ayέ		
	today	as_for	Kofi	PERF-I	CV	praise		
'As for today, Kofi has given praises'								
b.	Amá	deɛ	ə-bə-ə		duá			
	Ama	as_for	3SG-hit-	-PST	curse			
	'As for Ama, she cursed'							

The above sentences show that an analysis of $yi ay\varepsilon$ in (32) as a discontinuous verb creates an unnecessary distinction between it and the same verb and complement in (32b).

As to be expected, the Theme object of ICVs is subject to the same restriction as the Theme object of canonical ICVs. This is illustrated by the sentence below:

33.	Amá	bə-ə	owúra	nó	duá	(*nó)
	Ama	hit-PST	man	DEF	curse	DEF
	'Ama c	urse the mar	ı'			

The addition of a determiner to the inherent complement renders the sentence unacceptable.

Schaefer and Egbokare (2005) discuss data in Emai that is similar to the Akan one discussed above. However, they do not treat the sequence of verb and complement as discontinuous verb. Instead, they treat it as a simple transitive form that takes an extra object in order to become a DOC. Sentences (34a) and (b) below are Schaefer and Egbokare's (2005) (9) and (8a) respectively:

34a.	òhî	fi	úkpóràn	
	Ohi	hit	stick	
	'Ohi thre	ew a stick	κ.'	
b.	òhî	fi	ójé	úkpóràn

Ohi hit Oje stick Ohi hit a stick on Oje/Ohi hit Oje with a stick

In Emai, as in Akan and English, the Recipient occurs immediately after the verb.

8.5 Conclusion

In this paper I have shown that the verbs that take double complements in Gbe languages together with Akan and Emai belong to two classes. One class consists of canonical DOC verbs while the other class consists of verbs that are referred to as ICVs because the verb and its complement express concepts that are expressed with a simple verb in English. I have gone on to show that there is no difference between the behaviour of both verbs. Van Valin and LaPolla (1997) propose that the Macrorole Goal can be used to represent the various non-Theme arguments in DOCs which include Recipient, Benefactive, Goal, etc. Based on this, we can conclude that the basic DOC in Ewegbe has the word order Agent-Theme-Goal while that of Akan is Agent-Goal-Theme. As such where Ewegbe and Akan have a verb and inherent complement with equivalent meaning occurring in DOCs, their word order differs. This is shown below:

35a.	Kofi	da	kpé	Komi						
	Kofi	throw	stone	Komi						
	'Kofi threw a stone at Komi'									
b.	Kofi	to-o	Kw	áme	bóś					
	Kofi	throw-PS7	Г Kw	ame	stone					
	'Kofi throws a stone at Kwame'									

The above account takes cognisance of the properties of the canonical DOCs in all languages while also acknowledging the independence of all the complements of ICVs. By so doing, it obviates the need to posit discontinuous verbs (consisting of verb and complement) for Akan but not for Ewegbe or, for that matter, Gbe.

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Chapter 9 The Empty Subject Construction: Verb Serialization in Baule

Martha Larson

9.1 Introduction

Sentences containing multiple finite verbs, but no overt conjunctions are common in Baule.¹ In such verb series, the initial verb (V1) expresses a complete argument array, but, strikingly, the non-initial verb (V2) apparently leaves arguments unexpressed. In each of (1)–(5), V2 appears to be missing its subject.²

(1)	Э	si-li	aliɛ -'n	səkə-li	tro-'n.			
	3SS	pound-COMPL	food-DEF	prepare-COMPL	sauce-I	DEF		
	'S/he pounded the futu and prepared the sauce.'							
(2)	Э	yi-li	gbogbo-'n	i	ase	fa-li	bakan-'n.	
	3SS	move-COMPL	basket-DEF	3SO	earth	take-COMPL	child-DEF	
	'She dropped the basket and picked up the child.'							

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²The following abbreviations are used; 1SO = 1st person singular object marker, 1SS = 1st person singular subject marker, 3SO = 3rd person singular object marker, 3SS = 3rd person singular subject marker, 3PS = 3rd person plural subject marker, AGRo = Object Agreement, CP = Complementizer Phrase, CSC = Coordinate Structure Constraint, COMPL = completive, DEF = definite, ESC = Empty Subject Construction, FOC = focus marker, FUT = future, GB = Government and Binding, HAB = habitual, IP = Inflection Phrase, NEG = negative, NP = Noun Phrase, PF = Phonological Form, PERF = perfect, PL=plural, PROG=progressive, RSC=Resumed Subject Construction, SVC=Serial Verb Construction, TAM=Tense/Aspect/Mode, V1=initial verb, V2=second or any other non-initial verb.

(3)	Э	kpan-ni	sro-li.		
	3SS	cry-COMPL	respond-COM	MPL	
	'She	shouted a reply.'			
(4)	Э	fa-li	lalie	kpɛ-li	kpaun-'n.
	3SS	take-COMPL	knife	cut-COMPL	bread-DEF
	'S/he	e used a knife to c	ut the bread.'		
(5)	Э	to-li	lomi	yrɛ-li	i.
	3SS	buy-COMPL	orange	burn-COMPL	3SO
	'S/he	bought an orange	e and burned i	t.'	

In each of (6)-(10), V2 fails to express both its subject and its direct object.

(6)	B-'a 3PS-PERF 'They have	sa draw drawn water a	nzue water and drunk it.	a PERF	nən. drink			
(7)	J 3SS 'S/he bougl	to-li buy-COMPL nt papaya and	1 1 2	di-li. eat-COMPL				
(8)	Talua Girl 'The girls h	mun DEF.PL have told me th	b-'a 3PS-PERF ne news.'	kan say	ndɛ-'n word-DEF	a PERF	kle show	mi. me
(9)	Talua girls 'The girls p	mun DEF.PL pulled Konan c	be 3PS out of the ho	yi-li move-COMPL le.'	Konan Konan	fite-li exit-COMPL	kuman hole	nun. in
(10)	Aya	fa-li take-COMPL ne the book.'	fluwa-'n book-DEF	man-ni give-COMPL	mi. 1SO			

The unexpressed objects of (6)–(10) are not particularly surprising, since Baule generally³ permits drop of third person singular objects.

(11)	Э	di-li	(*i).	
	3SS	ate-COMPL	(*3SO)	
	'S/he a			

Subjects in Baule, however, can not generally be dropped.

(12) *(0) di-li. *(3SS) ate-COMPL 'S/he ate it.'

Moreover, when two conjuncts are conjoined by an overt conjunction in Baule, it is never possible to let the subject of a non-initial verb go unexpressed.

³Restrictions on the distribution of null objects in Baule are discussed in detailed in Section 9.3.

(13)	Э	to-li	ofle	kpɛkun	*(ə)	di-li.
	3SS	buy-COMPL	papaya	and	*(3SS)	ate-COMPL
	'S/he bo	ought papaya and at	e it.'			

The unexpressed V2-subject thus sets (1)–(10) apart from other constructions in Baule. For convenience, the designation Empty Subject Construction (ESC) is adopted for such examples.⁴ A fundamental question raised by these examples is whether ESC is merely a descriptive characterization or whether it is truly a reflex of a single underlying syntactic structure. This question does not arise in the Baule literature, which focuses exclusively on that subset of ESC that naturally translates as simple sentences - in other words, examples like (3), (4) and (8)-(10), calling them Serial Verb Construction (SVC) (Creissels and Kouadio N'Guessan 1977; Carteron 1992; Kouadio N'Guessan 2000).⁵ In this discussion, study of serialization in Baule is broadened in scope to cover all of (1)–(10). It is argued that ESC in Baule is a reflex of a single underlying syntactic structure involving parataxis, i.e., covert coordination, of two complete clauses and pro-drop of V2-arguments. The Parataxis plus Pro-drop account represents a further development of the insight of Creissels and Kouadio N'Guessan (1977), who find the designation série verbale (i.e., SVC) appropriate for Baule, but who emphasize that in Baule such constructions are formally closer to the juxtaposition of two main clauses than SVC in other languages. Under the Parataxis plus Pro-drop account, Baule ESC is analyzed as coordination effected with a null coordinator, a conjunction devoid of phonetic content. Arguments not expressed in the surface string of Baule ESC are absent because they have undergone pro-drop. In other words, missing V2-subjects and V2-objects in Baule ESC are null pronouns.

(7)' O to-li ofle pro_{subject} di-li pro_{object} 3SS buy-COMPL papaya pro_{subject} eat-COMPL pro_{object} 'S/he bought papaya and ate it.'

If (3), (4) and (8)–(10) are special ESC examples, it is due to their interpretation or function within the language and not due to a special syntactic structure; all of (1)–(10) are coordination of two complete clauses.

The Parataxis plus Pro-drop account faces two major challenges that will be overcome in the course of the discussion. The first challenge is to explain why, if (1)–(10) are to be analyzed uniformly as parataxis, these examples react with two distinct patterns when a conjunction is inserted into the surface string. Depending on which pattern is followed, the verb combination is called an Accidental Combination or

⁴Although this discussion treats only two verb examples, it is important to note that ESC can involve more than two verbs.

⁵Timyan (1977) alone discusses 'verbal groups' instead of SVC.

an Essential Combination.⁶ Examples (1)–(7) follow the Accidental Combination pattern. Inserting a conjunction into an ESC describes the process of creating a coordinated sentence that differs as little as possible from the original ESC. This coordinated sentence will be called an overt coordination. This designation aids differentiation of coordination effected with an overt marker of coordination (overt coordination) and parataxis (covert coordination). An Accidental Combination ESC remains virtually unaltered by the insertion of an overt conjunction, as shown by (5) (repeated here) versus (14).

(5)	ට 3SS 'S/he b	to-li buy-COMPL ought an orange	U	yrɛ-li burn-COMPL d it.'	i. 3SO		
(14)	J 3SS 'S/he b	to-li buy-COMPL ought an orange	lomi orange and burne	kpɛkun and d it.'	*(ə) *(3SS)	yrɛ-li burn-COMPL	i. 3SO

A V2-object that is missing in Accidental Combination ESC, remains unexpressed in the corresponding overt coordination, shown by (7) (repeated here) versus (15).

(7)	J 3SS 'S/he	to-li buy-COMPL bought papaya a	1 1 5	di-li. eat-COMPL			
(15)	Э 3SS 'S/he	to-li buy-COMPL bought papaya a	ofle papaya and ate it.'	kpekun and	*(ə) *(3SS)	di-li eat-COMPL	(*i). (*3SO)

Notice that the introduction of the overt marker of coordination also causes no radical shift in interpretation, and the translation of the ESC remains appropriate.

Examples (8)–(10) display the Essential Combination pattern. Here, insertion of a conjunction does not merely force the overt expression of the V2-subject. Rather, it disrupts the construction entirely. The Essential Combination ESC in (10) (repeated here) is no longer acceptable when an overt conjunction is added, as shown in (16).

(10)	Aya	fa-li	fluwa-'n	man-ni	mi.						
	Aya	take-COMPL	book-DEF	give-COMPL	1SO						
	'Aya gave me the book.'										
(16)	*Aya	fa-li	fluwa-'n	kpɛkun	э	man-ni	mi.				
	Aya	take-COMPL	book-DEF	and	3SS	give-COMPL	1SO				
	Intended reading: 'Aya took the book and gave it to me.'										

