

OF GRAMMATICAL CATEGORIES
OF
THE VERBAL PIECE IN NZEMA

T H E S I S

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by

Isaac Kodwo Chinebuah, M.A. (Lond.)

School of Oriental and African Studies,

University of London

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A B S T R A C T

The thesis is divided into seven chapters and is mainly devoted to an analysis, in formal terms, of the grammatical categories of mood, polarity, tense, person, number, transitivity and aspect that need to be set up for a synchronic description of the verbal piece in Nzema.

The introductory first chapter presents a general classification of the verb as a linguistic unit in the grammar, the characteristic phonological features of the verb word and its grammatical features; and, as a convenient reference, a summary of the grammatical categories set up together with the systems of their terms is provided.

Chapter 2 presents, as a necessary background, a phonetic and phonological description of the speech sounds of Nzema.

The remaining chapters 3 - 7 contain the main body of the analysis of the grammatical categories. Chapter 3 deals with the three terms of indicative, interrogative and imperative set up within the category of Mood.

Chapter 4 considers the category of Polarity in its specific relation to imperative mood clauses and treats together the two categories of Polarity and Tense as they relate to indicative and interrogative mood clauses. In the description of the various tense forms and their distinctive features, two contexts, marked by a nominal phrase or pronominal subject, are selected for the examples.

Chapter 5 presents together the closely-related categories of Person and Number.

Chapter 6 deals with the sets of grammatical relations between the verb and any items that may follow it in the clause by means of the seven

terms: transitive, complex transitive, intransitive, complex semi-transitive, semi-transitive, ditransitive and relational within the category of Transitivity. A sub-classification of the verbs capable of occurring in each transitivity clause-type is also provided.

Finally, Chapter 7 treats the tripartite distinction between normal and ingressive, dynamic and stative, and causative and non-causative within the category of Aspect.

A C K N O W L E D G E M E N T S

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"Let us praise famous men and our fathers that begat us" is a wholesome as well as an authoritative injunction. I accordingly add my concluding words of thanks to my father and mother. Most of the illustrative examples cited in this study represent their internalized voices recaptured in tranquility. I profoundly regret that in the case of my father it is only to his memory that I can offer my gratitude. To him, therefore, this work is dedicated in love and gratitude.

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C H A P T E R 1

INTRODUCTION

The term 'verbal piece', now well-established in linguistic studies, is usually used to refer to the verb word (with or without any affixes) and any other items in grammatical relation to it that may ^{accompany} follow it in the same clause. In this sense, it enables me to deal not only with the verb word but also with other elements of clause structure syntactically related to it, since the exponents of some of the categories set up extend beyond the verb to include these other elements and are syntactic as well as morphological features.

In this introductory chapter, a tentative attempt is made to present a general classification of the structural pattern of the verb as a single linguistic unit. Within the verb as a unit in the grammar, we shall, first of all, distinguish between 1) single-word or mono-morphemic verbs, which we shall term simple verbs and 2) multi-word verbs, we shall designate as complex verbs.

1. Simple verbs

Simple verbs are of I) mono-syllabic, II) disyllabic, III) tri-syllabic, or IV) quadri-syllabic structure. Statistically, mono- and di-syllabic simple verbs are more numerous than tri- or quadri-syllabic simple verbs.

- I) Mono-syllabic simple verbs are all of CV structure:
- | | |
|----------------------|------------------------|
| a) di/di/ 'to eat' | f) tu/tu / 'to uproot' |
| b) te/ti/ 'to tear' | g) no/nũ / 'to drink' |
| c) se/se/ 'to carve' | h) kpo/kpo/ 'to bark' |
| d) fe/fe/ 'to tire' | i) to/to / 'to buy' |
| e) da/da/ 'to sleep' | |

II) Disyllabic simple verbs are of a) CVV, b) CVCV, or c) CVNCV structure:

- a) CVV verbs:
- | |
|---|
| a) die/d(i)je / ² 'to receive' |
| b) tia/t(i)ja / 'to walk, toddle' |
| c) fea/f(i)ja / 'to hide' |
| d) tuo/tuwo / 'to proceed' |
| e) nua/nũwã / 'to extinguish' |
| f) kpoa/kpũwã / 'to sweep' |
- b) CVCV verbs:
- | |
|---------------------------------------|
| a) butu/butu / 'to stoop' |
| b) nyeks/nyĩks / 'to peel' |
| c) rels/rels / 'to dry' |
| d) dwazo/gywazũ / 'to stand, wake up' |
| e) sukwa/sukwa / 'to learn' |
| f) tunwue/tũnwẽ / 'to wake up' |
- c) CVNCV verbs:
- | |
|------------------------------|
| a) tends/tẽnds / 'to speak' |
| b) kanvo/kãnvũ / 'to praise' |

III) Tri-syllabic simple verbs

Tri-syllabic verbs are rare and are represented by the three items:

1. The examples are given first in the orthography and then in phonemic transcription between slashes.
2. For an explanation of the transcription see p. 86.

- (a) dumua /dumūwā / or dimua /dimūwā / 'to go ahead' CV-CVV
(b) gyabele /gyabeli / * 'to bend, meander' CV-CVCV
(c) asolo /asəlu / 'to be different' V-CVCV

The first item, which has two possible forms in free variation, may historically have been derived (with consequent vowel change in accordance with the vowel harmony) from the mono-syllabic verb di¹ 'to occupy, to go' and the place adverbial moa/mūwā/ 'far'; it is here analysed as a fused complex lexical item of CV-CVV structure.

The second item is also regarded as representing a fusion of two mono-morphemic verb stems: gya 'to parcel out' and bele 'to bend' and, therefore, analyzable as of CV-CVCV structure.

The third item may be regarded as an irregular verb; it is a stative verb, for which the categories of tense, person and number are not statable; it is possible in indicative and interrogative mood clauses but not in imperative mood clauses and exhibits polarity as in:

- (1a) asolo Kofi ó ze
(lit. different Kofi's father. Kofi has a
different father)
- (1b) ansolo Kofi ó ze
(Kofi's father is not different)

1. The verbal form di/i 'to occupy, to be, go' occurs in similar complex lexical items:

- 1a) odi me nyúnlu 'he goes in front of me'
1b) oli me nyúnlu 'he is in front of me'
2a) odi me nzi 'he follows me'
2b) oli me nzi 'he is behind me'

IV) Quadri-syllabic simple verbs

Quadri-syllabic verbs are equally rare and are represented by the following items:

- (Ia) belabela /bɛlɛbɛla / 'to deceive'
or /bɛbɛla /
- (Ib) nwonlonwonlo /ŋɛ̃nlɔ̃ŋɛ̃nlɔ̃ / 'to tickle'
or /ŋɔ̃ŋɛ̃nlɔ̃ /
- (Ic) nwunlonwunla /ŋɛ̃nlɔ̃ŋɛ̃nlã / 'to frighten'
or /ŋɔ̃ŋɛ̃nlã /

All three quadri-syllabic verbs are used transitively and take only human or animate² object noun phrases. On synchronic grounds, all three verbs are regarded as fossilized reduplicated forms. Firstly, they copy the morphological and phonological shape of reduplicated verbs of CVLV-CVLV structure formed from a sub-type of disyllabic simple verbs distinguished as CVLV structure. With the quadri-syllabic verbs (1a-c) above, compare the reduplicated forms of the CVLV verbs (IIa-c) below:

- (IIa) kelahela /kelɛhɛla 'to bid farewell'
or /kɛhɛla
- (IIb) minliminli /mɛ̃nlɪ̃mɛ̃nlɪ̃ 'to lose'
or /mɪ̃mɛ̃nlɪ̃
- (IIc) munlomunla /mɛ̃nlɔ̃mɛ̃nlã 'to frown'
or /mɔ̃mɛ̃nlã

Secondly, as the above examples show, the quadri-syllabic verbs have each an alternative three-syllabled pronunciation like the reduplicated forms of disyllabic verbs of CVLV structure.

And thirdly, the quadri-syllabic verbs have the same tonal pattern as the reduplicated form of any disyllabic simple verb:

-
1. For an explanation of the use of the schwa/ə/ see p. 138
 2. For a statement of the animate/inanimate as well as the human/non-human distinction see p. 643.

(2a) olébélabela be
(he is deceiving them)

(2b) olébízebiza be
(he is asking them)

(3a) okébelabela be
(he will deceive them)

(3b) okébizebiza be
(he will ask them)

MORPHOLOGY

Before discussing multi-word verbs, a word must be said, at this stage, about (a) the internal morphological structure of some simple verbs, (b) reduplication of simple verbs, and (c) various nominalization processes involving simple and reduplicated verbs.

(a) Internal morphological structure of some simple verbs

There exist in the language a small number of morphologically related pairs of verbal forms, which are semantically and syntactically related. One verbal form in each pair may be regarded as the verb stem and the other verbal form, which is derived from the verb stem by suffixation, is analyzable as verb stem plus suffix. Generally speaking, the suffixed verbal form requires one place¹ more than the corresponding verb stem, and clauses involving the suffixed verbal form and the corresponding clauses involving the verb stem are related as causative to non-causative. It is also to be noted that the suffixed verbal forms are disyllabic verbs of I. CVV, II. CVNV, or III. CVLV structure, whereas their corresponding verb stems are

1. For the use of the term 'place' see p. 72 f.

mono-syllabic CV simple verbs. The following is a complete list of such pairs of verbal forms, with an indication of the different transitivity clause-types into which each member of a pair can enter:

<u>Verb stem</u>		<u>Verb stem + suffix</u>	<u>Suffix</u>
<u>Transitive</u>		<u>Ditransitive</u>	
1. <u>no/nõ/</u>	I. CVV	noa/nõwã/	/-wã /
(to drink)		(to make drink)	
2. <u>zo/zõ/</u>		soa/sõwa/	/-wã /
(to be wearing/ carrying on head)		(to put on/carry on head)	
<u>Intransitive</u>		<u>Transitive</u>	
3. <u>nu/nũ/</u>		nua/nũwã/	/-wã /
(to go off)		(to put off, to extinguish)	
4. <u>se/sĩ/</u>		sea/s(ĩ)jã/	/-jã /
(to pass)		(to allow to pass)	
5. <u>bõ/bõ/</u>	II. CVNV ¹	bone/bõn(ĩ)/	/-n(ĩ)/
(to smell, stink)		(to smell, reek of)	
6. <u>sia/syã/</u>		siane/syãn(ĩ)/	/-n(ĩ)/
(to return)		(to make return)	

-
1. We might also include the pair of verbal forms:
 I. kone 'approaching the other side'/ko 'to go'; II. bane
 'approaching this side'/ba 'to come'; and III. tone 'to
 sell'/to 'to buy'. It should be mentioned that, in the case
 of items (I-II), the suffixed verbal form is a stative
 'verbid', whereas the corresponding verb stem is a dynamic
 verb of motion.

<u>Verb stem</u>		<u>Verb stem + suffix</u>	<u>Suffix</u>
7. be/bĩ/	IIIU CVLV	benle/bēnlĩ/	/-nlĩ/
(to be invulnerable)		(to make invulnerable)	
<u>Semi-transitive</u>		<u>Complex Semi-transitive</u>	
8. dwu/gywu/		dwula/gywəla/	/-la /
(to descend)		(to make descend)	
9. fo/fu/		fola/fəla/	/-la /
(to climb)		(to make climb)	
10. te/ti/		tenla ¹ /tēnlā/	/-nlā /
(to be sitting, seated)		(to sit, seat)	
11. gyi/gyi/		gyinla/gyēnlā/	/-nlā /
(to be standing)		(to stand)	

1. The suffixed verbal form has the alternative spelling
tenla/tēnlā/

It should be mentioned that the suffixed verbal form in each pair of verbal forms is a dynamic verb, whereas the corresponding verb stem may be stative (indicated by underlining) or dynamic (all other items). The following paired examples involving items (1), (3) and (10) illustrate:

- (4a) Akýé énloa ɔ rá Kofí' nzúle (ditransitive, causative, dynamic)
(Akýe has given her son Kofi water to drink)
- (4b) Kofí énlo nzule (transitive, non-causative, dynamic)
(Kofi has drunk some water)
- (5a) Akýé énlua senlé ne (transitive, causative, dynamic)
(Akýe has put out the fire)
- (5b) senlé ne énlu (intransitive, non-causative, dynamic)
(the fire has gone out)
- (6a) Akýé édenla Kofí ébía ne ánu (complex semi-transitive, causative, dynamic)
(Akýe has sat Kofi down in the chair)
- (6b) Kofí dé ébía ne ánu (semi-transitive, non-causative, stative)
(Kofi is seated in the chair)

It was noted above, and the above paired examples confirm, that clauses involving the suffixed verbal form and the corresponding clauses involving the verb stem are, as a rule, related as causative to non-causative. With item (5), however, the suffixed member can occur in a transitive clause and the corresponding verb stem in an intransitive clause, the transitive and intransitive clauses are in this case not related in terms of the aspectual opposition causative/non-causative, as the following paired examples illustrate:

- (7a) Kofí ánwo bóne nzá (transitive, dynamic)
(Kofi smells of drink)

1. In clause (4a), the item Kofí has two high tones instead of its low-high tone in isolation. Words do not always carry the same tone in context. See p. 220.

(7b) Kofí ánwó b́ (intransitive, stative)
(Kofi smells)

(b) Reduplication

Almost all simple verbs of mono-syllabic or disyllabic structure may undergo reduplication; tri-syllabic verbs are incapable of reduplication and quadri-syllabic verbs, as already mentioned, are fossilized reduplicated forms. We distinguish two types of reduplication: (I) fossilized and (II) non-fossilized reduplicated form.

(I) Non-fossilized reduplicated verbs are formed from mono-morphemic verb stems that are free forms in the language. The following are some examples of non-fossilized reduplicated forms:

	<u>Verb stem</u>		<u>Reduplicated form</u>	
a)	CV verbs:	tu/tu/	'to uproot'	tudu/tudu/
		wó/wó/	'to give birth'	wowo/wówó/
		so/so/	'to peck'	suso/suso/
		bó/bó/	'to beat; to break'	bobó/bóbó/
		tí/tí/	'to pinch'	tindi/téndi/
		fé/fé/	'to vomit'	fefe/féfé/
		sé/sé/	'to carve'	sise/sésé/
		pé/tpé/	'to cut'	pepe/tpétpé/
		dá/dá/	'to sleep'	deda/déda/
		guá/gwæ/	'to place; to pour'	gugua/gugwæ/
		gyá/gyæ/	'to marry'	gyigya/gyigyæ/

<u>Verb stem</u>		<u>Reduplicated form</u>
b) CVV verbs:		
die/d(i)je/	'to receive'	diel <u>ie</u> /d(ij)el(i)je/
tia/t(i)ja/	'to walk'	tiedia/t(ij)ed(i)ja/
tia/t(i)ja/	'to tread on, kick'	tietia/t(ij)et(i)ja/
fea/f(i)ja/	'to hide'	feesvea/f(ij)ev(i)ja/
tuo/tuwo/	'to proceed'	tuoduo/t(uw)oduwo/
nua/nūwā/	'to extinguish'	nuonlua/n(ūw)ōnlūwā/
kpoa/kpōwā/	'to sweep'	kpo <u>okpoa</u> /kp(ōw)okpōwā/
b) CVCV verbs:		
butu/butu/	'to stoop'	butu <u>butu</u> /butubutu/
nyeke/nyĩke/	'to peel'	nyekenyek <u>e</u> /nyĩkenyĩke/
keda/keda/	'to put'	kedaheda/ <u>ked</u> sheda/
sukoa/sukwa/	'to imitate'	sukoezuko <u>a</u> /sukwezukwa/
munla/mēnlā/	'frown'	munlomu <u>unla</u> /m(ēnl)ēmēnlā/ munlemunla/m(ēnl)ēmēnlā/
c) CVNCV verbs		
nrenze/ṛēnze/	'to be'	nrenzen <u>renze</u> /ṛēnzenṛēnze/
kpomgba/kpōṛṛṁgba/	'to sew'	kpomgbek <u>pomgba</u> /kpōṛṛṁgbekpōṛṁgba/

In the above examples of non-fossilized reduplicated forms, the constituent segment to the right (underlined in selected

examples) is regarded as the verb stem and the constituent segment to the left is the reduplicative prefix.

(II) Fossilized reduplicated forms have no mono-morphemic verb stems as free forms in the language. Fossilized reduplicated forms are either (i) quadri-syllabic, and copy the shape of reduplicated forms of disyllabic verb stems of CVLV structure; the above quadri-syllabic verbs exemplify; or (ii) disyllabic, and copy the shape of reduplicated forms of mono-syllabic CV verb stems; the following are some examples:

kyiki/kyækyi/	'to rub off'
sisi/səsi/	'to cheat'
sese/səsĩ/	'to make accounts'
wowo/wŭwŭ/	'to wash, rinse'
kpokpa/kpŭkpa/	'to smear, anoint'

The function of reduplicated forms

The grammatical categories that may be set up for a description of verbal pieces involving verb stems are also applicable to those involving reduplicated forms; but reduplicated forms, as distinct from verb stems, usually denote multiple activity (i.e. multiple 'actions' in the case of dynamic verbs, and multiple 'states' in the case of stative verbs).

1. The multiple activity may be grammatically indicated by a plurality of subject as the following paired examples involving the dynamic verbal form i) gyinla 'to stop' and its stative verbal form ii) gyi 'to be standing' illustrate:

- (8a) nrenyá ne égyinla
(the man has stopped)
- (8b) menlí né mo égyinlegyinla
(the people have stopped)
- (9a) baka kpóle kó gyí azulé ne ánu
(there is one big tree standing in the river)
- (9b) mbaka mgbóle dónwó gyigyí azulé ne ánu
(there are many big trees standing in the river)

In the above examples, the (a) clauses denote a single activity performed by one actor, the subject referent, whereas the (b) clauses denote multiple activity performed by more than one actor.

ii. The multiple activity may be grammatically indicated by a plurality of object, as in the following examples with tu 'to uproot' and buke 'to open':

- (10a) yedu baka kpóle kó
(he has uprooted one big tree)
- (10b) yedudu mbaka mgbóle dónwó
(He has uprooted many big trees)
- (11a) yebuke alénke ne yédo nwolé
(he has opened the door and left it ajar)
- (11b) yebukebuke nlénke né mo yégua nwolé
(he has opened the doors and left them ajar)

The above (a) clauses denote a single activity performed by one actor upon one object; the (b) clauses, on the other hand, denote multiple activity performed by one actor upon many objects. With particular reference to (11(a-b)), it is to be noted that the principal verb buke 'to open', which takes a singular object noun phrase, co-occurs in (11a) with the auxiliary verb to,

whereas the reduplicated form bukebuke 'to open', which takes a plural object noun phrase, co-occurs in (11b) with the auxiliary verb gua; it will be unacceptable to substitute one auxiliary verb for the other in the different grammatical contexts. The verb gua 'to put' may, in certain contexts, be regarded as the suppletive reduplicated form of to 'to put, place', as the following clauses illustrate:

(12a) yedo bulúku ne ékpónlé ne ázo
(he has put the book on the table)

(12b) yegua ye mbúlúku né mo ékpónlé ne ázo
(he has put his books on the table)

The verb gua may also collocate with mass nouns, as in:

(13a) yegua nzule ékpónlé ne ázo
(he has put water on the table)

We shall never attest the verb to in collocation with mass nouns, as in:

(13b) *yedo nzule ekponle ne azo

(III) In clauses involving a singular subject noun phrase with or without a singular object noun phrase, the multiple activity denoted by the reduplicated verb may be understood as a repetition of actions, as in the following examples with ti/tindi 'to pinch':

(14a) Kofí édi me
(Kofi has pinched me)

(14b) Kofí életíndi me
(Kofi is pinching me all over)

In similar contexts, the multiple activity may be understood as a repetition of actions performed at more than one time or at

different times, as the following clauses involving the reduplicated forms gyinlegyinla 'to stop' (of the verb stem gyinla) and toto 'to fall sick' (of the verb stem to):

(15a) ogyinlegyinlanle adenlé nú
(he stopped several times on the way)

(15b) onwó tóto ye sómaá
(lit. he keeps falling sick. he is sickly)

(IV) In some cases, the reduplicated form has a slightly different meaning from the corresponding verb stem:

- | | | |
|------|----------------------|--------------------------------|
| i. | nea 'to look at' | neenlea 'to look for, search' |
| ii. | nya 'to bend (fish)' | nyenya 'to fold' |
| iii. | kpu 'to smoke' | kpungbu 'to fumigate' |
| iv. | we 'to swim' | wewe 'to grovel on the ground' |

We shall say no more here about reduplication and leave to another occasion a detailed study of reduplication and the features which mark it in Nzema.

(c) Nominalization of verbs

In a footnote, Lyons (1966: 232) makes the observation, originally supplied by E. K. Brown and P. M. Postal, that "in a number of West African and American-Indian languages, the majority of the nouns appear to be derived from verbs by means of productive syntactic processes". With particular reference to the Kwa sub-family (of which Nzema is a member) of West African languages, with which the present writer is familiar, it is certainly not the case that a majority of the nouns are derived from verbs. What is certainly the case in Nzema, as in other members, is that some nouns are derived from verbs by

productive morphological processes and the opposite process (observable, for example, in English) of deriving verbs from nouns is largely unattested.

In what follows the various processes of nominalization and adjectivization from verbs are presented with exemplification.

Three main types of nominalization (including adjectivization) may be distinguished:

- A) prefixation by a vowel, with or without suffixation;
- B) prefixation by a nasal consonant (symbolized as N and homorganic with the stem-initial consonant of the verb), with or without suffixation; and
- C) suffixation.

Nominalization

<u>Type</u>	<u>Structure</u>	<u>Meaning</u>	<u>Examples</u>	<u>Verb</u>
A.I.i	a + verb	I. place	1. a-sóné (church)	sone (to baptize)
			2. a-zie (cemetery)	sie (to buy, keep)
		II. activity	3. a-kposa (to go about selling)	kposa (to roam)
			4. a-sande (dispersion)	sande (to scatter)
			5. a-hua (union)	kua (to gather)
		III. 'result' (that which results from the activity of the verb)	6. a-foto (a mashed food)	foto (to mix)
			7. a-yia (meeting)	yia (to meet)
A.I.ii	a + verb + le	I. activity, purpose	8. a-gya-le (marriage)	gya (to marry)
			9. a-wo-le (child birth)	wo (to give birth)
A.I.iii	a + verb + les	I. place	10. a-bia-les (bathroom)	bia (to have a bath)
			11. a-wie-les (the end)	wie (to finish)
			12. a-do-les (sunset, west)	to (to fall)

<u>Type</u>	<u>Structure</u>	<u>Meaning</u>	<u>Examples</u>	<u>Verb</u>
A.II.i	e/ε + verb	I. 'state'	13. e-hyia (pover- ty)	kyia (to be in need)
			14. e-siáne (mishap)	siane (to pursue stealthily)
		II. result	15. ε-dá (flatu= lence)	ta (to flatulate)
A.II.ii	ε + verb + le	verbal noun ¹	16. ε-hu-nlé (killing)	ku (to kill)
			17. ε-kposa-lé (roaming)	kposa (to roam)
A.II.iii	ε + verb + lee	I. result	18. ε-ve-lee (vomit)	fe (to vomit)
			19. ε-la-lée (dream)	da (to sleep)
A.II.iv	e + verb + le	I. result	20. e-bu-le (half)	bu (to break)
			21. e-wu-le (death, illness)	wu (to die, to be ill)

1. Almost all verb stems and their reduplicated forms have verbal noun forms. Verbal nouns may enter into a genitive construction with a preceding possessive noun phrase, and such a genitive construction may be (i) a subjective genitive, usually with an intransitive verb (e.g. su 'to cry' with the verbal noun forms ε-zu-nle 'crying'; and exemplified by me szunle ye ezeleke 'my crying is amusing' which is derivable from melssu ... 'I am crying' ...); (ii) an objective genitive, usually with a transitive verb (e.g. ku 'to kill' with the verbal noun form ε-hu-nle 'killing'); and exemplified by me shunle εn(a aze 'my killing is not easy', which has a different underlying structure: Δ eleku me 'Δ is killing me'.

<u>Type</u>	<u>Structure</u>	<u>Meaning</u>	<u>Examples</u>	<u>Verb</u>
B.I.	N + verb	I. activity	22. n-zela	sela
			(marching)	(to drive away)
		II. result	23. m-gbosa	kposa
			(walk, stroll)	(to roam)
			24. m-gbakye	kpakye
		(division, branch)	(to divide)	
		25. m-gbokye	kpokye	
		(crumb, fragment)	(to break off)	
B.I.i	N + verb + le/le	I. activity	26. n-doa-nlé	toa
			(reporting)	(to report)
			27. n-yila-lé	yila
		(blessing)	(to bless)	
		28. n-gyegye-lé	gyegye	
		(trouble, bother)	(to bother, trouble)	
B.I.ii	N + verb + le/le	II. activity instru- ment	29. m-gboda-lé	kpoda
			(pacifica- tion)	(to pacify)
		III. activity, state	30. m-gbagye-lé	kpaye
			(appella- tion)	(to give appellation)
		31. n-(d)afe-lé	dafe	
		(sleep)	(to sleep)	
		32. n-gyehys-lé	kyehye	
		(agreement, pact)	(to arrange)	

<u>Type</u>	<u>Structure</u>	<u>Meanings</u>	<u>Examples</u>	<u>Verb</u>
B.I.iii	N + verb + lee	I. Inanimate noun, re- sulting from or affected by the action of verb	33. n-rela-lee (message)	kela (to send message)
			34. n-geha-lee (rumour, gossip)	keha (to say)
			35. n-gyehye-lee (plan, arrange- ment)	kyehye (to arrange)
			36. n-gyekye-lee (parcel package)	kyekye (to bind, tie)
			37. m-(b)uke-lee (page of a book)	buke (to open)
C.I.	verb + vo(1e)	I. agentive ¹ (animate noun)	38. sɛɛ-vó(1e) (priest, beggar)	sɛɛ (to pray, beg)
			39. kpɔ-vó(1e) (enemy)	kpɔ (to hate)
			40. sie-vó(1e) (one who keeps)	sie (to keep)

1. Agentive nominalization, like the verbal noun formation, is a productive process. It should also be mentioned that the agential suffix -vo(1e) may also be added to nouns. Thus with the noun kpoma 'walking stick', for example, we find kpoma-vo(1e) 'linguist, standard-bearer'.

Adjectivization

<u>Type</u>	<u>Structure</u>	<u>Meaning</u>	<u>Examples</u>	<u>Verb.</u>
A.I.i	a + verb	I. state, activity	1. a-sele (beggary, begging)	sele (to beg)
			2. a-lumuá (first begin- ning)	dumua (to go ahead)
A.I.ii	e + verb + le/ke	I. state, activity	3. e-zulo-lé (frighte- ning)	sulo (to fear)
			4. e-ve-le (tiring, tired- ness)	fe (to tire)
			5. e-zele-ké (amusing, laughter)	sele (to laugh)
B.I.	N + verb	I. state, activity	6. n-zisi (a cheat, cheating)	sisi (to cheat)
			7. n-dondo (toasted)	tondo (to toast)
			8. n-gyehye (fried)	kyehye (to fry)
.I.	verb + lira/lera	I. state	9. wu-lirá (rotten)	wu (to rot, die)
			10. we-lerá (dried, dry)	we (to dry up)
			11. kpolo- léra (rotten)	kpolo (to rot)

2. Multi-word verbs

We are here concerned with word sequences or combinations of a simple verb and another element or elements that may reasonably be treated as single linguistic units. We may sub-classify multi-word verbs, in respect of the word class of the lexical item following the simple verb word in such combinations, into A) verb + noun word combinations, which we shall distinguish as complex verbs; the noun word in complex verbs may be regarded as I) object noun phrase or II) locative adjunct; and B) verb + verb combinations, which we shall distinguish as verbal groups; and C) various combinations of type A, which we shall distinguish as compound verbs.

2.A.I Complex verbs

In the examples which follow, the (a) clauses involve the complex verbs: (i) fa sya 'to get angry' (16a); (ii) di butule 'to quarrel' (17a); (iii) die menle 'to rest' (18a); and the (b) clauses are transitive clauses involving simple verbs:

- (16a) ovale sya
(he got angry)
- (16b) ovale sya
(he took a hundred)
- (17a) belédfí butúle
(they are quarrelling)
- (17b) belédfí awulé
(they are eating rice)
- (18a) medíe me ménle
(I am resting)
- (18b) medíe me búlúku ne
(I want my book)

What distinguishes the (a) examples involving complex verbs from the (b) examples which involve a verb followed by a nominal object in a transitive clause is that in the (a) examples there is greater semantic and syntactic cohesiveness such that the two elements can scarcely be said to be independently variable.

The following criteria may serve to distinguish them:

I) If the object noun phrase can be questioned, then it is variable independently of the verb or an ordinary nominal object. Thus in respect of (16a-b), the object may be questioned by (Q.I) *ovale nyé?* 'how many did he take?' to produce the following answers:

(16a.I) * *ovale eya*

(16b.I) *ovale eya*

(he took a hundred)

And in respect of (18a-b), the object may be questioned by (Q.II) *nzóne á edíe a* 'What do you want?'

with the following answers:

(18a.I) * *medie me menle*

(18b.I) *medie me búlúku ne*

(I want my book)

With the (a) examples the object noun phrase cannot be questioned, whereas with the (b) examples the object can significantly be questioned to produce meaningful answers.

II) As a rule, the object noun phrase occurring within a complex verb may not be modified by the definite article *ne* 'the', a determiner *eyeka* 'this', or an adjective.

Thus alongside (17a), we shall not attest:

(17a.I) * beledi butule ne

whereas alongside (17b) we shall find:

(17b.I) belédi awulé ne (they're eating the rice)

And with (18a-b), the object noun phrase in the transitive clause (18b) may be modified by the adjective fofóls 'new', but not the object in the complex verb in (18a):

(18a.I) * medie me menle fofóls

(18.bI) medie me búlúku fofóls ne
(I want my new book)

III) Generally speaking, the noun words which occur in complex verbs do not have plural forms.

IV) The simple verb in such complex verbs is restricted to simple verbs of either mono-syllabic CV or disyllabic CVV structure, whereas there is no such restriction on the verb word in a transitive clause; that is, verbs of mono-, di-, tri-, or quadri-syllabic structure may occur in a transitive clause.

V) As a rule, complex verbs take only animate subject noun phrase, whereas the subject noun phrase in a transitive clause may be animate or inanimate.

VI) The noun phrase occurring in complex verbs is, as a rule, either an inanimate or an inalienable noun, whereas the object nounphrase in a transitive clause may be animate, inanimate or inalienable.

Classification of Complex verbs (verb + object noun phrase

The noun word in Nzema may, on formal grounds, be subdivided into:

I) alienable nouns (e.g. eleka 'box') and II) inalienable nouns (e.g. snyele 'eye'). For immediate purposes, the following criteria may serve to distinguish the two sub-classes of noun:

I) In Nzema, two sets (I-II) of possessive pronouns may be distinguished:

	<u>Set I</u>		<u>Set II</u>	
	<u>Inalienable nouns</u>		<u>Alienable nouns</u>	
1st pers. sing.	me		me	'my'
2nd " "	e		wɔ	'your'
3rd " "	o		ye	'his, her, its'
1st " plur.	ye		ye	'our'
2nd " "				
3rd " "	be		be	'your, their'

As the above presentation shows, the 2nd and 3rd person singular terms in the possessive pronominal system are a two-form unit each, one form in each case being 'mono-phonemic' and the other 'bi-phonemic'; the mono-phonemic forms (i.e. e 'your' and o 'his, her, its') belong to one paradigmatic set (Set I), and the bi-phonemic forms (wɔ 'your' and ye 'his, her') belong to the ^{other} ~~same~~ paradigmatic set (Set II). The other terms have one form each. It is also to be noted that the 2nd person and the 3rd person plural possessive pronouns are identical in shape.

In a genitive construction, inalienable nouns select the mono-phonemic members, whereas alienable nouns select the bi-phonemic members of the 2nd and 3rd person singular possessive pronouns:

Inalienable noun:

nyele 'eye'

Alienable noun:

eléka 'box'

- (19.Ia) e nyé 'your eye' (19.Ib) wó éléka 'your box'
(19.Ic) o nyé 'his, her, its eye' (19.Id) ye éléka 'his, her box'

II) Inalienable nouns are either three- or two-form lexemes. In the case of three-form inalienable nouns (e.g. nyele 'eye'), in addition to the non-possessed form which occurs in subject or object position they exhibit in a genitive construction two other possible forms, depending on whether the possessive nominal is definite (i.e. post-modified by a determiner or an adjective) or indefinite (i.e. an unmodified noun or a possessive pronoun). Alienable nouns on the other hand, are morphologically invariable in a similar genitive construction.

- (19a) nyele hía
(the eye is precious)
- (19b) bendóné nyele
(they don't sell the eye)
- (20a) me nyé (20.Ib) me éléka ne
(my eye) (my box)
- (20b) ye nyé (20.Ib) ye éléka ne
(our eye) (our box)
- (20c) be nyé (20.Ib) be éléka ne
(their eyes) (their box)
- (21a) Kofi ánye (21.Ib) Kofi éléka
(Kofi's eye) (Kofi's box)
- (21b) nrenyá ne ánye (21.Ib) nrenyá ne éléka ne
(the man's eye) (the man's box)

As the above examples show, the inalienable noun enyele 'eye' exhibits three different morphological shapes in the different syntactic contexts. We shall distinguish the non-possessed form enyele 'eye' occurring either as subject in (19a) or object as in (19b) as the absolute form. The nominal root form nye which occurs in the genitive construction (20a-c) we shall distinguish as the possessed root form in contradistinction to the other possessed form anye occurring with a definite possessive noun phrase in (21a-b), which we shall refer to as the prefixed possessed form.

On the other hand, the inalienable noun nzi 'the back', which may be regarded as a nominal root, is a two-form lexeme. It has only the possessed root form, nzi, as in:

(22a) sua nzi
(back of a house)

(22b) o nzi
(his/her back)

and the prefixed possessed form, anzi, as in:

(23a) suá ne anzi
(the back of the house)

(23b) Kofí anzi
(Kofi's back)

(23c) Nrenyá ne anzi
(the back of the man)

III) In their referential meaning, inalienable nouns denote parts of the body (and may also be used to make 'local' distinctions) or are kinship terms. Other criteria may be adduced to distinguish inalienable nouns

from alienable nouns, but for immediate purposes, the above criteria serve to distinguish the two sub-classes of noun.

The object noun phrase in a complex verb (i.e. verb + noun word combinations) may be either (a) an alienable noun or (b) an inalienable noun. We may, therefore, sub-classify complex verbs in terms of (a) verb + alienable noun and (b) verb + inalienable noun.

In the discussion of complex verbs which follows, I shall begin with a consideration of verb + alienable noun combinations which are sub-classified syntactically and then morphologically, move to a description of verb + inalienable noun combinations, which are treated in terms of verb + corporal inalienable nouns and verb + local inalienable nouns, then move to a treatment of verb + locative adjunct combinations and end up with a general semantic classification of complex verbs.

Syntactic classification: Complex verbs (verb + alienable noun)

Syntactically, complex verbs, which are verb plus alienable noun combinations, can be divided into two main groups (A - B), with sub-divisions within each group:

Group A.I consists of those complex verbs which cannot admit another noun phrase between the verb word and the following object noun phrase; and Group A.II consists of those in which the object noun phrase may enter into a genitive construction with a possessive nominal such that the entire genitive construction is analyzable as the object noun phrase.

Group B.I consists of those complex verbs which can admit, between the verbal element and the object noun phrase, another noun phrase, usually animate, which may be regarded as the indirect object; and Group B.II consists of those which are also capable of admitting an indirect object noun phrase, which is a genitive construction consisting of a possessive nominal plus the possessed form of the 'local' inalienable noun nwole 'self, exterior'; we shall refer to such indirect object noun phrases involving the reflexive marker nwole as the reflexive dative. Members of Group B (I - II) are regarded as ditransitive complex verbs.

Group A.I: Complex verbs (verb + alienable noun)

The following are some examples of Group A.I complex verbs:

1. te kpoke 'to be fit, healthy'
2. tu adenle 'to travel'
3. si agole 'to dance'
4. to edwene 'to sing (a song)'
5. bo done 'to toll a bell'
6. bu namule 'to start a village'
7. di ekpa 'to do work'
8. di gua 'to trade'
9. di amanee 'to exchange messages'
10. di adwelie 'to converse'
11. di butule 'to quarrel'

Items (1 - 7) usually take a singular subject noun phrase as in the following examples involving items (3) and (6):

(24a) raalé ne élesí agole
(the woman is dancing)

(24b) nrenyá ne búle ye námúlé wó eké ne
(the man built his village in that place)

Items (8 - 11), on the other hand, usually take a plural subject noun phrase as in the following examples involving items (9) and (11):

(25a) egya neé syevóls ne éledí amanee
(my father and the stranger are exchanging messages)

(25b) Kofí neé Akysé éledí butúle
(Kofi and Akysé are quarrelling)

Group A.II: Complex verbs (verb + alienable noun)

Members of this sub-set include:

- | | | |
|-----|-----------|-----------------------------|
| 12. | di agya | 'to inherit' |
| 13. | bo duma | 'to mention (the name of)' |
| 14. | tua kake | 'to pay for (the price of)' |
| 15. | si epe | 'to hold wake-keeping for' |
| 16. | te ebole | 'to bother, harass' |
| 17. | tu ahonle | 'to frighten' |

The use of item (12) is illustrated by the following pair of clauses:

- (26a) Kofi báli Amá ágya
(Kofi will inherit Ama)
- (26b) Kofi báli ye ágya
(Kofi will inherit him)

As the above clauses show, the possessive nominal in the object noun phrase is animate and non-co-referential with the subject noun phrase. With members of this sub-set the possessive nominal in the object noun phrase may be regarded as the affected participant. With item (14), the possessive nominal in the object noun phrase may be inanimate, as in:

- (27) Kofi édua bulúku ne káké
(Kofi has paid (the price of)for the book)

It is to be noted that the noun words in items (16 - 17) are names of parts of the body but are regarded as alienable nouns since they do not have the properties of inalienable nouns; for example, in a genitive construction, they select the bi-phonemic forms wó 'your' and ye 'his, her' of the 2nd and 3rd person

singular possessive pronouns rather than the mono-phonemic forms e 'your' and o 'his, her' and are morphologically invariable, as the following examples with item (17) show:

- (28a) Kofi dúle Akyé áhonle
(Kofi frightened Akye)
- (28b) Kofi dúle wó áhonle
(Kofi frightened you)
- (28c) Kofi dúle ye áhonle
(Kofi frightened him/her)

Group B.I: - Ditransitive Complex verbs (verb + indirect object + alienable noun

Members of the sub-set of complex verbs include:

- | | | |
|----|------------|-----------------------------------|
| 1. | wa amonle | 'to curse' |
| 2. | da ase | 'to give thanks' |
| 3. | kpa kysle | 'to beg, entreat' |
| 4. | yia adenle | 'to meet' |
| 5. | bo ewoke | 'to make a promise' |
| 6. | kye ehone | 'to starve, fast' |
| 7. | tu fole | 'to give advice' |
| 8. | bo amanes | 'to report' |
| 9. | su kpolera | 'to dispute, argue, to challenge' |

Items (1 - 8) usually take a singular subject noun phrase as in the following examples with items (6) and (8):

- (29a) Kofi bóle Akyé éwóke ké obádo bulúku yeamaa ye
(Kofi promised Akye that he will buy a book for her)
- (29b) Kofi ébo o ze ámanes
(Kofi has reported it to his father)

Item (9) may take a singular subject noun phrase as in:

(30a) Kofí zúle Akýé kpolera
(Kofi challenged Akye)

but may also take a plural subject noun phrase as in:

(30b) Kofí neé Akýé zúle kpolera
(Kofi and Akye argued)

Group B.II: Ditransitive Complex verb (verb + reflexive dative + alienable noun)

Members of this sub-set of ditransitive complex verbs include:

- | | | |
|-----|------------|---------------------------------|
| 10. | fa sya | 'to be angry' |
| 11. | ka elales | 'to dream' |
| 12. | bo nzekue | 'to gossip' |
| 13. | bu mgbonda | 'to make accounts, think about' |

As noted above, members of this sub-set optionally take a reflexive dative. Thus with item (10), we shall attest:

(31a) Akýé éva Kofí ánwó éya
(Akye is angry with Kofi)

(31b) yeva o nwó éya
(she is angry with him)

(31c) yeva me nwó éya
(she is angry with me)

(31d) yeva e nwó éya
(we are angry with you)

As the above examples show, it is a characteristic feature of such verbs that the subject noun phrase and the possessive nominal in the reflexive dative can never be co-referents.

With the same item we shall also find:

(31e) Kofí éva sya
(Kofi is angry)

in which no reflexive dative occurs.

Morphological classification: Complex verbs (verb + alienable noun)

Morphologically, we may sub-divide complex verbs into two main groups:

1) those in which the (alienable) noun word is non-derived; items (1 - 17) of Group A above exemplify this morphological sub-class, and no further examples need be given; and 2) those in which the noun word is a nominalization of a simple verb. Two such nominalizations may be distinguished: (a) the internal constituent structure of the first type of nominalization is made up of: a nominalizing prefix e- + verb stem + nominalizing suffix -lé and is exemplified by the following complex verbs:

		<u>Verb stem</u>		<u>Nominalization</u>
1. fa ekpola	'to hate'	kpo	'to hate'	e-kpo-lé 'hating'
2. fa eluale	'to associate with'	dua	'to walk, proceed'	e-lua-lé 'walking'
3. le enriandile	'to be running'	nriandi	'to run'	e-nriandi-lé 'running'

b) the second type of nominalization is made up of a nominalizing prefix a- + verb stem, and is exemplified by the following complex verbs:

		<u>Verb stem</u>		<u>Nominalization</u>
4. bo asande	'to disperse, scatter'	sande	'to scatter'	a-sánde 'dispersion'
5. ko afea	'to conspire'	fea	'to hide'	a-fea 'hiding'
6. di asoa	'to carry things about for sale'	soa	'to carry'	a-soa 'carrying'

		<u>Verb stem</u>		<u>Nominalization</u>
7. tu agyinla	'to take counsel, delibe- rate'	gyinla	'to stand'	a-gyinla 'stan- ding'
8. di ahua	'to unite'	kua	'to ga- ther, toge- ther'	a-hua 'gather- ing toge- ther'

Of the above complex verbs (1 - 8), items (1) and (8) may take another noun phrase between the verbal element and the nominalization, as in:

(32a) ovale me ékpolé la, yehye
(since he started hating me, it has been long)

(32b) maa méndu wó ágyinla
(let me consult you)

Items (2), (4) and (8), on the other hand, take a plural subject noun phrase:

(33a) me nee ye vále elualé la, yehye
(since I and he started to associate, it has been long)

(33b) sonlá moo no nzá la, be nee ye éngo áfea
(a person who drinks, you and he don't conspire)

(33c) bema yéli áhua
(let us unite)

Morphologically, we can sub-divide complex verbs, in respect of the verbal element, into two main groups: (1) those in which the verbal element is a reduplicated form; the corresponding mono-morphemic verb stem may not be capable of entry into such combinations, which therefore serves as a synchronic means of distinguishing reduplicated verbs from their simple verb stems.

Examples of complex verbs which involve reduplicated verbal elements include:

		<u>Simple verb stem</u>
1. tudu kake	'to pay off debt'	tu 'to uproot'
2. tondo awule	'to treat or nurse sickness'	to 'to cook, roast'
3. bubu edanle	'to fold cloth'	bu 'to break'
4. tindi awule nu	'to pick foreign matter out of rice'	ti 'to pinch'
5. suosua amonle	'to undo a curse'	sua 'to tear up'

2) those in which the verbal element is a mono-morphemic verb stem; items (1 - 20) of Group A above exemplify this morphological sub-class.

Complex verbs (verb + inalienable nouns)

Among inalienable nouns, as a sub-class of nouns, a number of sub-sets can be distinguished on formal grounds, which we shall not go into here.

With particular reference to inalienable nouns which can occur in complex verbs, however, two sub-sets may be distinguished:

1a) three-form inalienable nouns (e.g. enyele 'eye') which are body-part names and are designated 'corporal' inalienable nouns and 1b) two-form corporal inalienable nouns (e.g. nzi 'back', nyunlu 'face', front', bo 'lower or under part') which can also be used to make 'local' distinctions; and 2) the three-form 'local' inalienable nouns (i.e. i. zole 'top' ii. nuhua 'inside, interior', iii. nwole 'exterior, self') which are sometimes referred to as postpositions.

Complex verbs (verb + Corporal inalienable nouns)

In clauses involving such complex verbs, the corporal inalienable noun characteristically enters into a genitive construction with a possessive noun phrase, which may be animate or inanimate. We may therefore, sub-classify such complex verbs in terms of A) those in which the corporal inalienable noun can enter into a genitive construction with an animate possessive noun phrase and B) those in which the corporal inalienable noun can enter into a genitive construction with an inanimate possessive noun phrase.

Members of sub-class A include 1. sia nzi 'return' and 2. fua nzi 'to support', as exemplified in the following clauses:

(34a) mezia me nzi^í
(I have returned)

(34b) mefua e nzi^í
(I support you)

It is to be noted that in (34a) involving item (1), the pronominal subject and the possessive pronoun in the object noun phrase are co-referential, whereas in (34b) involving item (2), the pronominal subject and the possessive pronoun in the object noun phrase are not, and can never be, co-referential. On the basis of this syntactic difference, two sub-sets may be distinguished among complex verbs of sub-class A. Sub-set A.I consists of such complex verbs as 1. sia nzi 'to return', of which the corporal inalienable noun can enter into a genitive construction with an animate possessive noun phrase which is co-referential with the subject noun phrase of the clause; and Sub-set A.II

consists of complex verbs like 2. fua nzi 'to support', of which the corporal inalienable noun can ^{likewise} ~~also~~ enter into a genitive construction with an animate possessive noun phrase which is, however, non-co-referential with the subject noun phrase of the clause. Members of the first sub-set (A.I) include:

1. sa snele 'to deny'
2. die esale 'to rest, disengage'
3. die enyele 'to amuse oneself'
4. mia enyele 'to endeavour, make an effort'
5. soho egyake 'to go to the toilet'
6. mua enloanle 'to shut up, keep quiet'
7. ye enloanle (nu) 'to brag, boast'
8. di etile 'to enjoy oneself'
9. di etile (nwo) 'to be independent'
10. sia nzi 'to return, turn back'
11. die menle 'to rest'
12. tu bo 'to set out, start on a journey'
13. nwu nyunlu 'to suffer (adversity)'

The following clauses (35 - 36), with items (2) and (12) respectively, provide further illustration:

(35) medie me sa ekyii
(I am having a short rest)

(36) yedule ye bó anlómá
(we set out yesterday)

Members of the second sub-set (A.II) include:

14. die enyele 'to entertain, amuse'
15. buke enyele 'civilize'
16. fa egyake 'to take after'

17. ye enloanle (zo) 'to interpret for'
18. kile bo 'to disclose the antecedents of'
19. fua nzi 'to support, agree with
(somebody's statement)'
20. tu bo 'to engage'

Item (14) may occur in a transitive clause and a corresponding intransitive clause:

- (37a) Kofí élie Akýé ánye (causative, transitive)
(Kofi has entertained Akýe)
(37b) Akýé ánye élie (non-causative, intransitive)
(Akýe is amused)

which may be related as causative to non-causative.

Further illustration of the uses of members of this sub-set is provided by the following clauses with items (16), (18) and (20):

- (38) Kofí éva o ze ágyake
(Kofi takes after his father)
(39) Kofí shile Akýé ábo
(Kofi has disclosed the antecedents of Akýe)
(40) Kofí shódu Kenlamó bie ábo ké ohu Akýé
(Kofi has gone and engaged a Malam to kill Akýe)

As noted above, sub-class B consists of complex verbs, of which the corporal inalienable noun may enter into a genitive construction with an inanimate possessive noun phrase which cannot be co-referential with its subject noun phrase which is usually animate. Members of this sub-class include:

21. tu bo 'to exhaust, finish'
22. bo bo 'to begin, start'

23. ku enloanle 'to weaken the power of'
24. ye enloanle 'to answer question'
25. te bo 'to understand'
26. kile bo 'to explain (the meaning of)'

Item (21) may be exemplified by the following pair of clauses:

- (41a) Kofí édu nzá ne ábo
(Kofi has finished the wine)
(41b) Kofí édu o bó
(Kofi has finished it)

It is to be noted that (41a) is related to (41b) by the pronominalization of the inanimate possessive noun phrase in the nominal object. It is also to be noted that the complex verb tu bo has at least three different senses: i. 'to set out', ii. 'to engage', and iii. 'to finish' and belongs, in its different senses, to the sub-sets set up; that is, in its first sense, it belongs to sub-set A.I, in its second sense to sub-set A.II, and in its third possible sense to sub-class B. Consequently a clause like (41b) above may, in isolation, be at least three-ways ambiguous. With the first meaning, the animate possessive pronoun in the object noun phrase is co-referential with the animate subject noun phrase; with the second meaning, the animate possessive pronoun is not co-referential with the animate subject noun phrase; and in its third meaning, the possessive pronoun is inanimate and, therefore, cannot be co-referent with the animate subject noun phrase. The different senses of the complex verb tu bo correlate with different syntactic properties.

The uses of items (24 - 26) may be exemplified by the following pairs of imperative mood clauses:

- (42a) ye me édwéké ne ánloa
(answer my question)
- (42b) ye me ó nlóa
(answer me it (the question))
- (43a) bɔ mɔdénlé té me édwéké ne ábo
(try and understand my statement/case)
- (43b) bɔ mɔdénlé té me ó bó
(try and understand me)
- (44a) kile me édwéké ne ábo¹
(lit. explain me the matter. explain the matter to me)
- (44b) kile me ó bó
(explain it to me)

In (42a - 43a) above, there is one object noun phrase (underlined), which is a genitive construction; in (44a), however, there is an indirect object followed by an object noun phrase, which is also a genitive construction but of a different constituency. All three complex verbs may admit an indirect object as exemplified in the (b) clauses.

1. A comparison of the Nzema clause and its English equivalent shows a difference in the ordering of the objects. In Nzema, as in other Ghanaian languages, the indirect object precedes the direct object of this verb. With the English verb 'explain', however, the object precedes the indirect object. It is this difference in the ordering of objects coupled with the habit of transliteration from the first language that accounts for such deviant sentences as 'explain me the meaning', which are attested in Ghanaian and, indeed, West African spoken and written English.

Nominalization: (Verb + alienable noun) V. (Verb + inalienable noun)

Complex verbs involving alienable nouns are readily nominalizable by a productive morphological process. The internal constituent structure of such nominalizations may be presented as: alienable noun + (nominalizing prefix -e) + verb + nominalizing suffix -le. The following examples illustrate:

<u>Complex verb</u>		<u>Meaning</u>	<u>Example</u>	
1. si agole	'to dance'	I. acti- vity	agolé-(é)-zi-lé	'dancing'
2. di gua	'to trade'		guá-(é)-li-lé	'trading'
3. to edwene	'to sing (a song)'		edwené-(é)-do-lé	'singing'

Forms with the nominalizing prefix may be regarded as emphatic, whereas the alternative forms without the prefix may be regarded as un-emphatic.

Complex verbs involving inalienable nouns are not so readily nominalizable; and this formal difference further serves to distinguish the two sub-classes of complex verbs. It should be mentioned, however, that a few complex verbs involving inalienable nouns have nominalized forms, as the following examples illustrate:

<u>Complex verb</u>		<u>Meaning</u>	<u>Example</u>
4. ye enloanle (nu) (to boast, brag)		I. acti- vity	a-nloa-nú-ye-lé (boasting, bragging)
5. te sbols		II. acti- vity, state	a-bo-de-le (worry, wearisome)

<u>Complex verb</u>	<u>Meaning</u>	<u>Example</u>
6. te bo (to understand)	III. acti- vity, result	n-dele-be-bó (explanation, faculty for understanding)
7. nwu nyunlu (to suffer)		a-nwu-be-nyúnlú (suffering, mishap, misfortune)

A comparison of the nominalizations (1 - 3) and (4 - 7) shows that the nominalizations of the two sub-classes of complex verbs differ in constituency.

Complex verbs (verb + 'local' inalienable noun)

Three sub-sets may be distinguished among such complex verbs. The first sub-set consists of complex verbs which may take an animate or inanimate subject noun phrase and, as a rule, do not allow the insertion of a noun phrase between their constituent elements.

Members of the first sub-set include:

- | | |
|----------------|---|
| 1. tukue nuhua | 'to burst into tears' |
| 2. tea nuhua | 'to shout, bawl' |
| 3. pe nuhua | 'to pass' |
| 4. nyia nwóle | 'to be ready to leave; to act in addition' |
| 5. dwu zole | 'to arrive, come (of time, event, fashion)' |
| 6. kpa nwóle | 'to be past (of time, event, fashion)' |
| 7. solo zole | 'to be in line' |
| 8. ko zole | 'to progress, develop' |
| 9. gyi zole | 'to continue, pursue; to be on' |

Items (1 - 4) characteristically take animate subject

noun phrase and may be exemplified by the following clauses with items (2) and (4):

(45) bɛd́á ne nwúnle awulé ne lá, ɔdeanle nu(huá)
(when the child saw the thief, he shouted)

(46) eysvóle ne ényia nwo(lé)
(the stranger is ready (to leave))

Items (5 - 6), on the other hand, take an inanimate subject noun phrase, as the following example with item (6) illustrates:

(47) edweké eyéká yekpa nwo(lé)
(this matter is past)

Items (7 - 9) may take an animate or inanimate subject noun phrase, as the following clauses involving item (9) illustrate:

(48a) nrenyá ne gyí zo(lé) dédeé áledwols
(the man continued on his journey until
night-fall)

(48b) melé mɔɔ konlé ne gyí zo(lé) esesebe lá ...
(when the battle was on fiercely)

As the above examples (45 - 48) show, the local inalienable noun may take the (possessed) root form (nu (45), nwo (46 - 47), zo (48)) or the corresponding absolute form (nuhua, nwols, zols). Utterances involving the (possessed) root form may be regarded as unemphatic and those with the absolute form as emphatic.