⁶The terms *Accidental Combination* and *Essential Combination* were used by Christaller (1875) to describe descriptively similar constructions in Akan. Osam (1994) treats the same dichotomy in Akan in detail. See also Agyeman (2002) and Hellan et al. (2003). Although the superficial similarities between Baule and Akan, both Central Tano languages (Gordon 2005), invite comparison, extending the analysis presented here to Akan is left for future work.

Other examples following this pattern remain acceptable after the insertion of the conjunction, but undergo radical shifts resulting in odd meanings.

(8)	Talua Girl 'The gi		b-'a 3PS-PERF ld me the new	say	ndɛ-'n word-DEF		kle show	mi. me	
(17)	Talua girl	mun DEF.PL	b-'a 3PS-PERF	kan say	ndɛ-'n word-DEF	kpɛkun and		kle show	mi. me
	*'The girls have told me the news.' 'The girls announced the news and showed me it.'								

In no case, does insertion of an overt conjunction force an object pronoun to appear in the second conjunct.

The second challenge that faces the Parataxis plus Pro-drop account is to explain why, if (1)–(10) are to be analyzed as involving null pronouns, these null pronouns are subject to the Coupling Effect, an interpretational constraint not affecting pronouns in other contexts in Baule. The Coupling Effect constraint can be described as follows. If a pronominal argument of V2 in ESC is interpreted as referring to an argument of V1, then this interpretation is the only interpretation possible and the pronoun cannot be interpreted with obviate reference. Example (5) (repeated here) serves as an illustration.

(5)'	Э	to-li	lomi _i	yrɛ-li	i _{i/*k} .
	3SS	buy-COMPL	orange	burn-COMPL	3SO
		0 0		d it (the orange).' ed it (something else	e, e.g., its peel).'

In this example, the pronoun object of V2 refers to the object of V1. It is not possible that the person brought the orange and burned its peel. Contrast this example with one containing an overt conjunction.

(18)	Э	to-li	lomi _i	kpɛkun	Э	yrɛ-li	i _{i/k} .
	3SS	buy-COMPL	orange	and	3SS	burn-COMPL	3SO
		ought an orange ought an orange		· U	·	., its peel).'	

In the overt coordination case, no Coupling Effect is imposed and the V2-object can be interpreted with obviate reference.

Both missing V2-objects and missing V2-subjects are subject to the Coupling Effect in ESC, as illustrated by (7) (repeated here).

(7)	Э	to-li	ofle	di-li.
	3SS	buy-COMPL	papaya	ate-COMPL

'S/he bought a papaya and (the same person) ate it (the papaya).'

*'S/he bought a papaya and (someone else) ate it (something else, e.g., the mass of seeds inside of the papaya).'

This example only has an interpretation in which the papaya bought is also the one eaten. Likewise, in (7), the person who bought the papaya is the one who ate the papaya. Such referential constraints do not hold for null pronouns in overt coordination.

(19)ວ to-li ofle kpekun Э di-li. **3**SS buy-COMPL **3**SS ate-COMPL papaya and 'S/he bought a papaya and ate it (the papaya).' 'S/he bought a papaya and ate it (something else, e.g., the mass of seeds inside of it).' 'S/he bought a papaya and she (someone else) ate it (the papaya).' 'S/he bought a papaya and she (someone else) ate it (something else).'

Note that Coupling Effect referential constraints hold not only for Accidental Combination ESC such as (7), but also for Essential Combination ESC.⁷

(20) N fa-li bolε-'n man-ni Bernard.
1SS take-COMPL package-DEF give-COMPL Bernard
'I gave the packet to Bernard.'
*'I picked up the packet and gave it (something else, e.g., the candy inside) to Bernard.'

In order to support the position that the missing arguments of V2 in Baule ESC are null pronouns, Parataxis plus Pro-drop must be able to account for the fact that the interpretation of Baule ESC is only consistent with the particular co-indexings associated with the Coupling Effect.

An explanation needs to be supplied as to why the interpretation of overt coordination is not limited by Coupling Effect constraints, but that such constraints necessarily apply to ESC.

The discussion is organized as follows. In the first section, the properties of Baule ESC are reviewed and evidence is accrued that ESC must be analyzed as covert coordination, or parataxis, of two complete clauses. The second section discusses Baule null pronouns and provides evidence that apparently missing arguments in ESC are null pronouns. The third section proposes a licensing mechanism for null pronouns in Baule ESC. This mechanism, called the Coupling Mechanism, licenses null pronouns in ESC, but not elsewhere. The difference between Accidental Combination ESC and Essential Combination ESC as well the Coupling Effect are shown to fall out from the Coupling Mechanism, overcoming the two challenges to the Parataxis plus Pro-drop account mentioned above. The final section provides an overview of the characteristics of SVC as it has been analyzed in other languages and discusses data which show that Baule ESC shares extensive commonalities with

⁷Note that Coupling Effect reference constraints do not apply across consecutive sentences within a discourse. For this reason, it is not appropriate to try to conflate coupled pronouns in ESC with same-subject pronouns (cf. e.g., Finer (1985)) that occur in switch reference languages.

serialization, motivating the use of a broader definition of SVC that does not exclude multi-clausal constructions such as ESC.

9.2 Parataxis Structure for Baule ESC

In this section, the properties of Baule ESC are reviewed and it is argued that ESC does not involve complementation, but is in fact covert coordination, or parataxis, of two equal constituents. In particular, Baule ESC (i.e., all of (1)-(10)) will be argued to be coordination of IP constituents as shown in (21).

This structure is a Boolean Phrase structure, proposed by Munn (1987) and also used by Kayne (1994) and Johannessen (1998). The structure represents a coordination as projected by a conjunction, the head &. The conjunction selects for the second conjunct and also contains a feature that requires the first conjunct to merge into its specifier. In this section, each piece of evidence in favor of this structure is reviewed in turn. It is shown that Baule ESC does not involve complementation; this evidence provides initial support for the coordination structure.⁸ The fact that in Baule ESC both verbs occur with evidence of a projected subject demonstrates that the coordinated constituents must be at least of size IP. Additional support for this conclusion is provided by the fact that both verbs appear with a representation of tense/aspect/mode and polarity. Finally, constraints on the distribution of sentential adverbs demonstrate that the constituents are not independent sentences, confirming the conclusion that IP is the size of the coordinated constituents.

9.2.1 Exclusion of Complementation Structure

Distribution of clause-final high tone in ESC provides striking evidence that ESC involves two complete clauses and that these clauses do not stand in a complementation relationship,⁹ but rather should be analyzed as coordination. Clause-final high tone is a high tone that is realized on the last syllable of the verb when the verb is clause final, as in (22).

(22) $\dot{\mathfrak{I}}$ w $\dot{\mathfrak{I}}$. 3SS go-COMPL 'S/he left.'

⁸That a coordination structure is correct for Baule ESC is further corroborated by the E-type reading test for null pronouns, which is introduced in the following section.

⁹This fact was pointed out by both Carteron (1992) and Creissels and Kouadio N'Guessan (1977).

When the verb is followed by a complement or an adjunct, the last syllable of the verb is realized with low tone, as in (23).

(23)
⁵ w³-lì. Buàkê
3SS go-COMPL Bouaké
'S/he went to Bouaké.'
(adapted from Creissels and Kouadio N'Guessan 1977, p. 393)

Clause final high tone is thus a diagnostic for complementation. In order to apply this test to ESC, it is necessary to consider an example involving two intransitive verbs, such as (3), repeated here with tone marked.

(3)'
 ³ kpàn-ní srò-lí.

 3SS cry-COMPL respond-COMPL
 ⁶She shouted a reply.'

If either V2, or the clause containing V2, were a complement of V1, the completive suffix of V1 would have low tone, which is not the case.

(24)	* ò	kpàn- nì	srò-lí.
	3SS	cry-COMPL	respond-COMPL
	'She s	houted a reply.'	

ESC differs in this way from constructions in which a verb is followed by a nominalized verb radical.

(25) ò sì sún.
3SS know cry
'S/he knows how to cry.'
(adapted from Creissels and Kouadio N'Guessan 1977, p. 429)

Here, *si*, 'know', is required to bear a low tone because it is not clause final, but rather followed by a complement, the verbal noun *sun*.¹⁰ Because the ESC contains two clause final high tones, one associated with each verb, it is clear that no complementation can be involved. The simplest assumption is that the ESC consists of two coordinated clauses.

9.2.2 Presence of V2-Subject

Evidence a V2-subject is projected in the syntax in ESC is provided by the presence of a tonal prefix.¹¹

¹⁰See Kouadio N'Guessan (2000) for additional arguments against a verb radical analysis.

¹¹The necessity of this prefix was pointed out by Creissels and Koudio N'Guessan (1977).

(26)	ć	sú	fà	tánnì	´màn	Kuàjó.				
	3SS	PROG	take	cloth	give	Kouadio				
	'He's giving cloth to Kouadio.'									
(Creissels and Kouadio N'Guessan 1977, p. 423)										

The tonal prefix is present on V2 of both Essential Combination ESC, as (26), and Accidental Combination ESC.

The existence of a Resumed Subject Construction (RSC) closely related to the ESC is consistent with a V2-subject being underlyingly present in ESC. RSC and ESC are closely intertwined, as analyzed in detail in Larson (2005). Here, the existence of RSC is mentioned in passing, in the interest of completeness. All of (1)-(10) have RSC variants in which the V2-subject is expressed overtly.

(27)	cf. (5)	Э	to-li		lomi	Э	yrɛ-li		i.	
		3SS	buy-CC	MPL	orange	3SS	burn-COM	MPL	3SO	
		'S/he bou	ight an oi	range and	burned it.'					
(28)	cf. (6)	B-'a	S	a	nzue	b-'a	n	ən.		
		3PS-PEF	RF d	raw	water	3PS-P	ERF d	rink		
		'They ha	'They have drawn water and drunk it.'							
(29)	cf. (8)	Talua	mun	b-'a	kan	ndε-'n	b-'a		kle	mi.
		girl	DEF.PL	3PS-PE	RF say	word-D	EF 3PS-	PERF	show	me
		'The girl	s have tol	d me the	news.'					
(30)	cf. (9)	Talua	mun		be	yi-li		Konar	ı	
		girls	DEF-F	PL	3PS	move-	COMPL	Konar	1	
		be	fite-li		kuman	nun.				
		3PS	extract	t-COMPL	hole	in				
		'The girl	s pulled H	Konan out	of the hole	.'				
(31)	cf. (10)	Aya	fa-li		fluwa-'n	Э	man	-ni	n	ni.
		Aya	take-CC	OMPL	book-DEF	3SS	give-	COMPL	. 1	SO
		'Aya gav	e me the	book.'						

Adding the second subject does not alter meaning, as reflected in the fact that the same translations apply to both ESC and the corresponding RSC.

9.2.3 Presence of Tense/Aspect/Mode on V2

In Baule ESC, each verb bears its own tense/aspect/mode (TAM) marker.

(8)	Talua	mun	b-'a	kan	ndɛ-'n	а	kle	mi.
	girl	DEF.PL	3PS-PERF	say	word-DEF	PERF	show	me
	'The girl	s have told m	e the news.'					