The second sub-set consists of complex verbs which characteristically take only animate subject noun phrase and may admit, between the verb and the inalienable noun, an animate noun phrase or an inanimate noun phrase which enters into a genitive construction with the inalienable noun.

Members of this second sub-set include:

- | | | |
|-----|----------|----------------------------------|
| 10. | so zole | 'to add to' |
| 11. | to zole | 'to add something to a purchase' |
| 12. | te zole | 'to reduce the price of' |
| 13. | so nuhua | 'to help (with)' |

The following clauses with item (10) illustrate the characteristic properties of members of this sub-set:

- | | |
|-------|---|
| (49a) | Kofí zóle eyevóle ne ézukoá ne <u>ázo</u>
(Kofi added to the stranger's money) |
| (49b) | Kofí zóle zo(lé)
(Kofi helped him out) |
| (50a) | Kofí zóle eyevóle ne <u>zó</u>
(Kofi added to (the money of) the stranger) |
| (50b) | Kofí zóle ye <u>zó</u> (Kofi helped him out) |

It is to be noted that in (49a) where the inserted noun phrase is definite and inanimate, the inserted noun phrase forms a genitive construction with the inalienable noun, which takes the prefixed possessed form ázo. In (49b), which is related to (49a) by the pronominalization of the possessive noun phrase, the inalienable noun takes the (possessed) root form zo or the absolute form zole. On the other hand, in (50a) where the inserted noun phrase is animate and definite, the inalienable noun takes the (possessed) root form, which also occurs in (50b) where the inserted definite noun phrase is pronominalized by ye 'him'. These different features serve to distinguish an inanimate from an animate noun phrase.

Members of the third sub-set include:

- | | | |
|-----|----------|--------------------------|
| 14. | tua zole | 'to cover, copk' |
| 15. | di zole | 'to obey (instructions)' |

- | | | |
|-----|----------------|---|
| 16. | kponle zole | 'to agree to, accept' |
| 17. | so zole | 'to continue (e.g. a story)' |
| 18. | bo nwole | 'to multiply, to add to' |
| 19. | wo nwole | 'to carry on with' |
| 20. | funvua nuhua | 'to go into (case)' |
| 21. | fedevede nuhua | 'to go into, investigate' |
| 22. | kile nuhua | 'to explain, (difficulty)' |
| 23. | kilehile nuhua | 'to explain, elucidate
(difficulty)' |

Members of this sub-set characteristically take an animate subject noun phrase and also allow the insertion of an inanimate noun phrase which enters into a genitive construction with the inalienable noun. The following example (51a) with item (14) illustrates:

- (51a) Kofi édua nzá ne ázo
(Kofi has cooked the wine)

(51a) above is related by the pronominalization of the definite inanimate possessive nominal to (51b) below:

- (51b) Kofi edua zo(le)
(Kofi has cooked it)

We might compare (49 - 51(a-b)) above with the following clauses (52 - 53(a-b)), which involve the complex verb 24. maa zole 'to lift up, raise'. This item may take an inanimate object noun phrase, as in:

- (52a) Kofi smaa ebía ne zó
(Kofi has raised up the chair)

- (52b) Kofi émaa zo(lé)
(Kofi has raised it up)

or an animate noun phrase, as exemplified in:

- (53a) Kofi émaa nrenyá ne zó
(Kofi has lifted up the man)
- (53b) Kofi émaa ye zó
(Kofi has lifted him up)

It is to be noted that with item (24), the inalienable noun takes the (possessed) root form, whether the object noun phrase is inanimate (52) or animate (53). There is a problem here in determining the grammatical relationship between the verb and the local inalienable nouns in such complex verbs as 10. so zole 'to add to' in (49 - 50), 14. tua zole 'to cover' in (51), and 24. maa zole 'to raise' in (52 - 53).

The solution which is offered here, albeit tentatively, is that in instances where the inalienable noun takes the prefixed possessed form as in (49a and 51a) the complex verb is analyzable as verb + object noun phrase, and that in instances where the inalienable noun takes the (possessed) root form as in (50a, 52 - 53) the complex verb is analyzable as verb + adjunct. In either case, there are formal criteria for distinguishing inanimate from animate noun phrases.

Nominalization of complex verbs (verb + local inalienable nouns)

Complex verbs which involve local inalienable nouns are characterised by a type of nominalization, the internal constituent structure of which is:

nasal consonant prefix (homorganic with the stem-initial consonant of the verb) + verb + the (possessed) root form of the local inalienable noun.

The following examples illustrate:

<u>Complex verb</u>	<u>Meaning</u>	<u>Examples</u>
1. ko zole (to progress)	I. activity	n-go-zo (progress)
2. to zole (to add to)	II. instrument: (inanimate noun used for the action of the verb)	n-do-zo (addition, allowance)
3. tua zole (to cover, put lid on)		n-dua-zo (lid, cover)
4. so zole (to continue add to)	III. activity, instrument	n-zo-so (continuation)
5. kile nuhua (to explain)		n-gile-nu (explanation)
6. kilehile nuhua (to explain)		n-gilehile-nu (explanation)
7. bo nwole (to multiply)		m-(b)o-nwo (multiplication)

Group 2A.II: Complex verbs (verb + locative adjunct)

Complex verbs involving noun phrases which may be regarded as locative adjuncts denoting location, can be divided into two sub-sets: (a) those which cannot admit an object noun phrase, and (b) those which can admit an object noun phrase between the verb and the locative adjunct.

Members of the first sub-set include:

1. gyi nzi 'to support' (lit. 'to stand behind somebody)
2. gyinla/gyi egyake nu 'to act on behalf of somebody' (lit. 'to stand in somebody's footsteps')

- | | | |
|----|-------------------------|--|
| 3. | di nzi/nyunlu | 'to be behind/in front of somebody' |
| 4. | gyi egyake nu | 'to act on the spot, there and then' (lit. 'to be standing in one's foot steps') |
| 5. | te aze | 'to be alive, living' |
| 6. | da aze (negatively) | '(not to be easy' (lit. 'not to be lyding down') |
| 7. | ka aze | 'to be left behind' |
| 8. | bo aze | 'to lose one's wealth' |
| 9. | ka bone nu (negatively) | 'to be out, come out (lit. 'not to remain in a hole') |

With items (1 - 3), the noun phrase may enter into a genitive construction with a possessive nominal which cannot be co-referential with the subject noun phrase of its clause, as the following example with item (1) shows:

- (54) megyi e nzi
(lit. I stand behind your back. I support you)

With item (4), the possessive nominal in genitive construction with the noun phrase must be co-referential with the subject noun phrase of its clause:

- (55) ogyi o gyáke anu óduale kaké ne
(there and then, he paid the debt)

The noun phrases occurring in the complex verbs (items 1 - 4) involve corporal inalienable nouns. The noun phrases in items (5 - 9), which are place adverbials, may not enter into a genitive construction. The following clauses with items (6) and (9) illustrate:

- (56) sonlá éhunlé énlá áze
(lit. the killing of a person does not lie down. murder is not easy)

- (57) etane énga bóné nú
(lit. evil does not remain in a hole. evil
will out)

Clauses such as (56 - 57) above are analyzable as semi-transitive.

Members of the second sub-set include:

10. ka aze 'to reduce the intensity of (light,
sound)'
11. bo aze 'to bring down, dissipate the wealth
of somebody'
12. bəls aze 'to humble oneself'
13. to sbo nu 'to prove too much for' (lit. 'to
throw into the bush')

and may be exemplified by the following clauses with items (10)
and (13):

- (58) ka kenlanée ne áze
(dim the lamp)
(59) egyimá ne édo nrenyá ne ébo nú
(the work has proved too much for the man)

Clauses such as (58 - 59) are regarded as complex semi-transi-
tive.

Semantic classification of Complex verbs

Semantically, three sub-classes may be distinguished
among complex verbs.

(I) The simple verb and the noun word are fused into a
new idiomatic combination, the composite meaning of which is not
normally deducible from the individual lexical meanings of its
component parts. Examples of members of this semantic sub-
class are:

- | | | | |
|----|-------------|--|---------------------------------------|
| 1. | kpa kyels | 'to beg,
entreat' | (lit. 'to doff hat') |
| 2. | da ase | 'to thank' | (lit. 'to lie down') |
| 3. | die enyels | 'to entertain;
to be entertained' | (lit. 'to amuse the
eye') |
| 4. | ko amozi | 'to ^{menstruate}
pass mensis ' | (lit. 'to go behind') |
| 5. | soho egyake | 'to ^{defecate}
go to the
toilet' | (lit. 'to accompany
the leg') |
| 6. | kpula esale | 'to eat, to have
meals' | (lit. 'to knock the
hand against') |
| 7. | tua kake | 'to punish' | (lit. 'to pay debt') |
| 8. | so nuhua | 'to help' | (lit. 'to hold inside
of') |

(II) The simple verb and the noun may be regarded as retaining their individual lexical meanings. The individuality of the component elements appears in possible contrastive substitutions. The following examples illustrate:

1. The verb to in the sense of 'to throw, lay' collocates with many nouns:

- | | | |
|------|-------------|--------------------|
| i. | to kels | 'to give a blow' |
| ii. | to etu | 'to shoot a gun' |
| iii. | to ats | 'to play marbles' |
| iv. | to dame | 'to play draughts' |
| v. | to skpa | 'to lay mat' |
| vi. | to kolonvia | 'to lay an egg' |

2. The verb fa 'to take' also collocates with a number of nouns:

- | | | |
|-------|----------|--------------------------------|
| vii. | fa skols | 'to take seed, to be pregnant' |
| viii. | fa eya | 'to get angry' |

3. The verb tu meaning 'to uproot' collocates with different nouns as in:

- | | | |
|-----|-----------|-----------------------------------|
| ix. | tu bo | 'to set off' |
| x. | tu bo | 'to exhaust, to finish' |
| xi. | tudu kake | 'to redeem debt, to pay off debt' |

4. The verb nyia 'to obtain, get' collocates with the following nouns:

- | | | |
|-------|-------------|---------------------------------|
| xii. | nyia amanes | 'to make a loss, to incur debt' |
| xiii. | nyia sya | 'to get angry' |

5. The verb die 'to accept, receive, get' collocates with a number of nouns, examples of which are:

- | | | |
|------|------------|--|
| xiv. | die menle | 'to rest' (lit. 'to receive the breath') |
| xv. | die esale | 'to rest, disengage' (lit. 'to take off the hand') |
| xvi. | die anwoma | 'to take a breather' (lit. 'to take wind') |

6. The verb bo 'to tell, deliver, say' also collocates with a number of nouns which denote discourse, as in:

- | | | |
|--------|-----------|---------------------|
| xvii. | bo ewoke | 'to make a promise' |
| xviii. | bo amanes | 'to give a message' |
| xix. | bo nkomo | 'to converse' |

(III) With other complex verbs, the noun alone may be regarded as retaining its individual lexical meaning, and the verb serves to convert the noun into a different grammatical word class:

- | | | |
|-------|------------|---------------------|
| xx. | bo elane | 'to go mad' |
| xxi. | bo modenle | 'to try, endeavour' |
| xxii. | sua ehane | 'to set a trap' |

In certain cases, the individuality of the noun word appears in possible collocations of different verbs with the same noun word, as in:

- | | | |
|----------|---------------|----------------------------|
| xxii (a) | te fole | 'to heed advice' |
| (b) | tu fole | 'to give advice' |
| xxiii(a) | yia adenle | 'to meet (on the way)' |
| (b) | tu adenle | 'to travel' |
| xxiv (a) | suosua amonle | 'to undo a curse' |
| (b) | wa amonle | 'to curse, put a curse on' |

In the above paired examples, the (a) complex verbs exemplify sub-class (II), and the (b) complex verbs exemplify sub-class (III).

2.B: Verbal Groups

It is generally acknowledged that one characteristic feature of African languages is their use of constructions involving a series of two or more verbs which are not joined by a co-ordinate conjunction and agree in mood, tense, person, polarity and auxiliaries. Such constructions have been labelled serial verbal construction. The following sentences involving three full verbs exemplify serial verbal construction:

- (60a) kye boané ne tóne ye (imperative, 2nd
túa wo káké person singular)
(catch the goat sell it
and pay your debt)
- (60b) yehye boané ne yédone ye (perfect tense,
yédua ye káké positive)
(he has caught the goat
sold it and paid his debt)
- (60c) otékyéle boané ne ótétónen- (perfect, negative)
le ye ótétúale ye káké
(he has not caught the goat
sold it and paid his debt)
- (60d) Kofí shye boané ne édone ye (perfect, positive
édua ye káké with nominal phrase
(Kofi has caught the goat subject)
sold it and paid his debt)

As the above examples show, the three verbs co-occurring in the sentence concord in (imperative and indicative) mood (60a-b), tense (60b), person (60b-c), and polarity (60c-d) as well as in respect of the preverbal perfect tense prefix marking a nominal phrase subject (60d). It would appear that there is greater syntactic and/or semantic cohesiveness or unity between some verbs in a series than in others. In instances

where the verbs in a series are marked by a greater degree of cohesiveness, the ^{occurrence} ~~domain~~ of an ingressive aspect marker, if present, is restricted to the first verb word in the series. Thus alongside the following imperative mood clauses involving the two verbal items 1. so nea 'to taste, sample', and 2. ka kile 'to tell to':

(61a) so enkoáne ne nea
(taste the soup)

(61b) ka edweké ne kile Kofi
(tell Kofi the matter)

we shall attest the corresponding clauses in the iterative-ingressive aspect:

(62a) kɔzɔ enkoáne ne nea
(go and taste the soup)

(62b) kɔhá edweké ne kile Kofi
(go and tell Kofi the matter)

We shall never find:

(63a) *kɔzɔ enkoane ne kɔnlea

(63b) *kɔhá edweke ne kɔhile Kofi

The corresponding perfect tense forms of (62a-b) are:

(64a) yehɔzɔ enkoáne ne yɛnlea
(he has gone and tasted the soup)

(64b) yehɔhá edweké ne yɛhile Kofi
(he has gone and told Kofi the matter)

The repetition of the aspect marker in both verb words will result in unacceptable clauses as in:

(65a) *yehɔzɔ enkoane ne yehɔnlea

(65b) *yehɔhá edweke ne yehɔhile Kofi

In instances, however, where there is less or no syntactic cohesion between the verbal items in the series, the ingressive aspect marker may be repeated in all the co-occurring verbs. Thus alongside:

- (66a) yehye boané ne yédone ye yédua ye káké
(he has caught the goat sold it and paid his debt)

we shall find:

- (66b) yehóhye boané ne yéhódone ye yéhódua ye káké
(he has gone and caught the goat gone and sold it and gone and paid his debt)

It is also possible to find, in the case of constructions involving a series of verbs between which there is less or no syntactic cohesion, two different co-occurring ingressive aspect markers (i.e. both itive and ventive):

- (66c) yehóhye boané ne yérádone ye yéhódua ye káké
(he has gone and caught the goat and has come and sold it and gone and paid his debt)

Among verbs in a series, then, we shall distinguish two main types:

(I) Those exemplified by 1. so nea 'to taste, sample' and 2. ka kile 'to tell to' in (61a-b), which usually consist of two simple verbs, between which there is a greater syntactic and/or semantic unity such that an aspect marker is restricted to only the first member; we shall designate such instances as verbal groups.

(II) Those exemplified in (66a-c), which consist of two or more simple verbs, between which there is less syntactic or semantic unity such that any aspect marker may be repeated in each member; we reserve the term 'serial verbs' for such instances

We shall say no more about serial verbs and leave to another occasion detailed description of serial-verbal construction.

With particular reference to verbal groups, we shall refer to the first member of the group as the principal verb, and the second member as the auxiliary verb; and the segment of the construction containing the principal (or first) verb, we shall designate as the principal constituent, and the second segment containing the auxiliary (or second) verb as the auxiliary constituent.

We shall further sub-categorize verbal groups in terms of (i) close-knit collocations and (ii) loose collocations.

i. Close-knit Collocations

The verbal groups 1. bu sia 'to waylay; to hide' and 2. fa kye 'to forgive' exemplify what is here termed a close-knit collocation. The following constructions illustrate their uses:

(67a) Kofí ébu ézia Akysé
(Kofi has waylaid Akysé)

(68a) Kofí éva Akysé étane éhys ye
(Kofi has forgiven Akysé her sin)

Alongside (67a), we shall never find:

(67b) *Kofi ebu

nor (67c) *Kofi szia' Akysé

Similarly, -alongside (68a) we shall neither attest:

(68b) *Kofi eva Akysé stane

nor (68c) *Kofi shys ye

With a close-knit collocation, then, the omission of the auxiliary constituent or of either constituent results in an unacceptable clause.

Secondly, constructions involving a close-knit collocation are not referable to an underlying conjoined structure. Thus a clause like (67a) is not derivable from a pair of sentences of the type (67b) and (67c) above.

We shall say, then, of such verbal groups that are characterized by such properties that their component members are syntactically and semantically fused into a close-knit collocation such that the meaning of the entire verbal group is not deducible from the individual lexical meanings of their members. The semantic unity in such close-knit collocations can often be shown by the possibility of substitution with a simple or single-word verb. Thus, for example, the simple verb fea 'to hide' may substitute for item (1) in its second possible sense of 'to hide'. And thirdly, such close-knit collocations are capable of a type of nominalization which involves no nominalizing affixes. Thus item (2) has the nominalized form fàkyé 'forgiveness', as exemplified in:

- (69) fakyé fá kpale bá sua zó
(forgiveness makes for welfare in a town)

ii. Loose Collocations

Examples of loose collocations are: 3. sia fa 'to take back, reappoint, re-engage' and 4. tane maa 'to sell to'. The use of item (3) is exemplified by:

- (70a) Kofí ézia éva Akyé
(Kofi has taken Akys back)

With a loose collocation, it is possible to omit one constituent without producing an unacceptable clause. Thus alongside (70a) we may find:

- (70b) Kofí ézia
(Kofi has gone back)
and (70c) Kofí éva Akyé
(Kofi has taken Akys)

Similarly, alongside (71a) below involving item (4):

- (71a) Kofí édone ye súá ne émaa Akyé
(Kofi has sold his house to Akys)

we shall, with the omission of the auxiliary constituent, attest:

- (71b) Kofí édone ye súá ne
(Kofi has sold his house)

Generally speaking, then, with a loose collocation the auxiliary constituent or either constituent can be omitted without producing an unacceptable clause. And for this reason, constructions involving loose collocations are more readily referable to underlying conjoined structures. Thus (70a) above may be derived from a pair of sentences of the type:

- (70a.I) Kofi ezia
(Kofi has gone back)
(70a.II) Kofi éva Akys
(Kofi has taken Akys)

Similarly, (71a) is derivable from a conjoined structure consisting of a pair of clauses:

- (71a.I) Kofi édone ye sua ne
(Kofi has sold his house)
(71a.II) Kofi éva ye sua ne émaa Akys
(Kofi has given his house to Akys)

Verbal groups which are characterized by such syntactic properties are distinguished as loose collocations. The term 'loose collocation' is here used to signify that, although the principal verb and the auxiliary verb co-occurring within such verbal groups lack semantic unity or keep their individual lexical meanings, they exhibit a certain degree of syntactic cohesion in that the order in which they occur is fixed, and a given principal verb may not co-occur with any other auxiliary verb within the same transitivity clause-type. Thus, the principal verb tone 'to sell' co-occurs with the auxiliary verb maa 'to give' (which corresponds to the English preposition 'to') in the ditransitive verbal group tone maa 'to sell to' and may not select any other simple verb as its auxiliary verb within a ditransitive clause. Similarly, the principal verb ka 'to say' selects as its auxiliary verb the simple verb kile 'to show' (which is equivalent in this particular collocation to the English preposition 'to') or is selectionally restricted as a ditransitive verbal group to the auxiliary verb kile. It is in this sense that verbal groups such as items (3 - 4), which exemplify a loose collocation, are said to exhibit syntactic cohesion rather than semantic unity.

Characteristic properties of verbal groups

Verbal groups are characterized by the following properties:

(I) As already mentioned, any ingressive aspect marker is, as a rule, restricted to the principal verb. Thus corresponding to:

- (72a) yeha edweké ne yéhile Kofi
(he has reported the matter to Kofi)

we shall find with itive-ingressive aspect:

- (72b) yehóha edwské ne yéhile Kofí
(he has gone and reported the matter to Kofi)

and with ventive-ingressive aspect:

- (72c) yeráha edwské ne yéhile Kofí
(he has come and reported the matter to Kofi)

The repetition of the ingressive aspect marker in both the principal and the auxiliary verb results in an unacceptable clause. Thus alongside (72a), we shall neither find:

- (72d) * yehoha edwské ne yehohile Kofi
nor (72e) * yeraha edwské ne yerahile Kofi

(II) The linear order in which the principal verb and the auxiliary verb co-occur within a particular verbal group is fixed and unalterable.

(III) As a rule, verbal groups take animate subject noun phrase. The verbal group bu sia in the sense of 'to rebound upon' is exceptional in taking an inanimate subject noun phrase, as in:

- (73) wo áyilé ne bábu ázia wo
(your fetish will rebound upon you)

(IV) As a rule, a definite inanimate object noun phrase occurring after the principal verb, is not pronominalizable by ye 'it', as the following pair of clauses with the verbal group ka kile 'to report to' illustrate:

- (74a) yeha edwské ne yéhile Kofí
(he has reported the matter to Kofi)
(74b) yeha yéhile Kofí
(he has reported it to Kofi)

We might, therefore, say that the principal verb in a verbal group, regarded as a simple verb, belongs to the sub-class

of simple transitive verbs which do not favour the pronominalization of a definite inanimate object noun phrase. The principal verb tone 'to sell' occurring within the ditransitive verbal group tone maa 'to sell to' is exceptional in favouring pronominalization, as the following pair of clauses illustrate:

(75a) medone suá ne mémaa Kofí
(I have sold the house to Kofi)

(75b) medone ye mémaa Kofí
(I have sold it to Kofi)

(V) Both verbs co-occurring within verbal groups, and, therefore, such verbal groups themselves, are dynamic. For example, the stative verbal form vea 'to be hidden' cannot substitute for its dynamic verbal form fea 'to hide' within the complex semi-transitive verbal group fa fea 'to hide'. In this connection, it is to be noted that a clause containing a verbal group in which the auxiliary verb is a dynamic verbal form, may be related to a corresponding clause involving the stative verbal form as a causative to a non-causative. The following related pair of clauses involving the verbal group fa fea 'to hide' and the stative verbal form vea 'to be hidden' illustrate:

(76a) Kofí éva bulúku ne évea (complex semi-
esumí ne ábo transitive, causa-
(Kofi has hidden the tive, dynamic)
book under the pillow)

(76b) bulúku ne véa esumí ne ábo (semi-transitive,
(the book is hidden under non-causative,
the pillow) stative)

(VI) Verbal groups, particularly close-knit collocations, are characterised by a type of nominalization which does not involve any nominalizing affixes. The following examples illustrate:

	<u>Verbal group</u>		<u>Nominalization</u>
1.	so nea 'to taste; to test'	sonéá	'examination'
2.	die di 'to believe in, trust'	diedi	'faith, belief'
3.	fa kye 'to forgive'	fakyé	'forgiveness'
4.	ye kile 'to show, reveal'	yekilé	'revelation, vision'
5.	di wula 'to incite; instigate'	diwúlá	'incitement, instigation'

As the above examples show, the syllables of the auxiliary verbal constituent have high tones within the nominalization.

Transitivity sub-types of verbal groups

As with simple verbs, complementation may or may not occur with verbal groups. Where no complementation is possible, we distinguish an intransitive verbal group. Among verbal groups which require complementation, we shall distinguish transitive, complex semi-transitive, semi-transitive and ditransitive on the basis of the type of complementation.

The different transitivity types of clauses involving verbal groups will be discussed, along with simple verbs, in Chapter 6 on transitivity.

2.C: Compound verbs

Combinations which are here termed as compound verbs are exemplified by the following:

1. ka bo nuhua 'to reconcile'
2. die to nuhua 'to accept, believe (a statement),
to trust'
- 3a. buke to nwole 'to leave (door) ajar'
- 3b. bukebuke gua nwole 'to leave (many doors) ajar'
4. fa sia zole 'to join'
5. fa wula ssale nu 'to entrust'
6. bu enyele gua zole 'neglect, to turn a blind eye to'

As the above examples show, compound verbs, like verbal groups, consist of a principal verb and an auxiliary verb. Structurally, three sub-sets may be distinguished: (i) those like items (1 - 4), in which the auxiliary verb is followed by a 'local' inalienable noun; (ii) those like item (5), in which the auxiliary verb is followed by a locative adjunct (which is a genitive construction consisting of a possessive 'corporal' inalienable noun plus the (possessed)^{root} form of a 'local' inalienable noun); and (iii) those like item (6), in which the principal verb takes as its nominal object a corporal inalienable noun and the auxiliary verb is followed by a local inalienable noun. It is to be noted that item (1) alone takes animate plural object noun phrase occurring after the principal verb, as in:

- (77) yeha be yebo nuhua
(he has reconciled them)

Item (2), on the other hand, may take an animate or inanimate object noun phrase occurring after the principal verb, as in:

(78a) yelie Kofí yédo nuhuá
(he trusts Kofi)

(78b) medie lóya Kofí édwéké ne méto nuhuá
(I believe Lawyer Kofi's statement)

All the other items (3 - 6) take inanimate object noun phrase, occurring, in the case of items (3 - 5), after the principal verb and, in the case of item (6), occurring after the auxiliary verb.

Item (3) is regarded as exemplifying a loose collocation, since alongside:

(79a) yebuke alénke ne yédo nwolé
(he has left the door ajar)

and (80a) yebukebuke nlénke né mo yégua nwolé
(he has left the doors ajar)

we shall find, with the omission of their respective auxiliary constituents:

(79b) yebuke alénke ne
(he has opened the door)

and (80b) yebukebuke nlénke né mo
(he has opened the doors)

All the other items exemplify close-knit collocation. We may exemplify with item (6), as in:

(81a) Kofí ébu o nyé égua edwéké ne ázo
(Kofi has neglected the matter)

alongside which, we shall not find:

(81b) * Kofi ébu o nye

It is to be noted that in (81a) above, the subject noun phrase

and the possessive pronoun in the object noun phrase occurring after the principal verb are, and must be, co-referents.

Phonological and Grammatical features of the verb

The simple or single-word verb is characterised by the following phonological features:

(I) All simple verbs are marked by a stem-initial consonant, which may be a nasal or non-nasal consonant; that is to say, no simple verb begins with an initial vowel syllable¹ or a syllabic nasal consonant.

(II) The constituent syllables of a simple verb do not contain a long vowel or a sequence of two like vowels realizable in speech as a long vowel.

(III) With simple verbs, the phonological feature of nasalisation (rather than tone as in the case of noun words²) is lexically distinctive. The following pairs of simple verbs are distinguished by nasalisation alone:

-
1. The irregular verb asolo 'to be different' is the only verb that begins with a vowel prefix.
 2. The nominals: adale/adale/ 'liar' and adanle/ãdãnlẽ/ 'mendicant, beggarly' are distinguishable by nasalisation and are the only pair of nominals known to the present writer which are lexically distinguished by nasalisation.

	<u>Non-nasalised</u>		<u>Nasalised</u>	
a) GV verbs:	1. su /sɨ /	'to measure'	su /sũ /	'to cry, weep'
	2. to /tɔ /	'to throw'	to /tũ /	'to cook'
	3. twi/kywi/	'to grate'	twi/kywĩ/	'to wring, drip'
	4. fe /fɪ /	'to vomit'	fe /fĩ /	'to loot'
	5. ka /ka /	'to bite'	ka /kã /	'to say'
b) CVV verbs:	6. sua/suwa/	'to set a trap'	sua/sũwã/	'to tear, to prop against'
	7. toa/tɔwa/	'to pursue'	toa/tũwã/	'to report'
	8. tia/t(i)ja/	'to walk; to kick'	tia/t(ĩ)jã/	'to count'
	9. fea/f(ɪ)ja/	'to hide'	fea/f(ĩ)jã/	'to cook soup'
c) CVLV verbs:	10. kpula/ kpɛla/	'to injure'	kpunla/ kpɛnlã/	'to be quiet, to direct against'
	11. kpola/ kpola/	'to visit'	kpɔnlã/ kpɔnlã/	'to fix'
	12. tili/tɛli/	'to be blunt'	tinli/ tɛnlĩ/	'to press'
	13. bele/bɛli/	'to bend'	benle/ bɛnlĩ/	'to make invulne- rable'

As the above examples show, lexical distinction by means of nasalisation is restricted to mono-syllabic CV verbs and di-syllabic verbs of CVV or CVLV structure. And it is also to be noted that simple verbs of the same syllabic structure, unlike noun words, are not classifiable in respect of their tonal pattern.

(IV) With verbs, consonant mutation as a phonological feature of reduplication may serve as one synchronic means of distinguishing the different senses or meanings of lexical items. The following examples illustrate:

<u>Verb stem</u>	<u>Reduplicated form</u>
14a. tia/t(i)ja/ 'to walk, toddle'	tiedia/ 'to walk, t(ij)ed(i)ja/ toddle'
14b. tia/t(i)ja/ 'to kick'	tietia/ 'to kick' t(ij)ed(i)ja/
15a. sua/sūwā/ 'to prop against'	suozua/ 'to prop s(uw)ozūwa/ against'
15b. sua/sūwā/ 'to tear'	suosua/ 'to tear' s(uw)osūwa/
16a. kpolo/kpolo/ 'to put dress on or off'	kpolomgbolo/ 'to be loose' kp(ol)omgbolo/
16b. kpolo/kpolo/ 'to bruise'	kpolokpolo/ 'to bruise' kp(ol)okpolo/

(V) Lip-rounding as a prosodic feature of a stem-initial syllable containing the close back rounded vowels /u, U/ may be extended into the following syllable, if the consonant element of the latter syllable is realized (i) as the voiced bi-labial plosive /b/ (symbolized as B) co-occurring in the same syllable with either the unrounded front, half-close vowel /e/ or the unrounded open, central vowel /a/, or (ii) as the voiced bi-labial nasal consonant /m/ (symbolized as M) co-occurring in the same syllable with the vowel /a/. The feature of lip-rounding is stated as w-prosody and indicated outside the round brackets either

as a subscript when functioning as a syllable prosody of the stem-initial syllable or as superscript when functioning as a syllable-initial prosody of the following syllable, and any nominal vowel prefix is represented in the phonological formulae by a. And if, for present purposes, we adopt a three-term vowel system (instead of the two-term system proposed in the general phonological analysis of vowels proposed in Chapter 2), and symbolize the front half-close vowel /e/ by E and the open, central vowel /a/ by A (without indicating syllable prosodies relating to unrounded lips); we might formularise this feature of extended lip-rounding by two phonological rules of the type:

- (Ia) H [(BE)] → H [^w(BE)] / H [(CI)_w] ---
 (Ib) L [(BA)] → L [^w(BA)] / H/L [(CI)_w] ---
 (II) L [(MA)] → L [^w(MA)] / H/L [(CI)_w] ---

Simple verb words and noun words are distinguished in respect of this particular phonological feature, since verb words (9 - 10) exhibit only the second type of extended lip-rounding, whereas noun words (1 - 8) exhibit both types. The following examples illustrate:

Type Ia:

1. sube /subé/ 'soup' H [(CI)_w ^w(BE)]
 2. adube/ædube/ 'mould' H [a(CI)_w ^w(BE)]

Type Ib:

3. duba /duba/ 'mortar' H [(CI)_w] L [^w(BA)]
 4. aluba/æluba/ 'beans' H [a(CI)_w] L [^w(BA)]
 5. toba /tUba/ 'bottle' L [(CI)_w ^w(BA)]

6. koba /kŭbá / 'hook' L [(CI)_w ^w(BA)]

Type II:

7. duma /dŭmã/ 'name' H [(CI)_w] L [^w(MA)]

8. nwoma /nŭmã/ 'learning' L [(CI)_w ^w(MA)]

9. fuma /fŭmã / 'to swell' H [(CI)_w] L [^w(MA)]

10. noma /nŭmã/ 'to sink,
dive' L [(CI)_w ^w(MA)]

(VI) As mentioned above, verbs can be converted into nominals by productive morphological processes, whereas verbs cannot be derived from nouns.

In addition to these characteristic phonological and morphological features of the verb word, the verb as a linguistic unit, which may be single-word or multi-word, is defined by the grammatical categories of mood, polarity, tense, number, person, transitivity and aspect that need to be set up for a synchronic description of the verbal piece. Some of these grammatical categories, namely number and person, are also statable for the nominal piece; but along with the other grammatical categories, they constitute a set of defining grammatical features of the verb as distinct from other word classes, for example, the noun.

For ease of reference, these grammatical categories together with the systems of their terms are summarised below:

SUMMARY: CATEGORIES OF THE VERBAL PIECE IN NZEMA

CATEGORY I: Mood

- 1) Indicative; 2) Interrogative; 3) Imperative:
Direct/Indirect.

CATEGORY II: Polarity

- 1) Positive; 2) Negative.

CATEGORY III: Tense

Tense 1, Habitual; Tense 2, Present; Tense 3, Continuous; Tense 4, Durative; Tense 5, Progressive; Tense 6, Future I; Tense 7, Future II; Tense 8, Perfect; Tense 9, Past; Tense 10, Consecutive.

CATEGORY IV: Number

- 1) Singular; 2) Plural.

CATEGORY V: Person

- 1) First person singular and plural
- 2) Second person singular and plural
- 3) Third person singular and plural; Impersonal.

CATEGORY VI: Transitivity

- 1) Transitive; 2) Complex transitive; 3) Intransitive;
- 4) Complex semi-transitive; 5) Semi-transitive;
- 6) Ditransitive; 7) Relational.

CATEGORY VII: Aspect

- 1) Ingressivity: Normal/Ingressive; Ingressive: Ingressive/ventive.
- 2) Stativity: Dynamic/Stative.
- 3) Causativity: Causative/Non-causative.

CHAPTER 2

PHONETICS AND PHONOLOGY

The phonetics and phonology of Nzema are fairly well documented¹, and in this chapter only those aspects of Nzema phonetics and phonology need be dealt with that will supply the necessary background for the description, including the transcription, presented in subsequent chapters.

Vowel articulation

Nzema has ten vowel sounds. In the current orthography, the ten vowel sounds are represented by seven vowel letters, of which the three letters, e, a, o (i.e. Nos. 2, 4 and 6 respectively) have two phonetic values each as shown in Table 1 below:

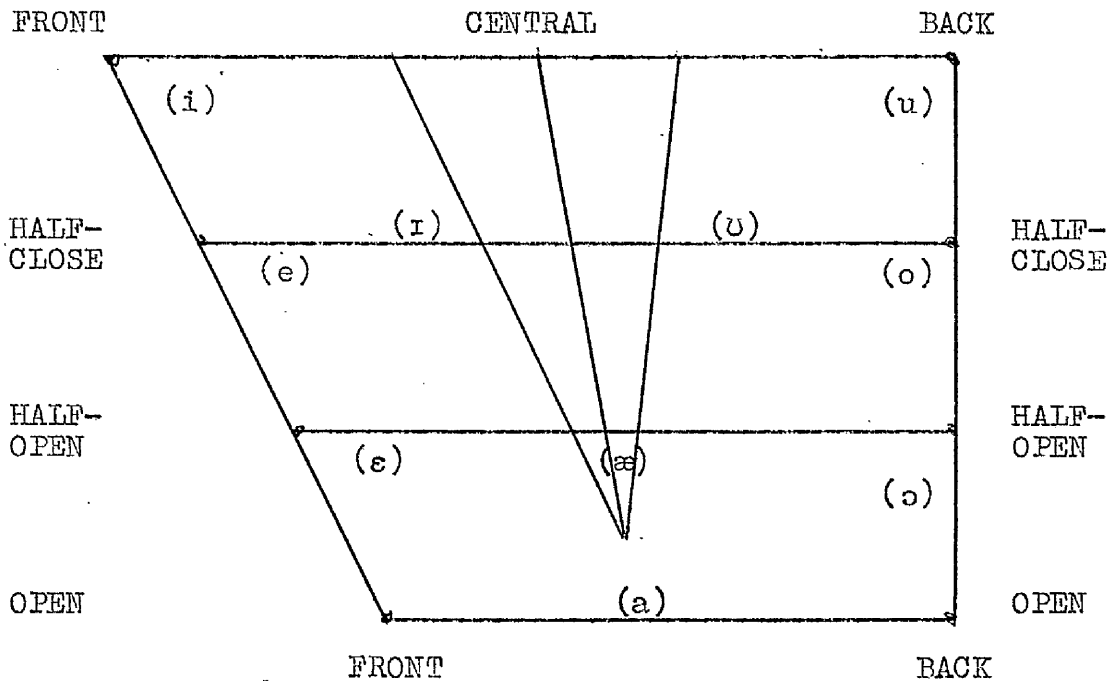
	<u>Orthography</u>	<u>Transcription for vowel sounds</u>
1.	i	/ i /
2.	e	/ ɪ /
	e	/ e /
3.	ɛ	/ ɛ /
4.	a	/ æ /
	a	/ a /

-
1. See in particular: (1) Chinebuah, I. K. (1962). A Phonetic and Phonological Study of the Nominal Piece in Nzema. Unpublished Master's thesis, University of London.
- (2) Mock, C. C. (1969). The Grammatical Units of the Nzema Language: A Systemic Analysis. Unpublished Ph.D. thesis, University of London.

	<u>Orthography</u>	<u>Transcription for vowel sounds</u>
5.	u	/ u /
6.	o	/ ʊ /
	o	/ o /
7.	o	/ ɔ /

Table 1

The approximate tongue position for the ten vowel sounds of Nzema, in relation to the accepted positions of the Cardinal Vowels, are shown on the vowel diagram as Table 2 below:



The dots represent Cardinal Vowel positions

Enclosed vowels represent Nzema vowels

Table 2

Distribution of vowels

(I) All the ten vowel sounds occur in monosyllabic CV (i) verb stems, and in disyllabic CVCV verb stems (ii), they may occur either in first or second position, as illustrated by the following examples:

- | | | | | |
|-----|-------|-----|---------------|-------------------------|
| 1. | / i / | i. | di /di?/ | 'to eat' |
| | | ii. | fiti/fiti?/ | 'to make a hole' |
| 2. | / ɪ / | i. | fe /fi?/ | 'to vomit' |
| | | ii. | bede/bidi?/ | 'to struggle' |
| 3. | / e / | i. | se /se?/ | 'to carve' |
| | | ii. | kele/kele?/ | 'to become erect' |
| 4. | / ɛ / | i. | pe /tpe?/ | 'to cut' |
| | | ii. | bete/bete?/ | 'to crush' |
| 5. | / æ / | i. | nyia/nyæ?/ | 'to obtain' |
| | | ii. | kakyi/kækyi?/ | 'to change' |
| 6. | / a / | i. | nya /nyã?/ | 'to bend fish' |
| | | ii. | kpata/kpata?/ | 'to strike on the head' |
| 7. | / u / | i. | tu /tu?/ | 'to uproot' |
| | | ii. | butu/butu?/ | 'to stoop, overturn' |
| 8. | / ʊ / | i. | to /tʊ?/ | 'to throw' |
| | | ii. | koto/kʊtʊ?/ | 'to kneel' |
| 9. | / o / | i. | so /so?/ | 'to peck; bear fruit' |
| | | ii. | kolo/kolo?/ | 'to melt' |
| 10. | / ɔ / | i. | ko /kɔ?/ | 'to go' |
| | | ii. | foto/foto?/ | 'to knead' |

In disyllabic verb stems, the vowel / ə / usually occurs in the first syllable before syllables containing the vowels /i, u /:

1. kakyi / kækɣi? / 'to change'
- tanli / tãnlĩ? / 'to scorch'
2. kanduu / kãndũ: / 'protruding'

(II) Of the ten vowels, a set of four, comprising

1. the front half-close vowel /e/; 2. the front half-open /ɛ/; 3. the half-open central vowel /æ/ and 4. the open central vowel /a/, occurs with low tone in initial position as nominal prefixes. Back vowels, as a rule, never occur in initial position.

1. / e / ebia /ebía / 'chair'
2. / ɛ / elɛka /eléka / 'box'
3. / ə / abusua/əbusũwã/ 'clan'
4. / a / aboka /abúka / 'kente cloth'

Of the set of four vowels, only the central vowels / ə, a / function as plural formative prefixes.

	<u>Singular</u>		<u>Plural</u>
1.	/ ə /	sua /suwã/ 'house'	azua /əzuwã/
		kila/kɛla/ 'mouse'	ahila/əhɛla/
2.	/ a /	bolɛ/búɛ/ 'stone'	awolɛ/awúɛ/
		kɛɛɛ/kéɛɛ?/ 'blow'	ahɛɛɛ/ahéɛɛ?/

Phonological analysis of vowel sounds

The phonological analysis of the ten Nzema vowels presented here is in terms of the prosodic approach to phonological analysis.

The illustrative verbal pieces which follow are all 3rd person singular progressive tense positive forms and provide one instance of vowel harmony or the syntagmatic relation between the vowel qualities in successive syllables. The uniform constituent structure of the verbal pieces is made up as follows: pronominal subject (written as o) + progressive tense prefix (written as -le-) + the verb stem.

- | | | |
|------|------------------|-------------------------------|
| (1a) | olepi /olétpi?/ | 'it (the soup) is thickening' |
| (1b) | olepe /olétpr?/ | 'he is struggling' |
| (2a) | oletu /olétu?/ | 'he is moving' |
| (2b) | oleto /olétu?/ | 'it (the hen) is laying' |
| (3a) | olese /olése?/ | 'he is carving it' |
| (3b) | olese /olése?/ | 'he is cracking it' |
| (4a) | olefo /oléfo?/ | 'he is sucking' |
| (4b) | olefo /oléfo?/ | 'he is anointing' |
| (5a) | olenyia/olényã?/ | 'he is getting' |
| (5b) | olenya/olényã?/ | 'he is bending the fish' |

In the above examples, the transcription /o, o/ of the 3rd person pronominal subject (uniformly written as o) and /le, le/ of the following progressive tense prefix (also uniformly written as -le-) indicates a difference in pronunciation.

The half-close back vowel quality /o/ regularly occurs as the pronominal subject where the vowels in the verb stems are the Set I vowels: /i, u, e, o, æ/ (the (a) examples). The more open vowel quality /o/ regularly occurs as the pronominal subject where the vowels in the verb stems are the Set II vowels: /ɪ, ʊ, ɛ, ɔ, a/ (the (b) examples).

Similarly, the vowel in the progressive tense prefix is realized as the front half-close vowel quality /e/ where the vowels in the verb stems are the Set I vowels: /i, u, e, o, æ/ (the (a) examples) and as the more open vowel quality /ɛ/ where the vowels in the verb stems are the Set II vowels: /ɪ, U, ɛ, o, a/ (the (b) examples).

Phonologically, if the ten vowel sounds occurring in the verb stems are generalised by V, two degrees of openness may be distinguished; namely, a close V element symbolized as I for the close front or back vowels /i, ɪ; u, U/ (examples 1 - 2 (a-b)) and non-close V element symbolized as E for the mid front or back vowels: /e, ɛ; o ɔ/ (examples (3 - 4(a-b))) as well as for the open central vowels /æ, a/ (examples (5a-b)).

In each of the above examples, there is a mutual dependence, irrespective of the stem-initial consonants of the verb stems, between the vowel qualities in the syllable of the pronominal subject, the progressive tense prefix and the verb stems, such that it is possible to group the ten vowels occurring in the verb stems into five sets of pairs: i/ɪ, u/U, e/ɛ, o/ɔ, æ/a, the first member of each pair having a closer quality than the second member which has a more open quality. And in order to differentiate phonologically between the members of each pair a two-term syllable prosodic system, H-/L-prosody, is set up. The phonetic exponents of H-prosody include a closer^{or} tense vowel quality, a higher tongue position or advanced tongue-root in contradistinction to the phonetic exponents of L-prosody, which include opener or lax vowel quality, lower tongue position

or non-advanced tongue-root. In the phonological formulae, the symbols, H and L, are written outside the square brackets.

The third dimension of vowel quality, which has to do with the rounding or unrounding of the lips during the articulation of a syllable involving a vowel, is dealt with in terms of a two-term syllable or word prosodic system, y-/w-prosody, which is stated, in the analysis adopted here, for only the close V element - I, and a three-term syllable or word prosodic system, y-/w-/ə-prosody which is stated for the non-close V element -E. The phonetic exponents of y-prosody include unrounded or spread lips associated, as an articulatory feature, with syllables involving the front close or half-close vowels, and the phonetic exponents of w-prosody include rounded lips, associated as an articulatory feature, with the back close or half-close vowels, and ə-prosody is realized phonetically as neutral lips, associated, as an articulatory feature, with syllables involving the open central vowels. In the phonological formulae, the symbols, y, w, ə, are written outside the round brackets to indicate that it is a feature of the syllable as a whole.

With particular reference to the open central vowels /æ, a/, it would seem analytically possible to set up a third V element symbolized as A. There is, however, clear formal evidence in support of the approach adopted here; that is, the approach which treats the front or back half-close vowels as well as the open central vowels as the same V element-E.

For instance, in reduplicated forms of verb stems, the open central vowels may be realized either as the front vowels /e, ε/ or the back vowels /o, ɔ/, as the following examples illustrate:

	<u>Verb stem</u>		<u>Red. form (I)</u>	<u>Red. form (II)</u>	<u>Vowel relation</u>
1a)	nyia/nyæ/	'to set on edge	nyinyia/ nyĩnyæ̃/	/nyĩnyẽ: nyæ̃/	æ/e
b)	tia/t(i)ja/	'to walk'	tiedia/ t(ij)ed(i)ja/		a/e
c)	biza/biza/	'to ask'	bizebiza/ bizebiza/		"
2a)	nya/nyã/	'to bend'	nyenya/ nyĩnyã̃/	/nyĩnyẽ: nyã̃/	a/e
b)	boda/bŭda/	'to in- jure'	bodsboda/ bŭdebŭda/		"
c)	fea/f(i)ja/	'to hide'	fevea/ f(ij)ev(i)ja/		"
3a)	fula/fəla/	'to col- lect'	fulovula/ f(əl)ovəla/		a/o
		(or	fulevula/ f(əl)evəla/		a/e)
b)	sua/suwa/	'to set trap'	suozoa/ s(uw)ozuwa/		a/o
4a)	kpola/ kpola/	'to brush off'	kpələkpola/ kp(əl)əkpola/		a/o
b)	tpoa/tŭwã/	'to re- port'	toɔdoa/ t(ŭw)ɔdŭwã̃/		"

In view of this relation, it would seem analytically more desirable to treat together the front or back half-close and half-open vowels /e, ɛ; o, ɔ/ as well as the open central vowels /æ, a/ in terms of the same V element -E and to deal with differences relating to the articulatory feature of lip positions by means of the three-term system, y-, w-, or ə-prosody, set up.

The above phonological analysis of the ten vowel sounds of the language is summarized in Table 3 below:

V Element	Word/Syllable prosody		Syllable prosody
Close I	H	L	
	i	ɪ	y (Front)
	u	ʊ	w (Back)
Non-Close E	e	ɛ	y (Front)
	o	ɔ	w (Back)
	æ	a	e (Central)

Table 3

In the phonological structure of the ten examples (1-5(a-b)) which follows, the consonant element in the syllable of the progressive tense prefix -lɛ is represented by the symbol R:

- (1a) ɔlɛpi /ɔletpi/ H [(E)w (RE)y (CI)y]
- (1b) ɔlɛpɛ /ɔletpɪ/ L [(E)w (RE)y (CI)y]
- (2a) ɔlɛtu /ɔletu/ H [(E)w (RE)y (CI)w]
- (2b) ɔlɛto /ɔletʊ/ L [(E)w (RE)y (CI)w]
- (3a) ɔlɛsɛ /ɔlɛsɛ/ H [(E)w (RE)y (CE)y]
- (3b) ɔlɛsɛ /ɔlɛsɛ/ L [(E)w (RE)y (CE)y]
- (4a) ɔlɛfo /ɔlɛfo/ H [(E)w (RE)y (CE)w]
- (4b) ɔlɛfɔ /ɔlɛfɔ/ L [(E)w (RE)y (CE)w]
- (5a) ɔlɛnyia /ɔlɛnyæ/ H [(E)w (RE)y (CE)ɛ]
- (5b) ɔlɛnya /ɔlɛnyä/ L [(E)w (RE)y (CE)ɛ]

On the basis of the phonological analysis of the relationship of vowel qualities in the ten examples, two types of monosyllabic verb stems may be distinguished and specified as H-type or L-type; that is, the H-type or L-type of feature is regarded as a characteristic of the verb stem and the vowel in the pronominal subject or the syllable of the progressive tense prefix is assimilated to the H-type or L-type feature which characterizes the verb stem. If the stem-initial consonants are generalized by C, as in the above phonological formulae, the ten verb stems in the verbal pieces may be specified in terms of H-type or L-type, as set out below:

<u>H-type</u>	<u>L-type</u>
(1a) pi /t _p i / H [(CI) _y]	1b) pe /t _p i / L [(CI) _y]
(2a) tu /t _u / H [(CI) _w]	2b) to /t _u / L [(CI) _w]
(3a) se /s _e / H [(CE) _y]	3b) se /s _e / L [(CE) _y]
(4a) fo /f _o / H [(CE) _w]	4b) fo /f _o / L [(CE) _w]
(5a) nya/nyã / H [(CE) _e]	5b) nya/nyã / L [(CE) _e]

Nasalization of vowels

The following generalization can be made in respect of vowel nasalization:

- a) Vowels are predictably nasalized when they precede or follow the nasalized frictionless continuant or naso-lateral consonant /nl/ and also when they co-occur in the same syllable with a preceding nasal consonant. This type of predictable nasalization has been traditionally designated as 'dependent' nasalization in contradistinction to

'independent' nasalization which is realizable in forms or syllables which do not contain nasal consonants or the nasalized frictionless continuant.

b) As a rule, no voiced non-nasal consonants¹ (including semi-vowels) co-occur in the same syllable with nasalized vowels.

c) The front and back mid vowels /e,ɛ; o, ɔ / do not, as a rule, occur dependently or independently nasalized and are always oral, particularly in mono-syllabic CV and disyllabic CVV verb stems; that is, there are no verb stems which are distinguished by contrasts² between oral and nasalized vowels of this set, and there are no verb stems which contain a nasal consonant followed by a nasalized vowel from this set.

d) All other vowels may be independently nasalized when they co-occur with voiceless (non-nasal) consonants, which are restricted to the voiceless plosives /t, tɸ, k, kɸ/, affricates /ky, kyw/, fricatives /f; s, sy/ and the labialized fricative /fw/³.

-
1. The only exceptions are: 1. gya/gyã/ 'to be enthused'; 2. be/bĩ/ 'to be well cooked; to be invulnerable'; and 3. bɔ/bɔ̃/ 'to smell'. Items (2 - 3) are the intransitive, stative verbal forms of the transitive, dynamic verbal forms: 2a) benle/bẽnlĩ/ 'to make invulnerable' and 3a) bɔn/bɔ̃n(ĩ)/ 'to smell of' respectively.
 2. The only known contrasts involving a vowel of the set are: 1a) bɔ/bɔ̃/ 'to beat; to break' and 1b) bɔ/bɔ̃/ 'to smell (for which see Footnote (1) above).
 3. With /fw/ independent nasalization is not lexically distinctive

Independent nasalization, particularly in mono-syllabic CV and disyllabic CVV verb stems in which the C element is phonetically realized as one of the set of voiceless consonants may be lexically distinctive; and, as already mentioned in the introductory chapter, lexical distinction by independent nasalization is a characteristic feature of verbs as distinct from noun words. The following examples illustrate:

	<u>Non-nasalized</u>		<u>Nasalized</u>	
CV verbs:	1. to /tʊ /	'to throw'	to //tũ /	'to cook'
	2. ta /ta /	'to shine'	ta /tã /	'to flatulat
	3. pe /tpɪ /	'to struggle'	pe /tpĩ /	'to drip; t stop rain- ing'
	4. ka /ka /	'to bite'	ka /kã /	'to say'
	5. kpa/kpa /	'to shave'	kpa/kpã /	'to drive away'
	6. kye/kyɪ /	'to catch; to bind'	kye/kyĩ /	'to grow fat'
	7. twi/kywi/	'to grate'	twi/kywĩ/	'to wring'
	8. fu /fu /	'to blame'	fu /fũ /	'to dig hole'
	9. fo /fʊ /	'to climb'	fo /fũ̃ /	'to offend'
	10. fi /fi /	'to grow'	fi /fĩ /	'to beat, hit'
	11. fe /fɪ /	'to vomit'	fe /fĩ /	'to loot'
	12. su /su /	'to measure; to compete'	su /sũ /	'to cry'
	13. sa /sa /	'to collect; to castrate'	sa /sã /	'to hang up'
	14. sia/syæ /	'to return'	sia/syæ̃ /	'to become watery'

<u>Non-nasalized</u>	<u>Nasalized</u>
CVV verbs: 15. tia/t(i)ja/ 'to walk, kick'	tia/t(ĩ)jã/ 'to count'
16. soa/sŭwa / 'to carry on the head'	soa/sũwã / 'to send'
17. fia/f(i)ja/ 'to carry baby'	fia/f(ĩ)jã/ 'to un- thread'
18. fea/f(ɪ)ja/ 'to hide'	fea/f(ĩ)jã/ 'to cook soup'

e) Nasalization may also be lexically distinctive in the case of disyllabic CVLV verb stems in which the medial L element is realized as the oral frictionless continuant /l/ or its nasalized variety /nl/, as the following examples illustrate:

<u>Non-nasalized</u>	<u>Nasalized</u>
CVLV verbs: 19. bele/bɛlɪ/ 'to bend, twist'	benle/bɛnlĩ/ 'to make invulnera- ble'
20. kpula/kpɛla/ 'to reach; to hurt'	kpunla/kpɛnlã/ 'to direct against'
21. tili/tɛli/ 'to become blunt'	tinli/tɛnlĩ/ 'to press'
22. fola/fɛla/ 'to make climb'	fonla/fɛnlã/ 'to mix'
23. fili/fɛli/ 'to buy on credit'	finli/fɛnlĩ/ 'to breathe in phlegm'

Representation of Nasalization

In the current orthography, nasalization of the vowel is usually not indicated by any symbol. It should be mentioned, however, that in verbal nouns (which involve the nominalizing suffix -lɛ), some inalienable nouns which have a 'droppable' suffix (usually -lɛ) and a few alienable nouns with a final -lɛ syllable, the preceding nasalized syllable is indicated by placing the letter n after the syllable. The following examples illustrate:

<u>Nasalized Verb Stem</u>		<u>Verbal Noun Form</u>	
1a) ka /kã /	'to say'	shanlɛ/shãlɛ/	'saying'
b) mia/m(ĩ)jã/	'to press'	emianlɛ/em(ĩ)jãlɛ/	'pressing'

Inalienable Noun

- 2a) enloanlɛ/ẽnlũwãlɛ/ 'mouth'
 b) ebutuanlɛ/ebutũwãlɛ/ 'buttocks'

Alienable Noun

- 3a) hanlɛ/hãlɛ/ 'sore'
 b) koanlɛ/kwãlɛ/ 'hoe'

Such sequences of two letters nl (of which the first letter n has phonological significance) should be distinguished from the digraph nl, which is used in the orthography as well as in the transcription adopted in this thesis to represent the naso-lateral or nasalized frictionless continuant /nl/. And also in the transcription used in this thesis both dependently and independently nasalized vowels have been symbolized by the I.P.A. symbol ~ placed over the symbol of the nasalized vowel.