This fact supports the position that Baule ESC consists of two clauses, each with its own realization of inflection. Interestingly, the TAM-markers on the verbs in ESC are required to match. It is not possible to mark one TAM on the first verb and another TAM on the second.

(32)	*Be	tra-li	крєта	wa	di.
	3PS	catch-COMPL	agouti	FUT	eat
	Intende	ed reading: 'They c	aught an ag	gouti and	they will eat it.'

Many of the TAM-mismatches that are excluded in ESC are permissible in overt coordination.

(33)Be tra-li kpema kpekun di. be wa 3PS catch-COMPL agouti 3PS and FUT eat 'They have caught an agouti and they will eat it.'

At first blush, the ESC TAM-matching facts appear to be easily attributable to a copying mechanism. Such an account would hold that the TAM-marker on V2 is simply a copy of the TAM-marker on V1 inserted at PF and not a reflection of a second representation of inflection in the syntactic structure. There are two cases in which TAM-matching does not involve repetition of a marker which serve to show that a copying account is not adequate to cover the entire range of TAM-matching data in Baule. These are V1 progressive + V2 intentional and V1 future + V2 intentional and were initially pointed out by Creissels and Kouadio N'Guessan (1977).

(34)	V1 progressive + V2 intentional								
	ò	sú	fà	tánnì	mán	Kuàjó.			
	3SS	PROG	take	cloth	give-INT	Kouadio			
	'He is giving the cloth to Kouadio.'								
	(Creissels and Kouadio N'Guessan 1977, p. 421)								

The IP-coordination structure in (21) holds an appeal based on the simplicity with which it accounts for the full range of TAM-matching data. Surface marking of TAM is simply always a reflection of the underlying syntax: the two TAM-markers in ESC are assumed to reveal two underlying IPs.¹² Under such an account, the

¹²This account is also appealing due to its consistency with the facts of TAM-marking in Akan. Marking of TAM on both verbs is also a characteristic of Akan SVCs, whose TAM matching constraint have been discussed by Christaller (1875), Schachter (1974), Dolphyne (1987), Baker (1989) and Osam (1994). In the Akan SVC in (i), each verb can be seen to bear its own marker of tense/aspect.

 ⁽i) Akosua yε-ε asor ma-a Yaw. Akosua do-COMPL prayer give-COMPL Yaw
 'Akosua prayed for Yaw.'
 (Akan, Osam 1994, p. 194)

In literature, it has often been claimed that Akan prohibits TAM-mismatch between the verbs of the SVC. Both Schachter (1974) and Baker (1989) are proponents of this position. Dolphyne (1987) undertakes a comprehensive investigation of the possibilities of TAM-mismatch in SVCs in Akan, and arrives at the conclusion that the TAM-mismatch prohibition in Akan is not an absolute constraint. Further support of this position is provided by Osam (1994).

TAM-matching constraint would be attributed to the nature of the null conjunction head, &. If null-& in Baule is used to effect a basic and entirely neutral coordination, it is likely that it is simply inherent in the meaning of parataxis that the two coordinated clauses must match in TAM. Such neutral coordination does not support contrast between the two conjuncts that arise with shift of tense, aspect or mode. This position is supported by data demonstrating that in Baule overt conjunctions also impose certain TAM restrictions on the conjuncts that they coordinate.

 (35) *B'a tra kpɛma kpɛkun be di-li.
 3PS-PERF catch agouti and 3PS eat-COMPL Intended reading: 'They have caught an agouti and they ate it.'

If other conjunctions impose looser versions of matching restrictions, it is plausible that the null-& also imposes matching conditions. In sum, both the fact that TAM is marked individually on each verb in ESC and the fact that these markers are required to match are consistent with an analysis that holds that the underlying is a coordination of two IPs.

9.2.4 Presence of Polarity Marker on V2

In Baule, each verb of the ESC is required to bear its own negation marker. Creissels and Kouadio N'Guessan (1977) provide the following as an example of negation being marked on both verbs.¹³

(36)	Э	fa-man	agba	man-man	Yao.		
	3SS	take-NEG	cassava	give-NEG	Yao		
	'He doesn't give any cassava to Yao.'						
	(Creissels and Kouadio N'Guessan 1977, p. 257)						

The presence of negation marking on both verbs supports the position that each verb occurs in the ESC as part of a complete clause.

It is necessary, however, to also account for the fact that verbs in the ESC are subject to an absolute polarity matching requirement. Either both verbs or neither verb must bear a negation marker.¹⁴ If the one verb is negated alone, the result is not acceptable, shown in (37), and a bi-clausal construction must be used, shown in (38).

¹³Creissels and Kouadio N'Guessan (1977) note that in Baule negation on V2 can be highly reduced.

¹⁴The restriction on negation also holds for Akan SVCs.

⁽i) O-e-n-huru a-n-tə nsu no mu. 3SS-COMPL-NEG-jump COMPL-NEG-fall river DEF in 'S/he did not jump into the river.' (Akan, Osam 1994, p. 212)

Osam (1994) states that negotiation must be marked on both verbs. Earlier mentions of the constraint include Dolphyne (1987), Schachter (1974) and Boadi (1968).

(37)	*Kε When Intendee		wunze-'n, be.pregnant-DEF : 'When Akisi is pi	388	5 grill	NEG	ngate peanuts peanuts ar		them.'	
(38)	Kε When 'When	Akisi Akisi Akisi is	wunzɛ-'n, be.pregnant-DEF pregnant she does	388	S grill	NEG			wa 5 FUT	di. eat
Т	he same	e holds	if the second ve	erb is	negated	d alone				
(39)	*Kε When	Akisi Akisi				ngate peanuts	di eat	man. NEG		
	Intended reading: 'When Akisi is pregnant she roasts peanuts and doesn't eat them.'									
(40)	Kε When	Akisi Akisi	wunze-'n a be.pregnant- 3 DEF			ngate peanuts	kpɛkun and	o di 3SS	man. eat	NEG

'When Akisi is pregnant she roasts peanuts and doesn't eat them.'

The polarity matching constraint can also be attributed to the interpretation of the null-& in Baule. The interpretation of null-& is completely neutral and cannot be used in situations where the interpretation of the conjunction would more appropriately be 'and yet' or 'but' rather than the neutral 'and' of null-&, which can be used only for completely non-contrastive coordination.

9.2.5 Distribution of Sentence-Level Adverbs

In Baule, sentence-level adverbs must occur in sentence-initial position.

(41)	(Nanwle)	Kofi	(*nanwle)	man-ni	
	(truly)	Kofi	(*truly)	give-COMPL	
	$(*nanwl\epsilon)$	mi	(*nanwlɛ)	fluwa	$(*nanwl\epsilon)$
	(*truly)	me	(*truly)	paper	(*truly)
	'Kofi defini	tely gav			

In the ESC, a sentence adverb can only appear in initial position and cannot appear in a position before V2.

(42)	Atrekpa	be	tra-li	kangale-'n	di-li.				
	probably	3PS	catch-COMPL	panther-DEF	eat-COMPL				
	'Probably they caught the panther and ate it.'								
(43)	*Be	tra-li	kangale-'n	atrɛkpa	di-li.				
	probably	eat-COMPL							

Evidently, the second conjunct does not contain the position necessary for the attachment of a sentence-level adverb. This pattern demonstrates that V2 occurs in

a conjunct that is smaller than an independent sentence. Since the presence of TAM and polarity marking shows that the conjunct must be a least of IP size, it can be concluded that Baule ESC coordinates IP-sized conjuncts. Taken together, the evidence of this section supports the conclusion that the coordination structure in (21) is appropriate for Baule ESC.

9.3 **Pro-Drop in ESC**

In this section, Baule is shown to make widespread use of null objects outside of the ESC. This fact motivates the analysis that the subjects and objects apparently missing from the V2 argument array have undergone pro-drop. The E-type pronoun test is introduced and shown to provide the proof necessary to confirm that unexpressed V2-arguments in the ESC must be analyzed as null pronouns. The section concludes with presentation of ESC data suggesting that some null pronoun objects of V2 must have a somewhat different licensing condition than garden variety null objects in Baule.

9.3.1 Garden Variety Null Objects and Unexpressed V2-Objects in ESC

The fact that Baule uses null objects in simple sentences provides initial motivation for an appealing, straightforward explanation for unexpressed V2-arguments in ESC, simply, that they are also null pronouns. Consider the ESC in (7) (repeated here), in which the verb di, 'eat', does not express a direct object.

(7) a to-li ofle di-li.
 3SS buy-COMPL papaya eat-COMPL
 'S/he bought papaya and ate it.'

This fact can be reduced to the requirement that di, 'eat', drop its object whenever possible, i.e., also in a non-coordinate sentence.

(44) Yao di (*i). Yao eat 'Yao eats it.'

The Parataxis plus Pro-drop account of Baule ESC adopts the position that apparently missing V2-arguments in ESC are null pronouns. Baule verbs can be divided into a class of Object Drop verbs, which are required to drop their objects whenever possible, and a class of Overt Object verbs, which can never drop their objects. These cases are presented here in turn and their implications for the analysis of ESC are discussed. Object Drop verbs include *di* 'eat'; *gua* 'put'; *kangan* 'read'; *klɛ* 'write'; *non* 'drink'; *soko* 'cook'; *fa* 'pick up'; *kundɛ* 'search for'; *nian* 'watch'; *to* 'buy, redeem' and *yi* 'extract'. An Object Drop verb is required to drop a pronoun object clause finally if that pronoun object refers to a third person singular inanimate entity.¹⁵ Clause medially, Object Drop verbs cannot drop their object pronouns.

(45)	N 1SS 'I dranl	nən-ni drink-COMPL k it/some.'	(*i). (*3SO)	
(46)	N 1SS 'I dranl	nən-ni drink-COMPL k it/some quickly.'	*(i) *(3SO)	ndende. quickly

When Object Drop verbs participate in ESC, their object drop restrictions pattern in the same way as they do when these verbs occur outside of ESC, e.g., in overt coordination or simple, non-coordinate sentences. If V2 is an Object Drop verb, it drops its object sentence finally but not sentence medially.

(47)	Aya Aya	to-li buy-COMPL	nzue water	nən-ni drink-COMPL	(*i). (*3SO)			
	'Aya bought water and drank it.'							
(48)	Aya Aya	to-li buy-COMPL	nzue water	nən-ni drink-COMPL	*(i) *(3SO)	ndɛndɛ. quickly		
'Aya bought water and drank it quickly.'								

These data support the position that when Object Drop verbs are used as V2 in ESC their missing objects should be analyzed as garden variety null pronouns. Overt Object verbs may never drop their object pronouns. This class includes verbs such as *fuan* 'chase away'; *kpo* 'detest'; *kun* 'kill'; *bo* 'shatter'; *bu* 'break'; *keje* 'shake'; *kpe* 'cut'; *wunzi* 'wash'; *wutu* 'spill'; *yonyon* 'shrink'; *yra* 'burn'; *kan* 'feel, touch'; *klo* 'like'; *si* 'know'; *sro* 'fear' and *wun* 'see.'