Vowel sequences

Generally speaking, successions of two vowels are phonetically uttered and perceived as a sequence of two separate, unlike vowel sounds, each bearing a separate tone. Such vowel sequences are phonologically analyzable as VV; that is, as two separate syllables or a sequence of two different V elements.

In slow deliberate speech, a junctural semi-vowel glide is characteristically uttered and perceived between the first and second syllables and may be a /w/-like glide or a /j/-like glide appropriate to the junction.

There are twelve such vowel sequences in the language. The linear arrangement of vowels in such sequences is constrained in such a way that not all vowels can occur as the first or second element. On the basis of the vowel quality of the first element in the sequence, three types (A-C) may be distinguished among such vowel sequences.

Type A : Where the first element is a close front vowel, which may be either /i/ or /ɪ/. Each sub-set is exemplified by three items of which the third, where possible, is a verb word.

I 1. / ie /

- | | | | |
|----|-------|-------------|----------------|
| 1. | debie | /deb(i)je / | 'something' |
| 2. | Mieza | /m(i)jezã / | 'a boy's name' |
| 3. | tie | /t(i)je / | 'to listen' |

II / ia /

- | | | | |
|----|-------|-------------|--------------------|
| 4. | ebia | /eb(i)ja / | 'chair' |
| 5. | biala | /b(i)jála / | 'any, every' |
| 6. | fia | /f(i)ja / | 'to carry (child)' |

III	/ɪs/		
7.	dādes	/dad(ɪ)jɛ /	'knife'
8.	Fames	/fam(ĩ)jɛ /	'a boy's name'

IV	/ia/		
9.	bosea	/bʊs(ɪ)jǎ /	'loan'
10.	mokyea	/mũky(ɪ)jǎ /	'hearth'
11.	fea	/f(ɪ)jǎ /	'to hide'

In Type A vowel sequences, the junction between the 1st and second elements is characterized, in slow deliberate speech, by a glide of a strong /j/-like quality. In normal speech, however, the first vowel is elided and the preceding consonant is palatalized; hence the transcription adopted here for such sequences. It is to be noted that vowel sequence Type A. III - i.e. /ɪs/ - does not occur in verb stems.

Type B : Where the 1st element is a close back vowel, which may be either /u/ or /ʊ/.

I.	/ue/		
12.	nzekue	/nzɛkuwé /	'gossip'
13.	elue	/ɛluwé /	'yam'
II.	/ʊɛ/		
14.	nvasoe	/mvasʊwɛ /	'profit'
15.	svaloɛ	/svalʊwɛ /	'bellows'
III.	/uo/		
16.	ebuo	/ebuwo /	'shed'
17.	tuoke	/tuwoke /	'hernia'
18.	tuo	/tuwo /	'proceed'

- IV. /ʊo/
19. etwiboo/ekywibŭwó/ 'sharpener'
20. etəfoo/etófŭwó/ 'accidental death'
- V. /ua/
21. sua /suwa / 'house'
22. dualə /duwale / 'tail'
23. mua /mūwā / 'to cover'
- VI. /ʊa/
24. ezəa /ezŭwá / 'a boy's name'
25. toalə /tŭwále / 'penis'
26. soa /sŭwa / 'to carry or wear on head'

In Type B sequences, rounded lips as a feature of the first syllable may continue through the second syllable, as exemplified by the Type B. III examples (16-18) and Type B. IV examples (19-20) or give way to unrounded lips as a feature of the 2nd syllable, as exemplified by Type B. I - II (examples 12-15) and Type B. V - VI (examples 21-26).

The junction between the first vowel and the second vowel in Type B sequences is characterized, in slow deliberate speech, by a glide of a strong /w/-like quality; and unlike in the case of Type A sequences, the first vowel in Type B sequences may not be elided in normal speech; hence the different transcription adopted for Type B sequences.

It is also to be noted that Type B. I - II, and B. IV sequences do not occur in verb stems.

Type C : Where the first element is a front half-open vowel /ɛ/ or an open central vowel /a/; the second element in Type C sequences is restricted to the front half-close vowel /i/.

I. /ɛi/

27. ehsee /shɛjɪ / 'yes'

28. mgbseba /ɱgɛjɪba / 'a kind of shell fish'

II. /ai/

29. debae /dɛbajɪ / 'in the past or olden days'

30. zehae /zɛhajɪ / 'this'

Type C vowel sequences, like those of Type A, are characterized by the presence of an unrounded vowel in both the first and second syllables. Type C sequences are, however, different in that the junction between the first and second vowels is characterized by a weak /j/-like glide and the vowel in the first syllable may not be elided; and in forms where the sequence is final (as in (27; 29-30), the final vowel /i/ may be pronounced very short and the semi-vowel glide is pronounced.

It is also to be noted that Type C sequences do not occur in verb words. Of the total number of twelve vowel sequences, only six occur in CVV verb stems; that is, 1. Type A.I /ie/, 2. Type A.II /ia/, 3. Type A.IV /ia/, 4. Type B.III /uo/, 5. Type B.V /ua/, and 6. Type B.VI /Ua/.

Phonologically, two sub-types of CVV verbs may be set up and distinguished as I. H/L [(CIE)y/w] and II. H/L [(CI)y/w] L [(E)ə].

If, however, we adopt a three-term V system instead of the two-term system proposed in the general analysis of the vowels, we might represent the two sub-types of CVV verbs as I. CIE and II. CIA respectively.

There are about forty CVV verbs in the language, of which CIE verbs, which are fewer, account for only seven of them, and the remaining thirty-three are CIA verbs. Table 4 below sets out the distribution of the phonetic realizations of the C element in relation to the six vowel sequences occurring in CVV verbs.

Charateristic features of CIE and CIA verbs

Before describing the characteristic feautres of each sub-type, a word must be said about the features of CVV verbs in general.

Firstly, it is a general feature of CVV verbs that both syllables are either nasalized or non-nasalized; that is, for all CVV verbs n-/ñ-prosody is statable as an element of structure of the word as a whole. As a rule, both syllables occur nasalized where the C element is realized as a nasal consonant or a voiceless consonant; no voiced non-nasal consonant co-occurs with a nasalized vowel sequence.

Secondly, the reduplicated forms of CVV verbs have at least two possible pronunciations, as the following examples illustrate:

<u>CVV verb stem</u>		<u>Red. Form</u>
1. sua /s̃uw̃a /	'to prop against'	suozua i./suwoz̃uw̃a / ii./s(uw)oz̃uw̃a/
2. doa /d̃Uwa /	'to wet'	doɔloa i./d̃Uwɔl̃Uwa / ii./d(Uw)ɔl̃Uwa/
3. die /d̃(i)je /	'to receive'	i./dijel̃ije / ii./d(ij)el̃(i)je/
4. tea /t̃(ɪ)j̃a /	'to shout'	tesdia i./t̃ijsd̃ij̃a / ii./t̃(ɪ)sd̃(ɪ)j̃a/

		I E				I A					
		1. i-e	2. u-o	3. i-a, ï-ã		4. I-á, Ï-ã		5. u-a, ù-ã		6. Û-a, Û-ã	
<u>PLOSIVE:</u>											
Labial	b	+	-	+	-	+	-	+	-	+	-
	tp	-	-	-	+	-	-	-	-	-	-
	kp	-	-	-	-	-	-	-	-	-	+
Apical	t	+	+	+	+	-	+	+	-	+	+
	d	+	+	-	-	-	-	+	-	+	-
EDorsal	k	-	-	-	-	-	-	-	+	-	+
<u>AFFRICATE:</u>											
Dorsal	ky	-	-	-	+	+	-	-	-	-	-
<u>FRICATIVE:</u>											
Labial	f	+	-	+	+	+	+	+	-	-	-
Apical	s	+	-	-	-	-	+	+	+	+	+
<u>NASAL:</u>											
Labial	m	-	-	-	+	-	-	-	+	-	-
Apical	n	-	-	-	-	-	+	-	+	-	+

Table 4

In examples (1-2), in which the first vowel element is realized as the back close vowels /u, ʊ/, the two possible pronunciations of the reduplicated forms are either i. four syllabled or ii. three-syllabled. On the other hand, in examples (3-4) in which the first vowel element is realized as the front close vowels /i, i/, the alternative pronunciations of the reduplicated forms are either i. four-syllabled or ii. two-syllabled.

Thirdly, with CVV verbs (1,4) which are characterized as a whole by nasality and in which the C element is realized as a voiceless (non-nasal) consonant, the syllable(s) of the reduplicative prefix is usually non-nasalized, although both syllables of the stem retain, within the reduplicated form, the feature of nasality. In the reduplicated forms of all CVV verbs in which the C element is phonetically realized as a voiceless (and, for the matter, also as a voiced non-nasal) consonant, we need to set up only \bar{n} -prosody for the reduplicative prefix, whereas for the verb stem in such reduplicated forms we need to set up n-/ \bar{n} -prosody. (For both the stem, in which the C element is realized as a nasal consonant, and its reduplicated form, n-prosody is stutable as an element of structure of the word as a whole.)

In this connection, it is perhaps significant to note that the vowels which occur in the second syllable of the reduplicative prefix are the mid vowels /e, e; o, o/, which as already noted, never occur nasalized.

In respect of the second and third features, CVV verbs resemble disyllabic CVLV verbs, particularly those in which the medial L element is phonetically realized as the nasalized frictionless

continuant or naso-lateral /nl/ (e.g. 1. sinla /sɛ̃nlã / 'to thread' whose reduplicated form: sinlezinla may be said either as i. /sɛ̃lezãnlã / or ii. /s(ɛl)ezãnlã /; and 2. tɛnla /tɛ̃nlã / 'to sit', whose reduplicated form: tɛnladenla may also be pronounced either as i. /tɛ̃lɛdɛnlã / or ii. /t(ɛl)ɛdɛnlã /. Note that in each case, the reduplicative prefix is characterized by the absence of nasality, whereas the stem occurring within the reduplicated form is characterized by the presence of nasality).

Fourthly, the d/l mutation, exemplified in (2-3), is exhibited by the reduplicated forms of only CVV verbs and, therefore, serves to distinguish CVV verbs from mono-syllabic CV verbs and disyllabic CVCV or CVNCV verbs.

I. CIE verbs : (where the sequence is from a close V element - I to the opener V element - E.)

The following are the seven CVV verbs which exemplify the CIE subtype:

- | | | | |
|----|-----|-----------|--|
| 1. | bie | /b(i)je / | 'to urinate' |
| 2. | tie | /t(i)je / | 'to listen' |
| 3. | tuo | /tuwo /1 | 'to proceed' |
| 4. | die | /d(i)je / | 'to receive' |
| 5. | duo | /duwo /1 | 'to proceed' |
| 6. | fie | /f(i)je / | 'to be well pounded' |
| 7. | sie | /s(i)je / | 'to keep, bury; to donate
at a funeral' |

1. The two items: 3. tuo/tuwo/ and 5. duo/duwo/are free variants.

The characteristic features of CIE verbs include:

- a. CIE verbs are characterized only by H-prosody; that is, L-prosody does not function for CIE verb stems;
- b. CIE verb stems are never nasalized, and there are no CIE verb stems in which the C element is phonetically realized as a nasal consonant; for CIE verb stems, as distinct from CIA verbs, therefore, only \bar{n} -prosody need be stated. In this connection, it is significant to note that the second vowel in the sequence is the front or back half-close vowels /e, o/, members of the set of mid vowels which, as already mentioned, never occur nasalized.
- c. As Table 4 shows, the C element is restricted, in its phonetic realizations, to the voiced or voiceless plosives /b, d; t/ and the voiceless fricatives /f, s/.

II. CIA verbs: (where the sequence is from a close V element -I to the opener V element -A)

The following are examples of CVV verb stems which exemplify CIA sub-type:

- | | | | |
|----|-----|---------------------------|--------------------------|
| 1. | pia | /tp(ĩ)jã/ | 'to push' |
| 2. | mia | /m̃/ /m(ĩ)jã/ | 'to press' |
| 3. | fea | /f(i)ja/ | 'to hide' |
| 4. | nea | /n(ĩ)jã/ | 'to look' |
| 5. | kua | /kũwã/ | 'to kindle' |
| 6. | nua | /nũwã/ | 'to put out, extinguish' |

7. soa /sŭwa / 'to put on or carry on head'
8. noa /nũwã / 'to give to drink'

The characteristic features of CIA verb stems include:

- a) CIA verb stems are characterized by either H-L-prosody or L-prosody; that is, there is no CIA verb stem which is wholly characterized by H-prosody.
b) Phonologically, CIA verb stems are further distinguished from CIE verb stems in that CIA verb stems, as a whole, may occur nasalized or non-nasalized and, therefore, n-/ñ-prosody is storable as an element of structure of the word as a whole.

As a rule, CIA verb stems are predictably nasalized where the C element is realized as a nasal consonant, which is restricted to /m; n/ (2; 4, 6, 8). Both syllables may also occur independently nasalized where the C element is realized as a voiceless non-nasal consonant, which may be a plosive /tp, kp, t, k/, a fricative /f, s/ or an affricate /ky/. As Table 4 shows, the nasalized vowel sequence /ĩã/ co-occurs with the set of consonants /tp, t, f, ky/, the sequence /ĩã/ with the set /t, f, s/; the nasalized vowel sequence /ũã/ with the set /k, s/; and the sequence /Ûã/ with the set /kp, t, k, s/.

Nasalization in CIA verb stems in which the C element is realized as the set of voiceless plosive and fricative consonants /t, f, s/ may be lexically distinctive. The following is the complete list of pairs of CIA verb stems which are distinguishable by nasalization:

	<u>Non-nasalized</u>		<u>Nasalized</u>	
i. /t/ :	1. tia/t(i)ja/	'to walk 'kick'	tia/t(i)jã/	'to count'
	2. toa/tUwa /	'to pursue, stay with'	toa/tÜwã /	'to report'
ii. /f/ :	3. fia/f(i)ja/	'to carry baby'	fia/f(i)jã/	'to unthread'
	4. fea/f(r)ja/	'to hide'	fea/f(ĩ)jã/	'to cook medicinal soup'
iii. /s/ :	5. sua/suwa /	'to set trap'	sua/süwã /	'to tear; prop against'
	6. soa/sÜwa /	'to put on or carry on head'	soa/sÜwã /	'to send'

c) It should be mentioned that four CIA verbs are not monomorphemic¹; each is relatable to a mono-syllabic CV verbal form~~y~~ from which it is derived by suffixation, as set out below:

<u>CV verbal form</u>		<u>CVV verb</u>		<u>Suffix</u>
1. zo/zÜ/	'to be wearing or carry- ing on head'	soa/sÜwa/	'to put on or carry on head'	/-wa/

1. We might perhaps also include the verbal form toa/tUwa/ 'to pursue' if relatable to to/tÜ/ in its sense of 'to catch up with'

<u>CV verbal form</u>		<u>CVV verb</u>		<u>Suffix</u>
2. no/nũ/	'to drink'	noa/nũwã/	'to give to drink'	/-wã/
3. nu/nũ/	'to go off'	nua/nũwã/	'to put out, extinguish'	/-wã/
4. se/sĩ/	'to pass'	sea/s(ĩ)jã/	'to allow to pass'	/-jã/

Finally, it should be mentioned that CVV verbs behave tonally like other disyllabic verbs of either CVCV (e.g. kpuda 'to wash') or CVNCV (e.g. kendɛ 'to wait') structure and in certain grammatical contexts the first syllable may contrast in tone with the second syllable, as the following 2nd person singular and plural direct imperative mood clauses illustrate:

	<u>Imperative, 2nd pers. sing.</u>		<u>Imperative, 2nd pers. plu.</u>
CVV :	1. nea/n(ĩ)jã / 'look at it'		benlea/bɛnl(ĩ)-jã/ 'all of you, look it'
	2. soa/sũwã / 'carry it'		bɛzoa/bɛzũwã/ 'all of you, carry it'
CVCV :	3. kpuda/kpudà/ 'wash it'		bɛkpuda/bɛkpù-dá/ 'all of you, wash it'
CVNCV:	4. kendɛ/kɛndɛ/ 'wait'		bɛhendɛ/bɛhɛn-dé/ 'all of you, wait'

The possibility of tonal contrast between the first and second syllables coupled with the morphological structure (verb stem + suffix) of the four CIA verbs constitute formal criteria in favour of regarding the succession of vowels occurring in CVV verbs as sequences rather than as diphthongs.

Current Orthography and Sequences of Vowel Letters

It should be noted that in the current orthography certain sequences of vowel letters, namely oa, oe, ua, and ue, occurring within the word before a restricted number of consonant letters may sometimes be realized not as a sequence of a close back rounded vowel and more open unrounded vowels but rather as a labialized consonant followed by a front or open vowel, as the following examples illustrate:

- | | | | | | | |
|-------|---------------|--------|-------|------------|-------------|-----------------|
| I. | 'f' | before | 'ua': | fuandi | /fwãndĩ | /'to throw' |
| II. | 'f' or
'v' | " | 'oa': | foanvoanle | /fwãnvwãnlĩ | /'coward' |
| III. | 'k' | " | 'oa': | ezukoa | /ezukwa | /'money' |
| IV. | 'k' | " | 'oe': | elonkoe | /elũŋkwe | /'snail' |
| V. | 'k' | " | 'ue': | kukue | /kukwe | /'coconut' |
| VI. | 'g' | " | 'oa': | ngoaye | /ngwajé | /'joke' |
| VII. | 'g' | " | 'ua': | gua | /gwæ | /'to pour out' |
| VIII. | 'h' | " | 'oa': | nohoale | /nohwalé | /'truth' |
| IX. | 'h' | " | 'ua': | nuhua | /nũhwã | /'the interior' |

In the above examples, the first vowel letter, either 'o' or 'u', may be regarded as the orthographic representation of the labialization of the preceding consonant, the former occurring, as a rule, in L-type syllable and the latter in H-type (except No. IX) syllable.

On the other hand, the letter 'i' in a sequence of vowel letters before a set of consonant and semi-vowel letters is sometimes used as the orthographic representation of palatalization (except No. XIII) in an H-type syllable:

X.	's'	before	'ia':	sia	/syæ	/'to return'
XI.	'ny'	"		nyia	/nyã	/'to obtain, benumb'
XII.	'n'	"		ya	/jæ	/'to meet'
XIII.	'ŋ'	"		nriandi	/ŋãdi	/'to run'
XIV.	'w'	"	'ie':	wie	/ɥe	/'to finish'

Long Vowels

The vowels of the language occur both short and long, and like short vowels, long vowels may occur nasalized or non-nasalized.

The tongue positions for the articulation of long vowels are much the same as those for their short varieties, except that the lip-position for the long vowels is more neutral, spread or rounded, as the case may be, than that for their short counterparts.

The description of long vowels presented here is limited to non-verbal pieces; for, as already mentioned in the introductory chapter, long vowels do not occur in mono-morphemic verb stems. Long vowels do, however, occur in 'secondary' reduplicated forms of verb stems (e.g. i. nya/nyã/ 'to bend fish', ii. 'primary' reduplicated form: nyenya/nyĩnyã/ iii. 'secondary reduplicated form: nyenyəsnyã/nyĩnyẽ:nyã/); and in the case of certain tense forms and imperative mood clauses vowel lengthening may be realized in junctural positions as a marker of emphatic speech or as a feature of the particular verbal piece. Such long vowels, particularly in instances where they characterize a particular verbal piece, will be dealt with at the appropriate places and treated as a characteristic feature of the particular verbal piece.

Long vowels, phonologically analyzable as V: occur initially, medially and finally.

I. Initial Position

Initial V: is restricted to the open central vowel /a:/ and occurs in a very small number of noun words, which may be exemplified by:

1. aakolo / a:kəlu / 'a kind of game'
2. aabe / á:bé / 'locust'

II. Medial Position

Medial V: realizable as the open central vowel /a:/ also occurs in a limited number of noun words:

1. Daalo / da:ló / 'Elmina (a place name)'
2. abaaba / ábá:ba / 'doll'

All the vowels of the language except the front or back close vowels /i, ɪ; u, ʊ/ occur long in medial position in ideophonic nouns (n), adjectives (adj.) and adverbs (adv.) and may be regarded as a distinctive feature of ideophones. The following examples illustrate:

1. /e:/
 - (a) weenyi /wé:ny(ĩ) / 'clear, bright' (adj.)
 - (b) kileenyi /kélé:ny(ĩ) / 'tall, erect' (adj., adv.)
2. /ɛ:/
 - (a) weenye /wé:ny(ĩ) / 'light, clear, bright' (adj., adv.)
 - (b) gysleenye /gyelé:ny(ĩ) / 'well, right' (adj., adv.)

3. /æ:/ (a) saanwu /sæ:ŋ(ũ) / 'healthy, clean, neat' (adj.)
 (b) tindaanwu /tãndæ:ŋ(ũ) / 'confused' (adj., adv.)
4. /a:/ (a) faanwo /fa:ŋ(ũ) / 'vast and wide' (adj.)
 (b) kangbaanwo /kãŋgbá:ŋ(ũ) / 'lean and lanky' (adj.)
5. /o:/ (a) koonwu /kó:ŋ(ũ) / 'quietly, reticent; quietly' (adj., adv.)
 (b) kuloonwu /kəló:ŋ(ũ) / 'deep' (adj.)
6. /ɔ:/ (a) fɔɔnwo /fó:ŋ(ũ) / 'very straight; exactly' (adj., adv.)
 (b) twelɔɔnwo /kyweló:ŋ(ũ) / 'sharp and pointed' (adj.)

With the above examples (1-6), the final vowel is elided in normal speech and the syllable containing the long vowel (part of which is nasalized during its articulation) ends with a nasal consonant.

The following fossilized reduplicated forms, which are ideophonic adjectives or nouns, have two alternative pronunciations, of which the second (used in normal speech) involves a prolonged vowel, in medial position, with consequent syllable reduction:

7. teteletetele i. /titɛlɪtɛlɪ / 'slippery' (adj.)
 ii. /titɛlɪ:tɛlɪ /
8. dweɔdweɔdweɔ i. /gywɪgywɛgywɪgywɛ/ 'grisly (of bone)'
 (adj.)
 ii. /gywɪgywɛ:gywɛ /
9. gugologugolo i. /gugɛlogugɛlo / 'unstable, weak'
 (adj., adv.)
 ii. /gugɛlo:gɛlo /
10. totototo i. /tʊtʊtʊtʊtʊ / 'measles' (n)
 ii. /tʊtʊtʊ:tʊ /

III. Final V:, like initial V:, is rare in non-ideophonic items, and may be exemplified by the following nominal forms:

1. alii / æli:/ 'fishing net'
2. nsuu / nsú:/ 'seven'

All the long vowels except the open central vowel /æ:/ may occur in final position in ideophones, which are usually adjectives. Such ideophonic adjectives may have reduplicated forms, which are normally used to express a 'higher' or 'superlative' degree of the state or quality denoted by the stems, and contain the corresponding short vowel. On the basis of the tonal pattern of such two-syllabled ideophonic nominals, two groups (A-B) may be set up:

<u>Group A.</u>	<u>Stem</u>		<u>Reduplicated Form</u>
1.	kisii /kisi:/	'dirty, black'	kisikisi / /kisi:kisi /
2.	nwohyee/ŋũhyĩ:	'white'	nwohyenwohye/ŋũhyĩnũhyĩ/
3.	kposee /kposé /	'rough, uneven'	kposekpose /kposékposé/

	<u>Stem</u>			<u>Reduplicated Form</u>
4.	peséé /pésé: /	'equal; neat'		pesapese /pésépésé /
5.	woyaa /wUjá: /	'whitish'		woyawoya /wUjéwUjé /
6.	kanduu /kãndũ: /	'protru- ding'		kandukandu /kãndũkãndũ/
7.	nwosoo /ŋŭsŭ: /	'dry, wizened'		nwosonwoso /ŋŭsŭŋŭsŭ /
8.	bakoo /bákó: /	'clean; completely'		bakobako /bákóbákó /

The reduplicated forms of members of this group have low tone on the first syllable followed by a succession of high tones.

Group B:

Two sub-sets (I-II) may be distinguished among members of Group B. Group B.I consists of those items which have two low tones and reduplicated forms which have a low tone on the first syllable followed by a succession of high tones; that is, their reduplicated forms replicate the tonal pattern of members of Group A. Members of Group B.I include:

	<u>Stem</u>		<u>Reduplicated Form</u>
9.	ketee ketee/kete: /	'hard, difficult'	ketekete /ketékété/
10.	mukuu /mũkũ: /	'acrid (the smell of smoke)	mukumuku /mũkũmũkũ/
11.	motoo /mŭtŭ: /	'powdery, well- ground'	motomoto /mŭtŭmŭtŭ/

Group B.II consists of those items which, like members of Group B.I, have two low tones but are different from members of Group B.I in that their reduplicated forms are characterized by low tones. Members of Group B.II include:

<u>Stem</u>	<u>Reduplicated Form</u>
12. tofoo /tofo: / 'very wet'	tofotofo /tofotofo /
13. betaa /bɛta: / 'filthy, soft'	betabeta /bɛtɛbɛtɛ /
14. buzuu /buzu: / 'overgrown, thick'	buzubuzu /buzubuzu /

The representation of long vowels

In the current orthography, long vowels are usually represented by double vowel letters, as in the examples given above. The representation of long vowels by double vowel letters is, however, not consistent; phonetically long vowels are sometimes represented by a single vowel letter as in example (1a-b) below and, on the other hand, short vowel sounds are sometimes written with a double letter, as in example (2a-b) below:

1a)	akoaba /akwá:ba /	'welcome'
b)	ezinra /eziŋá: /	'short'
2a)	maa /mã /	'to give'
b)	aakoba /akŪbá /	'burnt rice'

Semi-Vowels

The three (voiced) semi-vowel sounds of Nzema are:

1. /w/, the labio-velar semi-vowel, spelt with the letter 'w' as in wowo/wɔwɔ/ 'to wash' or the letters 'wu' as in wua/wɛɛ/ 'to steal';
2. /ɥ/, the labio-palatal semi-vowel, also spelt with the letter 'w' as in wɛ/ɥɛ/ 'to swim' or the letters 'wi' as in wie/ɥe/ 'to finish';
3. /j/, the palatal semi-vowel, represented orthographically by the letter 'y' as in yalo/jalɔ/ 'to yawn' or the letters 'yi' as in ya/jɛ/ 'to meet'.

Distribution of semi-vowels before vowels in Verb Stems

There are restrictions on the distribution of the three semi-vowels before vowels in (verb) stems.

The labio-velar semi-vowels /w/ occurs only before unrounded open vowels and rounded back vowels, as the following examples of (I) monosyllabic and (II) disyllabic items illustrate:

- | | | | | | |
|----|-----|------------|-------------|-----------------|-----------------------------------|
| 1. | /w/ | before /ɛ/ | I. wua/wɛɛ/ | 'to steal' | |
| 2. | " | " /a/ | I. wa /wa/ | 'to curse | II. wale/walɪ/ 'to be tall, long' |
| 3. | " | " /u/ | I. wu /wu/ | 'to die' | II. wudo/wudo/ 'to hoot at' |
| 4. | " | " /ɔ/ | I. wo /wɔ/ | 'to bear child' | II. wozo/wɔzɔ/ 'to shake' |
| 5. | " | " /o/ | | | II. woke/woke/ 'to peel off' |
| 6. | " | " /o/ | I. wɔ /wɔ/ | 'to prick' | II. wɔza/wɔza/ 'to besmear' |

The labio-palatal semi-vowel /ɥ/, on the other hand, only co-occurs with unrounded front vowels or open central vowels, as in the following examples:

- | | | | | | |
|-----|-----|------------|---------------|-------------|--------------------------------|
| 7. | /ɥ/ | before /ɪ/ | I. we/ɥɪ/ | 'to dry' | |
| 8. | " | " | /e/ I. wie/ɥe | 'to finish' | |
| 9. | " | " | /ɛ/ I. wɛ/ɥɛ/ | 'to swim' | II. wɛnɛ/ɥɛn(ĩ)/
'to watch' |
| 10. | " | " | /æ/ | | II. ewia/ɥæ/ 'the
sun' |
| | | | /a/ | | II. swea/ɥa/ 'tree
bear' |

Finally, the palatal semi-vowel /j/ occurs only before unrounded front and open vowels, as the following examples illustrate:

- | | | | | | |
|-----|-----|------------|---------------|--------------------------------|------------------------------|
| 11. | /j/ | before /i/ | I. yi/ji/ | 'to be full' | II. yiko/jiko/ 'to
belch' |
| 12. | " | " | /ɪ/ I. ye/jɪ/ | 'to re-
move' | |
| 13. | " | " | /ɛ/ I. yɛ/jɛ/ | 'to do' | |
| 14. | " | " | /æ/ I. ya/jæ/ | 'to meet' | |
| 15. | " | " | /a/ I. ya/ja/ | 'to be at
logger-
heads' | II. yalo/jaɭu/ 'to
yawn' |

The distribution of the three semi-vowels before vowel sounds described above is summarized in Table 5 below:

DISTRIBUTION OF STEM-INITIAL SEMI-VOWELS BEFORE VOWEL SOUNDS

	<u>F R O N T</u>				<u>O P E N</u>		<u>B A C K</u>			
	i	ɪ	e	ɛ	æ	a	u	ʊ	o	ɔ
/w/					+	+	+	+	+	+
/ɥ/		+	+	+	+	+				
/j/	+	+		+	+	+				

Table 5

Phonological analysis of semi-vowels

The summary of the distribution of semi-vowels before vowels presented in Table 5 shows that the labio-velar semi-vowel /w/ occurs only before unrounded open and rounded back vowels and that both the labio-palatal /ɥ/ and the palatal /j/ semi-vowels occur before unrounded open and front vowels; all three semi-vowels, that is, are possible before unrounded open vowels.

It may be possible in a phonemic analysis to treat at least the two semi-vowels /w/ and /ɥ/, which have in common the feature of labialization, as being in complementary distribution - a phonological relationship which is recognised by the current orthography in representing both semi-vowels by the letter 'w'; that is, to regard the semi-vowels /w/ and /ɥ/ as allophones of the same phoneme with labio-palatal realization before front vowels and a labio-velar realization before back vowels.

In the phonological analysis adopted here, the three semi-vowels are treated separately and any phonetic differences are dealt with in terms of a three-term system of syllable-initial prosodies and stated as w/ɥ/y/. The phonetic exponents of w-prosody include backness of tongue position and lip-rounding, which characterize the articulation of the labio-velar semi-vowel /w/; the exponents of syllable-initial ɥ-prosody include fronting and lip-rounding, features which characterize the articulation of the labio-palatal semi-vowel /ɥ/; and the phonetic exponents of syllable-initial y-prosody include fronting and spread lips, features characteristic of the articulation of the palatal semi-vowel /j/.

The phonological structure of the above examples (1-14), all of which are mono-syllabic verb stems except (5) which is disyllabic, is supplied below and each verb stem is specified either as an H-type or L-type. In the phonological formulae, the superscripts w, ɥ or y to the left of the round brackets are the syllable-initial prosodies and the subscripts w, y, ə to the right of the round brackets are the word or syllable prosodies.

EXAMPLES

- | | | | | | |
|----|------------|--------|-----------------------|---|---------------------------|
| 1. | wua | /wəə / | 'to steal' | H | [^w (E)ə] |
| 2. | wa | /wa / | 'to curse' | L | [^w (E)ə] |
| 3. | wu | /wu / | 'to die' | H | [^w (I)w] |
| 4. | wo | /wʊ / | 'to bear child' | L | [^w (I)w] |
| 5. | woke/woke/ | | 'to peel off' | H | [^w (E)w(CE)y] |
| 6. | wo | /wo / | 'to prick,
inject' | L | [^w (E)w] |

7.	we	/ɥɪ /	'to dry'	L	[^ɥ (I)y]
8.	wie	/ɥe /	'to finish'	H	[^ɥ (E)y]
9.	wɛ	/ɥɛ /	'to swim'	L	[^ɥ (E)y]
10.	yi	/ji /	'to be full'	H	[^y (I)y]
11.	ye	/jɪ /	'to remove'	L	[^y (I)y]
12.	ye	/jɛ /	'to do'	L	[^y (E)y]
13.	ɥia	/jæ /	'to meet'	H	[^y (E)ə]
14.	ya	/ja /	'to be at loggerheads'	L	[^y (E)ə]

Finally, it should be mentioned as a characteristic feature of CV verbs (and, for that matter, also of syllables) in which the C element is realized as a semi-vowel, that they are never nasalized, and therefore n/ \bar{n} -prosody does not apply.

It has already been mentioned that mono-syllabic CV and disyllabic CVV verb stems in which the C element is realized as a voiced non-nasal consonant do not, as a rule, occur nasalized. This common feature in respect of characterization by the absence of nasality constitutes formal grounds for regarding semi-vowels as voiced consonants.

Consonant articulations

Table 6 below presents the consonant articulations of Nzema in the phonetic transcription used throughout this thesis. The IPA symbols for the same phonetic values are given in round brackets.

	L A B I A L		A P I C A L		D O R S A L				
	bi-labial	alveolarized labial	velarized labial	labio-dental	alveolar	palato-alveolar	palatal	velar	glottal
<u>PLOSIVE</u>									
voiceless	p	tp ^l	kp	t			k	kw	ʔ
voiced	b	db	gb	d			g	gw	
<u>AFFRICATE</u>									
voiceless						ky(tʃ)		kyw	
voiced						gy(dʒ)		gyw	
<u>FRICATIVE</u>									
voiceless				f fw	s sy	hy(ʃ)	hy		h hw
voiced				v vw	z zy				f
<u>FRICTIONLESS CONTINUANT</u>									
NASAL	m	mm	mm	n	l nl(ɫ)		r		
			ny				ny(ɲ)	nyw	ɲw

1. The tie mark [~] over two symbols indicates a simultaneous (and not a sequential) articulation.

Table 6

All consonant letters have the qualities normally associated with them in the transcription of African languages except the following:

1. The voiceless alveolarized labial plosive /tp/ is written as 'p' as in (1) pema/tpĩmã/ 'grass-cutter' and the voiced variety /db/ is written as 'gb' as in (2) agbema/adbĩma/ 'grass-cutters'.

2. The letter 'n' has at least four phonetic values: (i) it usually represents the alveolar nasal consonant /n/ as the realization of the generalized C element in a CV syllable or specifically as the N element in nasal complexes or consonant sequences, where it occurs before the consonants/d; s, z/, as in (3) kpundi/kpũndĩ/ 'to exercise', (4) nsuu/nsũ/ 'seven', (5) minzi/mĩnzĩ/ 'to frown'; and the letter 'n' also represents the following nasal consonants as the realizations of the N element in consonant sequences: (ii) the labio-dental nasal /m/ occurring before the voiced labio-dental fricatives /v, vw/, as in (6) kanvo/kãmvũ/ 'to praise', and (7) funvoa/fumvwa/ 'to smell; sniff'; (iii) the palatal nasal consonant /ny/ occurring before the voiceless and voiced palato-alveolar affricates /ky, gy, gyw/ as in (8) abonkye/abõnykyĩ/ 'goat', (9) kangye/kãnygyĩ/ 'to harden', (10) ondwu/onygywu/ 'it's not the correct number' and also before the labio-palatal and the palatal semi-vowels /ɥ, j/, as in (11) onwe/onyɥi/ 'it doesn't dry' and (12) yeanyi/jɛ:nyji/ 'it's not full'; (iv) the velar nasal /ŋ/ before the voiceless and voiced plosives /k, kw; g, gw/, as in

(13) alenke/alĩnke/ 'door', (14) enkoane/(ε)nkwan(ĩ)/ 'soup'
(15) kongo/kũngũ/ 'to crawl', (16) ngoaye/ngwaje/ 'joke' and
also before the labio-velar semi-vowel /w/ as in (17) onwa/õnwa/
'he doesn't grow tall'.

3. The letter 'm' has three phonetic values: (i) its normal representation of the bi-labial nasal consonant /m/ as the realization of the C element or the N element in the consonant sequence /mp/ as in (18) mpaefoa/mpajifwã/ 'interest'; and in addition, the letter 'm' represents two other nasal consonants as the realizations of the N element in consonant sequences; (ii) the alveolarized labial nasal /nm/ occurring before the alveolarized labial plosives /tp, db/, as in (19) õmpe/õnmpĩ/ 'he doesn't struggle' and (20) mgbema/nmdbĩma/ 'grass-cutters' and (iii) the velarized labial nasal /ɸm/ occurring before the velarized labial plosives /kp, gb/, as in (21) õmkpo/õɸmkpũ/ 'he doesn't wash it' and (22) knongba/kpũɸngba/ 'to sew'.

4. In addition to its representation by the letter 'n' in consonant sequences, the velar nasal consonant /ŋ/ and its labialized variety /ɸw/ have two phonologically-determined spellings each. The velar nasal /ŋ/ is written as (i) 'nr' when it occurs before the close front vowels /i, ɪ/, as in (23) nrinzi/nĩnzĩ/ 'to wash up' and (24) nrese/nĩsĩ/ 'to grin', before the front and back non-close vowels /ε, o/, as in (25) nrɛlɛbɛ/nĩlɛbɛ/ 'wisdom' and (26) nrohwa/nɔhwa/ 'game', and before the open central non-close vowels /æ, a/ as in (27) nriandi/nĩndĩ/ 'to run' and (28) nrálɛ/nĩlɛ/ 'weevil' and (ii) 'nw', when it occurs before the close back vowel /u/, as in (29) nwu/nũ/ 'to see'.

5. The labialized velar nasal /nw/ is written as (i) 'nw' when it occurs before the open central non-close vowel /a/ as in (30) nwa /nwa / 'to remit' and (ii) 'nwu' before the front non-close vowel /e/ as in (31) tunwue /tunwe / 'to wake up'.

6. In the phonetic transcription adopted here, the following affricates (i - iv), fricatives (v - vi) and nasals (vii - viii) are written as shown below :

- | | | | | | |
|------------|---------------|------|-------|-------------------------|---|
| i./ky/ | is written as | 'ky' | as in | <u>kys</u> /'kys / | 'to share' |
| ii./gy/ | " | 'gy' | " | <u>gyi</u> /gyi / | 'to be standing' |
| iii./kyw/ | " | 'tw' | " | <u>twi</u> /kywi / | 'to wring' |
| iv./gyw/ | " | 'dw' | " | <u>dwu</u> /gywu / | 'to raise up;
to reach; to
descend' |
| v./hy/ | " | 'hy' | " | <u>hys</u> /hys / | 'to force' |
| vi./hy/ | " | 'hw' | " | <u>twehwe</u> /kywihy / | 'to pull' |
| vii./ny/ | " | 'ny' | " | <u>nya</u> /nya / | 'to bend fish' |
| viii./nyw/ | " | 'nw' | " | <u>nwe</u> /nywi / | 'to run aground' |

The double articulation consonants

A word must be said about the double articulation consonants represented in the phonetic transcription by the digraphs /k^hp, g^hb/ and /t^hp, d^hb/.

In the articulation of /k^hp/, the air passage is completely blocked by an outer closure made by bringing the lips together and by an inner closure between the back of the tongue and the velum. Both the outer closure at the lips and the inner closure at the back are made and released simultaneously. The release of the outer and inner closure is, generally speaking, accompanied by inward suction¹ due to air rarefaction. The consonant /k^hp/ is voiceless and /g^hb/ is its voiced equivalent. The articulation of k^hp/g^hb may therefore, be summarized as voiceless/voiced velaric bi-labial suction plosive.

In the articulation of /t^hp/, on the other hand, the air passage is completely blocked by an outer closure formed by bringing the lips together and by an inner closure between the front of the tongue and the hard palate in the alveolar region with the tip of the tongue down against the lower teeth. Both the outer closure at the lips and the inner closure on the alveolar ridge are made and released simultaneously. And on the simultaneous release of the outer and inner closure air suddenly escapes

1. On instrumental evidence /k^hp/ is sometimes realized as a pressure rather than a suction plosive as, for example, in ekputile/ekputéle?/ 'a kind of fresh water fish' or skponle/ekpenli?/ 'table'.

making an explosive sound with a palatal quality. The formation of /tp/ may, therefore, be briefly described as a voiceless alveolar bilabial pressure plosive. /db/¹ is the voiced equivalent and its production is accompanied by a reduced air release and palatal quality.

As already mentioned, the voiceless pulmonic bi-labial pressure plosive /p/ is rare in native Nzema words and it would appear that in the diachronic system it has been replaced by /kp/ and /tp/ in contrasting environment.

This claim would seem to be supported by a comparison with corresponding Akan (Twi² - Fante³) forms.

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1. Welman (1925) identified the voiced plosive consonant /db/ but not its voiceless variety /tp/. It is of historical interest to record his description of the articulation of /db/ and his decision, after 'discussion with the experts at University College, London', to adopt the symbol /d/ to represent it in his 'phonetic script'. He, like succeeding students of Nzema including the present writer, found this "a peculiar sound: a dental d instead of the alveolar d used in English; that is to say, the tongue touches the teeth all the way round instead of its tip touching the alveole or tooth-sockets or teeth-ridge between the teeth and the hard palate. The effect is that

Footnotes cont'd.

in some words, especially before the vowel i, there is a slight suggestion of an English soft th (as in then) following the d sound." (p. 15-16). In the introduction (p.13) he notes: "with regard to d, this represents a sound which Mr. B.B. Anaman (of Atuabo, an informant and student of the language who "had spent much time and labour on the production of a Child's Primer of the Nzima language and an English - Nzima manual" (p. 4) originally represented by th and explained as being like the soft English th in then, there, etc. For a time, therefore, I tried the phonetic symbol d, but this proved to be inexact, the sound having an undoubted d in it and only thereafter a slight ^ɹd (soft th) tendency. Consultation at University College led to my adopting d for this sound and using d to represent the alveolar d, more familiar to English people, which is also found in Nzima." (p. 13)

2. The Twi forms are taken from Christaller. J.G. (1933).
3. The Fante forms are taken from Mfantse Nkasafua Nkyerswee Nye Ho Mbra (Fante Word List with Principles and Rules of Spelling). 1942.

	<u>Twi</u>		<u>Fante</u>		<u>Nzema</u>	
1.	piw /piw?	/	piw /pyiw?	/	pi /tɔpi?	/
			'to become thick'			
2.	pia /piã?	/	pia /pyiã?	/	pia /tɔpiã?	/
			'to push'			
3.	pere /piri?	/	per /pyir	/	pe /tɔpi?	/
				or	pele /tɔpeli?	/
			'to struggle (for)'			
4.	apem /apim	/	apem /apyim	/	apenle /atpɛnlĩ?	/
			'a thousand'			
5.	paw /paw?	/	paw /paw?	/	kpu /kpu?	/
			'to spew out'			
6.	paŋ /pũŋ?	/	pun /pũn?	/	kpu /kpũ?	/
	or punu /pũnũ	/				
			'to spoke, expose to smoke'			
7.	pono /pũnũ?	/	pon /pũn?	/	kpo /kpũ?	/
			'to bend'			
8.	posaw /pũsãw?	/	posa /pũsã?	/	kposa /kpũsa?	/
			'to rub, grind, chew'			
9.	paw /paw?	/	pa /pa?	/	kpa /kpa?	/
			'to select, choose'			
10.	pase /pasĩ?	/	pasar /pasãr?	/	kposa /kpõsa?	/
			'to take a walk'			
11.	patu /pætú?	/	patu /pætú?	/	kpadule /kpædule?	/
			'owl'			
12.	ɔpanyin/ɔpanyin	/	ɔpanyin/ɔpanyin/		kpanyinli/kpanyinli?	/
	or ɔpanyini/ɔpanyini/					
			'an old person'			
13.	paŋ /pãŋ	/	pan /pãn	/	mgbane /mɔmɔban(ĩ)/	
			'empty, void'			
14.	ampa /ãmpã?	/	ampa /ãmpã?	/	amgba /ãmɔmɔgba	/
			'true, truly'			

In the comparative list, examples (1-4) show that Nzema /tp/ corresponds to Twi /p/ and Fante /py/ before front unrounded vowels. It should be noted that Nzema /tp/ sounds more like the palatalized bi-labial plosive /py/ in Fante, but differs in having a double articulation.

Examples (5-12) show that Nzema /kp/ corresponds to Akan /p/ before back rounded vowels (5-8) and open unrounded vowels (9-12). In addition, examples (13-14) show that Nzema /gb/, the voiced variety of /kp/, corresponds to Akan /p/ when prenasalized. On diachronic evidence, then, Nzema /kp/ and /tp/ are related to the voiceless pulmonic bi-labial pressure plosive /p¹.

It should also be mentioned that in present-day Evalueh (Axim) dialect of Nzema, /p/ as in pslɛ/pslɛ́?/ 'a rice farm' corresponds to my (Esiama) /tp/ as in pslɛ/tpslɛ́?/ 'a rice farm'.

The observations of Westerman and Bryan² and Ward³ on these double articulation sounds are worth quoting here. The former write: "/kp/ and /gb/ occur only before back vowels, while before-

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1. It is of interest to note that Welman represents the sound /kp/ (which he identified but not its voiced counterpart /gb/) in his phonetic script by the symbol /p/ and offers the following explanation as regards its articulation:
"Practically as in English, save (1) that it is not followed by an aspirate, and (2) that it begins more sharply, especially before the vowels \tilde{a} , o, o, U, u, an effect which may be produced by making as though to speak a k and bringing out a p." (op. cit. p. 15).
 2. Westerman, I. and Bryan, M.A. (1952). p. 90.
 3. Ward, Ida C. (1945). p. 63.

front vowels they are replaced by /tp/ and /db/". And Ward writes: "/tp/ is always followed by the front vowels, i, e, ε and none other..... Similarly, /db/, the voiced equivalent of /tp/, occurs like /tp/ before i, e, ε, while /gb/ is found before the vowels a, ɔ, o, u." On the basis of their complementary distribution, Ward suggests that the orthography in use then should be simplified by discarding /tp/ and /db/ and replacing them with /kp/ and /gb/ respectively.¹

The plosives /kp, gb/ and /tp, db/ are in complementary distribution, since the former occur only before back rounded vowels /u, ʊ, o, ɔ/ and the open unrounded vowels /æ, a/, whereas the latter occur only before front unrounded vowels /i, ɪ, e, ε/ as the following examples illustrate:

1. Hence the current spelling of the plural form 1. agbema/adbɪmã/ of the singular noun pema/tpĩmã/ 'grass-cutter' and also 2. mgbi/nmdbĩ/ 'stoic'.

<u>/kp/</u>		<u>/gb/</u>	
before /u/	kpu/kpu [?] / 'to spew out.'	amgbu/æ̃mgbu [?] / 'sneer'	
" /ʊ/	kpo/kpʊ [?] / 'to wash (clothes)	mgbʊvɔ̃nle/ɾmgbʊvɔ̃nli [?] / 'lazy'	
" /o/	kpo/kpɔ [?] / 'to bark.'	mgbɔdolo/ɾmgbɔdolo / 'bow-legged'	
" /ɔ/	kpo/kpɔ [?] / 'to hate.'	agbɔ / àgbó / 'cask'	
" /a/	kpa/kpá [?] / 'to shave'	amgba/ ãmgbá / 'true, truly'	

<u>/tp/</u>	
" /i/	pi/tpi [?] / 'to become thick'
" /ɪ/	pe/tpɪ [?] / 'to struggle'
" /e/	epe/etpe / 'wake-keeping'
" /ɛ/	pe/tpɛ [?] / 'to cut'

On both diachronic and synchronic evidence the plosive consonants /kp,gb/ may be regarded as velarized labials and /tp, db/ as alveolarized labials;¹ and in a phonological analysis of consonants may, along with other labial plosives, be generalized by the

Ladefoged, Peter(1971) refers to these sounds as 'labial-velar' and 'labial-alveolar' respectively: "We will use the terms labial-velar, labial-palatal and labial-alveolar when describing these sounds, restricting the term labio- to the term labio-dental, which specifies an articulation involving only one lip." (p.59)

phonematic unit P and any phonetic differences between /kp/ and /tp/ dealt with in terms of a two-term syllable-initial w-/ɥ-prosody: the phonetic exponents of w-prosody being backness (or velarization) and ingressiveness (or suction) and ɥ-prosody as fronting (or palatalization) and egressiveness (or pressure).

Leaving aside phonetic differences in terms of v-/v̄-prosody, the phonological structure of the following mono-syllabic CV verb stems exemplifies the analysis suggested:

- | | |
|----------------------------|------------|
| 1. bu /bu/ 'to break' | H [(PI)w] |
| 2. bo /bU/ 'to beat' | L [(PE)w] |
| 3. bo /bə/ 'to break' | L [(PE)w] |
| 4. be /bɪ/ 'to struggle' | L [(PI)y] |
| 5. ba /ba/ 'to roll' | L [(PE)ə] |
| 6. kpu/kpu 'to spew out' | H [w(PE)w] |
| 7. kpo/kpU/ 'to wash' | L [w(PI)w] |
| 8. kpo/kpə/ 'to bark' | H [w(PE)w] |
| 9. kpo/kpə/ 'to hate' | L [w(PE)w] |
| 10. kpa/kpa/ 'to shave' | L [w(PE)ə] |
| 11. pi /tpi/ 'to thicken' | H [ɥ(PI)y] |
| 12. pe /tpɪ/ 'to struggle' | L [ɥ(PE)y] |

Notes on the distribution of consonants

Some notes, at this stage, would be in place on the distribution of consonants in initial, medial and final position, particularly in verb stems.

a) Initial position

1) Of the plosive consonants, only the voiceless bilabial plosive /p/ (which, in any case, is rare) and the voiced alveolarized and velarized labial plosives /db, gb/ do not occur in initial position in verb stems. The voiceless bilabial /p/ and the voiced velarized labial /gb/ may, however, occur initially in lexical items of other word classes:

1. /p/ as in the noun word velasili /pələséli / 'enjoyment'
2. /gb/ as in the ideophonic adverbial gbugbagbugba
/gbugbagbugba / 'unsteadily'

Both /p/ and /gb/ may also occur prenasalized:

3. mpaefoa /mpajifwā/ 'interest'
4. mgbseba /mgbsejiba / 'a kind of shell fish'

2) Of the labialized voiceless and voiced velar plosives /kw, gw/, the voiceless variety /kw/ occurs initially only in disyllabic verb stems, as in :

5. koati /kwæti / 'to slip'

The voiced variety /gw/ occurs in initial position only in one mono-syllabic verb stem :

6. gua /gwæ/ 'to pour; to place, put'

Both may also occur prenasalized in nouns, as in :

7. enkoane / (s)ŋkwan(ɪ) / 'light soup'
8. ngoays /ŋwajé / 'joke'

3) All affricates occur initially; the voiceless pair /ky, kyw/ only before the front close vowels /i, ɪ/. Of the voiced pair, the non-labialized variety /gy/ occurs only before the front close vowels /i, ɪ/ and the open central vowels /æ, a/ and

voiced alveolarized labial plosives /tp, db/; and /ɱm/ before the voiceless and voiced velarized labial plosives /kp, gb/; and, in such consonant sequences, they are allophones of the bilabial nasal /m/ which occurs before the voiceless labial plosive /p/, as in (3) above.

i) Among the frictionless continuants /l, nl; r/, the oral and nasalized apical pair /l, nl/ do not occur in initial position in verb stems; the oral dorsal continuant /r/ only occurs in initial position in disyllabic verb stems and usually co-occurs with a voiced non-nasal apical consonant in medial position, as the following examples illustrate :

17a rɛlɛ /rɛlɛ / 'to dry(clothes)' 17b. rede /rɪdɪ/ 'to struggle'

In noun words, however, /r/ may co-occur with a voiceless or voiced nasal apical consonant in medial position :

18a. reseɛ /rɪsɪː / 'dry', hard' 18b. arane /aran(ĩ)'castle;
the government'

b) Medial position

All consonants occur in medial position in disyllabic verb stems except the following : the plosives /p, tp, gw/, the affricate /kyw/, the fricatives /fw, sy, hɲ, hw, h/, the nasal /nyw/ (i.e. excluding members of the labial set /ɱ, nm, ɱm/). In nominals, however, all these consonants, except the voiceless fricatives /sy, h/ may occur in medial position as the following examples illustrate:

1. /p/ : kapenle /kəpənlĩ / 'scar'
2. /tp/ : apenle /atpənlĩ / 'thousand'
3. /gw/ : aguane /ægwan(ĩ)/ 'dry coconut'

4. /kyw/ : motwe /mɔkywe / 'eight'
5. /fw / : alufuanle/ælufwãle/ 'myrrh'
6. /hɥ / : Ehwia /ehɥija / 'a girl's name'
7. /hw / : nrɔhoa /nɔhwa / 'game, play'
8. /nyw/ : enwea /ẽnywã / 'sand'
9. / r / : swolera /swolərə / 'start'

In medial position, the following labialized consonants:

i. the velarized labial plosives /kp, gb/ and the labialized dorsal consonants /kyw, gyw; hw; ɲw/ are usually preceded in a verb or noun word by a syllable which contains a back rounded vowel, which may be close /u, ʊ/ or mid /ɔ/. In the phonological structure of the examples, labialization is abstracted as a syllable-initial prosody and symbolized as superscript w to the left of the round brackets and nominal vowel prefixes are symbolized by the letter a (and realized phonetically as the front vowels /e, ɛ/ or the open central vowels /ɜ, ə/). The following examples illustrate:

- | | | | | | | |
|--------|----|----------|-------------|--------------|---|--|
| /kp/ : | 1. | kpukpuke | /kpukpúké/ | 'vapour' | H | [^w (CI) _w ^w (CI) _w (CE)y] |
| | 2. | sukpu | /sukpu / | 'to coa- | H | [_w (CI) _w ^w (CI) _w] |
| | 3. | dukpane | /dukpan(ɪ)/ | 'a support- | H | [_w (CI) _w] |
| | | | ting | | L | [^w (CE) _ə (CI)y] |
| | | | plant' | | | |
| | 4. | kpokpa | /kpɔkpa / | 'to annoint, | L | [^w (CI) _w ^w (CE) _ə] |
| | | | besmear' | | | |
| | 5. | sokpa | /sɔkpa / | 'abuse' | L | [_w (CI) _w ^w (CE) _ə] |
| /gb/ : | 6. | kpungbu | /kpũŋgbũ/ | 'to draw | H | [^w (CIN) _w ^w (CI) _w] |
| | | | near (of | | | |
| | | | time)' | | | |
| | 7. | kpomgbo | /kpɔŋgbo/ | 'to remove | L | [^w (CIN) _w ^w (CE) _w] |
| | | | corn from | | | |
| | | | cob' | | | |

/fw/ :	8.	alufuanle/ælufwāle/	'myrrh'	H [a(CI)w]
				L [w(CE)ə(CE)y]
/vw/ :	9.	funvoa /fũŋvwā /	'to sniff, smell'	H [(CI)w L w(CE)ə]
/kyw/ :	10.	motwe /mokywe /	'eight'	L [(CE)w w(CE)y]
/gyw/ :	11.	kpudwu /kpugywu /	'to wade'	H [w(CI)w w(CI)w]
	12.	fudwu /fugywu /	'to search, examine'	H [(CI)w w(CI)w]
	13.	wudwu /wugywu /	'to wade'	H [w(I)w w(CI)w]
	14.	awudwels /æwugywelé/	'jaws'	H [a w(I)w]
				L [w(CE)y(CE)y]
/hw/ :	15.	nuhua /nuhwa /	'interior, inside'	[(CI)w] L [w(CE)ə]
	16.	nrohwa /rohwa /	'game, play'	L [(CE)w w(CE)ə]
	17.	nhoals /nohwalé /	'truth'	L [(CE)w w(CE)ə (CE)y]
/nw/ :	18.	tunwue /tunwe /	'to wake up'	H [(CI)w w(CE)ə]

In the phonological formulae of the above examples, the syntagmatic relationship between successive syllables, of which the first containing a back rounded vowel is characterized by syllable w-prosody and the second or following syllable is characterized by syllable-initial w-prosody, may be regarded as exemplifying the type of harmony which has been termed 'labial harmony'.

The term 'labial harmony' is used by Aoki, H. (1968: 143) to refer to "the assimilation in respect of the feature rounding". He mentions that examples of this labial harmony are to be found "in Turkish, and certain other Altaic languages including Azeri, Tuvanian, Kumyk" and such languages of the Kwa subfamily of the Niger-Congo family as Fanti (usually spelt Fante) and Igbo. He further notes that "labial harmony frequently occurs secondarily (my own underlining) with another type of harmony, for example in

Turkish the harmony is both palatal¹ and labial, and in Fanti it is both horizontal² and labial".

We shall not go into the unsubstantiated implication that of two co-occurring or integrated harmonizing features one may be primary and the other secondary, but analyse the following data as further exemplification of labial harmony in Nzema.

Firstly, in medial position, the labialized velar plosive /kw/ co-occurring in the same syllable with the mid front vowels /e, ε/ or the open central vowel /a/ is regularly preceded in the same word by the back rounded vowels /u, ʊ/³. A comparison between the two verb stems: i. tukue/tukwe/ 'to open' (which is marked by the presence of the labialized consonant /kw/) and ii. buke/buke/ 'to open' (which is marked by the absence of /kw/) shows that the labialization of medial /k/ takes place under certain definite and generalizable conditions.

If, for present purposes, we symbolize medial /k/ by the phonematic unit K, the front vowels /e, ε/ by the V element E, and the open central vowel /a/ by the V element A, we may formalize these cases of labial harmony by phonological rules of the type:

$$\begin{array}{l}
 (1a) \quad H/L \left[(KE) \right] \text{-----} \rightarrow H/L \left[{}^w(KE) \right] / H/L \left[(CI)w \right] \text{----} \\
 (1b) \quad L \left[(KA) \right] \text{-----} \rightarrow L \left[{}^w(KA) \right] / H \left[(CI)w \right] \text{----}
 \end{array}$$

1. Aoki defines the term 'palatal' harmony (which he attributes to Roman Jakobson) as "harmonization in height, tenseness, or position of tongue root".
2. Aoki uses the term 'horizontal' (or gravity) harmony to indicate that "certain morphemes have vowels unspecified in respect to the feature backness. Examples are Finnish, Hungarian, Altaic languages, Korean and Kanembu".
3. The back rounded mid vowel /ɔ/ is also possible as in the one item: slokog/slokws/ 'raffia'.

Items, both verbs and nouns, exemplifying the first rule include:

1. tukue /tukwe / 'to open' H [(CI)_w ^w(KE)]
2. kukue /kukwe / 'coconut' H [(CI)_w ^w(KE)]
3. azukue /æzukwé / 'whisper' H [a(CI)_w ^w(KE)]
4. dokoe /dUkwé / 'something' L [(CI)_w ^w(KE)]
5. sokoe /sUkwe / 'to put
down load' L [(CI)_w ^w(KE)]
6. slonkoe /elÜŋkwe / 'snail' L [a(CIN)_w ^w(KE)]

And items which exemplify the second rule include:

7. sukua /sukwa / 'to learn' H [(CI)_w] L [^w(KA)]
8. ezukua /ezukwa / 'money' H [a(CI)_w] L [^w(KA)]
9. azukua /æzukwa / 'prospec-
ting for
gold in
sandy soil' H [a(CI)_w] L [^w(KA)]

It is to be noted that in (-) CIKE forms (1-6), the word as a whole is characterized by either H-prosody (1-3) or L-prosody (4-6) and the C element is realized as the apical plosives /t, d/, the apical fricatives /s, z/ the apical continuant /l/ and the dorsal plosive /k/.

With (-) CIKA forms (7-9) however, only H-L-prosody functions as an element of structure of the word as a whole, and the phonetic exponents of the C element are restricted to the apical fricatives /s, z/.

Labial harmony between successive syllables also characterizes forms in which the medial C element realized either as (I) the

voiced bi-labial plosive /b/ followed in the same syllable by the front unrounded vowel /e/ or the open unrounded vowel /a/ or (II) the bi-labial nasal /m/ followed in the same syllable by the open central vowel /a/ is preceded by a syllable which containing the back rounded vowels /u, ʊ/ is characterized by a w-prosody. If the medial consonants /b/ and /m/ are symbolized by B and M respectively, these instances of labial harmony may be formularized by the following phonological rules:

- (1a) H [(BE)] → H [^w(BE)] / H [(CI)w] _____
 (1b) L [(BA)] → L [^w(BA)] / H/L [(CI)w] _____
 (2) L [(MA)] → L [^w(MA)] / H/L (CI)w _____

Items which exemplify rule (1a) include:

- | | | | |
|----|----------------|-----------------|---|
| 1. | sube /subé / | 'light soup' | H [(CI)w ^w (BE)] |
| 2. | adube /ædube / | 'mould' | H [a(CI)w ^w (BE)] |
| 3. | awube /æwube / | 'foam, lather' | H [a ^w (I)w ^w (BE)] |
| 4. | Awube /æwubé / | 'a girl's name' | H [a ^w (I)w ^w (BE)] |

Items exemplifying rule (1b) include:

- | | | | |
|-----|-----------------|------------------|--|
| 5. | toba /tŭba / | 'bottle' | L [(CI)w ^w (BA)] |
| 6. | koba /kŭba / | 'hook' | L [(CI)w ^w (BA)] |
| 7. | akoba /akŭba / | 'burnt rice' | L [a (CI)w ^w (BA)] |
| 8. | edwoba/egywŭba/ | 'single' | L [a ^w (CI)w ^w (BA)] |
| 9. | awoba /awŭbá / | 'pawn, security' | L [a ^w (I)w ^w (BA)] |
| 10. | duba /duba / | 'mortar' | H [(CI)w] L [^w (BA)] |
| 11. | Nuba /nuba / | 'a girl's name' | H [(CI)w] L [^w (BA)] |
| 12. | aluba /æluba / | 'beans' | H [a (CI)w] L [^w (BA)] |

Items exemplifying rule (2) include:

- | | | | |
|-----|--------------|-----------------|-----------------------------|
| 13. | noma /nŭmá / | 'to sink, dive' | L [(CI)w ^w (MA)] |
|-----|--------------|-----------------|-----------------------------|

14.	anoma	/ãũmã /	'yesterday'	L	[a(CI)w ^w (MA)]
15.	nwoma	/ŋũmã /	'learning'	L	[(CI)w ^w (MA)]
16.	anwoma	/aŋũmã /	'wind, air'	L	[a(CI)w ^w (MA)]
17.	enwomaŋs/ɛŋũmãŋs/		'forehead'	L	[a(CI)w ^w (MA) (CE)y]
18.	anloma	/anlũmã/	'bird'	L	[a(CI)w ^w (MA)]
19.	shoma	/shũmã /	'a boy's name'	L	[a(CI)w ^w (MA)]
20.	tuma	/tũmã /	'fishing basket'	H	[(CI)w] L [w ^w (MA)]
21.	duma	/dũmã /	'name'	H	[(CI)w] L [w ^w (MA)]
22.	kuma	/kũmã /	'hole'	H	[(CI)w] L [w ^w (MA)]
23.	fuma	/fũmã /	'to swell'	H	[(CI)w] L [w ^w (MA)]

It is to be noted that with (-) CIBE forms, unlike (-) CIKE forms, only H-prosody (1-4) functions as an element of structure of the word as a whole; and in the case of (-) CIBA forms, unlike in the case of (-) CIKA forms, either L-prosody (5-9) or H-L-prosody (10-12) is statable as an element of the structure of the word as a whole. The C element in (-) CIBE forms is phonetically realized as the apical consonants /d, s/ and the labio-velar semi-vowel /w/, whereas in (-) CIBA forms the C element is realized as the apical consonants /t, d; n; l/, the dorsal consonants /k, gyw/ and the labio-velar semi-vowel /w/.

On the other hand, (-) CIMA forms are characterized as a whole by either L-prosody (13-19) or H-L-prosody (20-23), and the C element is realized phonetically as the labial fricative /f/, the apical consonants /t, d; n; nl/, and the dorsal consonants /k; h; n/.

And as it was mentioned in the introductory chapter, all

(-) CIBE and (-) CIBA forms are nouns; that is, there is no verb which expounds (-) CIBE or (-) CIBA¹ structure. On the other hand, (-) CIMA¹ forms may be either nouns (14-22) or verbs (13, 23)

1. On the basis of the above analysis, it is suggested that present-day Nzema disyllabic CIA verbs, in which the first V element-I is realized as the back rounded vowels /u, ʊ/, are the reduced forms of disyllabic verbs which were historically either CIBA or CIMA verbs; that is, CIA verbs which are not characterized by nasality were originally CIBA verbs, this suggestion being supported by the realization of doa/dʊwa/ 'to wet', which occurs in my speech, as doba/dʊba/ (exemplifying CIBA) in the Axim dialect of Nzema. On the other hand, CIA verbs which are characterized by nasality, may originally have been CIMA verbs, as evidenced by the realization of my speech form nua/nũwã/ as numa/nũmã/ (exemplifying CIMA), also in the Axim dialect, as well as the realization of soa/sõwã/ 'to send' as soma/sõmã/ in both the Axim dialect and Akan. In either case, the labialized medial consonant /b/ or /m/ dropped out leaving the labialization feature which now occurs as a /w/- like glide between the first and second vowel elements.

As regards the CIA verbs, in which the first V element-I is realized as the close front unrounded vowels /i, ɪ/, these may historically have been CILA verbs; that is, in the case of those CIA verbs which are not characterized by nasality, the I element in the original CILA verbs was realized as the oral frictionless continuant /l/ and as the nasalized variety /nl/ in those CIA verbs for which nasality functions as an element of the structure of the word as a whole.

Further exemplification of labial harmony is provided by the reduplicated forms of mono-syllabic verb stems of H/L $\left[{}^w(\text{CA})\right]^1$ or H/L $\left[{}^w(\text{GA})\right]$ sub-structure. In such reduplicated forms, the syllable of the reduplicative prefix contains the back rounded vowels /u, ʊ/ instead of the close front vowels /i, ɪ/ (used in slow deliberate speech but realized as /e/ in normal speech) which usually occur in the syllable of the reduplicated prefix of mono-syllabic verbs of H/L $\left[(\text{CA})\right]$ structure (e.g. I. fa 'to take': fefa/fifa/ and ii. nyia/nyã/ 'to set on edge': nyinyia/nyinyã/). The following verb stems and their reduplicated forms illustrate:

<u>Verb Stem</u>		<u>Reduplicated Form</u>		
24.	kpa/kpa/ 'to shave'	L $\left[{}^w(\text{CA})\right]$	kpokpa/kpʊkpa/	L $\left[{}^w(\text{CI})_w\right]$ ${}^w(\text{CA})$
25.	gua/gwæ/ 'to pour; to place	H $\left[{}^w(\text{CA})\right]$	gugua /gugwæ /	H $\left[(\text{CI})_w\right]$ ${}^w(\text{CA})$
26.	foa/fwã/ 'to drive away	L $\left[{}^w(\text{CA})\right]$	fofoa/fʊfwã /	L $\left[(\text{CI})_w\right]$ ${}^w(\text{CA})$
27.	foa/fwã/ 'to scratch'	L $\left[{}^w(\text{CA})\right]$	fonvoa/fũmvwã/	L $\left[(\text{CIN})_w\right]$ ${}^w(\text{CA})$
28.	fua/fwã/ 'to scratch'	H $\left[{}^w(\text{CA})\right]$	funvua/fũmvwã/	H $\left[(\text{CIN})_w\right]$ ${}^w(\text{CA})$
29.	nwa/ɲwã/ 'to grow lean'	L $\left[{}^w(\text{CA})\right]$	nwonwa/ɲũnwã/	L $\left[(\text{CI})_w\right]$ ${}^w(\text{CA})$
30.	wua/wæ / 'to steal'	H $\left[{}^w(\text{CA})\right]$	wuwua /wuwæ /	H $\left[{}^w(\text{I})_w\right]$ ${}^w(\text{A})$
31.	wa /wa / 'to grow tall'	L $\left[{}^w(\text{A})\right]$	wowa /wʊwa /	L $\left[{}^w(\text{I})_w\right]$ ${}^w(\text{A})$

1. The present-day Nzema verb kokwa/kʊkwa/ 'to polish a hearth', which exemplifies CIKA, is regarded as a fossilized reduplicated form, on the evidence that Akan (Twi) has the verb stem kwaw and the reduplicated form kokwaw (an example of labial harmony as a feature of reduplicated forms of mono-syllabic ${}^w(\text{CA})$ verb stems in Akan). It would seem, then, that in Nzema the reduplicated form has survived the verb stem, which is no longer a free form in the language.

/l/ or /nl/ Clusters

Nzema has two varieties of the voiced apical frictionless continuant or lateral consonant, one of which is an oral sound /l/ and the other, orthographically represented by the letters 'nl', is the nasalized variety /nl/.

Both the oral and nasalized variety only occur in medial position but never in initial position. Generally speaking, vowels preceding and following the nasalized variety are nasalized but occur non-nasalized in the environment of the oral variety. In the phonetic transcription adopted in this thesis, the two sounds are represented separately as /l/ and /nl/ and vowel nasalization in the environment of the nasalized variety is further indicated by the tilde.

In a phonological analysis, however, one medial C element (symbolized as L) may be set up and any difference in respect of nasality dealt with in terms of n-/ñ-prosody.

A common characteristic feature of forms involving both sounds is that in normal non-emphatic speech the vocalic articulation¹ separating the medial /l/ or /nl/ sound from the preceding consonant (except where it is realized as another /l/ sound) is reduced in duration with the result that a consonant cluster (with a dark /l/ as the second member) is heard. Any phonological

1. This type of reduction is impossible where /l/ is preceded by a vowel sequence, e.g. ebutuanlɛ/ebut[~]wáɛ / 'buttock'; and toalɛ/t[~]Uwáɛ / 'penis'

features statable in terms of w-/y- prosody or H-/L- prosody as an element of structure of the relevant (preceding) syllable is unaffected by the reduced vowel duration. It should be mentioned that stem-medial /l/ in Nzema is diachronically related to the Akan (Twi-Fante) /r/ sound (and the nasalized variety /nl/ corresponds to the Akan apical nasal /n̩/¹) and that the process of reduction synchronically observable in Nzema seems to have been completed in Akan and other Ghanaian languages².

1. <u>Akan</u>				<u>Nzema</u>		
/r/	1.	brs	/brs /	/l/	bɛls/bɛls/	'to bring'
	2.	bra	/bra /		bɛla/bɛla/	'to come'
	3.	trs	/trs /		tɛls/tɛls/	'to spread out'
	4.	kra	/kra /		kɛla/kɛla/	'to order; say good- bye'
	5.	kyere	/kyere /		kile/kɛle/	'to teach, show'
	6.	fre	/fre /		fɛls/fɛls/	'to call'
/n/	7.	ano	/an̩ /	/nl/	enloan̩ɛ/ ɛnl̩wɛɛ/	'mouth'
	8.	anoma	/an̩m̩a/		anloma/ ɛnl̩m̩a /	'bird'
	9.	nyini	/nyin̩(i)		nyinli/ nyɛnl̩i/	'male'

2. Gã and Ewe exhibit completed cases of the process of reduction, Ewe in respect of /r, l/ and Gã in respect of /l/. For a description of Ewe see G. Ansre (1966) and N. V. Smith (1968); and for Gã see H. M. J. Trutenau (1969).

In Nzema, however, there are constraints on the incidence of vowel reduction such that it is only realized in the case of some vowels but not in others. A reduced duration of the vocalic articulation is definitely realized in the non-emphatic pronunciation of forms in which the syllable preceding the medial L element contains the close V element - I. In the examples which follow, the reduced vowel is transcribed as /ə/ in the non-emphatic pronunciation in contradistinction to the emphatic pronunciation in which the corresponding vowel has its full phonetic value.

	(a) <u>Emphatic Speech</u>	(b) <u>Non-Emphatic Speech</u>
/i/	1. I. tili /tɪli / 'to be blunt'	/tɛli /
	II. tinli /tĩnlĩ / 'to press'	/tɛnlĩ /
/ɪ/	2. I. sele /sɪlɪ / 'to laugh'	/sɛlɪ /
	II. senle /sɪnlɪ / 'fire'	/sɛnlĩ /
/u/	3. I. kpula /kpulɛ / 'to reach; injure'	/kpɛla /
	II. kpunla/kpũnlã / 'to direct against; to be mute'	/kpɛnlã/
/ʊ/	4. I. bole /bʊlɛ / 'stone'	/bɛlɛ /
	II. nwonlo/ŋũnlũ / 'to disappear (of boil)'	/ŋɛnlũ /

If we symbolize emphatic/non-emphatic distinction in pronunciation as E/ \bar{E} , the phonological feature of reduced vowel-duration in respect of the V element - I before the medial consonants /l, nl/ (symbolized by L) may be formularized as:

$$H/L[(I)y/w] \longrightarrow H/L[(ə)y/w] / \text{---} L (\bar{E})$$

which rule may be read as: 'in non-emphatic speech, syllables involving the close V element - I are reduced in duration before the medial /l/ or /nl/ sound'.

As regards syllables involving the non-close V element-E, no reduction in the duration of the vocalic articulation is realized in the case of forms in which the syllable preceding medial-L contains the open central vowels /æ, a/; thus only one possible pronunciation in either emphatic or non-emphatic speech is attested for the following examples:

- | | | | |
|-----|----|---------------|--------------------|
| /æ/ | 5. | kpali/kpæli / | 'to snatch' |
| | 6. | tanli/tænli / | 'to scorch' |
| /a/ | 7. | salo /salu / | 'to spread' |
| | 8. | wale /wali / | 'to be long, tall' |
| | 9. | fals /falé / | 'belt' |

And no reduction, as a rule, is also realized in the case of the half-close vowels /e, o /¹, and the following items have only one pronunciation without vowel reduction:

- | | | | |
|-----|-----|---------------------------|------------------------|
| /e/ | 10. | tele /tele / | 'to spread, get worse' |
| | | gyela/gyela / | 'to put on' |
| | | fele /fele / | 'to boil fish' |
| | | sela /sela / ¹ | 'to give enema' |

1. Reduction seems possible with sela/sela?/ 'to give enema'.

/o/	11.	toli /toli /	'to comb'
		tolo /toló /	'soup'
		bolo /bólo /	'kenkey'
		kolo /kolo /	'to melt'
		kpolo/kpolo /	'to don or divest'
		solo /solo /	'to line up'

In forms, however, where the V element-E is realized as the half-open vowels /ɛ, ɔ/ vowel reduction may be realized as the following examples show:

		<u>Emphatic speech</u>		<u>Non-emphatic speech</u>
/ɛ/	12.	ksɛ /ksɛ /	'to write'	/kɛɛ?/
		sɛɛ /sɛɛ /	'to beg, pray for'	/sɛɛ?/
		rɛɛ /rɛɛ /	'to dry'	/rɛɛ?/
		twɛɛ /kywɛɛ /	'to scrape, scratch'	-
		ɛhɛɛ/ɛhɛɛ /	'a kind of bird; being long'	-
/ɔ/	13.	kpɔɔ/kpɔɔ /	'to rot'	/kpɔɔ?/
		dwɔɔ/gywɔɔ /	'to lop off'	-
		wɔɔ /wɔɔ /	'to protrude, emerge'	-
		swɔɔ/swɔɔ /	'snake'	-

It would seem that syllables containing the front vowel /ɛ/ exhibit reduction more frequently than those involving the back half-open vowel /ɔ/.

It should also be mentioned that presence or absence of reduction may serve, along with other distinctive features, to

distinguish lexical items. In the following paired examples, the (I) examples exhibit reduction in contradistinction to their corresponding (II) examples which do not.

		<u>Emphatic speech</u>		<u>Non-emphatic speech</u>
14.	I	Fɔlə /fɔləʔ/	'Saturday'	/fɔləʔ/
	II	fɔlə /fɔlə /	'monkey'	-
15.	I	fslɛ /fslɛʔ/	'to call'	/fɛləʔ/
	II	fslɛ /fslɛ /	'fish'	-
16.	I	tslɛ /tslɛʔ/	'to spread out'	/tɛləʔ/
	II	tslɛ /tslɛ /	'to be wide, broad'	-

Note that the members of the pair of items in example (14) are tonally distinguished; in (15) they are members of different word classes; and in (16), item (I) is a dynamic verb whereas item (II) is a stative verb. In addition to these other distinctive features, presence or absence of reduction serves to distinguish the items.

The possibility of reduction may also serve, along with other distinctive features, to distinguish homonymous items as in examples (17-18) below:

		<u>Emphatic speech</u>		<u>Non-emphatic speech</u>
17.	I	kenle/kĩnlĩʔ/	'day'	/kĩnlĩʔ/
	II	kenle/kĩnlĩ /	'drum'	-
18.	I	kpɔla/kpɔlaʔ/	'to brush away'	/kpɔlaʔ/
	II	kpɔla/kpɔla /	'to visit'	-

Phonologically, however, forms exhibiting presence or absence of vowel reduction before /l, nl/ are analysed as CVLV; that is,

phonologically, there are no cases of consonant cluster, and accordingly, in the phonetic transcription, instances of vowel reduction are represented by the vowel symbol /ə/ to indicate absence of consonant clustering.

It should also be noted that there are constraints on the realization of the stem-initial C element such that only certain consonants in stem-initial position can co-occur with medial /l/ or /nl/.

a. Where the stem-initial C element is realized as the voiceless dorsal affricates /ky, kyw/ (both occurring before front vowels), the fricatives /hy, hu/ (also occurring before front vowels) and the continuant /r/ (before front and open vowels), only the oral variety /l/ is attested in medial position, as the following examples illustrate:

- | | | | | |
|-----|------------|--------------|---|---------------------------------|
| 19. | kysls | /kysls | / | 'hat' |
| 20. | twels | /kywels | / | 'to scrape, scratch' |
| 21. | shysls | /shysls | / | 'a kind of bird, being
long' |
| | hyelehyele | /hyəlɪhyəlɪ/ | | 'closely' |
| 22. | rele | /rele | / | 'to scratch' |
| | rels | /rels | / | 'to dry' |
| | rals | /rals | / | 'child' |

b. The stem-initial semi-vowels /w, j, ɥ/, which as noted above never occur in a nasalized syllable, co-occur only with the oral variety /l/:

23. /w/ wulu /wəlu / 'to jump'
 wula /wəla / 'to put on'
 wolo /wəlu / 'to enter'
 wole /wələ / 'bee'
 wolo /wolo / 'to emerge'
 wale /wali / 'to be long, tall'
24. /j/ yila /jəla / 'to bless'
 yela /jəla / 'to burn'
 eysle /sɛslɛ / 'cold'
 yalo /jalu / 'to yawn'
25. /ɣ/ ewele /ɛɣələ / 'deer'
 wɛlekoko/ɣələ- 'cold'
 kókó/

c. It should also be mentioned that, as a rule, in forms where the vowel element in the first syllable is realized as one of the set of non-close vowels /e, ɛ, o, ɔ/- which are usually oral - only the oral variety /l/ follows, as in (10-13, 15-16).

As already mentioned, medial /l/ corresponds to Akan /r/. In Akan (Asante Twi), the consonant /r/, according to Dolphyne F. (1965), co-occurs only with initial plosives, fricatives or affricates but not with nasals. There is no such restriction on the corresponding Nzema consonant /l/ which, like its nasalized variety /nl/, co-occurs with plosives (except /gw/), fricatives and affricates as well as with the nasals /m, n, ny, ŋ/, as in the following examples in which the (a) items are nouns and the (b) items are verbs:

- /m/ : (a) monle /m̃nlĩ / 'tears' Mole /m̃ʊle / 'Sunday'
(b) minli /m̃nlĩ / 'to lose' munla/m̃nlã / 'to frown'
- /n/ : (a) ninli /ñnlĩ / 'mother' nolo /noló / 'gong-gong'
(b) nenle /ñnlĩ / 'not to answer'
- /ny/ : (a) nyinli/nỹnlĩ / 'male' nyila/nỹla / 'boil'
(b) nyenla/nỹnlã / 'to direct against'
- /ŋ/ : (a) nwonlomo/ŋ̃nlĩm̃o / 'morning' nwole/ŋole / 'oil'
(b) nwonlo/ŋ̃nlĩ / 'to disappear' nwoŋla/ŋ̃nlã / 'to roam'

It should be noted, however, that in noun words (underlined) nasal consonants may co-occur with the oral variety /l/ whereas in verbs nasal consonants only co-occur with the nasalized variety /nl/.

Syntagmatic relationship between /r/ and /l/

There exists a syntagmatic relationship¹ between the dorsal frictionless continuant /r/ and the oral apical frictionless continuant /l/ such that in nominal as well as verbal forms in which the stem-initial C element is realized as /r/, the consonant element of the following syllable is frequently realized as /l/, as in the following examples:

1.	raalé	'woman'
2.	rals	'child'
3.	srele	'sack'
4.	srelera	'old person'
5.	sreláke	'palm branches'
6.	rsle	'memory'
7.	srelé	'proverb'
8.	sreládáné	'motherly'
9.	arslé	'palm tree/nut'
10.	rele	'to scratch'
11.	rsle	'to dry'

Conversely in forms where /l/ occurs medially, /r/ usually occurs as the consonant of the following syllable as in the following noun words:

12.	bslérá	'young woman'
13.	solora	'cat fish'

1. The /r/- /l/ relationship is confirmed in the Nzema version riledio of the English word radio.

- | | | |
|-----|----------------------|-----------|
| 14. | swolera ¹ | 'star' |
| 15. | kpodelera | 'ring' |
| 16. | ngyigyilira | 'ants' |
| 17. | sendolera | 'bonfire' |

as well as in the adjectivizing suffix ~~lira~~ -lira exemplified in the following derivations from verbs:

- | | | |
|-----|---------|-------------------------------------|
| 18. | wu-lira | 'rotten' (<u>wu</u> 'to die, rot') |
| 19. | we-lera | 'dry' (<u>we</u> 'to dry') |

This syntagmatic relationship may be regarded as an instance of consonant harmony in Nzema.

Further evidence of the /r/-/l/ relationship is provided by the mutation of stem-initial /b/ as /r/ in forms where /b/ is followed by /l/ as the consonant element in the next syllable, as exemplified by the plural form arelemgbunli 'chiefs' of the singular noun belemgbunli 'chief' and the perfect tense form 3rd person singular yersele 'he has bought' of the verb stem bels 'to bring'.

c. Final Position

As a rule, consonants do not occur in final position; that is, final syllables in polysyllabic words and mono-syllables are open rather than closed syllables. In normal, unemphatic speech, however, final vowels co-occurring with some consonants and semi-vowels in final or only syllables may be elided with the consequent realization of consonants or semi-vowels in final position.

1. Items (14-17) may well be derivations from verbs in which the constituent elements -lira, -lera, -lera are realizations, according to the vowel harmony, of the same nominalizing suffix.

Final consonants/semi-vowels in polysyllabic words

With polysyllabic words, i. the bi-labial nasal consonant /m/ (in nominals only), ii. the alveolar and palatal nasal consonants /n, ny/ (in verbs as well as nominals), iii. the velar nasal consonant /ŋ/ (in nominals only), iv. the voiced fricative /z/ (in verbs only), v. the labio-velar semi-vowel /w/ (in nominals only) and vi. the palatal semi-vowel /j/ (in verbs only) may be realized in final position, when the polysyllabic words in which they occur as the consonant element of the final syllable are used as one-word sentences or occur in sentence-final position in normal unemphatic speech. In slow, emphatic speech, however, the full pronunciation of such polysyllabic words marked by a final vowel, of the set of front or back close vowels /i, ɪ, u, U/, is used. In the examples which follow, the (a) items are nominals and the (b) items are verbs.

	<u>Polysyllabic word</u>	<u>Emphatic Pronunciation</u>	<u>Non-emphatic Pronunciation</u>
/m/ : 1a)	medame ' (pronoun) I, me'	/mĩdámĩ/	/midám ?/
	komu 'monkey'	/komũ /	/kom? /
/n/ : 2a)	boni 'which'	/bonĩ /	/bon? /
	ehane 'trap'	/ehani /	/ehan? /
b)	tone 'to sell'	/tonĩ /	/ton? /
/ny/ : 3a)	Maanyi 'a girl's name'	/mãnyĩ /	/mãny? /
	manye 'herring'	/mãnyĩ /	/mãny? /
b)	sonyi 'to sieve'	/sonyĩ /	/sony? /
	bonye 'to call by shouting'	/bõnyĩ /	/bõny? /

	<u>Polysyllabic word</u>	<u>Emphatic Pronunciation</u>	<u>Non-emphatic Pronunciation</u>
/n/ :	4a) koonwu 'quietly, quiet'	/ko:ŋú /	/ko:ŋ? /
	doonwo 'many'	/do:ŋú /	/do:ŋ? /
/z/ :	5b) dwazo 'to stand up'	/gywazú /	/gywaz? /
/w/ :	6a) asawu 'a cast-net'	/æsæwu /	/æsæw? /
	adawu 'conversation'	/ædæwu /	/ædæw? /
/j/ :	7b) kpaye 'to call out about wares'	/kpajɪ /	/kpaj? /

In normal speech, the full pronunciation with a final vowel is also realized when such polysyllabic words occurring in nominal or verbal pieces are followed, in the case of nominal, by the definite article ne, 'the' the determiner ye 'this', or a vowel particle (e.g. ɔ) and, in the case of verbs, by the pronominal objects me 'me' and ye 'him, her, it', as the full pronunciations of the noun or verb words in the following nominal or verbal pieces illustrate:

	<u>Nominal/Verbal piece</u>	<u>Full pronunciation of Noun/Verb word</u>
8.	medame <u>ɔ</u> 'it's me'	/mĩdámĩ ɔ /
9.	shane ye 'this trap'	/shanĩ j(ĩ)? /
10.	manye ne 'this herring'	/mãnyĩ n(ĩ)? /
11.	asawu ne 'the cast-net'	/æsæwu n(ɪ)? /
12.	tone ye 'sell it'	/tonĩ j(ɪ)? /
13.	bonye me 'call me by shouting'	/bonyĩ m(ĩ)? /
14.	dwazo ye 'stand him up'	/gywazú j(ɪ)? /
15.	kpaye me 'give my appellation'	/kpajɪ m(ĩ)? /

Syllabic final consonants in mono-syllabic morphemes

In normal, unemphatic speech, final /m, n, ŋ, z/ as well as the semi-vowel /j/ may be syllabic, when they are realized as the contracted form of a mono-syllabic morpheme in sentence-final position. Such mono-syllabic morphemes may be the definite article ne 'this', the pronominal objects me 'me' and ye 'him, she, it', the determiner ye 'this' or the (possessed) root forms of the local inalienable nouns: nu(hua) 'inside, interior', nwo(ɬɛ) 'outside, exterior', zo(ɬɛ) 'top', occurring after nouns or verbs. In slow, emphatic speech, such mono-syllabic items receive their full pronunciation with a final vowel, as shown below in the unemphatic and emphatic pronunciations of the following nominal and verbal pieces:

<u>Nominal/Verbal piece</u>	<u>Unemphatic pronunciation</u>	<u>Emphatic pronunciation</u>
16. baka <u>ne</u> 'the tree'	/baká n ? /	/baké nĩ /
17. bɛda <u>ye</u> 'this child'	/bɛdã j ? /	/bɛdã jí /
18. fa maa <u>me</u> 'give it to me'	/fa mã m ? /	/fa mã mĩ /
19. kpɔnds <u>ye</u> 'look for him'	/kpɔ̃nds j ? /	/kpɔ̃nds jí /
20a. namule <u>nu</u> 'in a village'	/nãnúlé n ? /	/nãmúlé nú /
b. to nu(hua) 'make it loose'	/to n ? /	/to nũ(hwá) ? /
21a. baka nwo 'outside of tree'	/baka ŋ ? /	/baka ŋũ /
b. bo <u>nwo(ɬɛ)</u> 'add to it'	/bo ŋ ? /	/bo ŋũ (ɬɛ) ? /
22a. baka zo 'the toilet'	/baka z ? /	/baka zũ /
b. maa zo(ɬɛ) 'lift it up'	/mã z ? /	/mã zũ (ɬɛ) ? /

With particular reference to examples (20-22(a-b)), it should be mentioned that the (a) examples are genitive constructions

involving the possessed root forms of the three local inalienable nouns, whereas the (b) examples are verbal pieces, the unemphatic forms of which involve only the (possessed) root forms and the emphatic forms involve either the (possessed) root forms or the absolute forms.

To summarize, the elision of the final vowel as a feature of normal, unemphatic speech takes place under the following conditions

- (a) the mono-syllabic or polysyllabic morpheme must occur in pre-pause position;
- (b) the consonant or semi-vowel which is realized in final position upon the elision of the final vowel must be the consonant element of the final or only syllable and such final consonants may be syllabic in the case of mono-syllabic morphemes;
- (c) the elided final vowel is restricted to the close V element-I, but the members of the set of vowels are restricted in their distribution: /ɪ, u/ occurring only after /m/, /i, ɪ, u/ after /n/, the front close vowels /i, ɪ/ after the palatal nasal /ny/, /ɪ/ after the palatal semi-vowel /j/, the back close vowels /u, ʊ/ after the velar nasal /ŋ/ and the labio-velar semi-vowel /w/, and the back vowel /ʊ/ only after the voiced fricative /z/.

The elision of the final vowel is marked by certain features: the elided final vowel is usually replaced by a glottal stop in instances where there is none in the emphatic utterance (as in (1) above); the voiced apical fricative /z/ is slightly devoiced; and there is no oral release for the resultant final nasal consonants. Lip spread or rounding as a feature of the final syllable is retained.

Finally, mention should be made of final /m/ in a number of compound words (e.g. nrelebs-(a)sém 'wise talk') whose constituent elements consist of a native Nzema noun word (e.g. nrelebs 'wisdom') plus asém 'talk, case, matter'.

In view of the fact that the second element asém¹ is a free form in Akan but not in Nzema and that, as a rule, consonants do not occur in final position in Nzema but may be realized in final position in normal unemphatic speech under the conditions described above, the second element asem may be regarded as an Akan loanword (the Nzema equivalent being edweské² 'talk, case, matter').

In such compounds, which may be labelled 'asem-compounds', the native Nzema noun word element may be a plural form (1-9) or a singular noun with no specific plural form (10-14). The process involves the deletion of the vowel prefix -a of the second element asem (as in the corresponding Akan compounds³) and, in a few cases (7-10), of the final syllable of the Nzema noun word constituent which has an /l, nl/ as the consonant element.

-
1. The item asem occurs as the first element in the one Nzema word asémgéndwá 'nosey'.
 2. The Nzema equivalents of the Akan verbal pieces: 1a. ka asem 'to say some matter' and 2a. di asem 'to judge a case' are respectively 1b. ka edweské and 2b. di edweské.
 3. The corresponding Akan equivalents of the Nzema compounds 3a. nkoasea-sém 'foolish talk' and 4a. nrelebs-sém 'wisdom' are respectively 3b. nkwasea-sém and 4b. (a) - nyansa-sém.

In the following examples of 'asem - compounds', the singular forms of the plural noun constituents are indicated in round brackets:

Asem - compounds

- | | | | | |
|----|------------------|-----------------|----------------------------------|---|
| 1. | mbeda-sem | /mmedásém / | (<u>bedá</u> 'child') | 'childish talk' |
| 2. | mbelera-sem | /mmelérásém / | (<u>belérá</u> 'young woman') | 'girlish talk' |
| 3. | ngoasea-sem | /ngwas(ɪ)jasém/ | (<u>koasea</u> 'a fool') | 'foolish talk, matter' |
| 4. | mrelera-sem | /mmrelérasém / | (<u>srelera</u> 'old woman') | 'behaviour or manners associated with old age' |
| 5. | mrenya-sem | /mmenyásém / | (<u>nrenyá</u> 'man') | 'manly deed or behaviour, associating with men' |
| 6. | mraale-sem | /mmalésém / | (<u>raalé</u> 'woman') | 'womanly talk; associating with women' |
| 7. | ngaku(la)-sem | /ngakelasém / | (<u>kakula</u> 'child') | 'childish talk' |
| 8. | mgbanyi(nli)-sem | /mgbanyisém / | (<u>kwanyinli</u> 'old person') | 'talk, manners, airs, relating to an old person; history, oral tradition' |
| 9. | mgbavo(le)-sem | /mgbavúsém / | (<u>kwavole</u> 'young man') | 'talk, behaviour or manners associated with the youth' |

Asem - compounds

- | | | | |
|-----|---------------|---------------|--|
| 10. | munzu(le)-sem | /mũnzusém / | 'taboo; matter pertaining to bad omen' |
| 11. | abofo-sem | /abófʊsém / | 'boast, bragging, bluff' |
| 12. | ahone-sem | /ahon(ĩ)sém / | 'matters pertaining to fetish' |
| 13. | ayene-sem | /ajen(ɪ)sém / | 'evil talk or behaviour' |
| 14. | nrelsbɛ-sem | /nɛlsbɛsém / | 'wisdom, wise talk' |

It is to be noted that the syllable of the second element has always a high tone as in the Akan word asém.

The Glottal Stop

The glottal stop occurs in utterance-final position or pre-pause position and does not function as a consonant phoneme in the language.

In final position, it is only realized after short vowels but never after long vowels. Thus in the following examples, the glottal stop occurs after the reduplicated forms, regarded as one-word utterances, which involve final short vowels, but not after the long vowels occurring in the stems:

	<u>Stem</u>		<u>Reduplicated Form</u>
1.	komii /komi:/	'clear, clean'	komikomi /komíkómí? /
2.	betaa /bita:/	'soft, filthy'	betebeta /bitɛbita? /

The following are some of the contexts in which the glottal stop is particularly noticeable:

- (a) As mentioned above, the glottal stop usually replaces elided final vowels;

- (b) It is realized after polysyllabic noun words, used as one-word utterances, if such words contain a high-tone syllable which may be final or non-final, as in:

Final high-tone syllable:	3.	ayile	/æjələ?/	'medicine'
	4.	edwəke	/egywəké?/	'matter, case'
	5.	kuma	/kūmā? /	'hole'
	6.	eya	/ejá? /	'leaf, farm'
Non-final high-tone syllable:	7.	kelata	/kaláta?/	'paper, letter'
	8.	bozonle	/buzənli?/	'god'
	9.	bolo	/bólo? /	'a kind of food'
	10.	nyila	/nyēla? /	'boil'

- (c) In 2nd person singular direct imperative mood clauses, where the glottal stop occurs in pre-pausal position after a high tone in the case of mono-syllabic verbs and the tri-syllabic verb dumua and after a low tone in the case of disyllabic verbs:

11.	ko	/kó ? /	'go'
12.	sia	/syé ? /	'return'
13.	gyinla	/gyēnlā? /	'stop'
14.	kpɔsa	/kpɔsa ? /	'chew it'
15.	dumua	/dumūwā ? /	'go ahead'

- (d) In transitive clauses involving verbs which do not favour the pronominalization of a definite inanimate object noun phrase, even though the glottal stop may not occur after the corresponding transitive clause containing an object noun phrase:

16a. yekpo edanls ne /jikpU edã^hlé nĩ/

(she has washed the cloth)

16b. yekpo /jikpU ? /

(she has washed it)

In the transcription used in this thesis, the glottal stop is not, for convenience, indicated, particularly since its occurrence is so predictable.

Consonant Sequences

The descriptive statement of consonant sequences presented in this section is restricted to mono-morphemic (verbal as well as nominal) structures. Consonant sequences in non-monomorphemic structures, regarded as instances of the phenomenon of consonant mutation in the immediate environment of a preceding nasal consonant, are dealt with under 'consonant mutation' (see below).

Generally speaking, consonant sequences occurring in the language consist of a homorganic nasal as the first element followed by a plosive (examples 2-3, 6-8, 11), affricate (examples 5, 12) or fricative (examples 1, 4, 10) as the second element in the sequence. The nasal consonant element (symbolized as N) is restricted in its phonetic realizations to the set of non-labialized nasal consonants /m, m̥, ɱ, n, ny, ŋ/; that is, the labialized varieties /nyw, ɱw/ are excluded. The following consonant is, as a rule, voiced as in examples (1-8)

/m̥	1(a)	nvasos	/ɱvasʊwe	/	'profit'
	(b)	sanvs	/sãm̥ve	/	'key'
/ɱ	2(a)	ngbane	/ɱngbãñ(ĩ)	/	'useless'
	(b)	amgba	/ãɱgba	/	'true'
/n	3(a)	ndane	/ndan(ĩ)	/	'oath'
	(b)	nwonda	/ñõnda	/	'junction'
	4(a)	nzule	/nzule	/	'water'
	(b)	Manza	/mãnzã	/	'a girl's name'
/ny	5(a)	ngyenle	/nygyẽnlĩ	/	'salt'
	(b)	kongvs	/konygys	/	'guinea fowl'
/nm̥	6(a)	mgbi	/nm̥dbĩ	/	'long-suffering, stoic'
	(b)	pimgbi	/tpĩnm̥dbĩ	/	'to crease'

- /ŋ/ 7(a) Ngonloma /ŋgõnlõmã /¹ 'Nkrumah (the ninth child)'
(b) amungu /amũngũ / 'mist, fog'
8(a) ngoays /ŋwajés / 'joke'

The following homorganic consonant may, however, be voiceless:

- /m/ 9(a) mpaefoa /mpajifwã /² 'interest'
(b) kompele /kõmpɛle / 'business company
(English loan)

-
1. Abercrombie, David (1967) writes: "In many African languages, however, a nasal and a following homorganic stop at the beginning of a word do not form a cluster; the nasal is syllabic as in the Ghanaian name Nkrumah, for example." (p. 144). While agreeing with his descriptive statement as far as it goes, I should like to point out that the form of the proper name Nkrumah is both Anglicized and Akanized. The Akan equivalent is Akron/akrõŋ/ 'the ninth child' derived from the cardinal numeral akron/akrõŋ/ (or akonon/akõnõŋ/ 'nine'). In Nzema (the language of the late President of Ghana of that name) the consonant sequence /ŋk/ in either initial or medial position in a word is rare; and the consonant cluster /kr/, as already mentioned, is impossible. The native Nzema form given in example (7a) above is derived from the numeral ngonla/ŋgõnlã/ 'nine'.
2. This item is a compound: mpae-foa, of which the first constituent mpae is an Akan nominalization from the verb pae/par?/ 'to break, divide'; the second constituent foa/fwã/ 'half, part' occurs in the same form in both Akan and Nzema.

/n/	10(a)	nsa	/nsã	/	'three'
		nsia	/nsĩjã	/	'six'
		nsuu	/nsũ:	/	'seven'
	(b)	abõnsam	/abõnsãm	/ ¹	'the devil'
/ŋ/	11(a)	enkoane	/((ẽ)ŋkwã(ĩ)/		'light soup'
/ny/	12(b)	abõnkye	/abõnykĩ	/	'goat'

Consonant sequences involving a voiceless homorganic consonant as the second constituent are rare in native mono-morphemic structures; in particular the sequence /mp/ as in example (9) is attested only in loan words.

Phonologically, the homorganic nasal belongs to the preceding syllable and the following consonant belongs to the following syllable as its initial consonant; that is, the sequence is not realized phonologically as a cluster. Hence the descriptive term 'consonant sequence'.

In forms (usually nominals) where the sequence is initial as in the (a) examples of (1-12), the homorganic nasal is syllabic, and since this is a predictably regular feature such syllabic nasals are not indicated in the phonetic transcription adopted in this thesis. Thus, for example, in the cardinal numeral nsuu/ñsũ:/ 'seven' (10a), represented by the phonological formular NCV, the syllable division falls between the NC sequence ;

1. The final /m/ is evidence that the item is a loan word, possibly from Akan.

that is, the initial N element realized as the apical nasal /n/ is syllabic and the following C element realized as the voiceless apical fricative /s/ is the stem-initial consonant.

Where, however, the sequence occurs within the word as in the (b) examples of (1-7) the homorganic nasal is realized phonologically as the final closing consonant of the preceding syllable. For example, in the noun-word i. nwonda/n̄onda/ 'junction' or the verb stem ii. kenda/k̄endā/ 'to hang up', both of the phonological structure C₁VNC₂V, the syllable division falls between the NC₂ sequence; that is, the first syllable has the structure C₁VN (which is always characterized by nasality) in which the N element realized in either case as the apical nasal /n/ is the final closing consonant, and the second syllable has the structure C₂V (which may be characterized by the presence (as in ii.) or absence (as in i.) of nasality) in which the initial C₂ element is realized as the voiced apical stop /d/ in both words.

Consonant sequences only occur within polysyllabic verb stems; that is, the verb in Nzema is characterized by the absence of initial syllabic nasal (and, for that matter, of initial vowel syllable). Two sub-types of disyllabic CVNCV verb stems, within which consonant sequences occur, may be set up:

(a) XVNYV verb stems in which the stem-initial C element (symbolized as X) realized as a voiced or voiceless consonant and the voiced medial (non-nasal) consonant (symbolized as Y) may differ phonologically in respect of the place of articulation

but may have the same or different manner of articulation. The exponents of the stem-initial C element may be the voiced plosive /b/ (No.1), the voiceless plosives /tp; k, kp/ (15; 2-6), the voiceless fricatives /f, fw, s/ (7-10), the voiced affricate /gy/ (26), or the nasals /m, ŋ/ (17-20). The voiced medial (non-nasal) consonant may be the plosives /d; db; gb/ (2; 15; 1; 22) the fricatives /v; z/ (27-28), or the affricate /gy/ (14). The following list of disyllabic verb roots of XVNYV sub-structure is well-nigh complete and has been divided into five groups (A-E):

Group A

- | | | | | |
|-----|---------|---------|---|---------------------------------|
| 1. | benga | /bēnga | / | 'to go round, surround' |
| 2. | kundo | /kūndo | / | 'to roll on the ground' |
| 3. | kpundi | /kpūndī | / | 'to stretch limbs for exercise' |
| 4. | kponde | /kpūndī | / | 'to scatter' |
| 5. | kponde | /kpūnde | / | 'to search for' |
| 6. | kponza | /kpōnzā | / | 'to meet unexpectedly' |
| 7. | finde | /fīnde | / | 'to get/go out, appear' |
| 8. | fende | /fēndī | / | 'to scatter, sprinkle' |
| 9. | fuandi | /fwāndī | / | 'to throw' |
| 10. | sande | /sāndi | / | 'to disperse' |
| 11. | nriandi | /nēandī | / | 'to run (away)' |

Group B

- | | | | | |
|-----|--------|----------|---|--------------------------|
| 12. | bondo | /bōndo | / | 'to dent' |
| 13. | kondo | /kūndo | / | 'to open/bruise a wound' |
| 14. | kangye | /kānygyī | / | 'to harden or weaken' |

Group B (cont'd)

15. pingbi /tpĩnmdbĩ /¹ 'to crease'
16. fonda /fũnda / 'to worsen'
17. minda /mĩnda / 'to warp'
18. minzi /mĩnzĩ / 'to frown'
19. mundu /mũndũ / 'to cover completely'
20. nrinzi /ŋĩnzĩ / 'to wash up, rinse'

Group C

21. kpanza /kpãnzã / 'to flower (of maize)'
22. sɛngba /sɛŋgba / 'to flower, bloom (of maize)'
23. nrenze /ŋɛnze / 'to become pregnant'

Group D

24. kende /kɛnde / 'to wait'
25. kenda /kɛnda / 'to hang up'
26. gyenva /gyɛnvã / 'to carry on shoulder'

Group E

27. kenvo /kɛmvu / 'to praise'
28. kponza /kpɔnzã / 'to shout when singing'

Generally speaking, disyllabic XVNYV verb stems are dynamic verbs and may be sorted into the following semantic groupings: items (1-11) of Group A express processes which involve movement of one kind or another; items (12-20) of Group B refer to processes which result in a change of state; items (21-23) of Group C refer to biological processes resulting in a change of state; items (24-26) of Group D refer to localized processes; and finally, items (27-28) of Group E express communicative processes involving the use of the vocal organs.

1. This item exemplifies PVNBV rather than XVNYV verb stem.

(b) FVNBV verb stems are distinguished from XVNYV verb stems in that the stem-initial C element (symbolized as P) has the same place and manner of articulation as the medial (non-nasal) consonant (symbolized as B) and voicelessness as a feature of P is related to voicing as a feature of B. The phonetic exponents of stem-initial consonant P are restricted to the voiceless plosives /kp, t, k/ and fricatives /f, s/ and their voiced varieties realize B. As already mentioned, the members of the consonant sequence occurring within the word - i.e. the nasal N and the following voiced consonant B - are homorganic. It is, therefore, a characteristic feature of FVNBV verb stems that between the stem-initial consonant P, the nasal consonant N in the sequence and the following consonant B there is a phonological relationship of consonant harmony which may be labial, apical or dorsal, as the following examples illustrate:

I. Labial consonant harmony

- 1 (a) funvoa /fumvwã / 'to smell, sniff'
(b) ʔpomgbo /kpõmgbõ / 'to remove corn from cob'

II. Apical consonant harmony

- 2 (a) tends /tãnds? / 'to talk'
(b) sunzo /sũnzo / 'to remove rafia, to roll in
(of waves)'

III. Dorsal consonant harmony

- 3 (a) kenga /kãnga / 'to read'
(b) kongo /kõngõ / 'to crawl'

Morphologically, PVNBV verbs are distinguished from XVNYV verbs since the former are capable of secondary reduplication whereas, generally speaking, the latter exhibit primary reduplication.