(49) Ə yra-li *(i). 3SS burn-COMPL *(3SO) 'S/he burned it.'

¹⁵Note that sentence finally, a verb that drops its object carries sentence-final high tone

⁽i) Bè tò-lí.

³PS buy-COMPL

^{&#}x27;They bought it.'

This pattern indicates that an object drops with all its phonetic substance and leaves behind no floating tone.
When Overt Object verbs participate in ESC,¹⁶ they are also required to express their object pronouns overtly, as illustrated in (5) (repeated here).

(5) O to-li lomi yrε-li *(i).
 3SS buy-COMPL orange burn-COMPL *(3SO)
 'S/he bought an orange and burned it.'

The fact that V2-objects in Baule ESC follow the same distribution patterns of object pronouns in simple sentences suggests that it is not necessary to posit that ESC-specific principles are at work in Baule. Instead, it is simpler to prefer an account that derives ESC from structures and mechanisms independently observed to be at work elsewhere in Baule.

Parataxis plus pro-drop is exactly such an account, incorporating two commonplace mechanisms: coordination and null pronouns.

9.3.2 Unexpressed V2-Arguments in ESC Arise via Pro-Drop

The Parataxis plus pro-drop account holds that V2-arguments in ESC that are unexpressed in the surface string are simply null pronouns. Any residual doubt as to the correctness of this analysis is eliminated by the application of the E-type reading test. This test, originating from Baker and Stewart (2002), detects the presence of pronouns and demonstrates that missing arguments cannot be traces or implied objects. The line of reasoning applied by Baker and Stewart (2002) is simple. E-type readings occur in contexts in which a pronoun has a quantifier antecedent that doesn't bind it; if an E-type reading arises it must reflect the presence of a pronoun (p. 24).

An English example serves to illustrate the diagnosis of an E-type pronoun.

(50) Jens wrote only three letters and sent them to England.

According to Evans (1980), there are two arguments which together demonstrate that a pronoun is not bound by a quantified NP. First, if the scope of the quantified NP

¹⁶Baule does not follow the Anyi pattern observed by van Leynseele (1975), who reports that in Anyi, it is impossible to leave the repeated subject and object pronouns out of examples like

⁽i) 2-fa batrã, 0-bia i, 2-kp2kpa i. 3SS-take.HAB child 3SS-wash.HAB 3SO 3SS-anoint.HAB 3SO 'S/he takes the child, washes it, and anoints it.'

⁽Anyi, van Leynseele 1975, p. 192, ex. 8)

Example (ii) shows that the parallel sentence in Baule requires the subject to be expressed overtly only once, at the beginning of the sentence.

 ⁽ii) ∂ fa ba-'n wunzin i kpεkpε i.
 3SS take child-DEF wash 3SO anoint 3SO 'S/he takes the child, washes it and anoints it.'

does not include the clause containing the pronoun, then the quantified NP does not bind the pronoun. If the quantified NP in (50) had wide scope, the sentence would be applicable in any situation in which there existed only three letters that Jens both wrote and sent to England. For example, Jens could have written a huge stack of letters, but sent only three to England. The sentence in (50), however, does not apply to this situation, since it entails that Jens wrote only three letters total. The quantified NP in (50) can be concluded to have narrow scope. The scope of the quantified NP does not extend beyond the first conjunct and therefore the quantifier does not bind the pronoun in the second conjunct. Second, if the interpretation of the pronoun involves maximality effects, then the quantified NP does not bind the pronoun. This argument applies to (50) in the following way. The pronoun 'them' in (50) is interpreted as referring to all of the letters Jens wrote. In a situation in which Jens sends only two letters he wrote to England, (50) does not apply. Rather, this sentence entails that Jens sends all of the letters that he wrote to England. The pronoun in (50) is considered to demonstrate a maximality effect because it refers to the maximal set of letters Jens wrote. With these two arguments, Evans (1980) demonstrates that a pronoun can be anteceded by a quantified NP without being bound by it. Evans calls such pronouns E-type pronouns, the term which is adopted for them here. Only certain quantifiers yield a contrast between E-type readings and bound readings: 'few', 'most', 'just one', 'only one', 'some', 'a' and numerals such as 'three.'

Baker and Stewart (2002) use the occurrence of an E-type reading to demonstrate that in some SVC examples a referential element, which they analyze as a null pronoun, follows the second verb. Their original examples are from Edo and they are repeated here to illustrate the test. In the first example, the unexpressed argument turns out to be a null pronoun and in the second, the unexpressed argument cannot be concluded to be a null pronoun. In the SVC in (51), the first example, the direct object of V2, *read*, is not overtly expressed.

(51) Òzó dé èbé khéhré tié. (Edo Consequential SVC)
Ozo buy book little read
Ozo bought (a) few books and read them.'
(Baker and Stewart 2002, p. 23, ex. 29)

The interpretation of (51) is that Ozo bought some books and that he read all of the books that he bought. Baker and Stewart (2002) note that this SVC is inappropriate in situations in which Ozo buys many books but reads only a few of them. Ozo must read all the books that he buys. This maximality effect signals that the unexpressed argument of *read* receives an E-type reading. Baker and Stewart (2002) call (51) a Consequential SVC. The relevant aspect of the Consequential SVC is that it contrasts with (52), the second example, which Baker and Stewart (2002) call a Resultative SVC.

(52) Òzó sùá èrhán khérhé dè-lé. (Edo Resultative SVC)
Ozo push tree few fall-PL
'Ozo pushed (a) few trees down.'
(Baker and Stewart 2002, p. 23, ex. 28)

Example (52) does not necessitate that all the trees that Ozo pushes fall. Because this sentence is appropriate in contexts in which some of the trees that Ozo pushes

do not fall, we see that there is no maximality effect. In short, the unexpressed V2-subject in this sentence does not receive an E-type reading and therefore V2 does not have a null pronoun subject. The E-type reading test can be applied in the same way to Baule ESC, but does not yield the contrast observed in Edo. Instead, it reveals all unexpressed V2-subjects as well as all unexpressed V2-objects to be null pronouns. Each case will be discussed in turn. The following Baule ESC has a quantified V1-subject. This example was designed so that it involves one of the quantifiers mentioned above that yield a contrast between E-type readings and bound readings and is therefore appropriate for the E-type reading test.

(53) Talua nsan cε be tra-li wuo di-li. girl three only 3PS catch-COMPL snake eat-COMPL 'Only three girls caught a snake and they ate it.'

The ESC in (53) is applicable only in situations in which three girls caught snakes, and in which all of those three girls also ate snakes. Thus, the E-type pronoun test diagnoses the unexpressed subject of V2 as a null pronoun. The Baule example thus receives a different interpretation than the parallel English coordination.

(54) Only three girls caught a snake and ate it.

Example (54) does not entail that the girls that ate a snake are all the girls that caught a snake. Rather this example is appropriate in situations in which many girls caught a snake, as long as only three girls caught and ate a snake. No maximality effect arises and no E-type pronoun is present. The contrast between Baule example (53) and English example (54) is sharp and cannot be overlooked.

Unexpressed V2-objects are diagnosed individually for Accidental Combination ESC and Essential Combination ESC. The following Accidental Combination ESC has a quantified V1-object that is appropriate for the E-type reading test.

(55)	cf. (7)	Э	to-li	oflɛ	nyon	сε	di-li.
		3SS	buy-COMPL	papaya	two	only	eat-COMPL
		'S/he	bought only two	papayas and	l ate them.'		

This sentence means that the person involved bought only two papayas and ate both of the papayas that s/he bought. The unexpressed object has an E-type reading and thus must be a pronoun.

The following Essential Combination ESC involves a V2 that introduces a beneficiary and was designed by introducing an appropriated quantified V1-object in (10).

(56)cf. (10) Aya fa-li fluwa nyon сε man-ni mi book 1SO Aya take-COMPL two only give-COMPL 'Aya only gave me two books.'

This example means that Aya gave me only two books. It is not possible that this sentence is applied to a case in which Aya picked up a lot of books, but gave me

only two of them. It is necessarily the case that Aya gave me both the books that she picked up.

The E-type pronoun test demonstrates that all unexpressed V2-arguments of ESC are actually null pronouns. However, the test provides support for the Parataxis plus Pro-drop account of Baule ESC in another way as well. It provides further proof that the coordination structure in (21) is actually the correct structure for Baule ESC. If a pronoun receives a E-type reading, it must be the case that it is not bound by its quantifier antecedent. This configurational requirement is automatically satisfied if an underlying coordination structure is assumed.¹⁷

9.3.3 Garden Variety Null Objects Versus Null V2-Objects in ESC

Although the E-type pronoun test demonstrates unequivocally that unexpressed V2-arguments in ESC are null pronouns, it is not the case that garden variety object drop will account for all ESC. In particular, for some V2, Essential Combination ESC requires careful consideration. Examples (8)-(10) were chosen to represent the range of Essential Combination ESC occurring in Baule, and these will now be discussed in turn. Some Essential Combination ESC examples, such as (8) (repeated here), are unproblematic.

(8) Talua mun b-'a kan ndε-'n a kle mi.

¹⁷If the ESC is considered in terms of classic GB, Binding Theory reveals an unexpected fact about ESC examples in which V1 introduces an instrument. Note that in instrumental ESC, the object of V2 cannot refer to the same entity as the object of V1.

(i)	Be	fa	man	lalie _j	kpε	men	$\mathbf{i}_{*_{j/k}}$
	3PS	take	NEG	knife	cut	NEG	$3SO_{*j/k}$
	'You can	i't use a kn	ife to cut it.'	-			-

*'You can't use a knife to cut that same knife.'

If V2 in such ESC is analyzed as having an instrumental object that is a null pronoun with the same reference as the V1 object, the exclusion of the second reading is easily accounted for. The instrumental null pronoun would be bound within its Governing Category, resulting in a Principle B violation.

(ii)	*Be _i	fa	man	lalie _j	proi	kpε	men	i _j	pro _j
	3PS _i	take	NEG	knife _j		cut	NEG	3SO _j	

Intended reading: 'You can't use a knife to cut that same knife.'

The E-type reading test yields a result consistent with the presence of an instrumental V2-null object.

Consider the following example:

(iii) Kofi fa-li waka kun-gba ti-li amango mun.
 Kofi take-COMPL stick one-single pick-COMPL mango DEF.PL
 'Kofi used only one stick and harvested the mangoes.'

This example means that Kofi picks up one stick total and uses that stick to harvest mangos.

girl DEF.PL 3PS-PERF say word-DEF PERF show me 'The girls have told me the news.'

V2 in (8), the verb kle, 'show', can be used with a null object in a simple sentence.

(57) N kle-li Kofi. 1SS show-PAST Kofi 'I showed Kofi it.'

In the case of (8), the unexpressed V2-object can be straightforwardly analyzed as a null pronoun, as in the case of the Accidental Combination examples discussed in the previous subsection. Other Essential Combination ESC examples, however, represent a particular challenge for the Parataxis plus Pro-drop account. There are two different object patterns displayed by verbs used as V2 in Essential Combination ESC.

The first pattern involves a V2 of the type that will be referred to as an otherwiseintransitive verb, and is represented by (9) (repeated here). Example (9) is an Essential Combination ESC because it is disrupted by the introduction of a conjunction. In this case, the result is coordination with a significantly different interpretation.