Below is a complete list (divided into four groups F-I) of PVNBV verb stems with their secondary reduplicated forms:

	<u>PVNBV Verb Roots</u>		<u>Secondary Reduplicated Form</u>	
	<u>Group F</u>			
1.	tende /tĩndĩ/	/'to stretch, stand on tin-toe'	tendeende /tĩndĩ:ndĩ/	/
2.	kongo /kũngũ/	/'to crawl'	kongoongo /kũngũ:ngũ/	/
3.	kpungbu/kpũŋgbũ/	/'to draw near, (of even, time)'		
4.	sinze /sĩnze/	/'to hang'	sinzeenze /sĩnze:nze/	/
	<u>Group G</u>			
5.	tenda /tãndã/	/'to entangle, become entangle (of thread)'	tindaenda /tãndã:ndã/	/
6.	kpomgba/kpũŋgba/	/'to sew'	kpomgbæmgbæ/kpũŋgbæ:ŋgba/	/
7.	senza /sãnzã/	/'to change (dress, money)'	senzeenza /sãnzẽ:nzã/	/
8.	senze /sĩnzĩ/	/'to become stiff'		

PVNBV Verb Roots

Secondary Reduplicated Form

Group H

9. kpomgbo/kpõŋmgbo / 'to remove corn from cob' kpomgboomgbo/kpõŋmgbo:ŋmgbo /
10. sinzi /sĩnzĩ / 'to peel (yam, cassava)' sinziinzi /sĩnzĩ:nzi /
11. sunzo /sũnzõ / 'to remove rafia' sunzoonzo /sũnzõ:nzõ /

Group I

12. tende /tãnds / 'to talk' tendsende /tãnds:nde /
13. kenga /kãŋga / 'to read, chant' kengsanga /kãŋgã:sŋga /
14. funvoa /fũŋvwã / 'to smell, sniff' funvoenvoa /fũŋvwã:sũŋvwã /

A common phonological feature of disyllabic verbs of (a) XVNYV and (b) PVNBV structure is that in either case the first syllable ending with a closing nasal consonant (i.e. (a) XVN- and (b) PVN-) is predictably characterized by nasality, but the second open syllable (i.e. (a) -YV and (b) -BV) is characterized by the presence or absence of nasality. The second syllable is non-nasalized if it contains the usually oral vowels /e, ɛ, o, ɔ/ (4, 12, 11, 9); it is usually nasalized if it contains the close vowels /i, u/ (10, 3); and it may occur either nasalized or non-nasalized if it contains the half-close vowels (ɪ, ʊ) (A. 8, 10; E. 27) or the open vowel /a/ (G.5-6, I.13-14).

Like XVNYV verb stems, PVNBV verb stems are, as a rule, dynamic verbs, which, in their semantic interpretation, express inherently repetitive (non-momentary) processes: semantically, items (1-4) of Group F express movements of various kinds; items (5-8) of Group G refer to processes which result in a change of state of the affected object; similarly, items (9-11) of Group H refer to processes (of a different kind from those referred to by Group B items) which result in a change of state of the affected vegetable object; and finally, items (12-14) of Group I refer to processes associated with humans or animates and related to the functioning of specific body parts.

It should be interesting to speculate about the diachronic derivation of disyllabic PVNBV verbs. In the first place, there is some phonological evidence, in respect of two of the items, to suggest that PVNBV verbs are not regular mono-morphemic verb stems. The items i. kongo/kũngũ?/ 'to crawl' (No.2 of Group F) and ii. kenge/kẽnga?/ 'to read' (No.13 of Group I) have the respective verbal noun forms:

- i. egongonle/egũngũlé? 'crawling' and ii. egengale/egĩngalé?/ 'reading', both exhibiting the k/g consonant mutation in the immediate environment of the nominalizing vowel prefix /e/ rather than the more regular k/h mutation as in iii. ka/kã?/ 'to say': shanle/shãlé?/ 'saying' or iv. kundo/kũndo?/ 'to roll': shundole/ehũndolé?/ 'rolling'.

Secondly, PVNBV verbs bear a close phonological resemblance to the primary reduplicated forms of a closed set of mono-syllabic verb stems of ⁿ(CV) structure. The following is a complete list of such ⁿ(CV) verb stems with their primary and secondary reduplicated forms:

	<u>ⁿ(CV) Verb Stem</u>	<u>Primary RED Form</u>	<u>Secondary RED Form</u>
1.	ti /tĩ / 'to pinch'	tindi /tĩndĩ /	tindiindi/ tĩndĩ:ndĩ /
2.	to /tũ / 'to cook'	tondo /tũndũ / (to roast)	tondoondo/ tũndũ:ndũ /
3.	kpu/kpũ / 'to smoke, expose to smoke'	kpungbu/kpũŋgbũ/ (to fumigate)	kpungbuungbu/ kpũŋgbũ:ŋgbũ/
4.	fu /fũ / 'to dig a hole'	funvu /fũŋvũ /	funvuunvu/ fũŋvũ:ŋvũ /
5. (a)	fua/fwæ / 'to scra- tch'	funvua /fũŋvwæ /	funvueenva/ fũŋvwæ:ŋvwæ /
(b)	foa/fwã / 'to scra- tch'	fonvoa /fũŋvwã /	fonvoaenva/ fũŋvwã:ŋvwã /
6.	se /sĩ / 'to pass flow'	senze /sĩnzĩ /	senzeenze/ sĩnzĩ:nzĩ /
7.	su /sũ / 'to cry'	sunzu /sũnzũ /	sunzuunzu/ sũnzũ:nzũ /
8.	so /sũ / 'to weed'	sonzo /sũnzũ /	sonzoonzo/ sũnzũ:nzũ /

The phonological features which PVNBV verbs and the primary RED forms of ⁿ(CV) verb stems have in common include:

- a) the presence within either word of a consonant sequence;
- b) the first syllable in either case has a CIN structure (characterized by nasality), which is a characteristic feature of primary RED forms of monosyllabic ⁿ(CV) verb stems:

- c) the initial consonant (restricted to voiceless plosives or fricatives) has the same place and manner of articulation as the medial (non-nasal) consonant and voicelessness as a feature of the initial consonant is related to voicing as a feature of the medial non-nasal consonant;
- d) a phonological relationship of consonant harmony between the initial voiceless consonant, the homorganic nasal and the following voiced consonant, the consonant harmony being either labial, apical or dorsal;
- e) the syntagmatic relationship of vowel qualities in successive syllables of FVNBV verbs copies that of primary RED. forms of ⁿ(CV) verb stems such that the entire word is characterized by H- or L-prosody.

And morphologically, FVNBV verbs behave like primary RED forms of CV verb stems, since they are only capable of secondary reduplication.

On the evidence of the phonological and morphological resemblances described above, it may be claimed that FVNBV verbs are historically fossilized (Primary) RED. forms of monosyllabic ⁿ(CV) verb stems which are no longer free forms in Nz(ema).

This claim is supported by a comparison with corresponding Ak(an) non-fossilized reduplicated forms¹ whose monosyllabic verb stems of ⁿ(CVN) structure exist in present-day Akan, as set out below:

1. The Akan forms are taken from Christaller, J.G., (1933).

	<u>Monosyllabic Verb Stem</u>		<u>Primary RED. Form</u>
9a.	Ak. puŋ /pũŋ? /	'to smoke or expose to smoke'	pumpuŋ /pũmpũŋ /
	or: puŋu/pũŋũ?/		
b.	Nz. kpu/kpũ? /	"	kpumgbu/kpũmgbũ?/
10a.	Ak. pam /pãm? /	'to sew'	pompam /pũmpãm? /
			or pempam /pĩmpãm? /
b.	Nz. *kpa /kpã?/	"	kpomgba/kpũmgbã?/
11a.	AK. kaŋ /kaŋ? /	'to read'	kenkaŋ /kĩŋkãŋ? /
b.	Nz. *ka /kã? /	"	kenga /kĩnga? /
12a.	Ak. seŋ /sẽŋ? /	'to cut, peel'	sinsen /sĩnsẽŋ? /
b.	Nz. *si /sĩ /	"	sinzi /sĩnzĩ? /
13a.	Ak. sen /sen? /	'to grow stiff'	sinsen /sĩnsẽŋ? /
b.	Nz. *se /si? /	"	senze /sĩnzĩ? /
14a.	Ak. seŋ /seŋ? /	'to hang'	senseŋ /sĩnsẽŋ? /
b.	Nz. *se /sẽ /	"	sinze /sĩnze? /

In the above examples, the starred Nzema monosyllabic verb items of ⁿ(CV) structure, which correspond to Akan free forms of ⁿ(CVN) structure, have been reconstructed on the basis of the Nzema items (1-8) above.

Differences between the Nzema primary RED. forms and their corresponding Akan forms include:

- a) where the Nzema forms exhibit a voiced medial consonant following the homorganic nasal, the Akan forms have the corresponding voiceless consonant;

- b) the final (or stem) syllable in the Akan RED. forms are predictably characterized by nasality, whereas the corresponding Nzema forms are characterized, in some cases (Nos. 2b, 3b, 6b), by the absence of nasality; the feature of nasality may have been lost in the course of time.

Consonant Mutation

The phenomenon of consonant mutation is exhibited by nominal pieces as well as by verbal pieces. The descriptive statement of consonant mutation presented here is restricted to verbal pieces, but where necessary, exemplification with nominal pieces is provided; the generalized phonological statements made, on the basis of the operation of consonant mutation in verbal pieces, are, however, applicable to nominal pieces.

Conditions favouring consonant mutation

As a rule, consonants mutate for grammatical purposes. It is not all consonants, however, that undergo mutation and those which, generally speaking, undergo mutation do not always do so under the conditions which favour consonant mutation. When mutation does take place, however, these are the favourable conditions: firstly, as a rule, consonant mutation affects only stem-initial consonants; and secondly, stem-initial consonants, as a rule, undergo mutation in constructions where they are in junction with (i) a preceding nasal consonant homorganic with the following stem-initial consonant, and (ii) a preceding vowel element. Consonant mutation may, therefore, be regarded as a junctural phenomenon. The following verbal pieces exemplify the general conditions which favour consonant mutation:

	<u>Verb Stem</u>	<u>Perfect Tense, Positive</u>	<u>Mutation</u>
1a.	kakye/ <u>k</u> akɪ/	yehakye/ <u>jɪh</u> akɪ?/	k / ^h
	(to remember)	(he has remembered)	
1b.	sake / <u>s</u> sɪ /	yezake / <u>jɪz</u> sɪ? /	s/z
	(to spoil)	(it is spoiled)	

	<u>Verb Stem</u>	<u>Perfect Tense, Positive</u>	<u>Mutation</u>
1c.	di / <u>d</u> i / (to eat)	yeli / <u>j</u> ili? / (he has eaten it)	d/l
	<u>Verb Stem</u>	<u>Habitual Tense, Negative</u>	<u>Mutation</u>
2a.	kisa / <u>k</u> isa / (to lean against)	ongisa / <u>õ</u> ngisá? / (it does not lean against)	k/g
2b.	di / <u>d</u> i / (to eat)	onli / <u>õ</u> nni? / (he does not eat it)	d/n

A comparison between (1a) and (2a) above shows that in (1a), the stem-initial consonant /k/ undergoes mutation as /h/ in the immediate environment of the preceding vowel in the syllable of the pronominal subject, whereas in (2a) the same stem-initial consonant mutates as /g/ in the immediate environment of the preceding nasal consonant, which is the negative prefix. And in (1c) and (2b), the same stem-initial consonant /d/ undergoes mutation as /l/ in (1c) where it occurs before a vowel and as /n/ in (2c) where it occurs before a nasal consonant.

A further comparison between (1a) and (1b) shows that in (1a) where /k/ is stem-initial, it undergoes mutation as /h/ in the immediate environment of the preceding vowel element in the syllable of the pronominal subject, whereas in (1b) where the same consonant /k/ is medial it does not exhibit mutation. Similarly, the same consonant /s/ exhibits mutation as /z/ before a vowel element in (1b) where it is stem-initial, but does not exhibit mutation in (2a) where it is not stem-initial.

We might, therefore, set up two main types of consonant mutation: Type A mutation of a stem-initial consonant takes place

in the immediate environment of a preceding nasal consonant (symbolized as N) and Type B mutation is effected in the immediate environment of a preceding vowel element (symbolized as V). We shall talk in terms, then, of mutation under N/V influence.

The various instances of consonant mutation are summarized in Table 7 below:

	<u>Stem-initial C element</u>	<u>Type A Mutation under N influence</u>	<u>Type B Mutation under V influence</u>
1.	t	I. d	I. d
2.	f	v	v
3.	fw	vw	vw
4.	s	z	z
5.	sy	zy	zy
6.	k	g	h
7.	ky	gy	II. hy
8.	kw	gw	hw
9.	kyw	gyw	hy
10.	d	II. n	III. l
11.	n	(n)	nl
12.	b	m	r
<u>Special Cases</u>			
13.	tp		db
14.	kp	gb	
15.	h	g	
16.	hy	gy	
17.	l	n	
18.	nl	n	
19.	r	m	
20.	b		w

Table 7

Regular and Special Mutations

Of the mutations set out in the above Table 7, mutations (1-12) - except mutation (5) - are exhibited by both nominal and verbal pieces and may be regarded as the regular cases. On the other hand, mutations (13-19) - except the kp/gb mutation (14) which may also characterize the reduplicated forms of a few verbs (e.g. /kpũ/ 'to smoke' : /kpũngbũ/ 'to fumigate') - are restricted to the plural forms of a limited number of singular nouns and may be regarded as special cases.

It is to be noted, as a characteristic feature of Type A mutation under Ñ influence, that I. it converts a voiceless consonant into its voiced counterpart, as exemplified by regular mutations (1-9) and distinguished as Type A.I; and II. it converts a voiced consonant into another voiced consonant, as illustrated by the regular mutations (10-12) and distinguished as Type A.II.

In respect of its distribution, Type A mutation is exhibited, in the case of verbal pieces, by 1a. tense forms, which include i. present tense, negative; ii. future tense I, negative; iii. past tense, positive 1st person singular only; iv. past or consecutive tense, negative; 1b. positive indirect imperative mood clauses, 1st person singular only; 1c. the reduplicated forms of mono-syllabic verbs of $H/L^n [(CI)y/w]$ or $H/L^n [{}^w(CE)ə]$ structure. And in the case of nominal pieces, Type A mutation is exhibited by 2a. the plural forms of singular nouns which are formed by the prefixation of a nasal consonant; 2b. certain nominalizations from verbs.

The following are some examples of the various constructions which are marked by Type A mutation. In the case of the tense forms, only examples with the 3rd person singular present tense negative are given.

TYPE A MUTATION:

1. Verbal Pieces: a) present tense, negative; b) indirect imperative, positive

Verb Stem	a) present tense, negative b) indirect imperative, positive	Mutation
1. to /tũ / 'to cook'	a) ondo /õndũ? / 'he is not cooking it' b) maa mendo /mã mõndũ? / 'let me cook it'	t/d
2. fe /fi / 'to vomit'	a) onve /õmvi? / 'he is not vomiting' b) maa menve /mã mãmvi? / 'let me vomit'	f/v
3. fua /fwæ / 'to scratch'	a) onvua /õmfvwæ? / 'he is not scratching' b) maa menvua /mã mãmfvwæ? / 'let me scratch it'	fw/vw
4. su /sũ / 'to cry'	a) onzu /õnzũ? / 'he is not crying' b) maa menzu /mã mãmzũ? / 'let me cry'	s/z
5. sia /syæ / 'to return'	a) onzia /õnzyæ? / 'he is not returning' b) maa menzia /mã mãmzyæ? / 'let me return'	sy/zy
6. ke /kã / 'to say'	a) onga /õngã? / 'he does not say it' b) maa menga /mã mãmngã? / 'let me say it'	k/g

Verb Stem	a) present tense, negative b) indirect imperative, positive	Mutation
7. kye /kyĩ / 'to grow fat'	a) ongye /õnygyĩ? / 'he does not grow fat' b) maa mengyẽ /mã mãnygyĩ? / 'let me grow fat'	ky/gy
8. koati/kwæti/ 'to slip'	a) ongoati /õngwæti? / 'he does not slip' b) maa mengoati/mã mûngwæti? / 'let me slip'	kw/gw
9. twe /kywĩ / 'to pull'	a) ondwe /õnygywĩ? / 'he is not pulling' b) maa mendwe /mã mãnygywĩ? / 'let me pull'	kyw/gyw
10. do /do / 'to weed'	a) onlo /õnnó? / 'he does not weed it' b) maa menlo /mã mûnnó? / 'let me weed it'	d/n
11. --		
12. buke /buke / 'to open'	a) ombuke /õmmúké? / 'it does not open' b) maa membuke /mã mûmmúké? / 'let me open it'	b/m

TYPE A MUTATION:

1. Verbal pieces: c) reduplicated forms of mono-syllabic verbs of H/Lⁿ [(CI)_{y/w}] or H/Lⁿ [^w(CE)_e] structure

<u>Verb Stem</u>		<u>Reduplicated Form</u>	<u>Mutation</u>
I. ti /tĩ /	'to pinch'	tindi /tēndĩ /	t/d
to /tũ /	'to cook'	tondo /tũndũ /	"
	'to toast'		
II. fu /fũ /	'to dig'	funvu /fũnvũ /	f/v
III. su /sũ /	'to cry, weep'	sunzu /sũnzũ /	s/z
so /sũ /	'to weed'	sonzo /sũnzũ /	"
se /sĩ /	'to flow'	senze /sēnzĩ /	"
IV. fua /fwæ /	'to scratch'	funvua /fũnvwæ /	fw/vw
foa /fwã /	'to scratch'	fonvoa /fũnvwã /	"

TYPE A MUTATION

2. Nominal Pieces: a) pluralization by prefixing nasal consonant

	<u>Singular</u>		<u>Plural</u>		<u>Mutation</u>
1.	taboa /tábUwa 'board'	/	ndáboa /ndabUwa / (or adaboa /adábUwa /)	/	t/d
2.	felenra /fələŋǎ 'flag'	/	nvelenra /mveléŋǎ /	/	f/v
3.	fuazinli /fwəzēnlí 'rag'	/	nvuazinli /mvwəzēnlí/ (or avuazinli /əvwəzēnlí/)	/	fw/vw
4.	--				
5.	--				
6.	kenlanes /kēnlān(ĩ)jē/ 'lamp'		ng ⁿ lanes /ŋēnlān(ĩ)jē/		k/g
7.	ekyi /ekyí 'little'	/	ngyikyi /nygyíkyi /	/	ky/GY
8.	koanle /kwǎlé 'hoe'	/	nkoanle /ŋgwǎlé /	/	kw/gw
9.	twea /kyw(ɪ)ja 'dog'	/	ndwea /nygyw(ɪ)ja/ (or ahwea /ahw(ɪ)ja /		kyw/gyw
10.	duku /dúkū 'headkerchief'	/	nluku /nnúkū / (or aluku /əlúkū /)	/	d/n
11.	--				
12.	baka /ba'ra 'tree'	/	mbaka /mmaka /	/	b/m

TYPE A MUTATION:

2. Nominal pieces: b) nominalizations from verbs

	<u>Verbs</u>	<u>Nominalizations</u>	<u>Mutation</u>
1.	tafe /tafi / 'to lick, taste'	n-dafe /ndafi / 'greedy'	t/d
2.	fene /fen(ĩ)/ 'to borrow'	n-vene /mven(ĩ)/ 'borrowing'	f/v
3.	--		
4.	senza /sãnzã / 'to change'	n-zenza - /nzãnzã / 'change, exchange'	s/z
5.	--		
6.	kakyi /kãkyi / 'to change, turn'	n-gakylie /ngakylie/ 'change'	k/g
7.	kyehye/kyehyĩ / 'to roast, toast'	n-gyehye /nygyehyĩ / 'roasted, toasted'	ky/gy
8.	--		
9.	twehwe/kywehwi / 'to pull'	n-dwehwe /nygywehwi / 'rope for climbing'	kyw/gyw
10.	da /da / 'to sleep'	n-da /nna / 'grave'	d/n
11.	buke /buke / 'to open'	m-(b)ukslee/m(m)uksl(ĩ)je/ 'page'	b/m

It is a characteristic property of Type B Mutation under Ψ influence that I. it changes voiceless plosive and fricative consonants into their voiced counterparts, as illustrated by the regular mutations (1-5), and distinguished as Type B.I. We include in this sub-type the k/h mutation (6), although the stem-initial consonant is a voiceless plosive whereas its mutated form is a voiced fricative; and II. it may also convert a voiceless consonant into another voiceless consonant as in the case of regular mutations (7 - 9), which are distinguished as Type B.II; and III. it may convert a voiced consonant into another voiced consonant of a different manner of articulation, as in the case of mutations (10-12), which are distinguished as Type B.III.

Type B mutation under Ψ influence has a wider distribution than Type A mutation, being exhibited in the case of verbal pieces, by 1a. tense forms, which include: i. the continuative tense, positive; ii. future tense I, positive; iii. future tense II, positive and negative; iv. perfect tense, positive; v. past tense, positive (all persons other than the 1st person singular); vi. consecutive tense, positive; 1b. positive direct imperative mood clauses, 2nd person plural; 1c. positive indirect imperative mood clauses (all persons other than the 1st person singular); 1d. most reduplicated forms of mono-syllabic and disyllabic verbs. And, in the case of nominal pieces, it is exhibited by 2a. the plural forms of singular nouns formed by the prefixation of a vowel written as a but has two phonetic values / m , a /; 2b. genitive constructions involving a possessive pronoun and some four inalienable nouns, which are kinship terms; 2c. verbal nouns; and 2d. certain nominalizations from verbs.

The following are some examples of these various constructions whose phonological features include Type B mutation. In the case of the tense forms and the imperatives, only examples with the 3rd person singular perfect tense positive and positive indirect imperative mood clauses with the 3rd person singular are given.

TYPE B MUTATION

1. Verbal Pieces: a) perfect tense, positive; b) positive indirect imperative

<u>Verb Stem</u>	a) perfect tense, positive	b) indirect imperative, positive	<u>Mutation</u>
1. to /tũ / 'to cook'	a) yedo /jidũ? / 'he has cooked it'	b) maa odo /mó:dũ? / 'let him cook it'	t/d
2. fe /fi / 'to vomit'	a) yeve jivi? / 'he has vomited'	b) maa ove /mó:vi? / 'let him vomit'	f/v
3. fua /fwæ / 'to scratch'	a) ye fua /jivwæ / 'he has scratched'	b) maa ovue /mo:vwæ? / 'let him scratch'	fw/vw
4. su /sũ / 'to cry'	a) yezu /jizũ? / 'he has cried'	b) maa ozu /mo:zũ? / 'let him cry'	s/z
5. sia /syæ / 'to return'	a) yezia /jizyæ? / 'he has returned'	b) maa ozia /mo:zyæ? / 'let him return'	sy/zy

Verb Stem	a) perfect tense, positive	b) indirect imperative, positive	Mutation
6. ka /kã / 'to say'	a) yeha /jɪhã? / 'he has said it'	b) maa oha /mɔ:hã? / 'let him say it'	k/h
7. kye /kyĩ / 'to grow fat'	a) yehye /jɪhyĩ? / 'he has grown fat'	b) maa ohye /mɔ:hyĩ? / 'let him grow fat'	ky/hy
8. koati/kwæti/ 'to slip'	a) yehoati /jɪhwæti? / 'he has slipped'	b) maa ohoati /mɔ:hwæti? / 'let him slip'	kw/hw
9. twe /kywĩ / 'to pull'	a) yehwe /jɪhwĩ? / 'he has pulled it'	b) maa ohwe /mɔ:hwĩ? / 'let him pull'	kyw/hw
10. do /dɔ / 'to weed'	a) yelo /jɪlɔ? / 'he weeded it'	b) maa olo /mɔ:lɔ? / 'let him weed it'	d/l
11. no /nũ / 'to drink'	a) yenlo /jɪnlũ? / 'he has drunk it'	b) maa onlo /mɔ:nlũ? / 'let him drink it'	n/nl
12. bala /bɛla / 'to come'	a) yera /jɪrɛ? / 'he has come'	b) maa orɛla /mɔ:rɛlá? / 'let him come'	b/r

TYPE B MUTATION:

1. Verbal Pieces: d) reduplicated forms of i. CV verbs
ii. CVV or CVCV verbs

	<u>Verb Stem</u>	<u>Reduplicated Form</u>	<u>Mutation</u>
1.	i) tu /tu / 'to uproot'	tudu /tudu /	t/d
	ii) tukue /tukwe / 'to open'	tukuedukue /tukwedukwe /	
2.	i) -		
	ii) fede /fɛdɪ / 'to scratch'	fedevede /fɛdɪvɛdɪ /	f/v
3.	i) -		
	ii) fuandi/fwãndĩ/ 'to throw'	fuandivuandi/fwãndĩvwãndĩ/	fw/vw
4.	i) su /suzu / 'to measure'	suzu /suzu /	s/z
	ii) soa /sɔwɑ / 'to carry'	soozoa /s(ɔw)ɔzɔwɑ /	
5.	i) -		
	ii) -		
6.	i) ko /kũ / 'to fight'	koho /kũhũ /	k/h
	ii) kenda /kẽndã / 'to hang'	kendahenda /kẽndãhẽndã /	
7.	i) kye /kye / 'to share'	kyehye /kyehye /	ky/hy
	ii) kyiba /kyiba / 'to twist'	kyibehyiba /kyibehyiba /	

	<u>Verb Stem</u>		<u>Reduplicated Form</u>		<u>Mutation</u>
8.	i) -				
	ii) -				
9.	i) twi /k̄ywī /	twihwi	/kywĩh̄ī /		kyw/hu
	'to wring'				
	ii) -				
10.	i) -				
	ii) die /d(i)je/	dielie	/d(ij)el(i)je/		d/l
	'to accept'				
11.	i) -				
	ii) noma /nũmã /	nom̄enloma	/nũm̄enlũmã /		n/nl
	'to sink, dive'				
12.	i) -				
	ii) -				

TYPE B MUTATION:

2. Nominal Pieces: a) pluralization by a vowel prefix

	<u>Singular</u>			<u>Plural</u>	<u>Mutation</u>
1.	toba	/tŪba	/	'bottle' /adoba adŪba /	t/d
2.	funli	/fēnli	/	'corpse' /avunli avēnli /	f/v
3.	fuazinli	/fwēzēnli	/	'rag' /avuazinli avwēzenli /	fw/vw
4.	sua	/suwa	/	'house' /azua ezuwa /	s/z
5.	-				
6.	kels	/kále	/	'blow' /ahels ahéls /	k/h
7.	kysnze	/kyēnzī	/	'pan' /ahysnze ahyēnzī /	ky/hy
8.	koasea	/kwas(i)ja	/	'fool' /ahoasea ahwas(i)ja /	kw/hw
9.	twea	/kyw(i)ja	/	'dog' /ahwea ahw(i)ja /	kyw/hw
10.	duma	/dūmā	/	'name' /aluma aluma /	d/l
11.	-				
12.	belemgbunli	/bēlemgbēnli/	/	'chief' /erelemgbunli erelemgbēnli/	b/r

Nominal Pieces: b) genitive construction

	<u>Absolute form of Inalienable noun</u>	<u>Genitive construction</u>	<u>Mutation</u>
i.	sels /səlé / 'father'	o ze /ò zì / 'his father'	s/z
ii.	kunli /kǎnlǐ / 'husband'	o hu /ò hǔ / 'her husband'	k/h
iii.	ninli /nǎnlǐ / 'mother'	o nli /ò nǐ / 'his mother'	n/nl
	nenya /nǎnyǎ / 'grandfather'	o nlenya /ò nǎnyǎ / 'his grandfather'	

TYPE B MUTATION:

2. Nominal Pieces: c) Verbal nouns

	<u>Verb Stem</u>		<u>Verbal Noun</u>		<u>Mutation</u>
1.	to /tũ /		e-do-nle /sdũlé /		t/d
	'to cook'		'cooking'		
2.	fe /fi /		e-ve-le /evələ /		f/v
	'to vomit'		'vomiting'		
3.	fua /fwæ /		e-vua-nle /evuwǎle /		fw/vw
	'to scratch'		'scratching'		
4.	su /su /		e-zu-nle /ezũlé /		s/z
	'to cry'		'crying'		
5.	sia /syæ /		e-zia-le /ezyələ /		sy/zy
	'to return'		'returning'		
6.	ka /kā /		e-ha-nle /shālé /		k/h
	'to say'		'saying'		
7.	kye /kyĩ /		e-hye-nle /shyǎlé /		ky/hy
	'to grow fat'		'growing fat'		
8.	koati/kwæti/		e-hoati-le/ehwætélé /		kw/hw
	'to pretend'		'pretending'		
9.	twe /kywĩ /		e-hwi-nle/shwǎlé /		kyw/hw
	'to pull'		'pulling'		
10.	do /dɔ /		e-lo-le /slolé /		d/l
	'to weed'		'weeding'		
11.	no /nũ /		e-nlo-nle /snlũlé /		n/nl
	'to drink'		'drinking'		
12.	-				

TYPE B MUTATION:

2. Nominal Pieces: d) Nominalizations from verbs

	<u>Verbs</u>	<u>Nominalizations</u>	<u>Mutation</u>
1.	ta /tã / 'to flatulate'	s-da /sɔã / 'flatulence'	/ t/d
2.	fe /fɛ / 'to vomit'	s-ve-lee /svɪl(i)je 'vomit'	/ f/v
3.	-		
4.	sie /s(i)je/ 'to bury'	a-zie /æz(i)je 'cemetery'	/ s/z
5.	-		
6.	kua /kũwã / 'to gather'	a-hua /æhũwã 'unity'	/ k/h
7.	kyia /ky(ĩ)jã/ 'to be in need'	e-hyia /ehy(ĩ)jã 'poverty'	/ ky/hy
8.	-		
9.	-		
10.	dumua/dumũwã/ 'to go ahead'	a-lumua /ælumũwã 'first'	/ d/l
11.	nea /n(ĩ)jã/ 'to look at'	s-nlea-nlee/ẽnl(ĩ)jãnl(ĩ)jẽ/ 'mirror'	n/nl
12.	-		

Special Mutations

As mentioned above, the special mutations (13-20) are, as a rule, exhibited by the plural forms of a limited number, in each case, of singular nouns. The following examples illustrate the special cases of mutation:

	<u>Singular</u>		<u>Plural</u>		<u>Mutation</u>
13.	pema /tpɪmã /	'grass-cutter'	agbema /adbɪma /		tp/db
14a.	kpɔba /kpɔbá /	'gold nugget'	mgboba /ɾmgbɔbá/		kp/gb
	b. skpa /skpa /	'mat, bed'	mgbpa /ɾmgbpa /		
15a.	hanle /hãlé /	'sore'	nganle /ngãlé /		h/g
	b. shene /shã(ĩ)/	'trap'	ngane /ngã(ĩ) /		
16.	shyels /shyɛlé /	'sparrow'	ngyels /nygyɛlé /		hy/gy
17a.	ɛlɛka /ɛléka /	'box'	nleka /nnéka /		l/n
	b. alenke /alĩŋke /	'door'	nlenke /nnĩŋke /		
18.	anloma /ãnlõmã /	'bird'	nloma /nnõmã /		nl/n
19a.	rals /rals /	'child'	mrals /mmals /		r/m
	b. srals /srɛlé /	'proverb'	mrals /mmɛlé /		
20a.	boka /bóká /	'hill'	awoka /awóká /		b/w
	" " "	(or	mboka /mmóká /		
	b. bozonle/büzãnliĩ/	'god'	awozonle/awüzãnliĩ/		

The special cases of consonant mutation (15-20) may be regarded as special or 'reversive' cases of their corresponding regular mutations (6-7, 10-12). The h/g mutation (15), for example, may be regarded as a special case of the regular mutation $k \rightarrow g \rightarrow h$ (6); the special hy/gy mutation (16) of the regular mutation $ky \rightarrow gy \rightarrow hy$ (7); the special l/n mutation (17) of the regular $d \rightarrow n \rightarrow l$ mutation (10); the special nl/n mutation (18) of the regular mutation $n \rightarrow nl$ (11); and the special mutation r/m of the regular mutation $b \rightarrow m \rightarrow r$ (12).

The special mutation b/w (20) under Ψ influence is restricted to the plural forms of a closed set of some five singular nouns, which are characterized by the common phonological feature of the presence of a back rounded vowel in the first syllable of the singular form. The copular verbal forms bo/wo 'to be in', of which bo is the durative and wo the continuative tense form, may also be regarded as exemplifying the b/w mutation. The regular mutation b/r (12) under Ψ influence may also be regarded as taking place under a special phonological condition, since it is only exhibited by forms in which the stem-initial $/b/$ is followed by the front vowels $/e, e/$ before $/l/$; the b/w and b/r mutations (both under Ψ influence) may be regarded as being in complementary distribution. The following are examples of the regular b/r mutation:

<u>Singular</u>		<u>Plural</u>
belemgbunli	'chief'	arelemgbunli
<u>Verb stem</u>		<u>Perfect tense, Positive</u>
bels	'to bring'	yersle 'he has brought'
bale	'to come'	yera 'he has come'

Immutable Cases

Attention has already been drawn to the various tense forms and other constructions whose exponents include consonant mutation under either $\#$ or Ψ influence. All the other tenses are not marked by mutation and include: i. the habitual tense, positive; ii. the present tense, positive; iii. the durative tense, positive; iv. the progressive tense, positive; and v. the perfect tense, negative. It is also to be noted that vi. the direct imperative negative, 2nd person singular and plural and vii. indirect imperative negative (all persons) do not exhibit mutation.

But even in those constructions which are marked by mutation, it is not all stem-initial consonants of verbs that undergo mutation. Stem-initial consonants which do not exhibit mutation in mutation - marked constructions are here referred to as immutable cases and may be voiced or voiceless consonants.

Immutable voiced consonants

I. Of the stem-initial voiced consonants, the dorsal plosives: i. /g/ (occurring in CV, CVCV verb stems only) and ii. /gw/ (in CV verbs only) are regularly immutable. The voiced dorsal affricates: iii. /gy/ (in CV, CVCV, and CVNVCV verbs) and iv. /gyw/ (in CV, CVCV verbs only) are always immutable.

II. The voiced dorsal fricative /r/ (occurring in CVCV verbs only) is itself consistently immutable, but, as already mentioned, is realized as the mutated form of /h/ under Ψ influence in special phonological conditions.

III. The dorsal nasal consonants /ny, nyw, ŋ, ŋw/ are also regularly immutable.

IV. The semi-vowels /w, ɥ, j/ are immutable; of these, only the labio-velar semi-vowel /w/ is realized as the mutated form, under ɤ influence, of the labial plosive /b/.

V. As already mentioned, the voiced apical plosive /d/ (occurring in CV, CVV, and CVCV verbs) regularly mutates as /n/ under ɤ influence and as /l/ under ɤ influence. In reduplicated forms, however, the d/l mutation is only realized in the reduplicated forms of CVV verb stems (e.g. die/dielie 'to receive') and, therefore, serves to distinguish CVV verbs from CV and CVCV verbs.

VI. The apical nasal /n/ (occurring in CV, CVV, and CVCV verbs) mutates as /nʎ/ under ɤ influence. In reduplicated forms, however, the n/nʎ mutation is restricted to the reduplicated forms of CVV verbs (e.g. nua/nuonlua 'to put off') and CVCV verbs (e.g. noma/nomanloma 'to dive, sink') and, therefore, serves to distinguish them from CV verb stems.

Immutable voiceless consonants

I. Of the stem-initial voiceless consonants, the voiceless dorsal consonants: i. /h/ and ii. /hy/ (which, in any case, are rare and are represented by one item each: i. /hu/ 'to blow air', ii. /hys/ 'to force') are regularly immutable.

II. The double articulation consonants - i.e. the voiceless alveolarized labial /tp/ and the voiceless velarized labial /kp/ are consistently immutable in mutation-marked tense

forms. Both, however, exhibit mutation in plural forms, and the latter alone in reduplicated and nominalized forms.

III. Generally speaking, CV verb stems, in which the C element is realized phonetically as the voiceless consonants /f; s, t; k, ky/ exhibit consonant mutation in mutation-marked tense forms and verbal noun forms, except the verb fi/fĩ/ 'to thrash, beat'.

In reduplicated forms, however, the labial fricative /f/ never exhibits Type B mutation under Ψ influence (e.g. i. fe/fefe 'to vomit'; ii. fo/fufo 'to suck') but does exhibit Type A mutation under Φ influence (e.g. iii. fu/funvu 'to dig'); the apical consonants /s, t/ exhibit Type A mutation in CV verbs which exound $H/I^n [(CI)y/w]$ structure and Type B mutation in the case of CV verbs of $H^n [(CI)w]$ structure; in all other reduplicated forms of CV verbs they are immutable; and the dorsal consonants /k, ky/ may or may not exhibit Type B mutation (e.g. iv. ko/koho 'to go' and v. ka/keka 'to bite').

As a rule, the consonant in the syllable of the reduplicative prefix is immutable (in mutation-marked tenses and verbal nouns), if the reduplicated form of such CV verbs (i.e. those in which the C element is realized as the voiceless consonants /f; s, t; k, ky/) is itself not marked by stem-initial consonant mutation. The following examples, in which the (a) reduplicated forms are marked by mutation and the (b) reduplicated forms are not, illustrate:

	<u>Verb stem</u>	<u>Reduplicated form</u>	<u>Perfect tense</u>	<u>Verbal noun</u>
1a)	fu /f <u>ũ</u> /	funvu /funv <u>ũ</u> /	yevunvu /jiv <u>ũ</u> v <u>ũ</u> /	ε-vunvu-le / ev <u>ũ</u> v <u>ũ</u> lé /
	(to dig)		(he has dug it)	(digging)
b)	fe /f <u>i</u> /	fefe /fif <u>i</u> /	yefefe /jif <u>i</u> f <u>i</u> /	ε-fefe-le / εfif <u>i</u> lé /
	(to vomit)		(he has vomited)	(vomiting)
2a)	su /s <u>u</u> /	suzu /suz <u>u</u> /	yezuzu /jiz <u>u</u> z <u>u</u> /	ε-zuzu-le / ezuz <u>u</u> lé /
	(to measure)		(he has measured it)	(measuring)
b)	sa /s <u>a</u> /	sesa /səs <u>a</u> /	yesesa /jis <u>a</u> s <u>a</u> /	ε-sesa-le / εsəs <u>a</u> lé /
	(to collect)		(he has collected them)	(collecting)
3a)	tu /t <u>u</u> /	tudu /tud <u>u</u> /	yedudu /jid <u>u</u> d <u>u</u> /	ε-dudu-le / edud <u>u</u> le /
	(to uproot)		(he has uprooted them)	(uprooting)
b)	te /t <u>i</u> /	tete /tit <u>i</u> /	yetete /jit <u>i</u> t <u>i</u> /	ε-tete-le / εt <u>i</u> t <u>i</u> lé /
	(to tear)		(it is torn)	(tearing)
4a)	ka /k <u>ā</u> /	keha /k <u>ā</u> h <u>ā</u> /	yeheha /jih <u>ā</u> h <u>ā</u> /	ε-heha-nle / εh <u>ā</u> h <u>ā</u> lé /
	(to say)		(he said them)	(saying)
b)	ka /k <u>a</u> /	keka /k <u>a</u> ka /	yekeka /jik <u>a</u> ka /	ε-keka-le / εk <u>a</u> kalé /
	(to bite)		he has bitten them)	(biting)

<u>Verb stem</u>	<u>Reduplicated form</u>	<u>Perfect tense</u>	<u>Verbal noun</u>
5a) kye/ <u>kye</u> /	kyehys/ <u>kyihys</u> /	yehyehys/ <u>jihyhys</u> /	ɛ-hyehys-le / shyhyselé /
(to share)		(he has shared it)	(sharing)
b) kye/ <u>kyi</u> /	kyekye/ <u>kyiky</u> /	yekyekye/ <u>jikyiky</u> /	ɛ-kyekye-el / skyikyelé /
(to bind)		(he has bound it)	(binding)

Other examples of such CV verbs whose reduplicated forms are not marked by mutation are:

	<u>Verb Stem</u>		<u>Reduplicated form</u>	
/f/	1. fo /fo /	'to suck'	fufu /fufu /	
	2. fo /fU /	'to climb; rain'	fofo /fUfU /	
	3. fo /fo /	'to anoint'	fofo /fUfo /	
	4. fi /fi /	'to grow'	fifi /fifi /	'to germinate'
	5. fe /fe /	'to tire'	fefe /fəfe /	
	6. fe /fĩ /	'to bale out'	fefe /fifĩ /	
	7. fa /fa /	'to take'	fefa /fəfa /	'to pull in rope'
/s/	8. so /so /	'to peck'	suso /susu /	
	9. so /so /	'to catch'	soso /sUsu /	
	10. si /si /	'to build; pound'	sisi /sisi /	
	11. se /se /	'to carve'	sise /səse /	
	12. se /se /	'to lay mat; to crack'	sesə /səsə /	
	13. sa /sa /	'to collect'	sesa /səsa /	

/t/	15.	to /to /	'to make loose'	tuto /t <u>u</u> to /
	16.	to /to /	'to buy'	toto /t <u>o</u> to /
	17.	te /tè /	'to crackle'	tite /t <u>e</u> te /
	18.	ts Tts /	'to watch'	tets /t <u>e</u> ts /
	19.	tá /tã /	'to flatulate'	teta /t <u>ã</u> tã /
/k/	20.	ko /k <u>u</u> /	'to trim (stick)'	koko /k <u>u</u> k <u>u</u> / 'to gnaw'

Fossilized reduplicated forms

There are a number of fossilized reduplicated forms which copy the shape of the reduplicated forms of such CV verb stems which are not marked by mutation. The initial consonants (in the corresponding syllable of the reduplicative prefix) in such fossilized reduplicated forms are also immutable; such initial consonants are: /f; s, t; k, ky/. Some of these fossilized reduplicated forms may be homophonous with non-fossilized reduplicated forms of CV verb stems and in the examples which follow such homophonous items are supplied in round brackets with hyphenation to indicate morpheme boundary.

/f/	1.	fefe /f <u>e</u> fe /	'to germinate'	(/f <u>e</u> -fe/ 'to tire')
	2.	fefa /f <u>e</u> fa /	'to dry; be pregnant'	(/f <u>e</u> -fa/ 'to pull in rope')
/s/	3.	sisi /s <u>i</u> si /	'to cheat'	(/s <u>i</u> -si/ 'to build; pound')
	4.	sese /s <u>ĩ</u> s <u>ĩ</u> /	'to make accounts'	
	5.	sesa /s <u>ã</u> s <u>ã</u> /	'to evaporate'	(/s <u>ã</u> -s <u>ã</u> / 'to hang up')

- /t/ 6. teta /teta / 'to attack'
/k/ 7. kokoa /kOkwa / 'to polish hearth'
/ky/ 8. kyiki/kyeki/ 'to rub off'

IV. CVV verb stems, in which the C element is realized phonetically as the voiceless consonants /f; s, t/, usually exhibit mutation in the various mutation-marked constructions. In the following CVV verbs, however, the stem-initial consonants are immutable: i. fia/f(i)jã/ 'to unthread', ii. fea/f(i)jã/ 'to cook soup'; iii. sua/sũwã/ 'to tear', iv. sea/s(i)jã/ 'to eject a stream of spit'; v. tia/t(i)ja/ 'to kick, tread on'.

V. The same stem-initial voiceless consonants /f; s, t/ may also be immutable in certain CVCV verbs. Three groups (A-C) of such CVCV verbs may be distinguished. Group A consists of CVCV verb stems in which the stem-initial C element realizable as the voiceless consonants /f; s, t/ co-occurs with a medial C element whose phonetic realizations are also voiceless consonants, which may be i. labial /k, kp/, ii. apical /t, s/ or iii. dorsal /k, ky/.

Members of Group A include:

- /f-t/: 1. fiti /fiti / 'to bore a hole'
2. fete /fɛtɛ / 'to nudge; knead'
3. futu /futu / 'to fight playfully'
4. foto /foto / 'to mix'
5. feta /feta / 'to suit, be unbecoming'
- /f-k/: 6. foka /fOkã / 'to be excited, angry'

	7.	feke	/feke /	'to show off, be boastful'
/f-ky/:	8.	fokye	/fOkys /	'to fall ill'
	9.	fokye	/fokyr /	'to prepare palm tree for palm wine'
/s-t/:	10.	soti	/soti /	'to prod (with a stick)'
	11.	sota	/sota /	'to get stuck in throat'
/s-k/:	12.	suku	/suku /	'to develop pus'
	13.	saka	/saka /	'to rummage'
/s-kp/:	14.	sukpu	/sukpu /	'to coagulate'
	15.	sokpo	/sokpo /	'to shake'
	16.	sokpa	/sOkpa /	'to abuse roundly, disgrace'
/t-f/:	17.	tafe	/fafɪ /	'to taste, lick'
	18.	tifi	/fiti /	'to rot, decompose'
/t-s/:	19.	tosa	/tosa /	'to get stuck in throat'
/t-k/:	20.	tika	/tika /	'to stop, wait, suspend'

Group B consists of CVCV verbs in which the medial C element is phonetically realized as the oral and nasalized consonants /l, nl/. Members of this group include the following items:

/f/	1.	fonla	/fOnla /	'to bother; to mix'
	2.	folo	/folo /	'to fill syringe; to slip into hole'
	3.	fole	/folɪ /	'to wrap up'
	4.	finli	/fɛ̃nli /	'to breathe in phlegm'
/s/	5.	solo	/solu /	'to fade (of material); to be incorrigible (of person)'
	6.	solo	/solo /	'to line up'
	7.	sele	/sele /	'to slip'

8. ssa /sasa / 'to drive away; to take to one's heels'
9. salo /salu / 'to spread (of rumour)'
- /t/ 10. tulu /təlu / 'to untie; to become loose'
11. tolo /təlu / 'to descend (hill)'
12. tolo /tolo / 'to dilute, lose essence of'
13. toli /toli / 'to comb'
14. tili /təli / 'to become blunt'
15. tinli /tēnlī / 'to press on'
16. tele /təli / 'to slip'
17. talu /təlu /
18. tali /təli / 'to carry'
19. tanli /tənlī / 'to scorch'
20. tale /təli /
21. talo /təlu /

Group C consists of CVCV verbs in which the medial C element is realized as a voiced consonant (other than /l, nl/), which may be nasal /m, n, ny/ or the apical fricative /z/. Members of this group include:

1. fonyia/fōnyā / 'to rummage'
2. siane /syæni / 'to befall (of mishap)'
3. tima /tīmā / 'to become firmly fixed'
4. tazi /təzi / 'to carry, lift up'

Phonological analysis of consonant mutation

For a general phonological analysis of consonant mutation, two main types of phonological features may be set up:

I. Phonological features relating to particular organs of articulation which characterize (verbal or nominal) stems as well as the corresponding constructions of which they are constituent elements, and, therefore, serve to relate them.

II. Phonological features relating to manner of articulation which may a) characterize one but not the other; and, therefore, serve to distinguish them, or b) characterize both stems and the constructions of which the stems are a part and, therefore, serve to relate them.

Under (I), a three-term prosodic system of place of articulation is set up, namely i. Labiality, ii. Apicality, and iii. Dorsality, and symbolized in the structural formulae by the superscript capital letters: L, A and D respectively.

The phonetic exponents of L-prosody include different kinds of lip articulations: bilabial consonant articulations which may be plosive or nasal consonants, alveolarized or velarized labial plosives, labio-dental fricative consonants and the labio-velar semi-vowel.

The phonetic exponents of A-prosody include tip or tip and blade and blade articulations, which may be plosives, fricatives, frictionless continuants or nasals.

The phonetic exponents of D-prosody include ^{consonant} ~~tip or tip and~~ articulations with contact or narrowing involving the body of

the tongue, front, centre or back (and not involving the tip and blade nor the lips).

It is to be noted that in consonant sequences or nasal complexes, occurring in the various constructions, I, A, or D characterizes the sequence as a whole since in the pronunciation the nasal and the following consonant are homorganic.

In the grouped examples which follow, only CV verbs (and, in the case of the kw/gw and kw/hy mutations alone, a CVCV verb) with:

- A Negative present tense, 3rd person singular (to exemplify Type A mutation); and
- B Positive future tense I, 3rd person singular (to exemplify Type B mutation),

are used to illustrate the regular mutations. In the phonological formulae, the 3rd person singular pronominal subject written as o will be symbolized as O (and realized phonetically as /o, o/ according to the vowel harmony) and the tense prefix ba- of the positive future tense I will be represented as bW - (in which the W element is the vowel under whose influence Type B mutation takes place). Irregular cases of consonant mutation will be illustrated with the plural forms of singular nouns; vowel prefixes in singular nouns will be symbolized as E (and includes among its phonetic exponents, the vowels /e, e/).

I.i The phonological feature of L (ability)

Regular Cases

	<u>Verb stem</u>		<u>Tense forms</u>	
f/v :	1. fe /fi /	^L CV	A. onve / ^o ñvi /	^o ^T ^H CV
	(to vomit)		(he's not vomiting)	
			B. obave/obávi /	ob ^v ^L CV
			(he'll vomit)	
fw/vw:	2. fua /fwæ /	^L CV	A. onvua/ ^o ñvwá /	^o ^T ^H CV
	(to scratch)		(he's not scratching)	
			B. obovua/obávwæ/	ob ^v ^L CV
			(he'll scratch)	
b/m :	3. ba /ba /	^L CV	A. onbo / ^o mmó /	^o ^T ^H CV
	(to break)		(he's not breaking it)	

Special Cases

	<u>Singular</u>		<u>Plural</u>	
tp/db:	4. rema/tpĩmã/	^L CVCV	A. agbema/adbĩmã/	^v ^L CVCV
	(grass-cutter)		(grass-cutters)	
kp/gb:	5. ekpa /ekpa/	^E ^L CV	B. mgba /mgba /	^L NCV
	(mat)		(mats)	
b/w :	6. bols/bels /	^L CVCV	A. awols /awels /	^v ^L CVCV
	(stone)		(stones)	

I.ii The phonological feature of A (picality)

Regular Cases

	<u>Verb stem</u>		<u>Tense forms</u>	
t/d :	7. tu /tu / (to uproot)	^A CV	A. ondu /ondú / (he's not uprooting)	O ^A _H CV
			B. obadu /obádu / (he'll uproot it)	Obv ^A CV
s/z :	8. su /sũ / (to cry)	^A CV	A. onzu /onzú / (he's not crying)	O ^A _H CV
			B. obazu /obázũ / (he'll cry)	Obv ^A CV
sy/zy :	9. sia /syæ / (to return)	^A CV	A. onzia /onzýæ / (he's not returning)	O ^A _H CV
			B. obazia /obázýæ / (he'll return)	Obv ^A CV
d/n :	10. do /dɔ / (to weed)	^A CV	A. onlo /onnó / (he's not weeding it)	O ^A _H CV
d/l :	"		B. obalo /obálo / (he'll weed it)	Obv ^A CV
n/nl :	11. no /nũ / (to drink)	^A CV	B. obanlo /obanlũ / (he'll drink it)	Obv ^A CV

Special Cases

	<u>Singular</u>		<u>Plural</u>	
l/n :	12. elaka/eláka/ (box)	E ^A CVCV	A. nlska /nnska / (boxes)	A ^A _H CVCV
nl/n :	13. anloma/ãnlũmã/ (bird)	E ^A CVCV	A. nloma/nnũmã / (birds)	A ^A _H CVCV

I.iii The phonological feature of D(orsality)

Regular Cases

		<u>Verb stem</u>		<u>Tense forms</u>
k/g	: 14.	ka /kã /	^D CV A.	onga /õngã / O ^D NCV (to say) (he's not saying it)
k/h	:	"	^D CV B.	obaha /obahã / Ob ^D CV (he'll say it)
ky/gv	: 15.	kye /kyɪ /	^D CV A.	ongye /õnygyí / O ^D NCV (to catch) (he's not catching him)
ky/hy	:	"	B.	obahye /obáhyɪ / Ob ^D CV (he'll catch him)
kw/gw	: 16.	koati/kwɛt /	^D CVCV A.	ongwati/õngwétí / O ^D NCVCV (to slip) (he does not slip)
kw/hw	:	"	B.	obawoti/obáhweti/ Ob ^D CVCV (he'll slip)
kyw/gvw	: 17.	twe /kywɪ /	^D CV A.	ondwe /õnygywí / O ^D NCV (to pull) (he's not pulling it)
kyw/hy	:	"	B.	obahwe /obahyɪ / Ob ^D CV (he'll pull it)

Special Cases

		<u>Singular</u>		<u>Plural</u>
h/g	: 18.	shane /shã(ɪ) /	E ^D CVCV A.	ngane /ngã(ɪ) / D ^D NCVCV (trap) (traps)
hy/gv	: 19.	shyels/shyelé /	E ^D CVCV A.	ngyels /nygvéls / D ^D NCVCV (sparrow) (sparrows)

It is also to be noted that with the following voiceless stem-initial consonants: i. the labial fricatives /f, fw/ (1-2), ii. the alveolarized and velarized labial plosives /tp, kp/ (4-5), iii. the apical plosive and fricatives /t; s, sy/ (7-9), iv. the dorsal plosives /k, kw/ (14A, 16A), and v. the dorsal affricates /ky, kyw/ (15A, 17A), consonant mutation has the effect of changing them into their voiced counterparts.

Under (II), voicing as opposed to plosion is stated; and to handle the voicing/plosion opposition, two prosodic features, with two terms each, are set up:

- i. a two-term prosodic feature of voice symbolized as superscripts V/\bar{V} , of which V -prosody is realized phonetically as voicing (or presence of voice) and \bar{V} -prosody as voicelessness (or absence of voice);
- ii. a two-term prosodic feature of plosion symbolized as superscripts P/\bar{P} , of which P -prosody is realized phonetically as presence of plosion in contradistinction to \bar{P} -prosody which is realized phonetically as absence of plosion.

Voicing is opposed to plosion in these respects: I) voicing as a feature of the (verbal or nominal) stem is related to absence of plosion as a feature of the corresponding construction; and II) absence of voice as a feature of the stem is related to presence of plosion as a feature of the corresponding construction.

The following examples (22-29) illustrate the first type of relationship:

Regular Cases

	<u>Verb stem</u>	<u>Tense forms</u>
d/n : 22.	do /do / $V^{\bar{P}}CV$ (to weed)	A. onlo /ðnnó / $C^{\bar{P}}_{NCV}$ (he's not weeding it)
d/l :	"	B. obalo/obálo / $Ob^{\bar{P}}_{CV}$ (he'll weed it)
n/nl: 23.	no /nũ / $V^{\bar{P}}CV$ (to drink)	B. obanlo/obánlũ / $Ob^{\bar{P}}_{CV}$ (he'll drink it)
b/m : 24.	bo /bo / $V^{\bar{P}}CV$ (to break)	A. ombo /ðmmó / $O^{\bar{P}}_{NCV}$ (he's not breaking it)
b/r : 25.	bels /bæls / $V^{\bar{P}}CVCV$ (to bring)	B. obarsls/obárels / $Ob^{\bar{P}}_{CVCV}$ (he'll bring it)

Special Cases

	<u>Singular</u>	<u>Plural</u>
l/n : 26.	slene/slen(ɾ) / $E^{\bar{P}}_{CVCV}$ (boat, vehicle)	A. nlsne/nnen(ɾ) / $V^{\bar{P}}_{NCVCV}$ (boats, vehicles)
nl/n: 27.	anloma/~anlũmã / $E^{\bar{P}}_{CVCV}$ (bird)	A. nloma/nmũmã / $V^{\bar{P}}_{NCVCV}$ (birds)
r/m : 28.	raals /ralé / $V^{\bar{P}}_{CVCV}$ (woman)	A. mraals/mmalé / $V^{\bar{P}}_{NCVCV}$ (women)
b/w : 29.	boka /bUká / $V^{\bar{P}}_{CVCV}$ (hill)	A. mboka /mmUká / $V^{\bar{P}}_{NCVCV}$ (hills)
		or B. awoka /awUká / $\#^{\bar{P}}_{CVCV}$ (hills)

As the above examples show, voicing as a feature of the initial C element in the (verbal or nominal) stem is related to absence of plosion as a feature of the corresponding C element in the tense or plural form.

The following examples (30-37) illustrate the second type of the voicing-plosion relationship:

Regular Cases

	<u>Verb stem</u>	<u>Tense form</u>
t/d	30. tu /tu / \bar{V}^P_{CV} (to uproot)	A. ondu / $\tilde{o}nd\acute{u}$ / $O^V_{\bar{H}^P} CV$ (he's not uprooting it) B. obadu /ob $\acute{a}du$ / $Ob^V_{VP} CV$ (he'll uproot it)
k/g	31. ka /k \tilde{a} / \bar{V}^P_{CV} (to say)	A. onga / $\tilde{o}ng\acute{a}$ / $O^V_{\bar{H}^P} CV$ (he's not saying it)
kw/gw	32. koati/kw $\acute{a}ti$ / \bar{V}^P_{CVCV} (to slip)	A. ongoati/ongw $\acute{a}ti$ / $O^V_{\bar{H}^P} CVCV$ (he's not slipping)
ky/gy	33. kye /ky \acute{r} / \bar{V}^P_{CV} (to catch)	A. ongye / $\tilde{o}nygy\acute{r}$ / $O^V_{\bar{H}^P} CV$ (he's not catching it)
kyw/gyw	34. twe /kyw \tilde{r} / \bar{V}^P_{CV} (to pull)	A. ondwe / $\tilde{o}nygyw\acute{r}$ / $O^V_{\bar{H}^P} CV$ (he's not pulling)

Special Cases

	<u>Singular</u>	<u>Plural</u>
tp/db	35. pema /tp $\acute{r}ma$ / \bar{V}^P_{CVCV} (grass-cutter)	B. agbema /adb $\tilde{r}m\tilde{a}$ / $\Psi^V_{VP} CVCV$ (grass-cutters)
kp/gb	36. kp $\acute{o}ba$ /kp $\acute{o}ba$ / \bar{V}^P_{CVCV} (gold nugget)	A. mgb $\acute{o}ba$ / η mgb $\acute{o}ba$ / $V_{\bar{H}^P} CVCV$ (gold nuggets)

	<u>Singular</u>		<u>Plural</u>
hy/gy ¹ :	37. shysɛ/shysɛ/ E ^{V̄P} CVCV	A.	ngysɛ/nygysɛ/ V ^{V̄P} CVCV
	(sparrow)		(sparrows)

In the above examples, absence of voicing as a feature of the initial C element in the stem is related to the presence of plosion as a feature of the corresponding C element in the tense and plural forms.

Additional Cases

f/v :	38. fe /fɪ / V̄ ^P CV	A.	ɔnve /ɔ̃ŋvɪ / O ^{V^{V̄P}} CV
	(to vomit)		(he's not vomiting)
		B.	ɔbave /ɔbávi / Ob ^{V̄P} CV
			(he'll vomit)
fw/vw :	39. fua /fwe / V̄ ^P CV	A.	ɔnvua /ɔ̃ŋvwæ / O ^{V^{V̄P}} CV
	(to scratch)		(he's not scratching)
		B.	ɔbavua /ɔbávwæ / Ob ^{V̄P} CV
			(he'll scratch)

1. The affricate consonants /ky, gy; kyw, gyw/ may be classified ^{with} ~~as~~ plosives for the following reasons:
 - i) affricates occur before unrounded front and central open vowels, whereas velar plosives occur before rounded back and central open vowels, and may, therefore, be regarded as being in complementary distribution;
 - ii) there is no contrast between the affricate and the plosive modes of articulation, since only affricates are palato-alveolar and no plosives are articulated at the same place;
 - iii) only affricates and plosives have voiceless and voiced counterparts *as stem-initial consonants in verbs*

		<u>Verb stem</u>		<u>Tense forms</u>
s/z	: 40.	su /sũ / $\bar{V}^{\bar{P}}_{CV}$	A.	onzu /ɔnzũ / $O^{\bar{V}\bar{P}}_{CV}$ (he's not crying)
		(to cry)	B.	obazu /obəzũ / $Ob^{\bar{V}\bar{P}}_{CV}$ (he'll cry)
sy/zy	: 41.	sia /syæ / $\bar{V}^{\bar{P}}_{CV}$	A.	onzia /ɔnzyæ / $O^{\bar{V}\bar{P}}_{CV}$ (he's not returning)
		(to return)	B.	obazia /obəzyæ / $Ob^{\bar{V}\bar{P}}_{CV}$ (he'll return)
k/h	: 42.	ka /kã / $\bar{V}^{\bar{P}}_{CV}$	B.	obaha /obãhã / $Ob^{\bar{V}\bar{P}}_{CV}$ (he'll say it)
		(to say)		
ky/hy	: 43.	kve /kvi / $\bar{V}^{\bar{P}}_{CV}$	B.	obahye /obahvi / $Ob^{\bar{V}\bar{P}}_{CV}$ (he'll catch him)
		(to catch)		
kw/hw	: 44.	koati /kwɔti / $\bar{V}^{\bar{P}}_{CVCV}$	B.	obahoati /obahwɔti / $Ob^{\bar{V}\bar{P}}_{CVCV}$ (he'll slip)
		(to slip)		
kyw/hy	: 45.	twe /kwɛ / $\bar{V}^{\bar{P}}_{CV}$	B.	obehwe /obahvi / $Ob^{\bar{V}\bar{P}}_{CV}$ (he'll pull)
		(to pull)		
		<u>Singular</u>		<u>Plural</u>
h/g	: 46.	shane/shan(ɪ) / $E^{\bar{V}\bar{P}}_{CVCV}$	A.	ngane /ŋan(ɪ) / $V^{\bar{H}\bar{P}}_{CVCV}$ (traps)
		(trap)		(traps)

By way of contrast with examples (22-37), it is to be noted that in these additional cases (38-46), voicelessness as a feature of the initial C element in the stem is related to the absence of plosion (rather than to the presence of plosion as in the case of examples (30-37)) as a feature of the C element in the tense and plural forms, as exemplified by (38-45); and secondly,

voicing as a feature of the initial C element in the stem is related to presence of plosion (and not to the absence of plosion as in the case of examples (22-29)) as a feature of the C element in the plural forms, as exemplified by (46).

On the basis of the above phonological analysis, three general statements can be made about the relationship of stems to their corresponding constructions in respect of the feature 'voice'. Firstly, voicing in the stem is related to voicing in the corresponding construction, as exemplified by (22-29).

Secondly, voicelessness as a feature of the stem is related to voicing as a feature of the corresponding construction, as in (30-37 and 38-42); and, as mentioned above, in the case of voiceless plosive consonants (30-36) and voiceless fricative consonants (38-41), the mutated voiced consonant is homorganic with the voiceless stem-initial consonant.

And thirdly, voicelessness as a feature of the stem is related to voicelessness as a feature of the corresponding construction, as in (43-45); and it is to be noted that this relationship is a characteristic of consonants which have the feature of dorsality and the type of mutation involved is, in each case, Type B effected under ∇ influence.

The grammatical and lexical functions of Consonant Mutation

1a. One important grammatical function of consonant mutation is that it serves, in part, to distinguish dynamic verbal forms occurring in the habitual tense from their corresponding stative verbal forms occurring in the continuative tense. Both tenses are alike in that they do not have tense prefixes, but are distinguished from one another in that the dynamic verbal form, in the habitual sense, is not marked by mutation, whereas the stative verbal form, in the continuative tense, is marked by Type B mutation. The following paired examples illustrate:

- | | | | | |
|----|-------|-----|------------------------------|----------------|
| 1. | t/d : | (a) | <u>o</u> tenla skpá ne ázo | (Habitual, |
| | | | (he sits on the bed) | dynamic) |
| | | (b) | <u>o</u> de skpá ne ázo | (continuative, |
| | | | (he is sitting on the bed) | stative) |
| 2. | f/v : | (a) | <u>o</u> fea skpá ne ábo | (Habitual, |
| | | | (he hides under the bed) | dynamic) |
| | | (b) | <u>o</u> vea skpá ne ábo | (Continuative |
| | | | (he is hidden under the bed) | stative) |

It is to be noted that in the case of the verbal forms tenla/de 'to sit (or live)' occurring in (1a-b) above, the dynamic verbal form tenla is distinguished from the stative verbal de used in the continuative tense both phonologically by Type B mutation and morphologically by suffixation.

Other pairs of verbal forms whose dynamic form in the habitual tense is phonologically differentiated from their stative forms in the continuative tense by means of Type B mutation include:

		<u>Habitual, dynamic</u>	<u>Continuative, stative</u>
3.	s/z :	i. <u>soa</u> 'to put/carry on head'	<u>zo</u> 'to wearing/ carrying on head'
		ii. <u>soho</u> 'to resemble'	<u>zoho</u> 'to resemble'
4.	sy/zy:	<u>sia</u> 'to place in'	<u>zia</u> 'to be held in'
5.	k/h :	i. <u>koto</u> 'to kneel'	<u>hoto</u> 'to be kneeling'
		ii. <u>kisa</u> 'to lean against'	<u>hisa</u> 'to be leaning against'
		iii. <u>kenda</u> 'to hang'	<u>henda</u> 'to be hanging'
6.	ky/hy:	<u>kyia</u> 'to need, want'	<u>hyia</u> 'to be necessary,
7.	d/l :	i. <u>di</u> 'to occupy position'	<u>li</u> 'to be in position'
		ii. <u>ds</u> 'to hold, grasp'	<u>ls</u> 'to have'

It is to be noted that this phonological distinction by means of mutation is restricted to plosive and fricative stem-initial consonants and is realizable not under \forall influence.

We might, at this stage, compare the different phonological means employed by Akan (Twi and Fante) and Nzema to distinguish dynamic verbal forms occurring in the habitual tense from their respective stative verbal forms occurring in the continuative tense:

Twi :	(8a)	<u>ófi</u> (è)hó (he leaves there)	(positive Habitual, dynamic)
	(8b)	<u>òfi</u> (è)hó (he comes from there)	(positive Continuative, stative)
Nzema:	(8.1a)	<u>òfi</u> (è)ké (he leaves there)	(positive Habitual, dynamic)
	(8.1b)	<u>òyi</u> (è)ké (he comes from there)	(positive Continuative, stative)

Twi :	(9a.)	òmfì (è)hó (he doesn't leave there)	(negative Habitual, dynamic)
	(9b.)	òmfí (è)hó (he doesn't come from there)	(negative Continuative, stative)
Nzema:	(9. Ia)	ònví (é)kè (he doesn't leave there)	(negative Habitual, dynamic)
	(9. Ib)	ònví́ (é)kè (he doesn't come from there)	(negative Continuative, stative)
Twi :	(10a)	òtèná òpón nó só (he sits on the table)	(positive Habitual dynamic)
	(10b)	òtè òpón nó só (he is sitting on the table)	(positive Continuative, stative)
Nzema:	(10. Ia)	òtènlà èkpónlé nè ézò (he sits on the table)	(positive Habitual, dynamic)
	(10. Ib)	òdè èkpónlé nè ézò (he is sitting on the table)	(positive Continuative, stative)

As (8a-b) show, Akan effects the differentiation tonally, whereas Nzema does so by consonant mutation, as in (8. Ia-b). In the negative clauses (9a-b), Akan signals the difference tonally, but Nzema does not; in addition, the Akan and Nzema forms differ in that the Akan forms are not marked by mutation whereas the corresponding Nzema forms are. And in both Akan and Nzema, the dynamic and stative verbal forms occurring in (10a-b) are morphologically distinguished; and in Nzema, also phonologically distinguished by consonant mutation. With particular reference to verbal forms with voiceless stem-initial consonants which are not morphologically related, both Akan and Nzema make the

distinction by phonological means, Akan by means of tone and Nzema by means of mutation. With verbal forms which are morphologically distinguished¹, Nzema (but not Akan) additionally, and, therefore, redundantly distinguishes them by consonant mutation.

Also in the case of verbal forms with voiced stem-initial consonants which are not morphologically related, Akan achieves the distinction by means of tone and Nzema by means of mutation, as the following examples illustrate:

- | | | | |
|--------|---------|--|-------------------------------------|
| Twi | : (11a) | <u>òdà</u> òpón' nó só
(he sleeps on the table) | (positive Habitual,
dynamic) |
| | (11b) | <u>òdà</u> òpón' nó só
(he's lying on the table) | (positive Continuative,
stative) |
| Nzema: | (11.Ia) | <u>òdà</u> àkpónlé nè ázò
(he sleeps on the table) | (positive Habitual,
dynamic) |
| | (11.Ib) | <u>òlà</u> àkpónlé nè ázò
(he's lying on the table) | (positive Continuative,
stative) |

With verbal forms with other voiced stem-initial consonants, Akan distinguishes them tonally, whereas Nzema does so morphologically, as in:

- | | | | |
|--------|---------|---|-------------------------------------|
| Twi | : (12a) | <u>ògvíná</u> àkwán' mú
(he stops in the way) | (positive Habitual,
dynamic) |
| | (12b) | <u>ògvínà</u> àkwán' mú
(he is in the way) | (positive Continuative,
stative) |
| Nzema: | (12.Ia) | <u>ògyìnlà</u> àdènlé nú
(he stops in the way) | (positive Habitual,
dynamic) |
| | (12.Ib) | <u>ògyì</u> àdènlé nú
(he is in the way) | (positive Continuative,
stative) |

On the basis of the above descriptions, we might say that, as

1. Additional exemplification is provided by Nzema verbal forms: soa/zo 'to put or carry on head' and their Akan equivalents soa/so.

a rule, both languages employ phonological means to differentiate dynamic verbal forms in the habitual tense from their corresponding stative forms in the continuative tense and that whereas Akan uses tone, Nzema uses consonant mutation.

1b. Consonant mutation is also one synchronic means of distinguishing positive habitual tense forms from positive perfect tense forms with the 1st person singular and 1st person - 3rd person plural pronominal subjects only.

In addition to having different temporal references and, therefore, collocation with different temporal adverbials, the two tenses are different in that the positive habitual tense selects the Set I pronouns including the mono-phonemic forms, ɛ 'you' and ɔ 'he, she, it' of the 2nd and 3rd person singular pronominal subjects, whereas the positive perfect tense selects Set II pronouns including the corresponding bi-phonemic forms, wɔ 'you' and ye 'he, she, it'.

Apart from these differences, the two tenses are alike in being characterized by identical intonation consisting of a low tone on the pronominal subject followed by low tone on the syllable(s) of the verb stem, and in not being marked by any tense prefix, so that with verb stems whose stem-initial consonants are immutable the two tense forms are, in isolation, virtually homophonous.¹ The following examples with the verb stem kru 'to smoke (meat)' illustrate:

1. It seems, on kinaesthetic evidence, that the final low tone in clauses, particularly if they are objectless, with the perfect tense 'drops', whereas the corresponding low tone with the habitual tense is level; that is, the intonational patterns of the perfect and habitual tense forms are:

/ - ˩/ and / - -/ respectively.

		<u>Habitual</u>	<u>Perfect</u>
1st pers.	sing.	mekpu/mùkpù?/ (I smoke it)	mekpu/mùkpù?/ (I've smoked it)
1st "	plur.	yekpu/jèkpù?/ (we smoke it)	yekpu/jèkpù?/ (we've smoked it)
3rd "	"	bekpu/bèkpù?/ (they smoke it)	bekpu/bèkpù?/ (they've smoked it)

In the case of verb stems with mutable stem-initial consonants, mutation partly serves to distinguish positive perfect tense forms, which are marked by Type B mutation, from their corresponding positive habitual tense forms which are not marked by mutation, as the following examples with the verb stems, i. ko 'to go' and ii. bela 'to come', illustrate:

		i. <u>ko</u> 'to go'	
		<u>Habitual</u>	<u>Perfect</u>
1st pers.	sing.	meko/mùkò?/ 'I go'	meho/mùhò?/ 'I've gone'
1st "	plur.	yeko/jèkò?/ 'we go'	yeho/jèhò?/ 'we've gone'
3rd "	"	beko/bèkò?/ 'they go'	beho/bèhò?/ 'they've gone'
		ii. <u>bela</u> 'to come'	
1st "	sing.	meba/mèbà?/ 'I come'	mera/mèrà?/ 'I've come'
1st "	plur.	yeba/jèbà?/ 'we come'	yera/jèrà?/ 'we've come'
3rd "	"	beba/bèbà?/ 'they come'	bera/bèrà?/ 'they've come'

1c. Consonant mutation may also serve, along with other synchronic means, to distinguish CV verb stems, in which the C element is phonetically realized as the voiceless plosive and fricative consonants /t, k, ky; f, s/, from their reduplicated forms. As already mentioned, such CV verbs (except those which are characterized by nasality and/or w-prosody as a whole) have reduplicated forms which are not marked by mutation. The verbal noun forms and their mutation-marked tense forms of such CV verb stems regularly exhibit consonant mutation, whereas their corresponding reduplicated forms do not. In the illustrative examples involving the verbs: i. to 'to buy' and ii. si 'to pound' and their reduplicated (RED.) forms, only the verbal noun forms and the 3rd person singular habitual (Hab.) tense negative (Neg.) and perfect (Perf.) tense positive (Pos.) forms are given:

	<u>CV verb stem</u>	<u>Muta- tion</u>	<u>RED. form</u>	<u>Muta- tion</u>
	i. <u>to</u> 'to buy'		<u>toto/tuto/</u>	
1. Verbal noun :	sdole/sdolé?/ (buying)	t/d	etotole/etútólé?/ (buying)	t/t
2. <u>Tense forms:</u>				
a. 3rd pers. sing.				
Hab. Neg.	ondo/õndó (he doesn't buy)	t/d	ontoto/õntútó / (he doesn't buy)	t/t
b. 3rd pers. sing.				
Perf. Pos.	yedo/jìdò/ (he's bought it)	t/d	yetoto/jìtòtò/ (he's bought them)	t/t

	<u>CV verb stem</u>	<u>Muta- tion</u>	<u>Red. form</u>	<u>Muta- tion</u>
	ii. <u>si</u> 'to pound'		<u>sisi/sisi/</u>	
3. Verbal noun :	szile/ <u>ez</u> elé/ (pounding)	s/z	ssisile/ <u>es</u> iselé/ (pounding)	s/s
4. Tense <u>forms:</u>				
a. 3rd pers. sing.				
Hab. Neg.	onzi/ <u>õnz</u> í/ (he doesn't pound it)	s/z	onsisi/ <u>õns</u> ísí/ (he doesn't pound it)	s/s
b. 3rd pers. sing.				
Perf. Pos.	yezi/ <u>j</u> ízí/ (he has pounded it)	s/z	yesisí/ <u>j</u> ísísí/ (he has pounded it)	s/s

2. Lexical distinction

a. Consonant mutation is one synchronic means of distinguishing the following pairs of homophonous lexical items:

1a. siane/syænĩ/ 'to cause mishap', and 1b. siane/syænĩ/ 'to cause to turn back'; 2a. sua/sũwã/ 'to tear' and 2b. sua/sũwã/ 'to prop against', *fasten*'.

In the case of the first pair of items, the distinction may be exemplified by their perfect tense forms: 1a. wosiane/wosyænĩ/ 'you've caused (me) mishap', which is not marked by mutation; and 1b. woziane/wozyænĩ/ 'you've turned (me) back', which is marked by mutation. And in the case of the second pair, the first member 2a. sua/sũwã/ has the i. the verbal noun form: esuanle/esũwãlé/ 'tearing'; ii. the reduplicated form: suosua/s(uw)osũwã/ and iii. the perfect tense form: yesua/jisũwã/, all of which are not marked by mutation. The second member 2b. sua/sũwã/ has the corresponding forms: i. ezuanle/ezũwãlé/ 'fastening';

ii. suozua/s(uw)ozŋwā/; and iii. vezua/jizŋwā/ 'he has fastened it', all three forms being marked by the s/z mutation.

b. Consonant mutation may also serve in part to distinguish the different but related senses of polysemic lexical items. For instance, the verb stem 1. tia/t(i)ja/ has the two related senses of i. 'to walk or toddle' and ii. 'to kick or tread on'. In its first sense, this item has (a) the verbal noun form: ediala/ed(i)jalé/ 'walking'; (b) the reduplicated form: tiedia/t(ij)ed(i)ja/; (c) the perfect tense form: yedia/jid(i)ja/ 'he has walked', all three forms being marked by the t/d mutation.

In its second possible sense, the item has the corresponding forms: (a) stials/et(i)jalé/ 'kicking'; (b) tietia/t(ij)et(i)ja/; and (c) yetia/jit(i)ja/ 'he has kicked', all three forms exhibiting no mutation. Similarly, the verb sea/s(ĩ)jã/ has at least two related senses: i. 'to allow to pass' and ii. 'to eject a stream of spit', distinguishable, among other formal criteria, by consonant mutation, as exemplified by their corresponding perfect tense forms: i. vezea nrenyá ne 'he has allowed the man to pass' and ii. yesia nysle 'he has ejected a stream of spit'.

With the verbs: 1. kye/kyɪ/, which may mean either i. 'to catch' or ii. 'to bind' and 2. kpolo/kpolo/, which may mean either i. 'to take off dress' or ii. 'to bruise (or peel off skin)', the distinction, by means of mutation, of their different senses can be seen in their reduplicated forms. In its first sense, item (1) kve has the reduplicated form kvehve/kyɪhɪ/ which is marked by ky/hy mutation, whereas in its second sense it has the reduplicated form: kyekye/kyɪkyɪ/, which is not

marked by mutation. Similarly, item (2): kpolo, in its first sense, has the reduplicated form: kpologbolo/kp(ol)orngbolo/ 'to be loose (of dress)', which exhibits the kp/gb mutation under N influence, whereas its second sense is distinguished by the reduplicated form: kpolo**k**polo/kp(ol)okpolog/, which does not exhibit mutation.

c. It was noted above as a characteristic of verbs that nasality (rather than tone as in the case of noun words) may be lexically distinctive among mono-syllabic and disyllabic verb stems. In conjunction with nasality, consonant mutation may be lexically distinctive, as the following pairs of CV and CVV verb stems and their corresponding reduplicated forms illustrate:

	<u>Verb stem</u>	<u>RED. form</u>
CV verbs :	1a. <u>kp<u>u</u>/kp<u>u</u></u> / 'to spew out'	<u>kp<u>u</u>kp<u>u</u> /'kp<u>u</u>kp<u>u</u> /</u>
	b. <u>kp<u>u</u>/kp<u>ũ</u></u> / 'to smoke (meat)'	<u>kp<u>u</u>ngbu/kp<u>ũ</u>ngbu/</u> 'to fumigate'
	2a. <u>to /t<u>u</u></u> / 'to throw'	<u>toto /t<u>u</u>t<u>u</u> /</u> 'to deploy'
	b. <u>to /t<u>ũ</u></u> / 'to cook'	<u>tondo /t<u>ũ</u>nd<u>ũ</u> /</u> 'to roast'
	3a. <u>ko /k<u>u</u></u> / 'to trim (sticks)'	<u>koko /k<u>u</u>k<u>u</u> /</u> 'to gnaw'
	b. <u>ko /k<u>ũ</u></u> / 'to fight'	<u>koho /k<u>ũ</u>h<u>ũ</u> /</u>
	4a. <u>ka /k<u>a</u></u> / 'to bite'	<u>keka /k<u>a</u>k<u>a</u> /</u>
	b. <u>ka /k<u>ã</u></u> / 'to say'	<u>keha /k<u>ã</u>h<u>ã</u> /</u> 'to gossip'
CVV verbs:	5a. <u>fia/f(i)ja/</u> 'to carry child'	<u>fievia /f(ij)ev(i)ja/</u>
	b. <u>fia/f(i)jã/</u> 'to unthread'	<u>fiefia /f(ij)ef(i)jã/</u>
	6a. <u>fea/f(i)ja/</u> 'to hide'	<u>fesvea /f(ij)sy(i)ja/</u>
	b. <u>fea/f(i)jã/</u> 'to cook medicinal soup' --	

In the above paired examples, the (a) member of each pair of verb stems is characterized by the absence of nasality, whereas the (b) member is characterized by the presence of nasality. It is to be noted that the CV verb stems differ from the CVV verb stems in that among the CV verbs, presence of nasality as a feature of the verb stem is related to presence of mutation (either Type A or Type B) as a feature of the reduplicated form, whereas with the CVV verbs, absence of nasality as a feature of the verb stem is related to presence of mutation (Type B only) as a feature of the reduplicated form.

It should be mentioned ^{kat} with the pair of CV verb stems (1a-b), in which the C element is realized as /kp/ (which, as noted above, is regularly immutable in verb stems), that lexical distinction by mutation, in conjunction with nasality, can be seen in the reduplicated forms only. With the pairs of CV verb stems (2a-b; 4a-b), however, in which the stem-initial consonants /t, k/ in both members are regularly mutable (e.g. in verbal noun forms and mutation-marked tense forms), lexical distinction by mutation, in conjunction with nasality, relates to constructions involving their reduplicated forms.

On the other hand, in the case of the pair of CV verb stems (3a-b), the C element realizable as /k/ is immutable in the (a) member and mutable in the (b) member. And in the pairs of CVV verb stems (5-6(a-b)) the C element realizable as /f/ is immutable in the (b) members, but mutable in the (a) members. With these three pairs of items, consonant mutation functions, in conjunction with nasality, as a lexically distinctive feature in their reduplicated forms as well as in the other constructions which are regularly marked by mutation, as the following verbal noun forms of items (3a-b) and (6a-b) illustrate:

	<u>Verb stem</u>		<u>Verbal noun</u>		<u>Mutation</u>
3a.	ko /k <u>ü</u> /		skols /sk <u>ü</u> lé /		k/k
	(to trim)		(trimming)		
b.	ko /k <u>ũ</u> /		shonls /sh <u>ũ</u> lé /		k/h
	(to fight)		(fighting)		
6a.	fea/f <u>f</u> (r)ja/		sveals /sv <u>f</u> (r)jalé /		f/v
	(to hide)		(hiding)		
b.	fe ₂ /f(<u>ĩ</u>)jã/		sfeanls/ef(<u>ĩ</u>)jãlé /		f/f
	(to cook soup)		(cooking)		

Tone and Intonation

Nzema is a tone language of Pike's level-pitch register type. The descriptive statement presented here deals with only some of the main tonal and intonational features of the language.

The term 'pitch' is here used at the phonetic level to refer to the voice register, whereas the term 'tone' is used at the phonological level to refer to the systematic analysis of the pitches of the voice into tone patterns; that is, pitch is the phonetic exponent of tone. And tonal patterns correlating with formally established grammatical structures are regarded as intonational features and treated as a prosodic element of the structure as a whole.

Nzema has a two-term tonal system of high and low tone. The tone-bearing phonological units are:

- a. every syllable of CV or V structure occurring within the stem of a lexical item;
- b. every vowel or syllabic nasal prefix.

As a rule, a vowel or syllabic nasal prefix occurring in a one-word sentence or a non-verbal clause bears a low tone. Instances of vowel lengthening are sometimes analyzable as a sequence of two unidentical tones, but may, in other contexts, be realized as one, usually high, tone.

In order to minimize diacritical marks only high tones are regularly indicated by an acute accent, low tones being marked, where necessary, by a grave accent.

Downstep

It is a feature of the level-pitch register type of tone language which Nzema exemplifies that in a verbal or nominal piece, where a high tone is followed by one low tone or more which in turn is followed by another high tone the second high tone is realized as having a phonetically lower pitch than the first high tone; that is, in a tonal sequence of high-low-(low)-high the second high tone is predictably of a lower pitch than the first high tone. This intonational phenomenon has been variously labelled as 'automatic downstep'¹ or 'downdrift'² and may be exemplified in Nzema by the following nominal (1) and verbal (2) pieces in which the underlined syllables bear high tones of successively lower pitch than the first high tone:

(1) dúku fofóls kpolé ne
(the big new headkerchief)

(2) Sanéba élsgvínla
(Saneba is stopping)

1. Stewart, J.M. (1965)

2. Schachter, P. and Fromkin, V. (1968)

A second but different instance of downstep relates to the second of two adjacent high tones. Of two adjacent or sequential high tones (unseparated by a low tone), the second high tone is sometimes realized as being of a lower pitch than the immediately preceding high tone, as the following examples illustrate:

- (3a) nrenyá híála
(every man)
- (3b) mrenyá tóhulu
(men's towel)
- (3c) sua królé ne
(the big house)
- (4) meko mékáda
(I go and I go to sleep)

As already mentioned in the introductory chapter, lexical distinction by means of tone is a characteristic feature of polysyllabic - i.e. disyllabic and tri-syllabic-noun words, as the following examples illustrate:

- I. Disyllabic:
- | | | | |
|-----|------------------|-----|--------------------|
| 1a. | fole /fəle / | 1b. | fole /fələ́? / |
| | (Saturday) | | (advice) |
| 2a. | eya /ɛja / | 2b. | eya /ɛjá? / |
| | (anger; hundred) | | (leaf; farm) |
| 3a. | kuma /kũmã / | 3b. | kuma /kũmã́? / |
| | (kenkey) | | (hole) |
| 4a. | kanra /kaŋã / | 4b. | kanra /kaŋã́? / |
| | (slave) | | (fresh-water crab) |
- II. Tri-syllabic:
- | | | | |
|-----|------------------|-----|--------------------|
| 5a. | ebela /ɛbɛla / | 5b. | ebela /ɛbɛlá? / |
| | (life) | | (a girl's name) |
| 6a. | anloma /ãnlũmã / | 6b. | anloma /ãnlũmã́? / |
| | (bird) | | (yesterday) |

6a.	7a.	awule /əwəle/ (+thief)	7b.	awule /əwələ? / (rice)
	8a.	ayene /ajən(ĩ)/ (firewood)	8b.	ayene /ajən(ĩ)?/ (witch)

There are homonyms as in (2a), and, in certain cases (e.g. 4, 6, 8), differences in respect of a final glottal stop. In addition, noun words of the same syllabic structure, unlike verb stems, are classifiable in terms of their tonal structure. For disyllabic noun words three tonal classes may be set up:

Disyllabic: Class I: High - Low

Unmarked :	1.	duku /dúku? /	'headkerchief'
	2.	kusu /kúsu? /	'cat'
	3.	bólo /bólo? /	'ken'key' (food)'
	4.	tobo /tóbo? /	'a kind of game'
	6.	sipe /sitpe? /	'enmity'
	7.	sanve /sámve? /	'key'
	8.	kyenze /kyěnzĩ? /	'pan'
	9.	nyila /nyéla? /	'boil'
	10.	nyane /nyánĩ? /	'pain'

Disyllabic: Class II: Low - High

Marked :	11.	fale /falé /	'belt'
	12.	siale /syalé /	'loin cloth'
	13.	nrenya /nənyá /	'man'
	14.	taka /taká /	'blow'
	15.	kuma /kumá /	'hole'
Unmarked :	16.	sonla /sānlá? /	'person'
	17.	fəls /fəls? /	'fish'
	18.	eya /ejá? /	'leaf'
	19.	sane /sanĩ? /	'broom'
	20.	nyiane /nyānĩ? /	'disgrace'

Class III: Low - Low

Marked	:	21.	bols	/bɛls /	'stone'
		22.	sua	/suwa /	'house'
		23.	bane	/banĩ /	'wall'
		24.	kuma	/kũmã /	'kenkey'
		25.	kukue	/kukwe /	'coconut'
Unmarked	:	26.	beds	/beds? /	'cassava'
		27.	tsba	/tsba? /	'tobacco'

Among tri-syllabic nouns, five tonal classes may be distinguished.

Tri-syllabic: Class I: High-Low-Low

Unmarked	:	28.	taboa	/tábɔwã? /	'board'
		29.	tohulu	/tóhulu? /	'towel'
		30.	tomsle	/tóm̃slɛ? /	'tumbler' (loanword)
		31.	p̃nsɛlɛ	/p̃nsɛlɛi? /	'pencil' (loanword)

Class II: Low-High-Low

Unmarked	:	32.	ɛlɛkã	/ɛlɛkã? /	'box'
		33.	ɛbiã	/ɛb(i)jã? /	'chair'
		34.	ãlɛñkɛ	/ãl̃ñkɛ? /	'door'
		35.	ñrɛlãndɛ	/ñrɛlãnd̃ĩ? /	'cutlass'
		36.	bɔzɔñlɛ	/bɔz̃ñl̃ĩ? /	'god'

Class III: Low-High-High

Marked	:	37.	ɛkpoñlɛ	/ɛkpoñl̃ĩ /	'table'
		38.	tokulɛ	/tokɛlɛ /	'window'
		39.	namulɛ	/nãm̃ɛlɛ /	'window'
		40.	bɛlɛrã	/bɛlɛrã /	'young woman'
		41.	nyevilɛ	/nyɛvɛlɛ /	'the sea'

Tri-syllabic: Class IV: Low-Low-High

Unmarked	:	42.	edwaks /egywské?/	'case, matter'
		43.	shone /shonĩ? /	'hunger'
		44.	ayile /əjələ? /	'medicine'
		45.	bowule /bowulé?/	'bone'
		46.	saminla/səmānlā?/	'soap'
Marked	:	47.	nreyzenra/nɛzĩŋã/	'house-fly'

Class V: Low-Low-Low

Unmarked	:	48.	kpavols /knavəls?/	'young man'
		49.	asawu /əsawu? /	'cast-net'
Marked	:	50.	shane /shanĩ /	'trap'
		51.	anloma /ānlŭmã /	'bird'
		52.	awule /əwələ /	'thief'
		53.	boane /bŭwanĩ /	'goat'

Some Intonational features: (I) Noun + Numeral/adjective

Within the grammatical structure: noun + numeral/adjective (e.g. i. kò 'one' and ii. kpòlè 'big, fat') disyllabic and tri-syllabic noun words, as a rule, retain the same tonal pattern that they exhibit in isolation or as one-word sentences. There is, however, no uniform intonational pattern in the case of the first syllable of the following adjective word; that is, with some noun words the low tone of the first syllable of the adjective word may be raised to a high tone or remain low with other noun words.

a. Disyllabic noun + numeral/adjective

With particular reference to disyllabic nouns, members of Class I (High-Low) do not, as a rule, favour the raising of

the low tone of the following syllable of the adjective, as the following examples with items (2) and (3) illustrate:

- (5a) kúsu kò
(one cat)
- (5b) kúsu kpòlè
(a big cat)
- (6a) kyénze kò
(one pan)
- (6b) kyénze kpòlè
(a big pan)

On the evidence of perception disyllabic nouns (1-10) of Class I which do not usually favour raising are characterized by a final glottal stop in pre-nause position when uttered as one-word sentences.

Among disyllabic nouns of Class II (Low-High), items (11-15) favour raising, as the following nominal pieces with items (13) and (15) exemplify:

- (7a) nrenyá kó
(one man)
- (7b) nrenyá kpóle
(a fat man)
- (8a) kumá kó
(one hole)
- (8b) kumá kpóle
(a big hole)

On the other hand, disyllabic nouns (16-20) of Class II do not favour raising as the following examples with items (16-17) illustrate:

- (9a) sonla' kò
(one person)
- (9b) sonlé kpòlè
(a big person)
- (10a) fɛlé kò
(one fish)
- (10b) fɛlé kpòlè
(a big fish)

It is to be noted that, as in the case of Class I nouns, members of Class II which do not favour raising are characterized, as one-word sentences, by a final glottal stop, whereas those members which favour raising are not characterized by glottalization.

Similarly, among members of Class III (Low-Low), the nouns (21-25) which favour raising are not characterized by a final glottal stop, as the following nominal pieces with items (21) and (25) illustrate:

- (11a) bole kó
(one stone)
- (11b) bole kpólè
(a big stone)
- (12a) kukue kó
(one coconut)
- (12b) kukue kpólè
(a big coconut)

On the other hand, items (26-27) do not favour raising and, as one-word utterances, are characterized by a final glottal stop:

- (13a) teba kò
(one tobacco)
- (13b) teba kpòlè
(a big tobacco)
- (14a) bɛde kò
(one cassava)

- (14b) bede kpòlè
 (a big cassava)

In respect of this intonational feature, disyllabic nouns may be sub-classified in terms of (i) those nouns which favour the raising of the low tone of the following syllable in the structure, and (ii) those nouns which do not favour raising. In terms of markedness, nouns which are exceptional in favouring raising may be regarded as marked in contradistinction to the more normal cases which do not favour raising and are regarded as unmarked, and, as already mentioned, unmarked nouns are characterized by glottalization whereas marked nouns are not.

b. Tri-syllabic noun + number/adjective

Intonationally, tri-syllabic nouns of Class I (High-Low-Low) and Class II (Low-High-Low) are alike in not favouring raising and are, therefore unmarked; and like unmarked disyllabic nouns, tri-syllabic nouns of Class I - II are characterized, as one-word sentences, by glottalization. Tri-syllabic nouns of Class III are marked, whereas tri-syllabic nouns of Class IV - V may be either marked or unmarked, as the following examples with items (48) and (53) illustrate:

- (15a) kpavole kò
 (one young man)
- (15b) kpavole kpòlè
 (a fat young man)
- (16a) boane kó
 (one goat)
- (16b) boane kpóle
 (a fat goat)

On the basis of the above analysis, the following generalization can be made in respect of the intonational feature correlating with the grammatical structure:

- a. within the structure, noun words have the same tonal pattern as they exhibit in isolation or as one-word sentences;
- b. adjective words following the noun are not characterized by a uniform intonational pattern; that is, some noun words do, but others do not, favour the raising of the low tone of the first or only syllable of the following adjective word;
- c. those nouns which favour raising are regarded, in respect of this intonational feature, as the marked cases and, as far as one can determine by perception, are not characterized by a final glottal stop in pre-pause position when uttered as one-word sentences;
- d. those nouns which do not, however, favour raising are distinguished as the unmarked cases and, as a rule, are characterized by a final glottal stop; there is a relationship, then, between absence of raising and presence of a glottal stop;
- e. pairs of noun words which are lexically distinguished by tone are also distinguished in respect of this intonational feature of presence or absence of raising, as the following examples illustrate:

- | | | | | |
|-----|----------------------|---|---------------------|------------------------|
| i. | àyà 'anger; hundred' | : | (17a) àyà <u>kó</u> | (17b) àyà <u>kpòlè</u> |
| | | | (one hundred) | (great anger) |
| ii. | àyá 'leaf, farm' | : | (18a) àyá <u>kò</u> | (18b) àyá <u>kpòlè</u> |
| | | | (one leaf) | (a big leaf) |

i. àwùlè 'thief' : (19a) àwùlè kó (19b) àwùlè knólé
(one thief) (a big thief)

ii. àwùlé 'rice' : (20a) àwùlé kò (20b) àwùlé kpòlè
(one rice) (big rice)

Both of these two tonally-distinguished items, however, favour raising since both are marked cases:

i. kùmà 'kenkey' : (21a) kùmà kó (21b) kùmà kpólè

ii. kùmá 'hole' : (22a) kùmá kó (22b) kùmá knólé
(one hole) (a big hole)

II. Intonational feature: Noun + determiner

Within the grammatical structure: noun + determiner, some determiners raise the final low tone of the immediately preceding syllable of the noun word. Such determiners include:

i. the singular definite article ne 'the', ii. the plural marker no which may follow the definite article, and iii. the determiner ye 'this'.

Within the structure: noun + ne, the final low tone of a marked noun word characterized by the tonal pattern (L)LL is raised to a high tone (H); and in such a structure the definite article ne 'the' (NI) regularly bears a low tone. We may formalize this general intonational feature by a rule of the type:

(L)LL -----> (L)LH/ ----- NĪ

This rule is blocked by unmarked noun words in the sense defined above and may be illustrated with the following nominal pieces involving unmarked and marked noun words:

Marked disyllabic nouns Class III (LL):

(23a) bòlè 'stone' : bòlé nè 'the stone'

(23b) sùè 'house' : sùé nè 'the house'

Unmarked disyllabic noun Class III (LL):

(24a) bàdè 'cassava' : bàdè nè 'the cassava'

(24b) tóbà 'tobacco' : tóbà nè 'the tobacco'

Marked tri-syllabic noun Class V (LLL)

(25a) ànlòmè 'bird' : ànlómé nè 'the bird'

(25b) bòhè 'goat' : bòhé nè 'the goat'

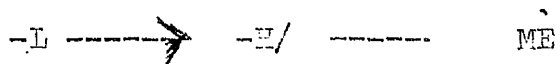
Unmarked tri-syllabic noun Class V (LLL)

(26a) àsèwù 'net' : àsèwù nè 'the net'

(26b) kràvòlè 'young man' : krèvòlè nè 'the young man'

As the above examples show, the final low-tone syllable of the marked nouns is realized as a high tone in the structure as in (23a-b) and (25a-b), whereas with the unmarked noun words the final low-tone syllable is not raised as in (24a-b) and (26a-b).

Within the grammatical structure: plural noun + (NI) + me, the immediately preceding low-tone syllable is regularly realized as a high tone, and the plural marker me (ME) has always a low tone. This intonational feature may be formularized as:



and exemplified by the following nominal pieces:

- (27a) àhyénzè nè 'the pans' : àhyénzè né mò 'those pans'
- (27b) mgbàvòlè nè 'the young men' : mgbàvòlè né mò 'the youth'
- (28a) ò zè 'his father' : ò zé mò 'his fathers'
- (28b) ò hú 'her husband' : ò hú mò 'her husbands'

It should be noted that with some noun words the junction between the vowel element of the final syllable of the noun word and the plural definite article *ne + mo* is realized as a prolongation of the final vowel; such long vowels also carry a high tone, as in the examples:

(29a) *ngakula ne mo /ŋækelá:mò/* 'the children'

(29b) *mrenya ne mo /mrenyá:mò/* 'the men'

Within the structure: noun + *ye*, the final low tone of a marked noun word characterized by the tonal pattern (I)I is realized as a high tone and the post-modifier *ye* 'this' (YI) unlike the definite article *ne*, has also a high tone. As in the previous cases, this intonational feature may be generalized by the rule:

(I)I → (I)H/ ----- YI

and exemplified by the following nominal pieces:

Marked disyllabic noun Class I(II):

(30a) *sùè* 'house' : *sué yé* 'this house'

(30b) *kùkuè* 'coconut' : *kukué yé* 'this coconut'

Unmarked disyllabic noun Class I(II):

(31a) *bèdè* 'cassava' : *bsdè yé* 'this cassava'

(31b) *tèbè* 'tobacco' : *tabè yé* 'this tobacco'

Marked tri-syllabic noun Class V(III):

(32a) *ènlòmà* 'bird' : *anlomé yé* 'this bird'

(32b) *bòànè* 'goat' : *boané yé* 'this goat'

Unmarked tri-syllabic noun Class V(III):

(33a) *kpàvòlè* 'young man' *kpavolè yé* 'this young man'

(33b) *àsàwù* 'cast-net' *asawù yé* 'this cast-net'

Intonational features correlating with verbal pieces will be dealt with in the appropriate places and stated, along with other features, as part of the exponents of the particular verbal piece under examination. It should be mentioned, however, that intonational features may serve to resolve ambiguities between polysemic clauses. For example, the 3rd person plural positive perfect tense and the 2nd person plural positive direct imperative mood clauses are alike in that both do not have a (tense) prefix and may be characterized by Type R consonant mutation such that with mono-syllabic verb stems ambiguity may result particularly in clauses where no complementation occurs. The following pairs of clauses involving the verb stem: di 'to eat' illustrate:

- (34a) b̀̀li (perfect tense)
(they have eaten it)
- (34b) b̀̀li áleé ne
(they have eaten the food)
- (35a) b̀̀li (direct imperative)
(all of you, eat it)
- (35b) b̀̀li áleé ne
(all of you, eat the food)

In the above clauses, the (b) examples are related by the **pro-nominalization** of the definite inanimate object noun phrase to the (a) examples. The two (a) clauses, which have the same intonation, are ambiguous as between a perfect tense interpretation and a direct imperative interpretation. This type of ambiguity is partly resolvable by means of the intonation characterizing the corresponding (b) clauses where complementation occurs.

In the case of disyllabic verbs (e.g. tiə 'to walk'), also without complementation, no such ambiguity occurs and the intonation alone serves to distinguish the two clauses as in:

- (36a) bɛdià
(they have walked) (perfect tense)
- (36b) bɛdiá
(all of you, walk) (direct imperative)

CHAPTER 3

Category I : Mood

Within the category of mood three terms are set up : indicative, interrogative and imperative and exemplified by the following clauses involving the verb stem bɛla 'to come':

Indicative, positive

(1a) ɔba asɔ́né 'he comes to church' (3rd pers. sing. Habitual)

(1b) bɛba asɔ́né 'they come to church' (" " plur. ")

Interrogative, positive

(2a) ɔba asɔ́né ɔ? 'does he come to church?' (3rd pers. sing. Habitual)

(2b) bɛba asɔ́né ɔ? 'do they come to church?' (" " plur. ")

Imperative, positive

(3a) bɛla asɔ́né 'come to church' (2nd pers. sing. Habitual)

(3b) bɛɛlɛ́lɛ́ asɔ́né 'come to church, all of you' (" " plur. ")

Leaving aside the direct imperative mood clause (3a), it is to be noted that apart from differences in intonation and the clause-final particle ɔ which distinguishes the interrogative mood clauses (2a-b), the indicative, interrogative and imperative mood clauses have the same word structure and order. There are, however, different grammatical features which serve to distinguish them. With particular reference to the verb stem bɛla 'to come', it is to be noted that the imperative clauses (3a-b) are different in that they contain the full form of the verb stem, whereas the indicative and interrogative mood clauses contain the 'contracted' form ba. In general, however, imperative mood clauses differ from the corresponding indicative

and interrogative mood clauses in making no tense distinctions. The direct imperative mood clauses exemplified in (3a-b) are also different in that, in respect of the category of person, the only term which is applicable is the 2nd pers. singular or plural. The direct imperative mood clauses are further different in having no subject pronoun overtly expressed in the case of the 2nd person singular. And as a rule, stative verbal forms cannot occur in imperative mood clauses.

The following clauses are the corresponding negative forms of the positive indicative, interrogative and imperative mood clauses (1-3(a-b)) above:

Indicative, negative

(4a) ɔmbá áśóné 'he doesn't come to church'

(4b) bambá áśóné 'they don't come to church'

Interrogative, negative

(5a) ɔmbá áśóné ɔ ? 'doesn't he come to church?'

(5b) bambá áśóné ɔ? 'don't they come to church?'

Imperative, negative

(6a) mmába asóné 'don't come to church'

(6b) bambába asóné 'don't come to church, all of you'

In the above negative clauses, the imperative mood clauses and the corresponding indicative and interrogative mood clauses are alike in selecting the contracted form ba of the verb. and, apart from (6a), in having the same word structure and word order.

A selection from among direct imperative mood clauses will show why the category of mood figures as the highest or most general

of the grammatical hierarchy of grammatical categories set up for the description of the verbal piece.

(7)	di aleé ne	'eat the food'	(Positive)
(8)	mmádi aleé ne	'don't eat the food'	(Negative)
(9)	dá	'sleep'	(Singular, 2nd person)
(10)	béla	'sleep, all of you'	(Plural, 2nd person)
(11)	fɛɛ Kofí	'call Kofi'	(Transitive)
(12)	fɛɛ me Kófí	'call me Kofi'	(Complex transitive)
(13)	dwazo	'stand up'	(Intransitive)
(14)	maa Kofí áɛɛ	'give Kofi some food'	(Ditransitive)
(15)	tenla Kofí ébía ne ánu	'sit Kofi in the chair'	(Complex semi- Transitive)
(16)	tenla ebía ne ánu	'sit in the chair'	(Semi- transitive)
(17)	ye koónwú	'be quiet'	(Relational)
(18a)	kolí debíé	'go and eat (something)'	(Aspect 1, Ingressive)
(18b)	balí debíé	'come and eat (something)'	(")
(19)	gyinla ské	'stand here'	(Aspect 2, Dynamic)
(20a)	dwola Kofí kúmá ne ánu	'put Kofi down in the hole'	(Aspect 3, Causative)
(20b)	dwo kúmá ne ánu	'descend into the hole'	(Aspect 3, Non-causative)

These examples show that the categories of polarity (but not of tense), number, person (in so far as direct imperative clauses are with 2nd pers. pronoun subject only), transitivity and aspect (in the case of

dynamic verbal forms only) apply to imperative mood clauses as well as to those which are indicative and interrogative, and with particular reference to the different transitivity clause-types, examples (11-17) show that imperative mood clauses show the same range and ordering of elements as indicative and interrogative mood clauses. Since the discussion of the other categories in the subsequent chapters will be mainly exemplified by indicative mood clauses, there is no need to say more about them here. In what follows, further description of interrogative and imperative mood clauses is presented.

Interrogative clauses

A study of the various descriptions of interrogatives or questions shows that the classification of questions has traditionally been based on a set of three different criteria, explicitly stated or implied; they are:

- (a) the type of appropriate answer expected;
- (b) the presupposition of the question; and
- (c) the presence or absence of an interrogative word
(or Q-item).

On the basis of the first criterion, questions are classified in terms of those which expect the answer 'yes'/'no' (i.e. polar) and may be exemplified by:

- (1a) Kofí hólé ɔ́?
(did Kofi go?)
- (1b) Kofí angɔ́ ɔ́?
(did Kofi not go?)

and those which cannot be appropriately answered by 'yes'/'no' (i.e. non-polar) :

- (2) ekeli kumá anaá awulé?
(will you eat kenkey or (will you eat) rice?)
- (3a) Kofi hólé kenle nzú?
(lit. Kofi went when. when did Kofi go?)
- (3b) Kenle nzú á/yeé Kofi hólé á?
(lit. when was it that Kofi went?)
- (4) Kofi hólé nienwu súa zó?
(which town did Kofi go to?)
- (5) ké befele wo é?
(what is your name?)

The distinction between 'total' and 'partial' interrogatives would seem to imply the application of the second criterion, by which a question such as (3a - b) above is accounted 'partial' since it presupposes that 'Kofi did go' and only asks about the time of his leaving, whereas such a question as (1a) is distinguished as 'total' since it does not make a similar supposition.

The third criterion opposes questions such as (3-5) which are marked by the presence of a Q-item to all others, for example (1-2), which are marked by the absence of a Q-item.

Of these criteria the third is different in being syntactic or formal; the remaining two are less explicit and by no means formal. While it may be conceded that an analysis of questions on the basis of the type of appropriate response expected or the presuppositions of the question is undoubtedly of considerable importance, it

is important that different interrogative types should first be characterized by their formal properties and only secondarily by their presuppositions or the type of appropriate answers they elicit.

If we adopt the third and more formal criterion, we may set up two main types of interrogative mood clauses in Nzema :

(A) those like (1-2) which do not contain a Q-item and are designated as 'Disjunctive' interrogatives and (B) those like (3a-b) which contain a Q-item or a Q-piece (i.e. the element of interrogative clause structure which contains the Q-item) and are classified as 'Non-disjunctive' interrogatives.

Disjunctive and non-disjunctive interrogatives are further distinguished by their different syntactic behaviour when embedded as dependent or subordinate clauses into a main (or matrix) clause such as menze 'I don't know'. In the following examples, the (a) cases are independent disjunctive or non-disjunctive interrogative clauses, whereas the (b) cases are complex sentences containing the corresponding dependent clauses :

- | | | |
|------|--|---------------------------|
| (6a) | Kofi h3le 3 ? | (Independent Disjunctive) |
| | (did Kofi go ?) | |
| (6b) | menzé sε Kofi h3le á | (dependent ") |
| | (I don't know whether Kofi went) | |
| (7a) | okeli kumá anaá awulé? | (Independent " " |
| | (will he eat kenkey or rice?) | |
| (7b) | menzé sε okeli kumá anaá awulé á | (dependent ") |
| | (I don't know whether he'll eat kenkey or rice), | |

- (8a) Kofí h̄s̄le kenl̄e nz̄ú? (independent Non-disjunctive)
 (when did Kofi go?)
- (8b) menz̄é k̄enl̄e m̄os̄ Kofí h̄s̄le á (dependent ")
 (I don't know when Kofi went)
- (9a) nz̄s̄ne áti á ób̄ole Kofí á? (independent ")
 (why did he hit Kofi?)
- (9b) menz̄é d̄éé m̄os̄ ti ób̄ole Kofí á. (dependent ")
 (I don't know the reason why he hit Kofi)

As the (b) examples show, the dependent clauses, whether they correspond to independent disjunctive or non-disjunctive interrogatives, are all characterized by a clause-final particle á, which may be regarded as syntactic evidence in support of the classification of all these clauses as variants or sub-types of the same type of mood clause. There are, however, differences which correlate with the distinction between disjunctive and non-disjunctive interrogatives. The dependent disjunctive interrogatives are different in being introduced by a subordinate conjunction or complementizer s̄e 'whether'. It is also to be noted, as a distinctive characteristic of the independent non-disjunctive interrogatives exemplified in (8a) and (9a), that when they are embedded as dependent clauses, the Q-item is realized as a noun word followed by the relative pronoun m̄os̄ 'when, which (whose)'.