- (9) Talua Konan be fite-li kuman mun yi-li nun. 3PS move-COMPL Konan extract-COMPL girls DEF.PL hole in 'The girls pulled Konan out of the hole.'
- (58) Talua mun be yi-li Konan kpεkun be fite-li kuman nun. girls DEF.PL 3PS move-COMPL Konan and 3PS emerge-COMPL hole in 'The girls pulled Konan out and they exited the hole.'

The ESC in (9) expresses that the girls pulled Konan out of the hole; they were not themselves in the hole. The corresponding coordination in (58) expresses that the girls themselves were in the hole and exited it. The E-type reading test makes it clear that when used as V2 in ESC *fite* occurs with a null pronoun direct object.

(59) Talua mun be yi-li waka nyon cε fite-li kuman nun. girls DEF.PL 3PS move-COMPL wood two only extract-COMPL hole in 'The girls pulled only two pieces of wood out of the hole.'

This sentence means that the girls pulled only two pieces of wood out and that those two pieces of wood came out of the hole. It cannot mean that they pulled at all of the pieces of wood and only two came out of the hole. The E-type reading diagnoses the presence of a V2 null pronoun object. Curiously, the verb *fite* cannot be used with a null object in a simple sentence.

(60) Talua mun be fite-li. girls DEF.PL 3PS emerge-COMPL 'The girls emerged.'
*Intended reading: 'The girls extracted it.'

If *fite* is used as an intransitive, (60) is acceptable and can be translated 'The girls emerged,' but this sentence cannot be interpreted as having a direct object. In fact, in a simple sentence, *fite* cannot be used transitively at all.

(61)	*Talu	a mun	be	fite-li	Konan.
	girls	DEF.PL	3PS	emerge-COMPL	Konan
	Intend	ded reading:	'The gir	ls extracted Konan.'	

The designation otherwise-intransitive verb for V2s such as *fite* serves as a reminder of the fact that these verbs occur with a null object when used as V2 in ESC, but are not otherwise transitive verbs.

The second pattern, involves a V2 that will be referred to as a definitenessrestriction verb. Above, (10) (repeated here) was shown to be Essential Combination ESC because the insertion of a conjunction disrupted the example, and in fact yields an un-interpretable sentence (cf. (16), also repeated).

(10)	Aya	fa-li	fluwa-'n	man-ni	mi.		
	Aya	take-COMPL	book-DEF	give-COMPL	1SO		
	'Aya gave me	the book.'					
(16)	*Aya	fa-li	fluwa-'n	kpɛkun	Э	man-ni	mi.
	Aya	take-COMPL	book-DEF	and	3SS	give-COMPL	1SO
	Intended readi	ng: 'Aya took th	e book and ga	ave it to me.'			

Arguing that *man*, 'give', is followed by a null pronoun object in (10) is challenging because *man* cannot be used with a null pronoun in a simple sentence.

(62) *N man-ni Kofi 1SS give-PAST Kofi Intended reading: 'I gave it to Kofi.'

Unlike *fite*, however, *man* does occur with a direct object in a simple sentence.

(63)	Э	man-ni	mi	fluwa.
	3SS	give.COMPL	1SO	paper
	'S/he	gave me paper.'		

This direct object is restricted by the Definiteness Restriction; it may not be a definite noun phrase.¹⁸

(64) *O man-ni mi fluwa-'n. 3SS give.COMPL 1SO paper-DEF Intended reading: 'S/he gave me paper.'

Neither can it be a null pronoun.

(65) D man-ni mi.
 3SS give.COMPL 1SO
 *Intended reading: 'S/he gave me it.'

The fact that otherwise-intransitive verbs like *fite* and definiteness restriction verbs like *man* cannot occur with null objects outside ESC makes it impossible to claim

¹⁸One other ditransitive verb in Baule, $c\varepsilon$, 'offer', also imposes such a definiteness restriction on its object. A parallel restriction exists in Akan (Stewart 1963).

that null objects in ESC are without exception garden variety null objects. Null objects in ESC apparently enjoy a licensing possibility that is not generally available to garden variety null pronouns. This conclusion is not surprising, since it is clear that an ESC-specific null pronoun licensing mechanism is independently necessary to license null subjects, which never occur in Baule outside the ESC. The next section will be devoted to developing a proposal for such a mechanism, which will be called the Coupling Mechanism.

Even with a promise of a licensing mechanism for ESC-specific null pronouns, an important issue remains open. If otherwise-intransitive verbs like *fite* and definiteness-restriction verbs like *man* clearly project direct objects when they are used in ESC, it is necessary to account for the fact that they do not freely occur with direct objects elsewhere. A return to an earlier insight in the Akan literature provides a viable basis for a solution. Stewart (1963) notes the existence of verbs in Akan that have transitive interpretations but never in simple sentences. An account that builds on this insight would claim that a V2 occurring with a null object in ESC is inherently capable of projecting a direct object into the syntax and that this direct object is, for some reason, not able to occur in contexts other than ESC.

The Minimalist Program, launched by Chomsky (1993), provides a convenient theoretical framework to formulate a parameterized account of this reason that will also explain the observed variation. If the object agreement head, AGRo, that is associated with otherwise-intransitive verbs (like fite) and definiteness-restriction verbs (like *man*) is assumed to be deficient, it is no longer a mystery why these verbs fail to occur consistently with direct objects. AGRo is responsible for checking Case and φ -features of the direct object. Since number and animacy play a defining role in the Baule pronominal system, it is natural to assume that NPs have number and animacy features that must be checked. An AGRo that is missing the φ-feature animacy selects for otherwise-intransitive verbs like *fite*. Because AGRo lacks an animancy feature, the animacy feature of the direct object of *fite* remains unchecked. Parallelly, a AGRo that is missing the φ -feature number selects for definiteness-restriction verbs like *man*. Because the number feature is missing in its AGRo, the number feature of the direct object of man remains unchecked. Unchecked features prevent the derivation from converging. Only in the case in which the direct object is indefinite, is man allowed to occur with a direct object, as shown in (63). Presumably, (63) is possible because, in contrast to definite marked NPs, bare NPs are not associated with a number feature.¹⁹ If verbs like *fite* and man were Object Drop verbs, they could be expected to occur in simple sentences with null objects, since it is plausible that a null object pronoun can occur with underspecified feature bundles, in other words, with no animacy or number features that must be checked. However, these verbs do not occur with garden variety null pronouns. It is only after the introduction of the Coupling Mechanism in the next

(i) talua-'n (ii) talua mun girl.DEF girl PL.DEF 'the girl' 'the girls'

¹⁹It is not possible to mark a Baule NP singular or plural without marking definiteness.

section, that it will be possible to provide an account of how otherwise-intransitive verbs (like *fite*) and definiteness-restriction verbs (like *man*) circumvent the restrictions of their deficient AGRo in ESC constructions.

9.4 Licensing Null Pronouns in Baule ESC

The discussion thus far has conclusively demonstrated that unexpressed V2-arguments in Baule ESC must be analyzed as null pronouns. However, two facts have turned up that make ESC null pronouns look very different from garden variety null objects in Baule. First, null pronouns in the ESC are subject to the Coupling Effect. A null V2-subject is necessarily interpreted with the same reference as the V1-subject and cannot have obviate reference. If a null V2-object is interpreted with the same reference as a V1-object, it has no additional alternate referents. Second, Essential Combination ESC sometimes involves null V2-objects that cannot be analyzed as garden variety null objects since they do not occur outside of the ESC. This case occurs when V2 is an otherwise-intransitive verb such as *fite* or a definiteness-restriction verb such as *man*. This section develops a proposal for a licensing mechanism for ESC null pronouns that simultaneously accounts for these two differences.

The licensing mechanism put forward here for ESC null pronouns in Baule will build on conventional accounts of null pronouns, which break licensing down into two conditions. Rizzi (1986) proposes that null pronouns must fulfill both a Formal Licensing Condition, which restricts the context in which null pronouns can occur, and an Identification Condition, which requires the null pronoun to recover content. The account takes the fact that object pronouns are generally possible in Baule as sufficient evidence to assume that the Formal Licensing Condition is inherently fulfilled. The variation in the possibility of pro-drop is, consequently, due solely to variation in the possibility of fulfilling the Identification Condition.

If pronouns are assumed to be simply bundles of φ -features (e.g., person, number, animacy) then one easily imaginable way that the Identification Condition could be fulfilled is by recovering the values of these features. Early accounts associated the distribution of null pronouns with the presence of agreement that is sufficiently rich (Chomsky 1982; Jaeggli 1982; Jaeggli and Safir 1989). For example, Huang (1984) observes that object agreement licenses null objects in Pashto. In the past tense, verbs agree with their objects in Pashto, and it is only in this case that it is possible to drop the object.

(66) ma pro wə-xwar-a.
I pro PERF-eat-3SSG.FEM 'I ate it.'
(Pashto, Huang 1984, p. 536, ex. 14b.)

If licensing of ESC null pronouns in Baule is to be related to their ability to recover content, it is clear that allowing the Identification Condition to be fulfilled via recovery of φ -feature values will not completely cover the facts. Recovery of

pronoun φ -features does not account for the existence of the Coupling Effect. It is true that φ -features constrain possible referents for a pronoun, but they do not force a pronoun to be interpreted with one and only one referent.

It has already been observed that a licensing mechanism is necessary that accounts for the fact that the distribution of certain null objects is limited to the second conjunct of ESC. This distribution motivates the assumption that it is actually the presence of the first conjunct of the ESC that is responsible for the licensing of the null pronouns in the second conjunct. If the Identification Condition in Baule is fulfilled via a mechanism that relies critically on the presence of the V1-conjunct, the fact that ESC null objects do not occur outside the ESC will be accounted for. Such a desirable consequence can be achieved if ESC null pronouns are analyzed as recovering content by making use of definite descriptions derived from the V1-clause.

The proposal, which will be referred to as the Coupling Mechanism, is illustrated with the Baule ESC in (67).

(67)	Talua	mun	be		yi-li	waka	nyon
	girls	DEF.PL	3PS		move-COMPL	stick	two
	prosubject	fite-li	proobiect	kuman	nun.		
		extract-COMPL		hole	in		
'The girls pulled two sticks out of the hole.'							

The following example demonstrates how the Coupling Mechanism recovers the content of pro_{object}, thereby fulfilling the Identification Condition.

(68) They pulled two sticks and they extracted [the sticks they pulled]

The Coupling Mechanism makes it possible for a ESC null object to recover content using a definite description derived from the V1-clause. In the next example, based on (7), an ESC null subject is shown to recover reference in a parallel fashion.

(69) She bought papaya and [the person who bought it] ate it.

Licensing of null pronouns via the Coupling Mechanism is effectively a discourse mediated process. The first conjunct introduces a referent into the discourse and the null pronoun of the second conjunct is forced to refer to this referent due to the manner in which it recovers its content.

The success of the Coupling Mechanism hinges critically on its ability to pick out a unique referent for the null pronoun; this constraint is referred to as the Uniqueness Condition. The Uniqueness Condition is strictly enforced. In order to understand the effect of the Uniqueness Condition, it is first necessary to note that the representations in (68) and (69) are not paraphrases. If they were paraphrases, the Coupling Effect would not be derived since the definite description would not be forced to have unique referents. Instead, the multiple referential possibilities for the pronouns contained in the definite description, represented by the subscripts in (68)', would leave open a possibility for the definite description to refer to unwanted referents.

(68)' They, pulled two sticks and they extracted [the sticks they, pulled]

Further, it is clear that the surface form of Baule ESC does not arise through elision of the material in square brackets in (68)'. Since the elided material admits multiple referents, the reference to one and one referent only demanded by the Coupling Effect could not be derived. Instead of paraphrases, it is necessary to interpret (68) and (69) as visualizations of the process by which the references of ESC null pronouns are computed in order to fulfill the Identification Condition and the definite descriptions should be understood to have implicit subscripts so that the pronoun in the definite description has the same reference as the corresponding V1-argument, as in (68)".

(68)" They, pulled two sticks and they extracted [the sticks they, pulled]

The Uniqueness Condition serves to account for the fact that certain ESC variations are not observed in Baule. The Uniqueness Condition dictates that factors that introduce possible variation in the identity of the referent of the definite description lead to failure of the Coupling Mechanism to license the null pronoun. For example, if the V2-subject in (10) is replaced with a subject different from the V1-subject, the example becomes unacceptable.

(70)	*Aya	fa-li	fluwa-'n	Akisi	man-ni	mi	proobject
	Aya	take-COMPL	book-DEF	Akisi	give-COMPL	1SO	pro
	Intended reading: 'Aya picked up the book and Akisi gave it to me.'						

This example violates the Uniqueness Condition, because the second subject introduces another possible referent for the subject of the definite description used to recover the reference of pro_{object}.

(71) Aya_i took the book_m and Akisi_k gave me [the book s/he_{i/k} took]_{m/n}

Because there are two subjects with two different referents in (70) it is not possible to form a definite description that picks out a unique book. The book could have been one picked up by Aya or it could have been one picked up by Akisi. The Coupling Mechanism fails to license pro_{object} of V2 due to a failure of the Uniqueness Condition.

The Uniqueness Condition of the Coupling Mechanism sheds light on why it is critical that TAM of V1 and V2 do not have distinct values. If V1 and V2 were permitted to have two different temporal indexes, the definite description used to recover reference would be ambiguous in reference between the papaya bought at some other time and the papaya bought at eating time.

(72) She bought_{t=i} papaya_m and will eat_{t=k} [the papaya she bought_{t=i/t=k}]_{m/n}

Because of this ambiguity, the Uniqueness Condition is violated and the Coupling Mechanism fails. A similar failure accounts for the fact that pro_{object} is not licensed in a sentential complement.