In the description which follows, I shall begin with a discussion of (A) disjunctive interrogatives and then move on to (B) non-disjunctive interrogatives.

(A) Disjunctive interrogatives

Disjunctive interrogatives may be further exemplified by (1a-b) and (2a) below:

(1a) ekeziá anaá?

(will you return?)

(1b) ekeziá s?

(will you return?)

(1c) ekeziá anaá ennéziá?

(will you return or will you not return?)

(2a) ekezia ené anaá ehemá?

(will you return to-day or to-morrow?)

(2b) ekezia ené anaá (ekezia) ehemá?

(will you return to-day or (will you return) to-morrow?).

It is to be noted that (1a) and (1b) are different in that (1a) contains a clause-final item anaá, whereas (1b) is characterized by a clause-final particle s. (1a) and (1b) are, however, alike in that each is referable to a disjunctive clause of the type exemplified in (1c). Clause (2a) above, which exemplifies one sub-type of a disjunctive interrogative, is derivable by reduction from a structure of the type exemplified in (2b). And it is because of the structural similarity between their corresponding underlying structures, that interrogative clauses such as (1a-b) and (2a) are regarded as sub-types of the same type of disjunctive interrogatives.

The disjunctive structures (1c) and (2c) are, however, different in that the disjunct clauses, in the case of (1c), contrast

in terms of positive/negative polarity, whereas they concord in positive polarity in the case of (2b).

Interrogatives such as (1) may be appropriately answered by shéé 'yes' or kyekye 'no'. On the other hand, interrogatives such as (2) expect as an appropriate answer (an indicative clause involving) one of the two, possibly more, alternatives mentioned in the interrogative. On the basis of these differences, we may distinguish two sub-types (I-II) of disjunctive interrogatives: Type A.I. disjunctive interrogatives such as (1a-b) are designated as polar-disjunctive and (i) are characterized by a clause-final item anaá or the particle ǰ; (ii) are derivable from a disjunctive structure such as (1c) in which the disjunct clauses differ in terms of positive/negative polarity, such structures themselves being attested in normal speech; (iii) contain no Q-item; and (iv) are appropriately answered by 'yes'/'no'. Type A.II. disjunctive interrogatives such as (2a) are, by contrast, designated as non-polar disjunctive and (i) marked by the absence of the clause-final item anaa or a particle; (ii) derivable by reduction from a disjunctive structure such as (2b), also attested in speech, in which the disjunct clauses agree in respect of positive polarity; (iii) marked by no Q-item; and (iv) appropriately answered by one of the alternatives mentioned in the disjunct clauses.

(A.I.) Polar Disjunctive Interrogatives

The following examples of polar interrogatives and their corresponding indicative mood clauses serve to show that it is a characteristic of polar disjunctive interrogatives that they preserve

the normal linear arrangement of elements found in indicative clauses.

Polar interrogative

Indicative

- | | |
|---|--|
| (1) ekegyinla Bolɔfó anaá?
(will you stop at Axim?) | ekegyinla Bolɔfo
(you will stop at Axim) |
| (2) eralé la, yehyé ɔ ?
(lit. since you came, has it been a long time) | eralé la, yehye
(since you came, it has been a long time) |
| (3) ekeli debíé ɔ?
(will you like something to eat?) | ekeli debíé
(you will like something to eat) |
| (3A.I) ehéé, menrélí debíé
(yes, I'll like something to eat) | |
| (3A.II) kyékya, menrélí debíé
(no, I won't have anything) | |
| (4) enrélí debíé ɔ ?
(won't you have something to eat?) | enrélí debíé
(you won't eat anything) |
| (4A.I) ehéé, menrélí debíé
(yes, I won't eat anything) | |
| (4A.II) mebáli debíé
(I will eat something) | |

It is also to be noted that polar disjunctive interrogatives may be of positive polarity as in (3) or of negative polarity as in (4).

Polar interrogatives of positive polarity may elicit either an affirmative/ehée 'yes' - answer with or without a following positive indicative clause or a negative/kyékya 'no' - answer with or without a negative clause as in (3A.I) and (3A.II) respectively. If however,

the question put is ^{of}negative polarity as in (4), it may elicit an answer which, if negative, consists of ehsé 'yes' plus a negative clause (4A.I), but if affirmative, consists only of a positive clause (4A.II).

Intonationally, the clause-final item anaá has a low tone on the first syllable and high tone on the long vowel in the second syllable (without a glottal stop in pre-pause position). The vowel particle ǝ (which may be oral or nasalized depending upon the preceding syllable) has a high tone followed by a strong glottal stop in pre-pause position. This vowel may occasionally be dropped.

Mention should also be made of three kinds of polar interrogatives exemplified in:

(5) asoo ebáholá kɔ (ɔ)?

(is it really the case that you'll be able to go?)

(6a) nwoma hia, sɛ wɔnwu ye ?

(learning is important, you've seen it?)

(6b) sɛ wɔnwu(ye) kɛ nwoma hia.

(you've seen that learning is important)

(7) sɛ ekéhɔ ?

(you'll go, won't you?)

The first type exemplified in (5) is characterized by a clause-initial item asoo with or without an accompanying clause-final vowel particle. ~~a clause-final vowel particle~~. Such questions imply a doubt about the truth of the corresponding indicative clause and may, for that reason, be regarded as having a negative orientation.

The second type exemplified in (6a) consists of a positive (or possibly a negative) indicative clause with an appended 'tag'

question introduced by sɛ. The 'tag' question is structurally a positive transitive clause in the perfect tense with the 2nd pers. sing. subject pronoun wɔ 'you' followed by the verb nwu 'see' and the pronominal object ye 'it', which refers anaphorically to the preceding indicative clause. Such interrogative constructions are transformationally relatable to the type of structure in (6b), which is itself attested in normal speech and is analyzable as a main clause plus^a sentential complement introduced by kɛ 'that'. This second type of polar interrogative indicates that the speaker has reason to believe that the answer is 'yes' and seeks by such an utterance confirmation of that assumption.

The third type exemplified in (7) is characterized by an introductory item sɛ without a clause-final vowel particle. Such constructions are understood as an entreaty or as being persuasive, although native speakers usually respond to such utterances as a polar question.

(A.II) Non-polar Disjunctive Interrogatives

Two main sub-types of non-polar disjunctive interrogatives may be distinguished. The first sub-type, to which attention has already been drawn, may be further exemplified by (1a) below:

(1a) ekenlo mezá anaá mraalé nzá?

(will you drink sweet palm wine or lemonade?)

(1b) ekenlo mezá anaá ekenlo mraalé nzá ?

(will you drink sweet palm wine or will you drink lemonade?)

As already noted, this type of non-polar interrogative is not marked by a Q-item or a clause-final vowel particle, and preserves the order of clause-elements normal in indicative clauses.

In terms of its underlying structure, this type derives from a structure such as (1b), in which the disjunct clauses linked by the conjunction anaa¹ 'or' are identical in structure as well as in tense, polarity and person, and as already mentioned such constructions may be used in normal speech. There are, however, instances such as (1c) below:

(1c) nzulé ne tétó anaá yegyaki?

(is the rain still falling or has it stopped?)

in which the disjunct clauses exhibit agreement in positive polarity, but not in tense, the first disjunct clause being in the durative tense and the second in the perfect tense; and the nominal subject in the first constituent clause is pronominalized in the second.

The second sub-type may be exemplified by (2a) below:

(2a) nzóne nzá á/yeé ekenlo á, mezá anaá mraalé nzá?

(what drink will you have, sweet palm wine or lemonade?)

(2b) nzóne nzá á/yeé ekenlo á, ekenlo mezá anaá (ekenlo) mraalé nzá?

(what drink will you have, will you have sweet palm wine or (will you have) lemonade?))

and is derivable by reduction from a structure such as (2b).

This type of non-polar disjunctive interrogative may be regarded as a compound of two separate and structurally different interrogatives. The first constituent resembles a non-disjunctive emphatic interrogative in being characterized by a Q-item nzóne 'what'

1. The conjunction anaá 'or' is attested in spoken register, and anzeé or anzényé in written register, though the present writer has heard the latter in the speech of some old women.

occurring within a Q-piece followed by the vowel particle á (in free variation in emphatic interrogatives with yéé) and a co-occurring clause-final vowel particle á, whereas the second constituent replicates the structure of a non-polar disjunctive interrogative of the first type exemplified in (1a). The clause-medial or - final particles in the first constituent have high tone and there is a noticeable pause at the end of the first constituent.

Both types of non-polar disjunctive interrogatives are, semantically, alike in asking the addressee to choose from a restricted range of possibilities and in requiring appropriate answers which consist of the indicative versions of one of the two (or more) separate disjunct clauses or the questioned elements in it.

(B) Non-disjunctive Interrogatives

Non-disjunctive interrogatives are characterized by the presence of a Q-item, which may occur by itself or within a Q-piece, and by a clause-medial and/or clause-final particle in instances where the Q-element (i.e. Q-item or Q-piece) takes clause-initial position; and, unlike disjunctive interrogatives, non-disjunctive interrogatives expect as answer an indicative clause or a reduced form of it supplying the missing information posited by the Q-element.

The Q-items occurring in non-disjunctive interrogatives include:

- | | | |
|------|-------|---------|
| (1a) | nwáne | 'who' |
| (1b) | nwáne | 'whom' |
| (1c) | nwáne | 'whose' |

- | | | |
|------|------------------------|------------------------|
| (2) | nz ³ ne | 'what' |
| | duzu | " |
| | duz ³ ne | " |
| (3) | boní | 'which' |
| (4a) | ní | 'where' |
| | niénka | 'where, which place' |
| (4b) | niénwu | 'where, which (place)' |
| (5) | kenle nzú | 'when, which time' |
| (6) | eze | 'how much' |
| (7) | nyé | 'how many' |
| (8) | kén ³ tí | 'why' |
| | nz ³ ne áti | " |
| | duzu áti | " |
| (9) | ké | 'what; how' |

The following are some examples of non-disjunctive interrogative clauses matched, where possible, against their corresponding indicative mood clauses which may be regarded as the presuppositions assumed by the questioner to be true. The (a) examples are unemphatic and the (b) examples are their corresponding emphatic forms.

Interrogatives

Indicative counterparts

(1) nwáne á/yéé elesu á?

áwie elesú

(lit. who is it that is crying?
who is crying?)

(someone is crying)

(2a) esulo nwáne?

esulo áwie

(lit. you fear whom? Whom do you fear?)

(you fear someone)

as a rule, in clause-final position¹ in non-emphatic interrogatives, and in this position does not co-occur with any particles, as in the (a) examples;

- (ii) the Q-element may obligatorily or optionally take clause-initial position as in the (b) examples, and in this position usually co-occurs with a clause-medial particle usually realized as á or its free variant yéé and also a clause-final vowel particle á; clauses in which the Q-element is optionally placed in clause-initial position are distinguished as emphatic interrogatives;
- (iii) there is no uniform word order in respect of the placing of the Q-item within a Q-piece; that is, within the Q-piece, some Q-items take first position (e.g. nwáne 'whose' as in (3a-b)), whereas other Q-items take second position (e.g. nye 'how many' as in (7a-b));
- (iv) as a rule, where the Q-element occurs (as in unemphatic interrogatives) in clause-final position the normal ordering of elements in indicative mood clauses is maintained as in the (a) examples; but the normal indicative order of elements is generally upset by the initial placing (as in emphatic and some unemphatic interrogatives) of the Q-element;

1. The clause-final placing of Q-items in unemphatic questions in most West African languages, along with the habit of literal translation from the first language, accounts for such questions as 'you saw whom?' or 'you came when?' which are normally unacceptable in English which favours initial placing of equivalent Q-items.

- (v) on the basis of a comparison between non-disjunctive interrogatives and their corresponding indicative mood clauses, we might say that this type of interrogatives is, as a rule, characterized by the association of the Q-item with some indefinite element in the corresponding indicative mood clause.

It should be noted that the same Q-item nwane may function in the clause as subject (in the sense of 'who') as in (1) and as object ('whom') as in (2a-b) or as 'possessor' nominal ('whose') within a Q-piece as in (3a-b). Subjective nwane 'who' is restricted to clause-initial position and does not upset the normal indicative order of elements.

In an emphatic interrogative, the initially-placed objective nwane 'whom' usually co-occurs, as in (2b), with a pronominal object ye 'him', which refers anaphorically to the preceding Q-item.

Similarly, in emphatic interrogatives, the initially-placed Q-piece involving the possessive nwane 'whose' (or the Q-items : nzɔne 'what' (4b), nye 'how many' and boni 'which') may also co-occur with the pronominal object ye '(him), it' (3b), if the verb belongs to the sub-class of transitive verbs which favour the pronominalization of a definite inanimate object noun phrase. In such cases, we may say that the initial-placing of the Q-element in emphatic interrogatives does not upset the normal indicative order of elements,

It is also to be noted that, within a Q-piece, the possessive Q-item nwane 'whose' co-occurs with the prefixed possessed from (e.g.,

asa) of an inalienable noun (e.g. esale 'hand') and in this connection functions like a definite or modified noun :

- compare : (8a) nwáne ása (whose hand)
(9a) nwáne ánwo (whose self/person)
with (10a) Kofí ása (Kofí's hand)
(10b) mrenyá ne ánwo (the man's self/person)

It may well be that pieces such as (8a-9a) are relatable by reduction to:

- (8b) nwane sonla asa (which person's hand)
(9b) nwane sonla anwo (which person's self/person)

or that the item nwane is historically a fusion of nwa + ne (the definite article).

It should also be mentioned that the Q-item ni 'where' is restricted to clause-final position and in this position is in free variation with the Q-items: nienka/ nienwu 'where, which place' :

- (11a) ehólé ní? (where did you go?)
(11b) ehólé nienka? (")
(11c) ehólé nienwu? (")

Of the three Q-items which function as locative adjuncts, nienwu is different in that it may also occur within a Q-piece taking first position:

- (12a) eyi nienwu súa zó?
(which town do you come from?)
(12b) edóle wó búlúku ne wó nienwu éfiádé?
(from which shop did you buy your book?)

As the above examples show, within such Q-pieces nienwu 'which' co-occurs with noun phrases which can function as locative adjuncts in a semi-transitive or complex semi-transitive clauses.

Similarly, the Q-item nzɔne 'what' which may occur by itself as in :

- (13a) edɔle nzɔne?
(what did you buy?)

may also function within a Q-piece occurring in first position:

- (13b) ebo nzɔne abusua?
(which clan do you belong to?)
(13c) nzɔne edweké a Shanle ɔhilele wo á?
(what matter did he tell you?)

On the evidence of (13b-c), we may say that clauses such as (13a) derive by reduction from structures of the type:

- (14) edɔle nzɔne debie?
(what thing did you buy?)

The Q-item eze 'how much' usually occurs alone and in clause-final position:

- (15) edɔle ye eze?
(how much did you buy for it?)

and does not favour an emphatic rendering. Interrogatives involving the Q-item nye 'how many', which occurs in second position within a plural Q-piece as in (7), usually have emphatic forms, except in:

- (16) bebɔ dɔne nyé ?
(lit. how many bells (of the clock) they have struck?
what's the time?).

We may be dealing here with a close-knit collocation.

With particular reference to the Q-items (8-9), it should be mentioned that they are exceptional in that they alone are restricted to clause-initial position; they are further different in that kémɔ́tí/nzɔ́ne áti/ duzu áti 'why', for what reason, on what account' co-occur with the clause-final vowel particle a or ɛ. So far as I can make out the occurrence of either vowel particle is determined by the vowel harmony; that is, preceding H-type syllable usually selects the particle ɛ, whereas a preceding L-type syllable may select either a or ɛ:

(17) kɛ́mɔ́tí á ɛbole Kofí ɛ (*a) ?
(why did you beat Kofi)

(18) nzɔ́ne áti á wɔ́angɔ́ á/ɛ?
(why didn't go?)

The Q-item (9) ké 'what' consistently co-occurs with clause final vowel particle ɛ, as in :

(19) ké ɔ́yɛle wɔ́ ɛ?
(what did he do to you?)

(20) ké bɛfɛlɛ wɔ́ ɛ?
(what is your name?)

It is not exactly clear what the indefinite counterparts of these Q-items are in indicative clauses. Perhaps their realizations when embedded into a main clause such as ménze 'I don't know' may provide a clue:

(17a) ménzɛ́ dɛɛ mɔ́s tí ɔ́bole Kofí á
(I don't/^{know}the reason why he beat Kofi)

(18a) menzé déε mɔ́ tɪ yeangɔ́ á
(I don't know the reason why he didn't go)

(19a) menzé déε mɔ́ ɔyele ye á
(I don't know the thing which he did to him)

(20a) menzé ké befele ye á
(I don't know what he is called)

or (20b) menzé yé dúma
(I don't know his name)

On this evidence we might say that the Q-items: kemɔti/
nzone ati/ duzu ati 'why', which question adjuncts of reason
correspond to deε mɔ́ti 'lit. the thing on account of which, for some
reason' (18a); and that ke as exemplified in (19) corresponds to
deε mɔ́ ti 'lit. thing which, something' (19a), whereas for ke as
used in (20) there is no obvious indicative counterpart.

The Q-item ke usually combines with the verb ye 'to do' with
or without m to denote 'the way by which you do' or 'how' :

(21a) ke ε eyele (mɔ́) edwule azé é ?
(how did you get down?)

(21b) ké eyele (mɔ́) enwunle ké mewɔ́ eké é ?
(how did find out that I was here?)

We may regard the entire Q-piece (underlined) as the Q-item, which
may be said to question the adjunct of manner constituent as in the
case of (21a); in (21b), which involves the suppletive dynamic verbal
form nwu of the stative verb ze 'to know', the question asks for the
evidence on the basis of which the knowledge was arrived at rather
than for the manner of knowing. It is to be noted, however that in
its various senses, the Q-item ke regularly selects the clause-
final vowel particle é.

In 'minor' interrogatives (i.e. without verbs), however, kemɔti selects the vowel particle é, whereas nzɔne ati/duzu ati co-occurs with ɛ:

(22a) kɛmɔtí é?

(why?)

(22b) nzɔne/duzu átí ɛ?

(why?)

In 'minor' interrogatives, Q-items, which may select either ɔ or é, with slight differences in meaning, include: nwáne 'who', nzɔne 'what' and boní 'which' :

(23a) nwáne ɔ?

(who is that/there?)

(23b) nwáne é?

(who is this?)

(24a) nzɔne ɔ?

(what is it/the matter?)

(24b) nzɔne é?

(what is this?)

(24c) nzɔne kákulá é?

(what sort of child is this?)

(25a) boní ɔ?

(which one?)

(25b) boní é?

(which one is this?)

We might, at this stage, compare the Q-items boní 'which' and nzɔne 'what' in respect of the feature definiteness. On this issue, Katz

and Postal (1964) explicitly claim that wh in a question may be associated with a definite element in a corresponding indicative or declarative clause and account for the difference between which and what by analyzing the Q-item which as in 'which book?' as 'wh + the' and the Q-item what as an 'what book?' as 'wh + a/some'. They conclude that the Q-item which questions a definitely marked domain, whereas the Q-item what questions in indefinitely marked one (1964 : 94). Apropos the same issue, Jespersen (1940 : 482) observes that "which asks for one (or more) out of a restricted number, while who and what ask indefinitely".

Huddleston (1971) who discusses the views of Katz and Postal says that the use of what indicates that "the range of possible answers is ... necessarily indefinite,," whereas "the use of which indicates that there is only a limited range of possibilities to be considered". He further notes that "the definite domain associated with which may be expressed explicitly as in 'which of the two models' or it may be simply implicit as in 'which end is the anterior and which the posterior'. He concludes that the syntactic analysis put forward by Katz and Postal is correct as far as it goes but it does not "satisfactorily explain this semantic difference between which and what, for it does not incorporate the notion of domain or range. Moreover, which surely involves both definiteness and indefiniteness: the set of possibilities is definite, but the selection from this set is indefinite. It is this indefiniteness that the questioner wants to have resolved" (21-22).

Here is a sample of interrogatives in which bóni may be used:

- (26) bedá ne bóni a/yéé asa épe á?
 (which child's hand is cut?)
- (27a) bedá téndenle kókolé bóni?
 (which fair, tall child?)
- (28a) mrenyá bóni á/yéé engúló mraalé á?
 (which/^{man}does not like women?)
- (29a) ebíá bóni á/yéé ebu á?
 (which chair is broken?)
- (30) ε hu á le bóni?
 (which one is your husband?)
- (30A) me hu á le ekyí ne
 (my husband is the younger one)
- (31) bóni á/yéé a le kpanyinlí á?
 (which is the elder?)
- (31.A.I) Kofí á/yéé a le kpanyinlí á
 (Kofi is the elder?)
- (31.A.II) Kofí ś,
 (it is Kofi)

It is to be noted that in (26) above, the Q-item bóni 'which' co-occurs with a noun which is post-modified by the definite article ne 'the'. Semantically, the interrogative clause (26) asks about one child out of a restricted number or expresses explicitly by the occurrence in surface structure of the definite article that there is a definitely limited set of possibilities to be considered.

In the minor interrogative (27), bóni occurs in a nominal piece which is not modified by the definite article. Such a minor interrogative may be put in reply to such an utterance as:

(27b) *bedá tēndenle kókolé ne éwu*
 (the fair, tall child is dead)

and may be said to ask for identification; that is, semantically, the addressee is not being asked to choose from a definite set of possibilities.

The negative interrogative exemplified in (28a) corresponds to a positive indicative mood clause such as :

(28b) *nrenyá bíála kúlo mraalé*
 (every man likes women)

This construction makes an assertion, that is, about a class of indefinite membership and can hardly be regarded as a question used to elicit objective information.

The interrogative clause (29a) may be uttered as a denial of the accusation:

(29b) *wóbu ebíá ne*
 (you've broken the chair)

and, like (28a), can hardly be regarded as a question.

The interrogatives (30) involving the equative copular verb le/ lɛ / ' to be, to be equated with' and (31) involving the identifying copular le /lɛ / 'to be' both ask about a limited number of persons, as their possible answers (30.A) and (31.A) respectively confirm. It is to be noted, however, that whereas (30) is non-emphatic,

(31) is emphatic; and an appropriate answer to (31), if major, repeats the particles which occur in the original interrogative clause, but if minor (31.A.II), the particle is realized as ǔ, which as noted above is one of the favourite vowel particles in minor interrogatives.

Unlike the Q-item bóni 'which', the Q-item nzóné 'what' never co-occurs, within a Q-piece, with a definite noun phrase (i.e. modified by the definite article), as the following examples illustrate :

- (30) ébo nzóné ábusua?
(which clan do you belong to / what is your clan?)
- (31) eyé nzóné égyima?
(what work do you do?)
- (32) nzóné bílúku á/yéé edolé á?
(what book did you buy?)
- (33) nzóné kákula é?
(what sort of child is this?)

By (30) the addressee is being asked to name one out of a fixed number (seven) of clans, although this definite domain is not overtly expressed by the occurrence in surface structure of the definite article. By contrast, the use of nzóné in (31) indicates an indefinite domain. (32) may be regarded as asking for a description or identification of any kind, and (33) has a perjorative implication usually absent from an interrogative. On the basis on the above description, we might say that the Q-item bóni 'which' is sometimes

used to question a definitely marked domain and that such instances may be marked in surface structure by the definite article, whereas the Q-item nzone 'what' usually indicates an indefinitely marked domain but that in the particular use exemplified in (30) it denotes a definitely marked domain, although this is not overtly expressed.

Imperative mood clauses

The description of imperative mood clauses or commands presented here is restricted to the positive forms of the various types distinguished; corresponding negative polarity forms will be dealt with under polarity in Chapter 4.

Imperative mood clauses may be broadly sub-classified in terms of (A) direct and (B) indirect imperatives, and in the discussion which follows the characteristic properties of each sub-type will be described.

(A) Direct imperatives

Direct imperative mood clauses may be further exemplified by the following clauses:

- (1a) kɔ
(go)
- (1b) fea
(hide)
- (1c) gyinla
(stop)
- (2a) bɛhɔ
(all of you, go)

- (2b) beveá
(all of you, hide)
- (2c) begyinlá
(all of you; stop)
- (3a) be mú nwio béhó
(both of you, go)
- (3b) awie bíála ého
(everybody go)

The above direct imperative mood clauses are different in that in (1a-c), no subject is expressed either by a pronoun or by a nominal phrase, whereas in (2-3), there is a subject noun phrase, which may be a pronoun as in (2) or a nominal phrase as in (3a-b).

Direct imperative mood clauses may or may not have a subject expressed in surface structure. We may, therefore, subclassify direct imperative in terms of (A,I) direct imperatives without subjects and (A,II) direct imperatives with subjects.

(A.I) Direct Imperatives without subjects

As already noted, this type of direct imperative mood clause, which may be regarded as the most common, usually contains the absolute form of a finite verb stem (i.e. without any affixes) and differs from other (direct) imperative mood clauses in having no overtly expressed subject.

The absence of a subject in surface structure is perhaps best accounted for by a transformation which deletes an underlying subject pronoun ə 'you', as proposed by Katz and Postal (1964). An

alternative analysis has recently been proposed by Thorne (1966) who suggests that the underlying subject in such 'short' imperatives as (1a) is 'you somebody', the vocative of the indefinite pronoun. This suggestion is rather unconvincing and counter-intuitive. There are clear formal criteria to support the testimony of our native intuition that the deleted subject is the 2nd pers. sing. pronoun realized as ε 'you' (rather than, in the case of Nzema, the alternative bi-phonemic form wɔ 'you').

Such supporting criteria include:

- (i) The omitted 2nd pers. sing. subject pronoun ε 'you' has surface realization in one possible version of a reported positive direct imperative clause occurring after the verb stem se 'to say' in the main clause:

(4a) tenla aze (direct imperative)

(sit down)

(4b) ɔse εdenlá aze (Reported " ")

(he says you should sit down)

- (ii) The 2nd pers. sing. subject pronoun subject is also realized in the surface structure of one type of persuasive commands, as exemplified in the following imperative mood clauses with the verb stems: (a) kɔ 'to go', (b) die 'to take, receive' and (c) tenla 'to sit':

(4c) εngɔ

(do go)

(4d) εnlíé

(do take it)

(4e) εndénlá aze

(do sit down)

(iii) The 2nd pers. sing. subject pronoun is realized in the surface structure of negative direct imperative clauses involving verbal groups (e.g. ka kile 'to tell') and occurs in the auxiliary verbal element:

(4f) ka kile Kofi (positive direct imperative)
(tell Kofi)

(4g) mmáka ékile Kofi (negative " ")
(don't tell Kofi)

(iv) Ditransitive and complex semi-transitive clauses involving a sub-class of verbs which can occur in such clauses have fa-paraphrases. The 2nd pers. sing. subject pronoun is realized in the negative direct imperative forms of such fa-paraphrases and occurs in the second (or ditransitive/complex semi-transitive) verb in such constructions. The following paradigm of ditransitive clauses illustrate:

(5a) soa Kofi Kyéle (direct imperative)
(put a hat on Kofi)

(5b) fa kyélé ne soa Kofi (fa-paraphrase dir. imper.)
(lit. take the hat put it on Kofi)

(5c) mmáfa kyélé ne ésoa Kofi (negative dir. imper.)
(don't put the hat on Kofi)

The corresponding paradigm of complex semi-transitive clauses provides further exemplification:

(5a.I) tenla Kofi ébía ne ánu (direct imperative)
(sit Kofi in the chair)

(5b.II) fa Kofi ténla ebía ne ánu (fa-paraphrase dir. imp.)
(sit Kofi in the chair)

(5c.III) mmáfa Kofi étenla ebía ne ánu (negative dir. imper.)

(v) The 2nd pers. sing. subject pronoun is expressed in the surface structure of emphatic negative ingressive (Aspect 1) forms of direct imperatives, as exemplified in the following clauses with the verb stem da 'to sleep':

(5d) mmáko ékóda (emphatic negative)
(don't go and sleep) (itive-ingressive)

(5e) mmába ébáda (emphatic negative)
(don't come and sleep) (ventive-ingressive)

(vi) In a co-ordinate conjunction of direct imperative mood clauses such as:

(6) ko ná éhemá wóára
(go and come to-morrow)

the overtly expressed subject pronoun wó 'you' occurring in the second clause introduced by na must be coreferential with, albeit of a different shape form, the omitted 2nd pers. sing. subject pronoun ε 'you'.

(vii) The 2nd pers. sing. pronoun wó 'you' occurs as the subject within a following formulaic expression wóde 'you have heard', as in :

(7a) kó, wóde
(go, you hear)

(7b) be la, wóde
(come, you hear)

The above clauses (7a-b) exemplify one type of a persuasive command and the formulaic expression wóde 'you have heard', which usually follows the command, is here termed an 'addressive' and is analyzable as a positive transitive ~~transitive~~ clause in the perfect tense consisting of the

pronominal subject wɔ and the verb stem te 'to hear' (which does not favour the pronominalization of its definite inanimate object noun phrase). The overtly expressed subject pronoun in the addressive clause must be co-referential with the omitted 2nd pers. sing. subject pronoun.

- (viii) The abrupt tone of direct imperatives may be toned down by markers of politeness such as mekpa wɔ kyɛlɛ 'I beg you, please', which usually precedes the imperative mood clause, as exemplified in :

(8a) mekpá wɔ kyɛlɛ, kɔ
(I beg you, go)

The occurrence in the polite expression, which is analyzable as a ditransitive clause, of the pronominal object wɔ 'you', which must be co-referential with the omitted subject pronoun, provides additional confirmation that the omitted subject must be the 2nd pers. sing. pronoun. It is to be noted that in instances such as (8a), no other pronominal object is possible within the ditransitive clause of politeness, and an imperative clause such as :

(8b) *mekpa ye kyɛlɛ, kɔ
(I beg him, go)

is unacceptable.

- (ix) It is a characteristic property of a reflexive clause that the subject noun phrase must be co-referential with the possessive pronoun in the reflexive complement; and in the case of those tenses which select

Set I subject pronouns¹ (e.g. habitual, progressive, future I, future II, positive past tense etc.) the subject pronoun in the reflexive clause is not only co-referent with, but has identical phonological shape as, the possessive pronoun in the reflexive complement, as in the following clauses :

(9a) εnea ε nwó bõe (habitual)

(you take good care of
yourself)

(10a) εkebia ε nwó (future II)

(you will wash
yourself)

(11a) εhanlé ε nwó (past)

(lit. you bestirred
yourself, you hurried)

Alongside (9a-11a), we shall find the following positive direct imperative clauses:

(9b) nea ε nwó bõe

(take good care of yourself)

(10b) bia ε nwó

(wash yourself)

(11b) ka ε nwó

(hurry up)

in which the only possible possessive pronoun ε 'your' in the reflexive complement must also be co-referential and identical in shape with the omitted subject pronoun.

1. See Chapter 4.

(x) And as mentioned in the introductory chapter, with a sub-class of complex verbs involving as object noun phrase an inalienable noun (e.g. die menle 'to rest') the subject noun phrase must also be co-referential with the possessive pronoun in the object noun phrase; and also in those tenses which select Set I pronouns, the pronoun subject of a clause involving such a complex verb must be co-referent as well as indentical in shape with the possessive pronoun in the nominal object :

(12a) elédfe ε ménle
(you are resting)

Alongside the above indicative mood clause, we shall attest the positive direct imperative mood clause (12b) below:

(12b) die ε ménle
(have a rest)

in which the only possible possessive pronoun in the nominal object must also be co-referent as well as indentical in shape with the omitted 2nd pers. sing. pronoun subject. We shall never find, alongside (12a), corresponding imperative mood clauses involving any other possessive pronoun, e.g. me 'my' as in (12c), which is clearly unacceptable;

(12c) *die me ménle

Intonationally, this type of positive direct imperative clause is characterized, in the case of a mono-syllabic verb stem, by a high tone if it is not followed by an object or an adjunct or by a low tone if it is followed and, in the case of disyllabic verbs,¹ by low tones, whether followed or not.

It should be mentioned that it is not all clauses which involve the absolute form of a verb stem that are interpretable as 2nd pers. sing. direct imperatives. Thus, for example, the following formulaic expressions, which are usually said with a clause-final particle:

(13a) tia boε ó

(lit. walk well, good-bye)

(13b) da boε ó

(sleep well/good night)

are not regarded as imperatives. Without the final particle, which may be attested, (13b) above is two-ways ambiguous as between a formulaic interpretation and an imperative interpretation of 'lit. sleep right, move to the other side', usually addressed to a sleeping partner.

1. The disyllabic verbs: túó and dúó 'proceed', which are free variants, are exceptional in being usually said with high tones and a higher pitch range; and also the verb dié 'accept it' when used to urge acceptance upon a reluctant addressee.

(A.II) Direct Imperative with subjects

The subject in this type of direct imperative may be the 2nd pers. plur. pronoun be 'you', which may occur alone as in the following examples with the verb (a) da 'to sleep', (b) tenla 'to sit', and (c) mua enloanle 'to shut mouth':

(14a) bela
(sleep)

(14b) bedenlá aze
(sit down)

(14c) bemuá be nlóa
(keep quiet)

or may be preceded by a subject noun phrase, as in:

(15a) be mé nsá bela
(the three of you, sleep)

(15b) be múala bemuá be nlóa
(all of you, shut your mouth)

A third person subject is also possible:

(16a) awie bíála éla koónwí
(everybody sleep quietly)

(16b) awie bíála émuá é nlóa
(everybody shut his mouth)

It is to be noted that in (15a-b), the clause-initial pronoun be is identical in shape as well as co-referent with the pronominal subject in the verb word. A comparison of (15b) and (16b) shows that the possessive pronoun in the nominal object, which is co-referent with

the subject noun phrase, is realized as the 2nd pers. plur.

possessive pronoun be 'your' where the subject is 2nd pers. plur.

pronoun but as the 3rd person sing. possessive pronoun ɔ 'his' where

the subject is third person; and also with third person subject

the verb has a prefix é.

We might sub-classify direct imperatives with subjects into (A.II.i) those with 2nd pers. plur. pronominal subject and (A.II.ii) those with a third person subject.

(A.II.i) Direct imperatives with 2nd pers. plur. pronominal subject

Further exemplification of this type of direct imperatives is provided by the following clauses involving verb stems enclosed in round brackets :

- | | | |
|-------|-----------|---------------------------|
| (17a) | behɔ | (<u>ko</u> 'to go') |
| | (go) | |
| (17b) | beli | (di 'to eat') |
| | (eat it) | |
| (17c) | bekpo | (<u>kpo</u> 'to wash') |
| | (wash it) | |
| (18a) | bedié | (<u>tie</u> 'to listen') |
| | (listen) | |
| (18b) | benleá | (<u>nea</u> 'to look') |
| | (look) | |
| (18c) | beboá | (<u>boa</u> 'to help') |
| | (help) | |
| (19a) | berelá | (bela 'to come') |
| | (come) | |

- (21b) beho sua nú (perfect tense, indicative)
(they have gone home)
- (21c) kekála bíé á beho sua nú (" " ")
(they've only just gone home)
- (22a) bekpo (direct imperative)
(wash it)
- (22b) bekpo ninyené ne (" ")
(wash the things)
- (22c) mekpá be kyéle, bekpo ninyené ne (" ")
(I beg you, wash the things)
- (23a) bekpo (perfect tense, indicative)
(they've washed it)
- (23b) bekpo ninyené ne (" " ")
(they've washed the things)

Apart from the different contexts of situation in which each clause may be appropriately used, this type of ambiguity is partly resolvable by the different intonational patterns which correlate with the entire clause including any complementation that is supplied as in the (b) clauses. As the above (b) clauses show, the first syllable of any complement has a high tone in direct imperative, whereas the corresponding syllable in the indicative clause has a low tone. The indicative mood clause is further distinguished since it may collocate with a time adverbial as in (21c) which is excluded from the corresponding direct imperative; and the direct imperative mood clause may contain a formulaic expression of politeness as in (22c) which is precluded from the corresponding indicative mood clause.

With polysyllabic verb stems, with or without complementation, the two types of clauses are intonationally distinguished and there is no possibility of ambiguity, as the following pairs of clauses illustrate:

- | | | |
|-------|----------------------|-----------------------------|
| (24a) | bəgyinlá | (direct imperative) |
| | (stop) | |
| (24b) | bəgyinlà | (perfect tense, indicative) |
| | (they've stopped) | |
| (25a) | bəlumúá | (direct imperative) |
| | (go ahead) | |
| (25b) | bəlumùá | (perfect tense, indicative) |
| | (they've gone ahead) | |
| (26a) | bədenlá aze | (direct imperative) |
| | (sit down) | |
| (26b) | bədenlà aze | (perfect tense, indicative) |
| | (they've sat down) | |

With disyllabic verb stems as in (24a-b) and (26a-b), direct imperative mood clauses are distinguished by a high tone on the second verb syllable, whereas the corresponding syllable in the indicative mood clause carries a low tone; and with a tri-syllabic verb stem, as in (25a-b), the direct imperative has high tones on the second and third syllables of the verb, whereas in the indicative clause, the second syllable has a low tone and the third syllable a high tone.

(A.II,ii) Direct imperatives with third person subject

We shall find such examples of this sub-type of direct imperatives as the following:

- (27a) awie bíála éhɔ sua nu
(everybody go home)
- (27b) awie bíála émuá'ɔ nlóa
(everybody shut his mouth)
- (27c) mekpá bɛ kyéleɛ, awie bíála émuá'ɔ nlóa
(I beg you, everybody shut his mouth)
- (28a) Nyamenlé énléá ɛ nwó zó
(God look after you)
- (28b) Nyamenlé éyilá wɔ
(God bless you)
- (28c) boɛ érelá
(lit. may good luck come. wish you good luck)

Direct imperatives with a third person subject are characterized by a prefix ɛ- in the verb word, which is a marker of a nominal phrase subject, and, like direct imperatives with a 2nd pers. plur. pronominal subject, by Type B mutation under \forall influence, the influential \forall element being realized, in the case of this sub-type of direct imperatives, as the vowel prefix ɛ- in the verb word. Intonationally, the vowel prefix has a high tone and, as in the case of a direct imperative with a 2nd pers. plur. pronoun subject, the first or only verb syllable has a low tone followed by a high tone on the next syllable of the verb.

With particular reference to (27b-c), it is to be noted that the possessive pronoun in the object noun phrase, which is co-referential

with the subject noun phrase, is the 3rd pers. sing. possessive pronoun ɔ 'his', whereas the pronominal object in the formulaic expression of politeness is realized as the 2nd pers. plur. pronoun bɛ 'you'. The occurrence of the 2nd pers. plur. pronoun confirms that there are two or more addressees. In direct imperatives with third person subject as exemplified in (27a-c), as also in the case of direct imperatives with a 2nd pers. plur. pronominal subject, the referent of the subject noun phrase (which is clause-initial in Nzama) is included among the addressees.

On the other hand, with the type of imperatives exemplified in (28a-c) the subject is obviously not included among the addressee, hence the non-co-referential 2nd pers. sing. possessive pronoun ɛ 'your', as in (28a). We might regard this type as more or less formulaic expressions.

It is also to be noted that a direct imperative with a third person subject is also intonationally distinguished from an indicative clause in the perfect tense with a nominal phrase subject, both of which have in common the following features; (i) the presence of a vowel prefix in the verb word, and (ii) the presence of Type B mutation. Corresponding to the direct imperatives (27a-b) above, we have the following indicative mood clauses in the perfect tense:

- (29a) awie bíála ého sua nú
(everybody has gone home)
- (29b) awie bíála émua ɔ nɔ́a.
(everybody has shut his mouth)

which are clearly distinguished intonationally.

The vocative noun phrase in a direct imperative with a 2nd pers. sing. (omitted) pronoun subject may easily be confused with the subject noun phrase in a direct imperative with a third person subject, particularly in negative clauses:

(30a) awie bíálà mmátene ɔ nwó (Neg. direct imp. 3rd pers),
(lit. everybody don't mind him, nobody should mind him.)

(30b) Kofi, mmátene ɔ nwó (neg. direct imp. 2nd pers.),
(Kofi, don't mind him)

As the above examples show, either positive direct imperative is negated in the same way: by prefixing the negative morpheme nma to the verb. We might, therefore, distinguish the two types of direct imperatives; and in the following examples, the (a) clauses are direct imperatives with a nominal phrase subject and the (b) clauses are direct imperatives with a vocative noun phrase;

(31a) awie bíálà émuá ɔ nlóa (direct imp. 3rd pers.)
(everybody shut his mouth)

(31b) Kofi, mua ε nlóa (" " 2nd ")
(Kofi, shut your mouth)

(32a) mekpá bε kyéle, awie bíálà émuá ɔ nlóa (" 3rd ")
(I beg you, everybody shut his mouth)

(32b) Kofi, mekpá wɔ kyéle, mua ε nlóa (" 3rd ")
(Kofi, I beg you, shut your mouth)

The two types of direct imperatives are distinguished in several respects :

- (i) direct imperatives with a nominal phrase subject are distinguished, as already noted, by the prefix ε-(which is usually not pronounced in normal, unemphatic speech);

- (ii) direct imperatives with a nominal phrase subject are characterized, in the case of mutable stem-initial consonants, by Type B mutation, whereas direct imperatives with a vocative noun phrase are not characterized by any mutation;
- (iii) the co-referential possessive pronoun in the object noun phrase is, in the case of a direct imperative with a nominal subject, the 3rd pers. sing., whereas in the case of a direct imperative with a vocative noun phrase, it is the 2nd pers. sing;
- (iv) where a formulaic expression of politeness occurs as in (32a-b), it precedes the nominal phrase subject (32a), whereas it follows the vocative noun phrase (32b);
- (v) within the polite formulaic expression, the pronominal object is realized as the 2nd pers. plur. bé 'you' in the case of direct imperatives with a nominal phrase subject, and as the 2nd pers. sing. wó 'you' in the case of direct imperatives with a vocative noun phrase;
- (vi) and also within a clause-final persuasive addressive, the pronominal subject is realized as the 2nd pers. plur. bé 'you' in the case of direct imperatives with a nominal phrase subject, whereas it is realized as the 2nd pers. sing. wó 'you' in the case of a direct

imperative with a vocative noun phrase, as the following examples illustrate:

(33a) awie bíála émuá ɔ nlóá, béde (direct imp. 3rd pers.)
(everybody shut your mouth, you hear)

(33b) Kofi, mua ɛ nlóá, wɔde
(Kofi, shut your mouth, you hear) (" " 2nd ")

(vii) the distinctness of the vocative noun phrase and the nominal phrase subject in a direct imperative is confirmed by the possibility of the co-occurrence of the vocative noun phrase with the 2nd pers. sing. contrastive subject pronoun wɔmɔ 'you' as in:

(33c) Kofi, wɔmɔ múa ɛ nlóá
(Kofi, you shut your mouth)

(viii) the two types of imperatives are intonationally distinguished as (31a-b) illustrate; and there is a noticeable pause after the vocative noun phrase.

Type B : Indirect Imperatives mood clauses

Positive indirect imperatives may be exemplified by the following paradigm with pronominal subjects and clauses (1-5) with nominal phrase subjects.

Indirect Imperatives

Positive: A Pronominal Subject :

Sing.

1st pers.	maa mernla	/má mʒnǎ? /	'let me sleep'
3rd "	maa ɔla	/mɔ; lá? /	'let him sleep'

Plur.

1st pers.	maa yɛla	/mɛ̃	(j)ɛlà?	/	'let us sleep'.
3rd "	maa bɛla	/mã	bɛlà?	/	'let them sleep'.

Positive: B. Nominal Phrase Subject

- (1) maà Koffi (ɛ̃)lâ. 'let Kofi sleep'.
- (2) maà Sanéba (ɛ̃)hɔ 'let Saneba go away'.
- (3) maà Akyé (ɛ̃)kpùdá 'let Akyé wash it'.
- (4) maà Akyé(ɛ̃)zɔ sɛnlé ne 'let Akyé light the fire'.
- (5) maà Sanéba (ɛ̃)kpùdá kyénze ne 'let Saneba wash the pan'.

As the above examples show, positive indirect imperatives are introduced by the formative maa/mã/'let', which may be regarded as an impetative form of a verb, followed in linear order by the pronominal subject or nominal phrase subject and the verb word with a prefix ɛ̃, as in the case of direct imperatives with a nominal phrase subject, where there is a nominal phrase subject as in (1-5). Unlike direct imperatives which may or may not have an overtly expressed subject, indirect imperatives regularly have a subject expressed either by a pronoun or a nominal phrase.

In respect of the category of person, we might say that direct and indirect imperatives complement each other and that together imperative clauses select Set I subject pronouns,¹ which include the mono-phonemic members (ɛ̃ 'you' and ɔ̃ 'him, her, it') of the 2nd and 3rd pers. sing. pronouns; and this constitutes an additional formal criterion in support of regarding the omitted subject

1. See Chapter 4.

pronoun in direct imperative clauses as the 2nd pers. sing. pronoun ε 'you' rather than the alternative bi-phonemic form wɔ 'you' which belongs to Set II pronouns. It should also be noted that the 1st pers. sing. subject pronoun is realized as men 'me' (rather than as me 'me').

Other characteristic features of indirect imperatives include:

- (i) characterization by Type A mutation under $\#$ influence in the case of the 1st pers. sing. pronoun mien 'me' only, the influential $\#$ element being realized as the homorganic final nasal consonant of the pronoun;
- (ii) indirect imperatives with all other subject pronouns are characterized by Type B mutation under \forall influence, the influential \forall element being realized, in the case of pronominal subjects, as the vowel of the syllable of the pronoun, and in the case of a nominal phrase subject, as the vowel prefix ε- which marks a nominal phrase subject;
- (iii) as regards the intonational feature which characterizes this type of imperative mood clauses, the introductory formative maa / mǎ / 'let' (said with a short vowel in spite of the double vowel letter) has a low tone, followed by a high tone on the syllable of the pronominal subject, and the first or only syllable of the verb has

a low tone followed by a high tone on any subsequent syllables of the verb; the junction between the introductory formative and the 3rd pers. sing. pronoun may be realized, particularly in slow, deliberate or emphatic speech, as a prolongation of the vowel of the pronoun with a rising pitch which is analyzable as a low-high sequence;

- (iv): the vowel prefix ε- (which may not be said in normal unemphatic speech) has, as in the case of direct imperatives with a nominal subject, a high tone; the verb syllables have the same intonational pattern as with a pronominal subject;
- (v) semantically, by indirect imperatives, the speaker is asking for the agreement or co-operation of the addressee in the proposed action and, therefore, the addressee who is not included within the reference of the subject noun phrase, is also not directly involved in the action proposed; by contrast, in direct imperatives, the subject of the clause is, as a rule, the addressee or included within the reference of the subject noun phrase and is directly involved in the action that is demanded or requested as a performer, although in direct imperatives with a nominal phrase subject exemplified in (28a-c) which may be regarded as formulaic expressions, the subject is not usually the addressee(s) who is involved in the action called for as the affected

or beneficiary. It should also be mentioned that there is semantic affinity between one type of polar disjunctive interrogatives and indirect imperatives which is syntactically marked as the following examples with ko 'to go' illustrate:

(6a) meng 5 5? (interrogative)

(may I go?)

(6b) maa mêng (imperative)

(let me go)

In a polar disjunctive such as (6a), the speaker is asking the permission or consent of the addressee to perform the action proposed and the appropriate response may be either 'yes' (granting permission/consent) or 'no' (denying permission/consent). Similarly, in the indirect imperative, as already noted, the speaker is asking for the agreement or co-operation of the addressee in the proposed action and the possible response on the part of the addressee may be either to grant or to deny agreement/co-operation. This semantic affinity between the two types of mood clauses is formally marked by the selection of the Set I 1st pers. sing. pronoun men with accompanying Type A mutation.

It was mentioned above that the formative maa 'let, to allow', which introduces a positive indirect imperative, is properly regarded as an imperative form of a verb; for like any finite verb, maa 'let, allow' may exhibit tense, person, number and polarity distinctions in addition to mood, as in:

- (7a) emaa békɔ (Habitual, 2nd pers. sing. positive)
 (lit. you allow they go.
 you allow them to go).
- (7b) ɔmaa békɔ (" 3rd " " ")
 (he allows them to go)
- (7c) yemaa béhɔ (Perfect, 3rd " " ")
 (he has allowed them to go)
- (7d) ɔmaanle béhɔlé (Past 3rd " " ")
 (he allowed them to go)
- (7e) yeammaá beangɔ (Past 3rd " " negative)
 (lit. he didn't allow they
 didn't go.)
 (he didn't allow them to go)

The above sentences are interpreted as complex sentences consisting of a main (or matrix) clause involving the verb word maa and a subordinate clause or sentential complement. It is to be noted that the matrix clause and the sentential complement concord in respect of the categories of tense and polarity, but never in person.

At this stage, we may summarize the structural types of imperative mood clauses distinguished as follows:

(continued over)

Type	Subject	1st Person	2nd Person	3rd Person
Direct (Type A)	Without Subject	-	(A. I) da (sleep)	-
	With Subject	-	(A.II,i) bela (sleep)	(A.II,ii) awie biala εla (everybody sleep)
Indirect (Type. B)	With Subject	<u>maa</u> menla (let me sleep)	-	<u>maa</u> Kofi εla (let Kofi sleep) <u>maa</u> ɔla (let him sleep)
		<u>maa</u> yela (let us sleep)		<u>maa</u> bela (let them sleep)

Persuasive imperatives

Persuasive imperatives normally used to urge or entreat consent are distinguished by clause-final formulaic expressions which are here termed as 'addressives'. Such persuasive addressives include: i. wóde/wóó, ii. egyá, and iii. ahaa and the use of each addressive is restricted to particular types of imperative mood clauses, which may be direct or indirect.

i. addressive : wóde /wóó

The addressive wóde 'you have heard, you understand', as already mentioned, is interpreted as a transitive clause in the positive perfect tense whose elements of structure are the 2nd pers. sing. pronominal subject wó 'you' plus the transitive verb te 'hear, understand' (which belongs to the sub-class of transitive verbs which do not favour pronominalization as exemplified by the relationship of (a) wóde edwéké ne mómehá lá 'you've heard the matter I've said' to (b) wóde 'you've heard it'). The addressive wóó may be analyzed as consisting of the pronoun wó plus a vowel particle ó.

The two addressives are usually appended to 2nd pers. sing. direct imperatives (Type A.I) addressed to children and may be exemplified by :

- (1a) dí, wóde
(eat it, you hear)
- (1b) dí, wóó
(eat it, you hear)
- (2a) béla, wóde
(come, you hear)
- (2b) béla, wóó
(come, you hear)

In positive clauses as in (1-2) (a-b)) above, the addressives wóde and wóo are in free variation. In negative imperatives, however, the addressive wóde is more normal, as in :

(3) mmáko, wóde

(don't go, you hear)

The addressive wóde with the appropriate 2nd pers. plur. pronoun bé 'you', may also be appended to positive or negative direct imperatives with a nominal phrase subject:

(4a) awie bíála éye kooñwí, bède

(everybody keep quiet, you hear)

(4b) awie bíála mmáte o nlóa nu, bède

(nobody should utter a word, you hear)

As the above negative imperatives (3) and (4b) show, the clause-final addressive wóde has always positive polarity, whether the imperative is of positive or negative polarity.

ii. addressive: egyá

The addressive egyá (which is to be distinguished from the noun word egya 'my (the speaker's) father') may be used with the 2nd pers. sing. positive direct imperative (Type A.I), as in :

(5a) dá, egyá

(do sleep)

(5b) belá, egyá

(do come)

or with the 1st pers. sing. positive indirect imperative (Type B):

- (6a) ményε koónwú, egyá
(let me be quiet (lest I say too much))
- (6b) ménlá, egyá
(let me sleep)

The above clauses (6a-b) may be relatable, by the deletion of maa, to their corresponding indirect imperatives:

- (7a) maa ményε koónwu, egyá
(let me keep quiet)
- (7b) maa ménlá, egyá
(let me sleep)

which may be attested in normal speech,

iii. addressive : ahaá

One particular type of 2nd pers. sing. positive direct imperative in which the subject pronoun is phonologically realized in surface structure followed by a nasal consonant homorganic with the stem-initial consonant of the following verb may be regarded as a persuasive imperative. It may be used by a superior to an inferior but is also possible among equals. The addressive ahaá may be appended to this type of persuasive imperative, particularly in contexts where the persuasive utterance is repeated because the expected satisfactory response has not been obtained :

- (8a) êng⁵ súa nú
(do go home)
- (8b) êng⁵ súa nú, ahaá
(do go home, won't you)

(9a) éngyínlá

(do stop)

(9b) éngyínlá, ahaá

(do stop, won't you)

As the above examples (8a-b) with the verb stem kɔ 'to go' show, this type of persuasive imperative is marked, in the case of mutable stem-initial consonants, by Type A mutation. The first syllable involving the pronoun is said on a high tone followed by high tones on the verb syllables. If the utterance is repeated with the addressive ahaá added the whole pitch range is higher.