(73) *O fa-li ako-'n se-li kε o man-ni talua mun. 3SS take-COMPL chicken-DEF say-COMPL that 3SS give-COMPL girl DEF.PL Intended reading: 'S/he took the chicken and said she gave it to the girls.'

```
(74) She took<sub>tei</sub> the chicken and
said<sub>tei</sub> she gave<sub>tek</sub> the girls [the chicken she took<sub>tei/tek</sub>] _{m/n}
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In both these examples, the fact that the ESC supplies no single temporal index that can be uniquely associated with the index of the definite description means that the definite description is not guaranteed to pick out a unique referent for the null pronoun and the Coupling Mechanism fails due to violation of the Uniqueness Condition.

A potential challenge to the Coupling Mechanism account is that many ESC must use two definite descriptions to fix reference for both a null subject and a null object of V2.

Such examples naturally raise the question of why does the possibility of exchanging the two definite descriptions not constitute a violation of the Uniqueness Condition. In example, (75) there is a simple answer to this question. The verb di, 'eat', requires an animate subject and an inanimate object in Baule. This fact excludes the possibility of a switch, illustrated in (76).

(76) Not possible: She bought papaya and [the papaya that she bought] ate [the person who bought it]

It is necessary to consider examples in which both V1-arguments potentially fulfill the selectional restrictions of V2.

(77)	Be	tra-li	kangale-'n	prosubject	di-li	proobiect
	3PS	catch-COMPL	panther-DEF		eat-COMPL	
	'They c	aught the panther a	nd ate it.'			

Here, it is clear that the Uniqueness Condition is sensitive to the agentivity of the V1-subject. For reference recovery, the definite description identifying the V2-subject must pick out a referent that acts as an agent. Because the panther is not an agent in the first conjunct, the following recovery is excluded:

(78) Not possible: They caught the panther and [the panther that they caught] ate [the people who caught it]

Larson (2005) develops the Coupling Mechanism in greater detail and also proposes that the Uniqueness Condition is sensitive not directly to the agentivity but to the level of volitionality associated with a referent in the discourse. In cases in which both a subject and an object pronoun must fix reference, the Coupling Mechanism only works if the V1-subject is clearly volitional and the V1-object is clearly non-volitional. This clear contrast provides the uniqueness of the definite description necessary to fulfill the Coupling Mechanism. Giving volitionality a role in the analysis of ESC makes it possible to account for the fact that ESC excludes certain readings.

⁽⁷⁵⁾ She bought the papaya and [the person who bought it] ate [the papaya that she bought]

(79) Aya sa nzue wutu i. Aya draws water spills 3SO 'Aya draws water and spills it (on purpose).'

This example is inappropriate in cases in which Aya drew the water and spilled it by accident. Rather, Aya is the volitional agent of both verbs, both drawing the water and spilling it with intention.²⁰

Parataxis plus Pro-drop allocates to the Coupling Mechanism a central part to play in accounting for the distribution and behavior of pronouns in Baule ESC. In fact, the Coupling Mechanism actually fulfills two separate roles. First, it allows null pronouns to fix reference thereby satisfying the Identification Condition necessary for licensing. Because it is critically dependent on the presence of a V1-clause, the Coupling Mechanism explains why certain verbs have null objects when they occur as V2 in ESC, but not otherwise. Recall that there are two cases of such verbs. otherwise-intransitive verbs (like *fite*) and definiteness-restriction verbs (like *man*). These verbs were analyzed as projecting direct objects into the syntax but not being able to check Case for these objects due to a defective AGRo, which is missing either animacy features (in the case of otherwise-intransitive verbs) or number features (in the case of definiteness-restriction verbs). Recall from the previous section that it was pointed out that if null objects are considered to have underspecified feature bundles, they will be able to occur with verbs with defective AGRo since they could occur without the features that the AGRo can't check. In other words, otherwise-intransitive verbs could check a null object underspecified for animancy and definiteness restriction verbs could check a null object underspecified for number. However, otherwise-intransitive verbs and definiteness-restriction verbs do not display garden variety pro-drop, i.e., pro-drop outside of ESC. Such verbs lack that factor that allows null objects of Object Drop verbs to satisfy the Identification Condition. They can, however, occur with null objects that fulfill the Identification Condition via the Coupling Mechanism. The Coupling Mechanism makes possible fulfillment of the Identification Condition exactly in the case that the pronoun occurs as a V2-argument in ESC. It thus accounts for cases in which ESC contains null objects not occurring elsewhere in Baule. It also accounts for null subjects in ESC. Null subjects do no occur generally in Baule and their restriction to V2-subjects in ESC is explained by the fact that they can only fulfill the Identification Condition using the Coupling Mechanism.

The licensing role of the Coupling Mechanism makes it possible to address the first challenge to the Parataxis plus Pro-drop account, namely the puzzle as to why two distinct patterns arise (i.e., the Essential Combination pattern and the Accidental Combination pattern) when an overt coordinator is inserted in ESC. The answer to this puzzle is the following: A conjunction disrupts Essential Combination ESC by destroying the context that the ESC-specific null object of V2 needs in order

²⁰The fact that SVCs are interpreted as having volitional agents has been pointed out for Akan by Osam (1994).

to be licensed. It does not disrupt an Accidental Combination ESC because the null pronoun object of V2 is a garden variety pronoun and can occur anywhere, in other words, both in ESC as well as in a conjunct of an overt coordination. An additional comment is necessary concerning Essential Combination ESC such as (8) in which insertion of a conjunction results in meaning shift rather than unacceptability (cf. (17)). Apparently, some verb combinations in Baule receive an idiomatic interpretation when they occur together in ESC. When the insertion of the conjunction destroys the ESC, the idiomatic interpretation is no longer possible. The effect is parallel to cases in English.

- (80) She hemmed and hawed.
- (81) ?She hemmed and then hawed.

These examples illustrate that idioms involving coordination are strange if the coordinator is not a neutral one. The existence of verb combinations with idiomatic interpretations in ESC cannot be used as evidence against analyzing ESC as parataxis.

The second role played by the Coupling Mechanism is that it provides a default mechanism for interpreting pronominal arguments of V2 in ESC. Pronominal V2-arguments sharing referents with V1-arguments are required to be interpreted via the Coupling Mechanism. Use of the Coupling Mechanism for interpretation is required even in the case of Accidental Combination ESC, where the Coupling Mechanism is not necessary for the licensing of V2 null objects. The interpretational role of the Coupling Mechanism thus addresses the second challenge to the Parataxis plus Pro-drop account, namely the existence of Coupling Effect restrictions on interpretation imposed on both V2-subjects and V2-objects in Baule ESC.²¹ This section concludes by drawing special attention to two points that provide indirect support for licensing of null pronouns via the Coupling Mechanism. First, it should be noted that if the Coupling Mechanism were not the factor at work licensing null pronouns in ESC, it would be still necessary to propose a very similar mechanism in order to account for Coupling Effect interpretational restrictions on overt pronominal V2-objects in ESC, as illustrated by (5)'. The fact that ESC in which an overt pronoun V2-object is co-referent with the V1-object is subject to the Coupling Effect confirms the independent status of the Coupling Mechanism as an interpretational mechanism. Further, under the account proposed here, null arguments of V2 in Baule ESC already make use of definite descriptions to establish reference in the case of quantifier antecedents (i.e., E-type readings). The Coupling Mechanism merely extends the use of the definite descriptions already necessary for E-type readings and claims that similar descriptions contribute to accounting for Coupling

²¹Note that apparently the Coupling Mechanism is not only not necessary it is probably actually excluded for licensing null objects of Object Drop verbs. When an Object Drop verb occurs as V2 in ESC, the pattern of object drop followed is that of garden variety pronouns. In other words, pronouns must be sentence final in order to be dropped, as was shown with (48). Null objects licensed by the Coupling Mechanism differ from Object Drop verb null objects in that they need not occupy sentence final position.

Effects and to recovering reference necessary to license null pronouns. Heim and Kratzer (1998) conjecture that E-type pronouns are freely generated in situations in which they do not have quantifier antecedents, but simply go unused or unnoticed (p. 294). If E-type pronouns are widely generated it is no surprise that they are put to further use by the Coupling Mechanism.

9.5 Baule ESC vs. Verb Serialization in other Languages

Similarities between Baule ESC and Serial Verb Constructions studied in other languages are striking and cannot be overlooked. Although the literature does not converge on a universally accepted characterization, it is easy to find descriptive definitions of SVC that subsume ESC. For example, Collins (1997: 462) delimits SVC data with the statement, "A serial verb construction is a succession of verbs and their complements (if any) with one subject and one tense value that are not separated by any overt marker of coordination or subordination." (p. 462). However, it is equally easy to find SVC definitions that exclude ESC. The definition of Déchaine (1993: 799) falls into this category: "A serial verb construction is a succession of verbs and their complements (if any) in a single clause with one subject and one tense or aspect value." It is clear that Baule ESC does not fulfill the Déchaine (1993) definition since it must be analyzed as parataxis of multiple clauses. In this section, the descriptive characteristics of SVC are reviewed and the extensive similarities of Baule ESC with SVC in other languages are discussed. The wide reaching parallels support the position that definitions of SVC should not exclude multi-clausal constructions from their scope.

9.5.1 Multiple Verbs in Series without overt Conjunctions

Although no single SVC definition has gained universal acceptance, widespread consensus exists that SVC must involve multiple verbs and no overt markers of coordination, exemplified by these classic cases:

(82)	Bólá	sè	eran	tà.			
	Bola	cook	meat	sell			
	'Bola cooke	d some mea	t and sold	it.'			
	(Yoruba, Ba	ker 1989, p.	529; from	Lord 19	(74)		
(83)	mi	teki	а	nefi	koti	а	brede
	Ι	take	the	knife	cut	the	bread
	'I cut the br	ead with the	knife.'				
	(Sranan, Sel	oba 1987, p.	25)				
(84)	e-kó	fíá	kó	dzá	ati-a		
	3sg-raise	axe	TAKE	hack	stick-DEF		
	'He used an	axe and had	cked the w	ood.'			
	(Ewe, Amel	ka 2007, p. 1	135)				

Baule unequivocally fits this general description. Examples (1)-(10) certainly involve multiple finite verbs and no overt coordinators are in evidence. Further characteristics of prototypical SVCs must be examined to understand the extent of this readily apparent surface similarity.

9.5.2 One TAM and one Polarity Value

Another widely accepted generalization about SVC is that tense/aspect/mood and polarity is marked only once. This characteristic serves to distinguish SVC from consecutive clauses.

Á (85) Sésínú! má ná sð kùn mótò cè so'(*má ná) Sesinou 2SG NEG FUT again drive car 1SG-POSS hit (*NEG FUT) àdó égbè. wall today 'Sesinou! You will not again drive my car hit (i.e., into) the wall today!' (Gungbe, Aboh 2009, ex. 10)

Baker (1989), Déchaine (1993), Campbell (1996), Collins (1997) and Aboh (2009) all treat SVCs for which a structure containing a single representation of tense is appropriate. The Baule evidence rehearsed in Section 9.2 supports the conclusion that in Baule multiple marking of TAM and polarity reflects a covert coordination structure that combines two IP-sized conjuncts. However, the fact that the Baule enforces both polarity matching and tense matching requirements on both verbs, means that it is possible to speak of verbs sharing TAM and polarity values even if in Baule the verbs do not actually share the syntactic structure associated with TAM and polarity.

9.5.3 One Subject

In Baule ESC, the subject is expressed only once in association with V1 and in this way Baule resembles a classical serializing language such as Ewe, cf. (84). The discussion has made clear, however, that both V1 and V2 have their own syntactic subject in Baule, the V2-subject being a null pronoun co-referent with the V1-subject. In some cases, it may be tempting to analyze the V2-subject as co-referential with the V1-object, for example, to claim that (9) (repeated here) is underlyingly "The girls pulled Konan and he exited the hole."

(9)Talua mun be yi-li Konan fite-li kuman nun. girls DEF-PL 3PS move-COMPL Konan extract-COMPL hole in 'The girls pulled Konan out of the hole.'

However, this discussion has accumulated evidence that although verbs like *fite* are in general intransitive, they occur with direct objects in ESC. The appropriate gloss for *fite* is 'emerge' in simple sentences and 'extract' when it is V2 in SVC. In other words, the subjects of V1 and V2 must be analyzed as having the same referent.²²

9.5.4 Unexpressed Pronoun Objects

Baule ESC exhibits missing V2-objects, but imposes no general requirement that a V2-object pronoun co-referent with a V1-object go unexpressed in the surface string. In fact, if V2 is an Overt Object verb, its pronoun object is required to be overt, just as it would be in a simple sentence (cf. (5)). Baule does not demonstrate the sort of object sharing discussed by Baker (1989), which can be characterized as a sort of overlap of verb argument structure in which the object satisfies the selectional requirements of both verbs and is projected only once into the syntax. The argument for the existence of languages with structural object sharing is supported by cases exhibiting an alternation between SVC and overt coordination. In Yoruba, for instance, an object that is unexpressed in a SVC, (82) (repeated here), reappears when a conjunction is added to turn the SVC into coordination, (86).

(82)	Bólá sè	eran	tà.						
	Bola cook	meat	sell						
	'Bola cooked s	ome meat and	d sold	it.'					
	(Yoruba, Baker	1989, p. 529	ex. 27	a; from	Lord 19	974)			
(86)	Bólá sè	eran,	ó	sì	tà	á.			
	Bola cook	meat	he	and	sell	it			
	'Bola cooked s	ome meat and	d (then) sold it	.'				
	(Yoruba, Baker 1989, p. 529 ex. 27b; from Lord 1974)								

In Baule ESC, V2-objects do not reappear in this way. In particular, it is important to be aware of the pronominal object patterns displayed by plural and animate pronouns. In general, Object Drop verbs drop a third person object sentence finally, unless that object is plural or animate. Example (87) demonstrates that *men* 'swallow' is an Object Drop verb.

(87) O men-ni.
 3SS swallow-COMPL
 'S/he swallowed it.'

(i) Mede aburow migu msum.
 1SS.take corn 1SS.flow water.in
 'I pour corn into water.'
 (1) title blocore
 (2) for the blocore

(Akan, Aikhenvald 2007, p. 40, ex. 52; from Schachter 1974, p. 258; from Christaller 1933) The facts of Baule strongly suggest that Aikhenvald's analysis of Akan must be revisited.

²²Aikhenvald (2007) asserts that (i), an Akan SVC from Schachter (1974), demonstrates a case in which the verbs have two different underlying subjects despite the fact that they carry the same surface marker.

The general rule is that when the referent is animate the object must be overt, as illustrated in (73).

(88) O menni i.
 3SS swallow-COMPL 3SO
 'S/he swallowed him/her.'

However, in practice, if the sentence follows one in which the referent is mentioned, it is possible to drop a third person singular object, even if its referent is animate or plural.

(89)	Э	tra-li	Jonas	kpɛkun	Э	mɛn-ni		(i).		
	3SS	catch-COMPL	Jonas	and	3SS	swallow-COM	MPL	(3SO)		
	'S/he	caught Jonas and	l swallov	ved him.'						
(90)	Aya	to-li	duo	nsan	kpɛkun	Э	si-li		(be).	
	Aya	buy-COMPL	yam	three	and	3SS	pound	-COMPL	(3SO)	
	'Aya bought three yams and pounded them.'									

The V2 object in an ESC such as (91) can optionally be overtly expressed.

(91)	Э	tra-li	akə-'n	mɛn-ni	(i).		
	3SS	catch-COMPL	chicken-DEF	swallow-COMPL	(3SO)		
	'S/he caught the chicken and swallowed it (alive).'						

There is a tendency for speakers to prefer to drop the pronoun in the ESC, but this is a tendency only. The status of the optional overt animate pronoun in (91) is thus clearly different from that of the required Overt Object verb object pronoun in (5) (repeated here).

(5)	Э	to-li	lomi	yrɛ-li	*(i).		
	3SS	buy-COMPL	orange	burn-COMPL	*(3SO)		
	'S/he bought an orange and burned it.'						

In short, some Baule ESC involve V2-objects missing in the surface string and interpreted as co-referent with V1-objects. This pattern bears a certain resemblance to object sharing phenomena discussed in the literature, but the resemblance is without significance for the structural analysis of Baule ESC.

9.5.5 Multiple Clauses

Déchaine (1993) cites complement extraction as a hallmark of Yoruba SVC's; movement to a sentence initial position is available to either the complement of the first verb or the complement of the second verb. In Yoruba, the possibility of this extraction distinguishes SVCs from bi-clausal structures. In Baule, some ESC clearly prohibit extraction. The following examples show that neither the V1-object nor the V2-object of the ESC in (1) can occur in the left peripheral focus position.

(92)	*Alie-'n	уε	э	si-li	səkə-li	tro-'n	ən.		
	food-DEF	COMP	3SS	pound-PAST	prepare-PAST	sauce-DEF	PRT		
	'It's the futu	that s/he p	ounded an	d prepared the sa	uce.'				
(93)	*Tro-'n	yε	э	si-li	aliɛ-'n	səkə-li	ən.		
	sauce-DEF	COMP	3SS	pound-PAST	futu	prepare-PAST	PRT		
	'It's the sauce that s/he prepared and pounded the futu.'								

This pattern is consistent with the position that Baule ESC is parataxis and thus sensitive to Coordinate Structure Constraint (CSC) violations (Ross 1967). Other ESC examples, such as (8), permit either object to occur in focus position.

(94)	Ndε-'n	yε	Э	kan-ni	kle-li	mi	ən.			
	word-DEF	FOC	3SS	say-COMPL	show-COMPL	1SO	PRT			
	'It's the matter that s/he explained to me.'									
(95)	Mi	yε	Э	kan-ni	kle-li	mi	ən.			
	1SO	FOC	3SS	say-COMPL	show-COMPL	1so	PRT			
	'It's me that s/he explained the matter to.'									

However, it is not possible to conclude that such examples are not coordination because they fail to violate the CSC. Recall that the Parataxis plus Pro-drop account analyzes V2 in this case as having a null pronoun direct object co-referent with the V1-object. Example (94) should not be expected to cause a CSC violation since focus occurs across the board. In (95), the focused object must necessarily be resumed in situ since it is animate, making this example something less than a clear cut case of a failed CSC violation.^{23,24} In sum, extraction tests do not provide substantive evidence against the Parataxis plus Pro-drop account that holds that Baule ESC consists of two coordinated clauses.

Ameka (2007) takes nominalization of SVCs as evidence of underlying monoclausal status, citing the example \acute{E} -fé da-a fofo wu, 'His snake hitting and killing' (p. 141). Such double nominalization is well known from Yoruba where SVC allows the focus of nominalizations such as mí-mú-fún 'taking giving' (Déchaine 1993). Similar facts in Baule are discussed by Kouadio N'Guessan (2000), who uses them to support his position that there is a difference in Baule between serialization and between examples that are the juxtaposition of two independent propositions. Kouadio N'Guessan (2000) cites (96) and points out that it is possible to nominalize the two verbs together, as in (97).

²³ Whether or not focus constructions and questions in Baule are formed by standard Wh-movement is not entirely clear. Baule admits subjacency violations, forces certain question words to occur in situ and in certain cases requires question words to be resumed in situ. Until Wh-movement in Baule is better understood, it will not be possible to analyze the full implications of extraction tests for ESC. Refer to Saah (1988, 1994) for analysis of the focus construction in Akan.

²⁴ A further complication is introduced by the fact that it is the case that certain coordinations simply permit CSC violations. Pertinent here are the conditions identified by Lakoff (1986).

- (96) O wanndi-li wo-li.
 3SS run-COMPL go-COMPL
 'S/he left running'.
 (Kouadio N'Guessan 2000, p. 78, ex. 9)
- (97) I wanndi(-lε) ko-lε-'n
 3SS run(-NOM)-DEF go-NOM-DEF
 'The fact that s/he left running'
 (Kouadio N'Guessan 2000, p. 79, ex. 12)

Many ESCs allow a double nominalization to be formed from their constituent verbs.

- (98) Kofi to-li di-li. ako-'n Kofi buy-COMPL chicken-DEF eat-COMPL 'Kofi bought the chicken and ate it.'
- (99) To-di-wa²⁵ buy-eat-NOM

However, other ESC do not have corresponding nominalizations.

(100) Aya si-li aliɛ-'n sɔkɔ-li tro-'n. Aya pound-COMPL food-DEF prepare-COMPL sauce-DEF 'Aya pounded the futu and prepared the sauce.'

(101) *si- səkə-wa pound-prepare-NOM

The Parataxis plus Pro-drop account holds that ESC using these verb pairs are all built with the same syntactic structure. The ability to nominalize its component verbs together thus does not represent a syntactic property of ESC, but must instead involve the syntax of nominalizations and the semantics of the verbs involved. A relevant generalization appears to be that the two verbs conform to a characterization formulated by Aikhenvald (2007:13) as "A prototypical SVC has an overall argument structure which is not more complex than that of one of its components." The applicability of this generalization is suggested by the fact that (100), whose verbs fail to form a double nominalization, involves two referentially distinct direct objects that are both patients.

9.5.6 Multiple Events

The Baule literature contains multiple allusions to verb series describing single events. Timyan (1977), using the term Verbal Groups, observes that in Baule two or more verbs occurring together can express "...a single action/process or a series of actions/processes seen as occurring in very close sequence." (p. 212) Kouadio N'Guessan (2000) and Creissels (2000) both call Baule examples like (4)-(10) Serial

²⁵-wa and -l ε are interchangeable nominalizing suffixes.

Verb Constructions. Kouadio N'Guessan (2000: 81) states that the verbs ... reproduit généralement les phase successive d'un processus ("...generally reproduce the successive phases of a process"). Creissels (2000: 240) argues about such examples, "...this verb sequence cannot be viewed as reflecting the decomposition of a complex event into elementary ones..."²⁶ The fact, mentioned above, that the most natural translations of certain ESC are simple sentences also suggest that they describe a single event. In the case of Accidental Combination ESC, however, it is actually quite difficult to discern if one or multiple events are involved. Accidental Combination ESC can contain two manner adverbs, one modifying each verb.

(102)Κε nzuewe kun Ava. อ \$9 nzue-'n ndende non i i bleble water-DEF When thirst kill Aya she tap quickly drink it slowly 'When Aya is thirsty, she taps the water quickly and drinks it slowly.'

Example (102) supports the view that Accidental Combination ESC describes two events, since the action associated with each verb is carried out in a different manner. Further examples show that the scope interpretations of manner adverbs are unexpected. If an Accidental Combination ESC contains only one adverb, it can either follow the V1-object as in (103) or follow the V2-object as in (104).

(103)	Κε	nzuewe	kun	Aya	Э	sa	nzue	ndende	nən.	
	When	thirst	kill	Aya	3SS	draw	water	quickly	drink	
	'When A	ya is thirsty	, she di	raws wa	ter and	drinks it	quickly.'			
(104)	Kε	nzuewe	kun	Aya	э	sa	nzue	nən	i	ndende.
	When	thirst	kill	Aya	3SS	draw	water	drink	3SO	quickly
	'When Aya is thirsty, she draws water and drinks it quickly.'									

Example (103) can be interpreted to mean that only the drawing of the water happened quickly. Likewise, example (104) can be interpreted to mean only the drinking of the water happened quickly. However, both examples have alternative interpretations under which both the drawing and the drinking of the water happened quickly.

(i) o'a fa i sua-'n o'a kle mi.
 3SS-PERF take 3SO house-DEF 3SS-PERF show 1SO 'He has shown me his house.'

- (ii) N fε-li i.
 1SS resemble-COMPL 3SO
 'I resemble him/her/it.'
- (iii) ∂ fa mi kε Kofi ∂'a kun ak∂-'n.
 3SS take 1so that Kofi 3SS-PERF kill chicken-DEF.
 'It appears to me that Kofi has killed the chicken.'

An argument could be made that fa in (i) is more appropriately translated as "indicate."

²⁶Creissels (2000: 240) supports this statement with the remark "one does not 'take' a house before showing it to somebody else," alluding to the RSC example in (i).

It is necessary to treat this argument with appropriate caution, since it is not clear that the most basic meaning of fa is "take" in the sense of "pick up." Fa requires a range of translations in simple sentences.

The Accidental Combination ESC in (103) and (104) stand in clear contrast to overt coordination, shown in (105) and (106).

- (105) Kε nzuewe kun Aya, o sa nzue ndεndε kpɛkun o non. When thirst kill Aya 3SS draw water quickly and 3SS drink 'When Aya is thirsty, she draws water and she drinks it quickly.'
- (106) Kε nzuewe kun Aya o sa nzue kpɛkun o non i ndɛndɛ. When thirst kill Aya 3SS draw water and 3SS drink 3SO quickly 'When Aya is thirsty, she draws water and she drinks it quickly.'

Here, the scope of the manner adverb *ndende* is limited to the conjunct in which it occurs. Baule, thus, fails to pattern like the serializing language Edo. Stewart (1998) points out that in an Edo SVC, an adverb preceding the first verb modifies the actions expressed by both verbs in the sentence.

(107)	Òzó	gi <u>é</u> !gi <u>é</u>	dú!nmwún	èmà	khi <u>é</u> !nné.				
	Ozo	quickly	pound	yam	sell.PL				
	'Ozo quickly pounded the yams and sold them.'								
	(Edo, Stewart 1998, p. 30)								

The SVC in (107) expresses that both the pounding and the selling of the yams happened quickly. Stewart (1998) states that this example contrasts with examples such as (108), which involve only covert coordination.

(108) Òzó gi<u>é</u>!gi<u>é</u> gb<u>ó</u>!<u>ó</u> ívìn bòló <u>ó</u>kà.
 Ozo quickly plant coconut peel corn
 'Ozo quickly planted the coconut and [he] peeled the corn.'
 (Edo, Stewart 1998, p. 30)

Under Stewart's (1998) analysis (108) is an example of covert coordination. This example expresses clearly that the planting of the coconut happened quickly. There is no particular implication for how the peeling of the corn happened. In overt coordination in Baule (cf. (105) and (106)), adverbs are limited in scope to the conjunct which they occur. However, in Baule ESC adverbs are not restricted in this way, but can scope over the entire ESC. Accidental Combination ESC in Baule appears to involve two events because the two verbs can be modified independently by two different manner adverbs. At the same time, it appears to involve one event because a manner adverb associated with either of the two component verbs can be interpreted as having scope over the entire sentence. This pair of facts is not necessarily contradictory, however. If V2 has the same temporal index as V1, it is possible that a manner adverb modifying one of the verbs effectively modifies whatever compound event was taking place at that particularly temporal index. Listeners would not be forced to conclude that a particular adverb was exclusively associated with the activity described by only one of the verbs. The important point that should be retained from this discussion is that whether ESC arguably describes one event, as is the case for Essential Combination ESC, or whether it describes multiple events, as is the case for (102) all ESC is built upon the same syntactic structure and there is no difference in the syntax corresponding to the number of events.

9.5.7 Extending Valence

Aikhenvald (2007: 13) points out that SVCs are used as valency increasing mechanisms. She goes on to state, "They are also employed for specifying arguments, that is, to introduce direct objects and various other arguments and obliques." Baule ESC can also be argued to effectively carry out a sort of valency increasing function. Particularly when V2 is an otherwise-intransitive verb or a definiteness-restriction verb, ESC makes it possible for V2 to be associated with NP or definite NP objects it could not appear with otherwise.

Apparently, fa is sometimes used in Baule ESC simply to introduce a direct object rather than to contribute meaning. This position is supported by the existence of the fa-stacking phenomenon.

(109)	э	fa-li	fluwa-'n	fa-li ²⁷	man-ni	Kofi.
	3SS	take-COMPL	book-DEF	take-COMPL	give-COMPL	Kofi
	'S/he g	ave Kofi the book.	,			

Evidently, repetition of fa is not redundant in cases such as (109), suggesting that in this ESC one occurrence is the verb fa used as a functional element introducing the direct object and one occurrence is the verb fa making a semantic contribution in the sense of 'pick up.'²⁸ The picture that emerges is that Parataxis plus Pro-drop supplies the syntactic skeleton for Baule ESC, but that Parataxis plus Pro-drop exists independently of the need for certain interpretations (e.g., combining two verbs in an idiom) or certain functions (e.g., extending valence).

9.6 Conclusion

This discussion identifies Baule multi-verb constructions (1)–(10) as data homogeneous with respect to the descriptive characterization that the V2-subject is missing in the surface string. This generalization earns such examples the designation Empty Subject Construction (ESC). The facts of Baule ESC are shown to support the position that a single underlying structure gives rise to the surface similarity of ESC examples. Specifically, it is argued that all ESC examples can be accounted for by Parataxis plus Pro-drop, an analysis which holds that Baule ESC is covert coordination of IPs and that arguments missing in the surface string are without exception null pronouns. The Coupling Mechanism makes it possible for null subjects and null objects not appearing elsewhere in Baule to be licensed in the ESC by making use of

²⁷Usually this completive suffix occurs in its reduced form.

²⁸This explanation is consistent with the observation of Creissels and Kouadio N'Guessan (2007) that *fa* used as V1 imposes semantic restrictions on its object when V2 is transitive that are not in force when V2 is ditransitive. This pattern makes sense if *fa* used with ditransitive is the functional *fa* used to introduce the direct object.

a definite description derived from the V1-clause to fulfill the Identification Condition. Under this account, Essential Combination ESC examples consistently lack parallel overt coordination examples due to the fact that they involve Coupling Mechanism null objects that fail to be licensed outside ESC. Since Accidental Combination ESC involves only garden variety pro-drop, parallel overt coordinations are unproblematic. Not only does the Coupling Mechanism license null pronouns, it also plays a role in the interpretation of pronominal V2-arguments. In this way, it explains the Coupling Effect, a constraint that prevents a V2-argument co-referent with a V1-argument from ever having alternate obviate interpretations. Once Baule ESC has been analyzed as Parataxis plus Pro-drop, definitions that require Serial Verb Constructions (SVCs) to be monoclausal no longer apply to Baule. However, Baule ESC shares extensive similarities with SVC as it has been studied in other languages; it is a construction involving multiple finite verbs with a single subject, matching in TAM-value and polarity and joined without the aid of an overt marker of coordination. It is clear that an understanding of Baule ESC helps to shed light on the phenomenon of the Serial Verb Construction and may, in fact, motivate a reformulation of narrower definitions of SVC that have been applied in the literature.

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