This type of persuasive imperative (without the addressive 'tag' ahaá) is intonationally distinguished from the common/^{present}(non-future tense) negative with the 2nd pers. sing. which it otherwise resembles in respect of (a) presence of the (negative) nasal prefix and (b) presence of Type A mutation, as the following examples with the verb stem da 'to sleep' illustrate:

(10a) énlá

(do sleep)

(persuasive imperative)

(10b) enlá

(you don't sleep)

(common/^{present}(non-future tense) negative)

CHAPTER 4

Categories II and III : Polarity and Tense

There are two terms in the category of polarity : positive and negative, and ten positive tenses are distinguished. The category of polarity, particularly in its relation to indicative and interrogative mood clauses, usually intersects with the category of tense and for this reason the two-closely related categories are more satisfactorily dealt with together. But since tense is not a category that is stutable for imperative mood clauses, polarity will be discussed first in its specific relation to imperative mood clauses.

Polarity in Imperative Clauses

In the previous chapter, the various types of positive imperatives were distinguished and their characteristic properties discussed. In this section particular attention is drawn to the negative forms of the positive types distinguished.

(A.I) Direct imperatives without subjects

The following positive and their corresponding negative clauses exemplify 2nd pers. sing. direct imperatives without overtly expressed subject :

<u>(a) Positive</u>		<u>(b) Negative</u>	
(1)	dá 'sleep'	mmáda	'don't sleep'
(2)	kɔ sua nú 'go home'	mmákɔ sua nú	'don't go home'
(3)	die 'take it'	mmádie	'don't take it'

<u>(a) Positive</u>		<u>(b) Negative</u>	
(4)	kpoa egyádé ne 'sweep the kitchen'	mmákpoa egyádé ne	'don't sweep the kitchen'
(5)	gyinla 'stop'	mmágyinla	'don't stop'
(6)	tenla aze 'sit down'	mmátenla aze	'don't sit down'

As the above examples show, the positive and negative forms of this type of direct imperative are alike in not having the 2nd pers. sing. subject pronoun expressed in surface structure. The positive is negated by the prefixation of mma (realized as (mē/or/mā/ according to the vowel harmony) to the absolute form of the finite verb stem,

Intonationally, the negative prefix has a high or rising tone and the syllables of the verb (whether followed or not) have low tone.

A.II.i) Direct imperatives with 2nd pers. plur. subject

<u>(a) Positive</u>		<u>(b) Negative</u>	
(7)	bela 'sleep, all of you'	benmáda	'don't sleep all of you'
(8)	bəhɔ́ súa nú 'go home'	benmákɔ́ sua nú	'don't go home'
(9)	bəlié 'take it'	benmádie	'don't take it'
(10)	bəkpoá egyádé ne 'sweep the kitchen'	benmákpoa egyádé ne	'don't sweep the kitchen'
(11)	bəgyinlá 'stop'	benmágyinla	'don't stop'
(12)	bədenlá aze 'sit down'	benmátenla aze	'don't sit down'

The negative forms of direct imperative mood clauses with 2nd pers. plur. subject pronoun are formed by inserting the negative morpheme mma between the subject pronoun bə 'you' and the verb stem. Unlike the positive forms which are characterized by Type B mutation, the

negative forms are not characterized by any mutation.

The intonational feature of the negative clauses consists of a low tone on the subject pronoun, followed by a high or rising tone on the negative prefix and low tones^{on} the verb syllables, whether or not complementation occurs.

(A.II.ii) Direct imperatives with third person subject

<u>(a) Positive</u>	<u>(b) Negative</u>
(13) awie bíála éhɔ́ súa nú (everybody go home)	awie bíála <u>mmá</u> kó sua nú (nobody should go home)
(14) awie bíála ézuló (everybody answer)	awie bíála mmásulo (nobody should answer)
(15) awie bíála ézoma ye (everybody shake hands with him)	awie bíála mmásoma ye (nobody should shake hands with him)
(16) awie bíála édenlá aze (everybody sit down)	awie bíála mmátenla aze (nobody should sit down)

As in the case of direct imperatives with 2nd pers. plur. subject, the negative forms of positive direct imperatives with third person subject are formed by the prefixation of mma to the absolute form of the verb. The negative form differs from the corresponding positive in not having a vowel prefix and in not being marked by Type B mutation. The verbal piece has the same intonation as in the corresponding negative direct imperative with 2nd pers. plur. subject pronoun; that is, the negative prefix has a high or rising tone and the verb syllables low tones.

(B) Indirect imperatives

(a) Positive

(b) Negative

- | | |
|--|---|
| (17.I) <u>maa</u> méndenlá aze
(let me sit down) | <u>mmámaa</u> métenla aze
(don't let me sit down) |
| (17.II) maa ǵdenlá aze
(let him sit down) | <u>mmámaa</u> ǵtenla aze
(don't let him sit down) |
| (17.III) maa yédenlá aze
(let us sit down) | <u>mmámaa</u> yétenla aze
(don't let us sit down) |
| (17.IV) maa bédénlá aze
(let them sit down) | <u>mmámaa</u> béténla aze
(don't let them sit down) |
| (18) maa Akyé <u>ézo</u> sénlé ne
(let Akye light the fire) | <u>mmámaa</u> Akyé sǵ senlé ne
(don't let Akye light the fire) |
| (19) maa Sanéba ékpudá kyénze ne
(let Saneba wash the pan) | <u>mmámaa</u> Sanéba kpúda kyénze ne
(don't let Saneba wash the pan) |

The negative clauses are characterized by the negative form mmámaa 'don't let' of the introductory imperative verb maa 'let, allow'.

The stem-initial consonant of the verb stem in the negative clause, unlike in the corresponding positive clause where Type A mutation (of 17.I.a) or Type B mutation (17.IIa-IVa) occurs, does not exhibit mutation, and in contexts marked by a nominal phrase subject as in (18-19), the verb stem in negative clauses does not have a prefix as in the corresponding positive clauses.

The tonal pattern of the introductory negative verb is the same whether it is followed by a nominal phrase subject or a pronominal subject and consists of a high or rising tone on its first syllable and a low tone on its second syllable. The following syllable of the

pronoun has a high tone; and the prolonged vowel of the 3rd pers. sing. pronoun which is realized at the junction between the negative imperative verb and the pronoun has a rising tone analyzable as a low-high sequence, and the verb syllables, in contexts involving pronominal subject (17), have low tone. In contexts, however, where there is a nominal phrase subject, the verb syllables have a slightly different tonal pattern; that is, the first or only syllable has a high tone followed by a low tone on the second syllable and a high tone on the third (e.g. mmámaa Kofi dúmuá 'don't let Kofi go ahead').

Polarity and Tense

The two categories of polarity and tense, in their relation to indicative and interrogative mood clauses, are more satisfactorily dealt with together rather than separately. A joint treatment is considered a more economical and, therefore, analytically a more delicate way of handling the data.

For the illustrative examples, which are here restricted to indicative mood clauses, two contexts have been selected: one where there is a pronominal subject and the other where the subject is a nominal phrase. The choice of these two contexts is necessary, since the forms concerned display particular features with regard to the junction of the different subject noun phrases and to the shape of the pronominal subjects.

Ten positive tenses are distinguished, but not all of them have distinct negative forms; for example, there are not distinct negative forms for the positive habitual, present continuative, durative and progressive tenses: they share a common negative tense form. Similarly, the positive past and consecutive tenses share a common negative tense form.

There may well be additional tenses in the language that have not as yet been identified. For example, we shall find alongside the positive clause:

(1a) ɔta ɔkɔ̃ ásɔ̃né

(he frequently goes to church)

the following possible negative forms:

(1b) ɔnda' ɔ̃ngɔ̃ ásɔ̃né

(he frequently doesn't go to church)

(1c) ɔnda' ásɔ̃né hɔ̃

(lit. he doesn't frequently church go)

Leaving aside the clause-final locative adjunct ásɔ̃né 'church', one possible interpretation is to regard (1a) above as consisting of a pronominal subject ɔ plus a tense prefix ta followed in the next element by a repetition of the pronominal subject ɔ plus the verb stem kɔ̃ 'to go'. Interpreted in this way, (1a) above resembles, in respect of the repetition of the pronominal subject, the contrast in tone of the two pronominal subjects and the linear arrangement of elements within the verbal piece (i.e. ɔta ɔkɔ̃), the possible positive progressive tense form involving the tense prefix - le and the verb stems: dafe 'to sleep':

(2) melemédáfe

(I'm sleeping)

and may for that reason be regarded as a separate tense form, despite the different written forms.

A second possible interpretation is to regard (1a) above as a serial verbal construction - an interpretation which is particularly supported by the first negative form (1b), in which there is a repetition of the pronominal subject as well as of the negative nasal prefix in both verb words. A possible count, however, against this second interpretation is that the lexical item ta is non-finite or does not usually function as a full verb in its own right.

And in view of the different position of the locative adjunct asone 'church' between the two verb words as in the second negative form (1c), a third possible interpretation would be to regard the entire string as a catenative piece¹ in which the first verb word nda is the catenative verb and the second verb word hɔ is the non-finite verbal form of the full verb kɔ 'to go'. The same contrary evidence as in the case of the second interpretation equally applies to this third interpretation.

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1. Palmer, F.R. (1965 : 15) uses the term 'catenative' to refer to "those full verbs that are followed by other verbal forms with regular rules of co-occurrence". Thus in (I) ɔnzé ásóné yé 'lit. he doesn't know prayer say. he doesn't know how to pray', the first full verb ze 'to know', which is followed by the second verbal form yé 'to do, say', is a catenative. The present writer distinguishes this type of construction as a 'catenative piece', of which the first full verb is designated as a 'catenative verb' and the second non-finite verbal form (which may be an infinitival as in (I), a consecutive tense form or a nominalization from a verb) as the 'non-catenative' verbal form.

The burden of the above argument is in favour of regarding (1a-c) above as exemplifying the positive and negative forms of a separate tense, which is not traditionally listed among the tenses of the language. Pending further investigation, no more will be said about this particular tense which may be christened the 'frequentative' tense.

Perhaps the traditional term 'tense' is not the most appropriate term to use for this dimension of the grammar, particularly as some of the tenses have varied referential meanings; for example, the basic meaning of the positive perfect tense is past action with present relevance but in addition, the perfect tense may also refer to a present state resulting from past action, and to past in past as the following clauses illustrate:

- | | | |
|----------------------------|-----------------------------------|--|
| (4a) yebia | (he has had a bath) | (meaning: past with present relevance) |
| (4b) yehɔ Bolɔfo | (he has gone to Axim) | (" : ") |
| (5 a) yeloa | (he has become wet) | (" : present state) |
| (5b) yeze | (he has become mad) | (" : ") |
| (6) Membalé la, (ene) yéhɔ | (when I came, he had (then) gone) | (" : past in past) |

The progressive tense may refer to present or past time (and, in the latter case, as also in (6) above, is usually introduced by an

optional conjunction ene after a preceding temporal clause), as in:

(6a) ɔlɛ́bía

(he's having a bath)

(6b) mɛmbalé la, (ene) ɔlɛ́bía

(when I came, he was having a bath)

And the consecutive tense cannot by itself constitute a sentence and usually occurs in non-initial clauses, where it may be specifically introduced by the item na:

(7a) di debíé ná wɔ́áhɔ

(eat (something) before you go)

(7b) mekpónde meáhɔ Bolɔfo

(I want to go to Axim)

The term 'tense' is, however, used to distinguish this particular category from the other categories that need to be set up in dealing with this area of the grammar.

In describing the various tenses particular attention will be drawn to their favourite uses and the morphological, phonological and collocational features which characterize them. Morphological characteristics include such features as the presence or absence of affixes and the selection of one or other of the two paradigmatic sets of pronominal subjects that may be distinguished.

It was noted in the introductory chapter that, on the basis of the 2nd pers. sing. possessive pronoun (ɛ/wɔ 'your') and the 3rd pers. sing. possessive pronoun (ɔ/ye 'his, her, its'), which are a two-form term each, two paradigmatic sets (I-II) might be distinguished, and that Set I possessive pronouns include the mono-phonemic members (i.e. ɛ 'your' and ɔ 'his, her, its') and co-occur, in a

genitive construction, with nouns which may be specified as inalienable possessions, whereas Set II possessive pronouns include the corresponding bi-phonemic members (i.e. wɔ 'your' and ye 'his, her') and only oc-occur with alienable possessions.

Similarly, on the basis of the 2nd pers. sing. subject pronouns (ε/wɔ 'you') and the 3rd pers. sing. subject pronoun (ɔ/ye 'he, she, it') which are a two-form term each, two corresponding paradigmatic sets (I-II) may be set up among the subject pronouns abstracted from the various tense forms. And as in the case of the possessive pronouns, Set I subject pronouns include the mono-phonemic members (i.e. ε 'you' and ɔ 'he, she, it') of the 2nd and 3rd pers. sing. pronouns, whereas Set II pronouns include their corresponding bi-phonemic members (i.e. wɔ 'you' and ye 'he, she, it'), as set out below:

		<u>Set I Pronouns</u>		<u>Set II Pronouns</u>	
1st pers. sing.		me(n)	'I'	me	'I, me'
2nd "	"	ε	'you'	wɔ	'you'
3rd "	"	ɔ	'he, she, it'	ye	'he, she, it' 'him, her, it'
1st "	plur.	yε	'we'	yε	'we, us'
2nd "	"	bε	'you'	bε	'you'
3rd "	"	bε	'they'	bε	'they, them'

The category of person, in conjunction with the closely-related category of number, is specifically dealt with in Chapter 5. For immediate purposes, it should be mentioned that Set I pronouns function as subject, whereas Set II pronouns may function as subject as well as pronominal objects, and the selection of either paradigmatic set of pronominal subjects is regarded as a characteristic morphological feature of the particular tense form.

All positive tense forms select Set I pronouns except the positive perfect and consecutive which select Set II pronouns. And all negative tense forms select Set I pronouns except the negative past and consecutive which select Set II pronouns; that is, the habitual (Tense 1), present (Tense 2), continuative (Tense 3), durative (Tense 4), and progressive (Tense 5) tense forms (which share a common negative form) as well as the two future tenses - future tense I (Tense 6) and future tense II (Tense 7) - are consistent in selecting Set I pronouns for both their positive and negative forms and the consecutive (Tense 10) is equally consistent in selecting Set II pronouns for the positive as well as for the negative form. The perfect (Tense 8) and past (Tense 9) are exceptional in 'mixing' the two sets of pronominal subjects, the perfect selecting Set II pronouns for the positive form and Set I pronouns for the negative form, whereas the past tense selects Set I pronouns for the positive form and Set II for the negative form.

With particular reference to the 1st pers. sing. pronominal subject, it should also be noted that it has, unlike its corresponding possessive pronominal form, two possible forms: either i.me or ii.men, as a member of Set I only, and that all positive and negative tense forms which select Set I also select the first form me whereas the positive past tense alone selects the second possible form men (with a final nasal consonant homorganic with the stem - initial consonant of the verb and the exponent of the influential element N of Type A mutation which distinguishes the positive past tense form with

the 1st pers. sing. pronoun from forms with all other pronouns which are marked by Type B mutation).

As in the case of the possessive pronouns, the other terms have one form each, the 2nd and 3rd pers. plur. subject pronouns being identical in shape.

The phonological features to which attention need be drawn include the intonational features and the presence or absence of mutation, specifying in the case of tense forms whose exponents include consonant mutation, whether a particular tense is characterized by Type A or Type B mutation. As a rule, Type A mutation (under N influence) does take place, in the case of mutable stem-initial consonants, where the favourable condition obtains and, as already mentioned, is exhibited by the following tense forms: i. the common present negative form; ii. negative future tense I; iii. positive past tense, 1st pers. sing. only; and iv. negative past and consecutive tenses (all persons). On the other hand, it is not all tense forms in which the condition which favours Type B mutation obtains that exhibit it. Type B mutation is exhibited by the following tense forms: i. the positive continuative; ii. positive future tense I; iii. positive and negative future tense II; iv. positive perfect tense; v. positive past tense (all persons other than the 1st pers. sing.); and vi. positive consecutive tense. The following other tenses do not exhibit Type B mutation, although the potentially favourable condition does obtain: i. positive habitual tense; ii. positive present tense; iii. positive durative

tense; iv. positive progressive tense; and v. negative perfect tense. Presence or absence of each type of mutation will be stated as part of the exponents of a particular positive or negative tense form.

In respect of collocational features, attention will be drawn, where necessary, to the time adverbials with which a particular tense form habitually collocates and, therefore, serve in conjunction with other features to distinguish it. As Palmer, F.R. (1967:192) states: "it seems to be true that often meaning cannot be stated for grammatical forms independently, but only combinations of them. Secondly, polysemy may be resolved by the immediate environment and especially by the adverbials. Habituality or futurity is usually shown by an adverb. In this sense, futurity and habituality are not inherent in the verbal form itself". Thus the following clause with the 1st pers. sing. pronoun:

(8a) mebuke alénke ne

is, in isolation, at least two-ways ambiguous as between its habitual tense meaning of 'I open the door' and its perfect tense meaning of 'I have opened the door'. This type of ambiguity may be partly disambiguated by means of the different time adverbials which each particular meaning may select. In its habitual tense meaning, the clause may select the adverbial dahuu, 'always', as in:

(8b) mebuke alénke ne dahuu

(I open the door always)

whereas in its possible perfect tense meaning, the selection of the adverbial kekala '(just) now' is possible:

(8c) mebuke alénke ne kekála.

(I have just opened the door)

In order to facilitate comparison among the various tenses, only the verb stem da 'to sleep' is used in the paradigms involving pronominal subjects; other verb stems, mono-or di-syllabic, are used in clauses involving nominal phrase subjects.

Positive: Tense 1. Habitual

A. Pronominal subject

Sing.

1st pers.	meda	/mɛda /	'I sleep'.
2nd "	eda	/ɛda /	'you sleep'.
3rd "	ɔda	/ɔda /	'he, she, it sleeps'.

Plur.

1st pers.	yeda	/jeda /	'we sleep'.
2nd/3rd "	beda	/beda /	'you, they sleep'.

B. Nominal Phrase Subject

- (1) egya dá ewiá zó 'my father sleeps in the afternoon'
- (2) ɔ rá ne sú somaá 'her child cries too much'.
- (3) nrenyá ne dí pɔne ko kɛnle kó. 'the man spends a pound a day'.
- (4) Kofí dwázo ndɛ 'Kofi wakes up early'.
- (5) Akyé bíza edweké somaá 'Akye asks many questions'.

The habitual tense is used, usually with time adverbials of habituality - e.g. :

- (i) dahuu 'everyday', (ii) alehelɛ bíála 'everyday'.
 - (iii) kenle kó 'daily, everyday', (iv) siané kó 'every month',
 - (v) dapɛné bíála 'every week, weekly', (vi) ɛvolé bíála 'every year' -
- to make habitual time statements. In addition to (1-5) above, the use of the habitual tense to make habitual time statements may be further exemplified by the following clauses:

- (6) Sanéba tó alee dáhuu
(Saneba cooks everyday)
- (7) Kofí kpóla me álehéle bíála
(Kofi visits me everyday)
- (8) dapéné bíála Akyé tú adenlé
(every week Akye travels)

Such habitual time statements may denote an occupation or profession:

- (9) egya dí adwinli
(my father is a goldsmith)
- (10) e mɔ kpóngba ninyené
(lit. my mother sews things. my mother is a seamstress)

The 3rd pers. plur. pronoun be 'they' is used, with the habitual tense, as an indefinite unspecified pronoun to refer to 'people in general', as in:

- (1a) bɛfɛle me Áka
(lit. they call me Aka. I'm called Aka)
- (1b) bɛdi
(lit. they eat it. it is eaten/edible)

The habitual tense form is characterized by:

- (i) Set I pronouns (with the 1st pers. sing. pronominal form me 'I');
- (ii) absence of a tense prefix;
- (iii) absence of any kind of mutation;
- (iv) absence of a prefix in the verb word in contexts with a nominal phrase subject, as (1-5) above illustrate;

- (v) a low tone on the subject pronoun as well as on the verb syllables; but in contexts with a nominal phrase subject, the first or only syllable of the verb has a high tone followed by a low tone on the second verb syllable and a high tone on the third syllable:

(12) Sanéba dúmuá

(Saneba goes ahead)

Positive: Tense 2. Present

A. Pronominal Subject

Sing.

1st pers.	meda / mǽdá /	'I'm just sleeping'
2nd pers.	ɛda / ɛdá /	'you're just sleeping'
3rd pers.	ɔda / ɔdá /	'he, she, it is just sleeping'

Plur.

1st Pers.	yɛda / jɛdá /	'we're just sleeping'
2nd/3rd pers.	bɛda / dedá /	'you, they are just sleeping'

B. Nominal Phrase Subject

- | | |
|--------------------------------|--------------------------------------|
| (1) Aká súkoa | 'Aka is learning' |
| (2) ɛ mɔ bíá | 'Mother is having a bath' |
| (3) ye koónwú, (na) Naná teíde | 'keep quiet, the chief is speaking'. |

The following uses of the present tense are distinguished:

- (a) the present tense is usually used to denote an action that is taking place at the time of utterance, as in (1-3) above.
- (b) in its reference to an action in progress, the present tense may be used to make an ironic comment, and in this use is specifically introduced by the item akee 'now', as in:

(4) akeé énríandi

(lit. now you are running)

- (c) the present tense may also be used to denote a future happening which is anticipated in the present or regarded as a fixed plan or arrangement, and in this use often has a time adverbial of present or future reference:

(5a) ené mékó Bolófo

(to-day I'm going to Axim)

(5b) mékó egyima kékála

(I'm going to work right now)

(5c) ehemá égya yéla ye éyá ne

(to-morrow my father burns his farm)

(5d) medwénle me nwó

(I'm thinking about myself)

- (d) the present tense may also be used with future time reference in a conditional clause introduced by the conjunction se 'if, when' and marked by a clause-final

vowel particle a, as in:

(6a) se eyevóle ne bá a, fɛle me

(when the stranger/guest arrives, call me)

(6b) se ezulé ne tó a, ye me ninyené ne

(if it is raining, remove my clothes)

- (e) the present tense may be used with past time reference, usually with verbs of communication (e.g. (a) se 'to say' (b) fɛle 'to call'), to report a past communication:

(7a) egya sé obíza wɔ

(father says that he sends you his greetings)

(7b) egya fɛle wɔ

(father is calling you)

The present tense is characterized by:

- (i) Set I pronouns;
 - (ii) absence of a tense prefix;
 - (iii) absence of any kind of mutation;
 - (iv) absence of a prefix in the verb word in contexts which are marked by a nominal phrase subject;
 - (v) a low tone on the subject pronoun, and in contexts involving either a pronominal or nominal phrase subject, by a high tone on the first or only verb syllable followed by a low tone on the second verb syllable and a high tone on the third syllable:
- (8) medúmuá
- (I'm going ahead)

Positive Tense 3. Continuative

A. Pronominal Subject

Sing.

1st pers.	mela	/mɛla/	'I'm sleeping /lying down'
2nd "	ɛla	/ɛla/	'you're " '
3rd "	ɔla	/ɔla/	'he, she, it " '

Plur.

1st pers.	yɛla	/jɛla/	'we're " '
2nd/3rd "	bɛla	/bɛla/	'you, they are " '

B. Nominal Phrase Subject

- (1) bulúku ne lá ɛkpónlé ne ázo. 'the book is (lying) on the table'
- (2) kyénze ne gyí ɛkpá ne ázo. 'the pen is (standing) on the bed'
- (3) ɛyɛvóle ne dé wo ébía ne ázo. 'the stranger is sitting on your chair'
- (4) Kofí zé nwoma. lit. 'Kofi knows learning. Kofi is learned'
- (5) bɛda ne zóho ɔ ze. 'the child resembles his father'.

It is not all classes of verbs that can occur in the continuative and durative tenses: these two tenses are the favourite tenses of stative verbal forms and other stative verbs¹ and may be regarded as the non-active tenses in contradistinction to all the other tenses in which corresponding dynamic verbal forms and other dynamic verbs can occur and may be regarded as the active tenses.

- (a) The basic meaning of the continuative tense is reference to a state or static condition in the present as exemplified in clauses (1-5) above.

1. See Chapter 7 on the dynamic/stative distinction within the category of aspect.

(b) The continuative tense may also be used with reference to a state or static condition in the past, and with such a past reference is specifically introduced by the item ene 'then' where a temporal clause in either the present or past tense precedes or by the item anne 'then' (without a temporal clause) with the implication that the referent of the subject noun phrase used to be but is no longer in that particular location, as the following examples illustrate:

(6a) mekó lá, ene ʔla ekpónlé ne ázo

(when I was leaving, it was then (lying)
on the table.

(6b) mennwunle ye lá, ene ʔzo kyele

(when I saw him, he was then wearing a hat)

(7a) anne ʔla ekpónlé nē ázo

(it was (lying) on the table (but is no
longer there))

(7b) nreyá zḥáne anne ʔde Bolḥfo

(that man used to live in Axim)

The continuative tense, like the habitual tense, is characterized by:

- (i) Set I pronouns;
- (ii) absence of a tense prefix;
- (iii) absence of a prefix in contexts with a nominal phrase subject;

- (iv) a low tone on the subject pronoun followed by low tones on the verb syllables, and in contexts marked by a nominal phrase subject, by a high tone on the first or only verb syllable followed by a low tone on the second verb syllable, irrespective of the tonal pattern of the nominal phrase subject;
- (v) the continuative is, however, different from the habitual tense in being characterized, in the case of mutable stem-initial consonants, by Type B mutation.

It was noted, with examples, in the section on 'consonant mutation' (Chapter 2), ^{that} there are some verbal forms in Nzema - mainly verbs of adornment or locative verbs - whose dynamic verbal forms in the habitual tense are differentiated from their corresponding stative verbal forms in the continuative tense in respect of the phonological feature of Type B mutation. Other dynamic (habitual)/stative (continuative) verbal forms which are distinguishable by Type B mutation are:

1. dua/lua 'to walk/to be walking',
2. fia/via 'to carry/to be carrying',
3. kye/hye 'to put on/to be wearing belt',
4. keda/heda 'to put on/to be wearing cloth'.

The verbal forms:

5. tenla/de 'to sit or stay/to be seated or to be living' and

6. soa/zo 'to put on or carry/to be wearing or carrying (on the head)' are distinguished both phonologically by Type B mutation and morphologically by the dynamic verbal form having a suffix. By contrast, the verbal forms:
7. gyinla/gyi 'to stand or stop/to be standing' are only distinguished, in the two tenses, morphologically.

There are other verbal forms with immutable stem-initial consonants whose dynamic verbal forms in the continuative tense are neither differentiated phonologically nor morphologically, and include such verbs of adornment as:

8. bɔ 'to put on/to be wearing (a headkerchief)',
9. mo 'to put on/to be wearing a loin cloth',
10. wula 'to put on/to be wearing (dress or ring)' as well as such locative verbs as:
 11. gua 'to place or put/to be lying',
 12. bea 'to place across/to be lying across, and
 13. butu 'to place/be lying face downwards'.

The following pairs of clauses in which the (a) examples are in the habitual tense and the (b) examples are in the continuative tense illustrate:

- (8a) Sanéba fia ɔ díemá ne
(Saneba carries her brother)
- (8b) Sanéba vía ɔ díemá ne
(Saneba is carrying her brother)
- (9a) Sanéba sóa kyele
(Saneba puts on a hat)

- (9b) Sanéba zó kyεle
(Saneba is wearing a hat)
- (10a) Sanéba gyínla adenlé nú
(Saneba stops on the way)
- (10b) Sanéba gyí adenlé nú
(Saneba is (standing) in the way)
- (11a) Sanéba bó dúku
(Saneba puts on a headkerchief)
- (11b) Sanéba bó dúku
(Saneba is wearing a headkerchief)

The stative verbal form ze 'to know' as in (4) above has no other tense than the continuative.

Positive Tense 4. Durative

A. Pronominal Subject

Sing.

1st pers.	metéda	/mʔtéda /	'I'm still sleeping'
2nd "	etéda	/etéda /	'you're " " '
3rd "	ɔtéda	/ɔtéda /	'he, she, it " " '

Plur.

1st pers.	yetéda	/jetéda /	'we're still sleeping'
2nd/3rd "	betéda	/betéda /	'you, they are still sleeping'

B. Nominal Phrase Subject

- (1) bulúku ne téda skpónle ne ázo. 'the book is still(lying) on the table'
- (2) kyénze ne tégyi skpá ne ázo. 'the pan is still(standing) on the bed'.

(3) eyevóle ne téte wɔ́ ébía ne ázo. 'the stranger is still sitting
on your chair'

(4) membalé la, ene éyevóle ne téte wɔ́ ébía ne ázo.

(when I came back, the stranger was still sitting on your chair)

As already mentioned, the durative tense and the continuative tense constitute the favourite tenses of stative verbal forms and other stative verbs.

(a) With such verbs, the durative tense is used to denote a continuing state, static condition or quality in the present or past. Reference to present state or static condition is exemplified by (1-3) above, and (4) exemplifies reference to past state; and it is to be noted that in (4) the clause containing the verb in the durative tense is introduced by the item ene and there is a preceding temporal clause in the past tense.

(b) With a dynamic verbal form or other dynamic verbs, the durative tense may be used to denote a continuing habitual activity, which may be an occupation or profession, as the following clauses illustrate:

(5a) ɔ́tesɔ́ kyɛle

(he still wears a hat (when it has gone out of fashion))

(5b) ɔ́tekɔ́ Nakéba asóné

(he still attends Nakeba church)

(5c) ɔ́tedi adwinlí ne

(he still carries on the profession of goldsmithy)

- (c) The durative tense may also be used with a dynamic verb to denote a past happening which is continuing in the present, and in this use usually collocates with the time adverbial of present reference:

ene nee ene ala 'right up to this day or present moment':

(6) ené neé ené ála, oteka

(to this day, he still says it)

As already mentioned, present state, static condition or quality may also be expressed by the habitual or continuative tense; we might, therefore, compare these tenses with the durative:

- (7a) nrenyá ne lé ezukoa (Continuative)
(the man has money)
- (7b) nrenyá ne téde ezukoa (Durative)
(the man has still money)
- (8a) namúlé ne téle (Continuative)
(the village is big (i.e. essential quality))
- (8b) namúlé ne tetele (Durative)
(the village is still growing big (i.e. continuing state))
- (9a) ☉ rá raálé ne kéda edanlé (Habitual)
(her daughter puts on cloth (i.e. habitually))
- (9b) ☉ rá raálé ne héda edanlé (Continuative)
(her daughter is wearing cloth (i.e. at the moment of speaking))
- (9c) ☉ rá raálé ne tékeda edanlé (Durative)
(her daughter still puts on cloth (i.e. when it's no longer fashionable))

It is to be noted that the durative and the habitual are not characterized by any kind of mutation, whereas the continuative is marked by Type B mutation, as in (7a) and (9b). The above examples serve to show the semantic differences between these tenses and the formal features which correlate with these semantic differences.

Characteristic features of the durative tense are:

- (i) selection of Set I pronouns;
- (ii) presence of the tense prefix tε-; and it should be mentioned that with the 3rd pers. sing. pronoun ɔ 'he, she, it', the front unrounded non-close vowel of the tense prefix is usually realized as the back rounded non-close vowels /o,ɔ/ before following stem-initial syllables for which word or syllable w-prosody is statable e.g. (a) kɔ 'to go', (b) su 'to cry':
 - (10a) ɔtekɔ /ɔtəkɔ /
(he still goes)
 - (10b) ɔtesu /otosu /
(he's still crying/he still cries)
- (iii) absence of a potential Type B mutation.
- (iv) absence of a prefix in the verb word in contexts which are marked by a nominal phrase subject;
- (v) intonationally, a low tone on the pronoun subject, a low tone on the tense prefix followed by low tones on the verb syllables; in contexts with a nominal phrase subject, however, the prefix has a high tone and the verb syllables have low tones as in the case of a pronominal subject.

Positive: Tense 5. Progressive

A. Pronominal Subject

Sing.

1st pers.	meleda	/ m'álédá /	'I'm sleeping'
2nd "	ɛleda	/ ɛlédá /	'you're " '
3rd "	ɔleda	/ ɔlédá /	'he, she, it is sleeping'

Plur.

1st pers.	yeleda	/ jɛlédá /	'we're sleeping'
2nd/3rd "	beleda	/ belédá /	'you, they are sleeping'
(1a)	ɔlédí debíé.		'he's eating (something)'
(1b)	ɔlékɔ sua nú.		'he's going home'
(1c)	ɔlébíà ɔ rá ne		'she's bathing her child'
(1d)	ɔlésúkoà Kofí		'he's imitating Kofi'

Tonal Pattern I

Tonal Pattern II

(2a)	ɔledi	/olédí /	/olédì /	'he's eating it'.
(2b)	ɔlekɔ	/ɔlékɔ /	/ɔlékò /	'he's going'
(2c)	ɔlebia	/olébíjà/	/olébìjá /	'he's having a bath'
(2d)	ɔlesukoa	/olésúkwà/	/olésúkṵá/	'he's studying'
(2e)	ɔletendé	/ɔlétṵndé/	/ɔlétṵndè /	'he's speaking'

Positive Tense 5. Progressive

B Nominal Phrase Subject

(3)	Kofí (é)lédá	'Kofi is sleeping'
(4a)	eyevóle ne (é)lédí debíé	'the guest is eating (something)'
(4b)	nrenyá ne (é)lékɔ sua nú.	'the man is going home'
(5)	Naná (é)léténdè	'the chief is speaking'

(6a) Sanéba (é)lèbíà ɔrá ne. 'Saneba is bathing her child'.

(6b) Ayké (é)lèsukoà Kofi. 'Akye is imitating Kofi'.

The progressive tense usually indicates an action that is in progress, as in (3-6) above, rather than the completion of an action or the existence of a state.

The action in progress may be simultaneous with the occurrence of another action in progress at the present time, as in:

(7) melékpó wɔ nɔnyené ne lá, ene wámɔ élédí nwɔhoa

(whilst I'm washing your clothes, you're playing)

The action in progress may also be in relation to the occurrence of another action in the past, as exemplified in:

(8a) mekɔ lá, ene ɔlédí debíé

(when I was leaving, he was then eating)

(8b) mengɔlé la, ene ɔlédí debíé

(when I went, he was then eating)

It is to be noted that simultaneity with present or past action is specifically indicated by the introductory item ene and a preceding temporal clause of present (7, 8a) or past reference (8b).

The progressive tense may also be used to indicate an action or event that is about to begin or is 'on the way':

(9a) ezulé ne élebá

(it is going to rain)

(9b) aléé élekyé

(the day is downing)

(9c) melékɔ sua zó

(I'm going to town)

In this use, the progressive tense has more or less the same meaning as the present tense, and the corresponding present tense forms of clauses such as (9a) and (9c) are understood as being similar in meaning:

(10a) ezulé ne bá

(it is going to rain/looks like rain)

(10a) mekó sua zó

(I'm just now going to town)

Characteristic features of the progressive tense are:

- (i) selection of Set I pronouns;
- (ii) presence of the tense prefix le-, the front unrounded vowel of which may be realized, with the 3rd pers. sing. pronoun ɔ, as the back rounded non-close vowels / o, ɔ / before stem-initial verb syllables which are characterized by word or syllable w-prosody:

(11a) ɔlɛno / ɔlɔnɔ /

(he's drinking it)

(11b) ɔlɛsu / ɔlɔsɔ /

(he's crying)

- (iii) absence of any kind of mutation;
- (iv) presence of the prefix ɛ- in contexts with a nominal phrase subject; and of the active (non-past, non-future) tenses so far considered - the others being the habitual and the present - the progressive tense is the only one which has a prefix in the verb word as a marker of a nominal phrase subject; such a

prefix is usually not pronounced in normal, unemphatic speech;

- (v) In order to describe the rather complex and variable tonal pattern of the progressive tense prefix and that of verb syllables following it, it may be necessary to set up two separate but intersecting contexts; that is, in addition to contexts in which there is (I) a pronominal subject and (II) a nominal phrase subject, we shall consider the intonational feature correlating with contexts where (A) complementation occurs and (B) no complementation occurs.

(I) Nominal phrase subject: (A) with complementation or (B) without complementation

- (i) The prefix $\hat{\epsilon}$ which marks a nominal phrase subject has always a high tone, whether complementation occurs or not, as in (3-6) above;
- (ii) the progressive tense prefix $\underline{l\epsilon}$ - has regularly a low tone, whether complementation occurs or not (3-6); that is, the prefix $\hat{\epsilon}$ and the tense prefix $\underline{l\epsilon}$ - contrast tonally;
- (iii) the first or only verb syllable has a high tone followed by a low tone on the second verb syllable, whether or not complementation occurs. To summarize, with a nominal phrase subject, whether complementation

occurs or not, the intonational pattern is a sequence of High (prefix é-) - Low (tense prefix lè-) - High (1st verb syllable) - Low (2nd verb syllable).

(II) Pronominal subject : (A) with complementation or (B) without complementation

- (i) The pronominal subject, as in other tense forms, has always a low tone, whether there is a complement or not (paradigm; (1-2));
- (ii) the tense prefix lè- has regularly a high tone, whether complementation occurs or not; that is, the pronoun and the tense prefix contrast tonally; it is also to be noted that the tonal realization of the tense prefix lè- is variable, being high with a pronominal subject and low with a nominal phrase subject;
- (iii) in contexts with a pronominal subject where (A) complementation occurs (1a-d), the tonal pattern of the verb syllables is regular and consists of a high tone on the first or only verb syllable followed by a low tone on the second verb syllable - which replicates the tonal pattern of the verb syllables with a nominal phrase subject, whether complementation occurs or not; in this context, then, the tense prefix lè- and the first verb syllable have high tones, although the second high tone of the verbal piece is of a lower pitch than the first high tone on the tense prefix;

(iv) in contexts, however, where (B) no complementation occurs (2a-e), the tonal pattern of the verb syllables is variable; that is, the first or only verb syllable (2a-b) may be high or low, and with a disyllabic verb stem (2c-d), if the first syllable has a high tone, the second syllable has a low tone, but if the first syllable has a low tone then the second syllable has a high tone: the first and second syllables of a disyllabic verb stem are always in tonal contrast.

Intonationally, then, the progressive tense form is characterized by tonal variation in respect of the verb syllables in contexts with a pronominal subject where no complementation occurs.

In view of this tonal variation, it may be worth noting that the normal progressive tense form such as (i) mielekɔ 'I'm going' is occasionally realized in speech as well as in written texts as (ii) melemekɔ. In relation to the more normal first form, the occasional second form may be regarded as the full uncontracted form.

The use of the uncontracted form is attested in at least one written text¹:

"ɔhu ne buale ke , 'Mekponde ke menwu ke me nyunlu si de la
(the husband replied that: 'I should like to know what my face looks like,

1. Aboagye, P.A.K. (1961 : 11). Sele bie kyekye e nɛle, ahaa ('Laugh and console yourself'). Accra : Bureau of Ghana Languages.

wɔ mele mɔɔ melemedafe la;"

(at the time when I am sleeping;)

Welman (1925 : 103), who provides only examples with the 1st pers. sing. pronoun, gives only the full uncontracted form of the positive progressive tense. The following are three of Welman's sixteen examples:

(i) melemeda / mɾlemɾda / 'I'm sleeping'

(ii) melemekɔ / mɾlemɾkɔ / 'I'm going'

(iii) melemeba / mɾlemɾba / 'I'm coming'

The present writer has, on occasion, heard the uncontracted form melemekɔ used and pronounced emphatically as /mɾlemɾkɔ / or unemphatically as /mɾlemkɔ / but with at least two possible semantic and grammatical interpretations; that is, either with (a) a progressive tense interpretation of 'I'm going' and analyzable as pronoun me 'I' + prefix le- + (repeated) pronoun me 'I' + verb stem kɔ 'to go' or (b) a non-progressive interpretation of 'lit. I am holding it I am going. I am taking it with me' and analyzable as a compound consisting of (i) the continuative tense form: me + le 'I have in hand' and (ii) the present tense form: me + kɔ 'I am going'.

It is to be noted that the uncontracted form occurring in the corpus cited above and in Welman's examples are 1st pers. sing. forms only. The present writer has neither found nor heard the uncontracted form with any other pronoun (nor with a nominal phrase subject). On this evidence, we might say that the uncontracted form is normally used with the 1st pers. sing. pronoun

or that the contraction is not obligatory with the 1st pers. sing. pronoun.

It may well be that the uncontracted form (used only with pronominal subjects) is the original form which has been retained in certain, possibly dialectal, speech forms and in relation to the contracted form, accounts for the high tone of the morpheme le (which, as shown above, may be relatable to the stative verbal form le 'to have' of the dynamic verbal form de 'to hold or grasp in hand') and the tonal variation of the verb syllables in contexts where there is a pronominal subject; that is, in the course of the evolution of the contracted form, the morpheme le has assimilated the high tone of the following pronoun with resultant variation of the tonal pattern of the verb syllables in contexts where no complementation occurs.

Common Present Negative: Tenses 1-5

A. Pronominal Subject

Sing.

1st pers.	menla ¹	/ mɛ́nná / ²	'I don't sleep'
2nd "	enla	/ ɛ́nná /	'you " " '
3rd "	onla	/ ɔ́nná /	'he, she, it, doesn't sleep'

-
1. The orthographic representation used throughout is according to Essuah, J.A. (1965).
 2. The transcription with double nasals /-nn-/ or /-mm-/ is phonological rather than phonetic.

Plur.

1st pers.	yenla	/jenná /	'we don't sleep'
2nd/3rd "	benla	/benná /	'you, they don't sleep'

B. Nominal Phrase Subject

- (1a) Sanéba énla éwiá zó. 'Saneba doesn't sleep in the afternoon'
(1b) ketéke ne ényinlá eké. 'the train doesn't stop here'
(2) egya éngɔ súa zó kékála. 'father is not going to town now'
(3) Kofi énzohó ɔ ze 'Kofi doesn't resemble his father'
(3b) Sonlá éhunlé énla áze 'murder is not easy'
(4) Kofi énzukoá kekála 'Kofi is not studying now'

As already mentioned, the positive habitual, present, continuative, durative and progressive - i.e. the non-past, non-future - tenses (1-5) do not have specific negative forms and share a common negative form, which may be provisionally termed the 'common present negative'.

As with the positive habitual tense, the 3rd pers. plur. pronoun is used with the negative form as the indefinite unspecified pronoun:

- (5a) benlí
(lit. they don't eat it, it's not edible)
(5b) edweké zeháé, bengá
(it is a taboo to mention such a matter)
(6a) nrezenrá bengú yé
(you don't kill the fly)
(6b) enyelé bendóné ye
(the eye is not sold)

It is to be noted that in (6a-b), a pronominal object substitutes for the nominal object if the latter is front-shifted by topicalization. Such substitution takes place under the following conditions:

- (i) the object noun phrase must be animate or human, as in (6a);
- (ii) if the object noun phrase is inanimate, the verb must be a member of the sub-class of transitive verbs which favour pronominalization (6b).

The common present negative form has the following characteristics:

- (i) like the corresponding positive forms, the common present negative selects Set I pronouns;
- (ii) it is marked by a nasal consonant prefix occurring between the pronoun and the verb stem, which is homorganic with the stem-initial consonant of the verb;
- (iii) it is characterized by Type A mutation, the influential element being the negative nasal consonant prefix;
- (iv) a nominal phrase subject is marked by the prefix ϵ_3 , which is not pronounced in normal unemphatic speech;
- (v) the intonational feature characteristic of the common negative form consists of a low tone on the syllable of the pronoun, followed by high tones on the verb syllables, and in contexts with a nominal phrase subject the prefix marker has a high tone, the first or only verb syllable has a low tone followed by a high tone on the second and third verb syllables.

Positive: Tense 6. Future I

A. Pronominal Subject

Sing.

1st pers.	mebala	/m(ʒ)bála /	'I will sleep'
2nd "	ɛbala	/ɛbála /	'you " " '
3rd "	ɔbala	/ɔbála /	'he, she, it will sleep'

Plur.

1st pers.	yɛbala	/jɛbála /	'we will sleep'
2nd/3rd pers.	bɛbala	/bɛbála /	'you, they will sleep'

B. Nominal Phrase Subject

- | | | |
|------|---|--|
| (1) | bɛdǎ ne <u>bála</u> | 'the child will sleep' |
| (2) | Kofí <u>bázɔ</u> senlé ne | 'Kofi will light the fire' |
| (3) | ɛ mɔ <u>bádia</u> me. | 'my mother will scold me' |
| (4) | Aká <u>bádende</u> | 'Aka will speak' |
| (5a) | <u>ɛhemá</u> éyevóle ne <u>báho</u> | 'to-morrow the stranger will leave' |
| (5b) | Kofí <u>bázia</u> <u>ɛhemá</u> <u>ánzi</u> | 'Kofi will return the day after tomorrow.' |
| (5c) | <u>kenlé</u> <u>bie</u> Sanéba <u>bánlu</u> | 'some day Saneba will regret it' |

ɔ nwó.

Positive future tense I denotes future action or an intended action to be performed some time to come and usually collocates with time adverbials of future time reference (e.g. (a) ɛhemá 'tomorrow', (b) ɛhemá ánzi 'the day after tomorrow', and (c) kenlé bie 'some day'), as exemplified in (5a-c) above.

Positive future tense I is characterized by:

- (i) Set I pronouns;
- (ii) the tense prefix ba-, the vowel element of which is slightly lengthened in emphatic speech, and with particular reference to forms with the 1st pers. sing. pronoun, it should be noted that in normal, unemphatic speech, the vowel in the syllable of the pronoun is reduced in duration resulting virtually in a bi-labial consonant sequence;
- (iii) Type B mutation, the influential element ∇ being realized as the vowel in the tense prefix;
- (iv) absence of a prefix in the verb word in contexts involving a nominal phrase subject;
- (v) a low tone on the subject pronoun followed, whether the subject is a pronoun or a nominal phrase, by a high or rising tone on the tense prefix and low tones on the first and second verb syllables and a high tone on the third.

Positive Future I V. Unemphatic Positive Habitual Ventive-ingressive forms

It may well be that the future I prefix ba-, like the ventive-ingressive marker ba 'to come', is relatable by contraction to the verb ba₁la 'to come'. In this connection, it is suggestive that, with verb stems with immutable stem-initial consonants, positive and negative future I forms and their corresponding unemphatic habitual ventive-ingressive forms are homophonous. With particular reference

to their positive forms (corresponding negative forms are discussed later), it should be noted that, in the case of mutable stem-initial consonants, positive future I forms are different in being marked by Type B mutation. The following examples with the verb stems: (i) da 'to sleep' (with mutable stem-initial consonant) and (ii) bia 'to wash' (with immutable stem-initial consonant) illustrate:

Positive Future I

Positive Habitual Ventive-Ingressive

- | | |
|---|---|
| (6) <u>ɔbala</u> eke /ɔbálɛ kɪ /
(he'll sleep here) | (8a) <u>ɔbada</u> eke / ɔbádɛ kɪ / (unemphatic)
(he comes and sleeps here) |
| | (8b) <u>ɔba ɔbada</u> eke / ɔba ʃbádɛ kɪ / (emphatic)
(he comes and sleeps here) |
| (7) <u>ɔbabia</u> eke / obéb(i)jɛ kɪ /
(he'll wash here) | (9a) <u>ɔbabia</u> eke / obéb(i)jɛ kɪ / (unemphatic)
(he comes and washes here) |
| | (9b) <u>ɔba ɔbabia</u> eke / ɔba ʃbéb(i)jɛ kɪ
(emphatic)
(he comes and washes here) |

As the above examples show, in the case of verbs with immutable stem-initial consonants (7-9) the two types of clauses are homophonous; but with verbs with mutable stem-initial consonants (6-8), positive future I forms are distinguished by Type B mutation.

We might also distinguish positive future I forms from their corresponding unemphatic positive future tense I ventive-ingressive forms.

Positive Future I

(10) ɔbala eke / ɔbá:le kɪ /
(he'll sleep here)

(11) ɔbabilia eke / obé:b(i)jɛ kɪ /
(he'll wash here)

Positive Future I Ventive-Ingressive

(12a) ɔbarala eke / ɔbá:le kɪ /
(unemphatic)
(he'll come and sleep here)

(12b) ɔbara yearala eke / ɔbára já:le kɪ /
(emphatic)
(he'll come and sleep here)

(13a) ɔbarabilia eke / obé:b(i)jɛ kɪ /
(unemphatic)
(he'll come and wash here)

(13b) ɔbara yearabilia eke / ɔbára já:b(i)jɛ kɪ /
(emphatic)
(he'll come and wash here)

It is to be noted that both forms are alike in being characterized by Type B mutation (10-12), but are different in that the ventive-ingressive form is marked by a prolonged vowel with rising tone.

Negative: Tense 6. Future I

A. Pronominal Subject

Sing.

1st pers.	mɛmbanla / m(ɔ̃)mánná /	'I won't sleep'
2nd pers.	ɛmbanla / émáná /	'you " " '
3rd pers.	ɔmbanla / ɔmáná /	'he, she, it won't sleep'

Plur.

1st pers.	yɛmbanla / jamánna /	'we won't sleep'
2nd/3rd pers.	bɛmbanla / bɛmánna /	'you, they won't sleep'

B. Nominal Phrase Subject

(1)	nrenyá ne émbánla	'the man will not sleep'
(2)	Kofi émbángɔ súa nú	'Kofi will not go home'

B. Nominal Phrase Subject (continued)

- (3) eyevóle ne émbánli áleé ne 'the stranger will not eat the food'
(4) eyá ne émbányelá. 'the farm will not burn'
(5) nrenyá ne émbánduá ezukoá ne 'the man will not pay the money'

The negative future tense I has the following characteristics:

- (i) Set I pronouns, like the corresponding positive forms;
- (ii) the negative tense prefix m̄ban-;
- (iii) Type A mutation, the influential N element being realized as the final nasal consonant of the negative prefix, and, in relation to the positive future tense I prefix ba-, the negative prefix m̄ban- may be morphologically analyzable as $N_1 + \underline{ba} + N_2$ with the initial bi-labial plosive consonant of the positive tense prefix undergoing Type A mutation under the influence of N_1 and the stem-initial consonant of the verb also undergoing Type A mutation under the influence of N_2 ;
- (iv) presence of the prefix ε- as a marker of a nominal phrase subject;
- (v) the intonational pattern consists of a low tone, as always, on the pronoun subject, followed by high tones on the negative prefix as well as on the verb syllables. In contexts with a nominal phrase subject, the prefix ε- has a high tone followed by a high tone, as with a pronominal subject, on the negative prefix; the tonal

(v) contd. pattern of the verb syllables is slightly different from that with a pronominal subject, and that is that the first or only verb syllable has a low tone (rather than high tone as with a subject pronoun) followed by high tones on the second and third syllables.

As already mentioned above, the negative future tense I forms and corresponding negative habitual ventive-ingressive forms, which are alike in being characterized by Type A mutation, are homophonous.

Thus in the following clauses, the (a)examples are two-ways ambiguous as between a (negative) future I interpretation and a (negative) habitual ventive-ingressive interpretation:

Negative Future I

Negative Habitual Ventive-ingressive

- | | |
|---|--|
| <p>(6a) ɔmbanlie/oménn(í)jé/
(he will not take it)</p> | <p>(8a) ɔmbanlie/oménn(í)jé/(unemphatic)
(he will not come to take it)</p> |
| | <p>(8b) ɔmba ɔmbanlie/ ʒmmá oménn(í)jé/
(emphatic)
(he will not come to take it)</p> |
| <p>(7a) ɔmbankpoa/ ʒmmáŋkpɔwá/
(he will not sweep it)</p> | <p>(9a) ɔmbankpoa/ʒmmáŋkpɔwá/(emphatic)
(he will not come to sweep it)</p> |
| | <p>(9b) ɔmba ɔmbankpoa / ʒmmá
ʒmmáŋkpɔwá / (emphatic)
(he will not come to sweep it)</p> |

It is to be noted that both forms are alike in being characterized either by Type A mutation as in (6a-8a) or by no mutation as in (7a-9a) and have similar intonational pattern. They are, however, distinguished in that the subject noun phrase, with the ingressive forms, is

usually animate or human, but may be animate or inanimate with the corresponding negative future tense I forms. Thus the following clauses with inanimate subject noun phrases:

(10a) eyá ne émbányelá
(the farm will not burn)

(10b) ezukoá ne émbánza yé
(the money will not be enough for us)

are only interpretable as negative future tense I forms.

Positive: Tense 7. Future II

A. Pronominal Subject

Sing.

1st pers.	mekela	/ mʔkela /	'I will (probably) sleep'
2nd "	ekela	/ ekela	'you " " "
3rd "	ɔkela	/ ɔkela /	'he, she, it " " '

Plur.

1st pers.	yekela	/ jekela	'we " " "
2nd/3rd "	bekela	/ bekela /	'you, they " " "

B. Nominal Phrase Subject

- | | | |
|-----|------------------------------|-------------------------------|
| (1) | Kofí <u>ké</u> lā | 'Kofi will sleep' |
| (2) | Sanéba <u>ké</u> zɔ senlé ne | 'Saneba will light the fire' |
| (3) | nrenyá ne <u>ké</u> hakyé | 'the man will remember it' |
| (4) | ε mɔ <u>ké</u> bia Akyé | 'mother will bathe Akye' |
| (5) | bedá ne kéminli sánve ne | 'the child will lose the key' |

As the above clauses (1-5) illustrate, future tense II is usually used to denote a definite or certain future action; that is, in addition to its reference to futurity there is an implication of definiteness or certainty.

Two special uses of future tense II may be distinguished.

Firstly, it is used in expressing approximate numbers, as in:

(6a) menli mɔɔ rálé la kéye ke bulú

(those who turned up will be about ten)

(6b) ɔkeye máyele ke mɔtwe

(it's about eight miles)

(6c) menli mɔɔ rálé la kédwu bulú

(those who turned up will number about ten)

Secondly, it occurs in clauses which are characterized by the optional introductory item ke and the clause-final particle, la, as exemplified in:

(7a) (ké) Kofí kéhɔ sukúlu lá, ɔlédí nwɔhoa

(instead of going to school, Kofi is playing)

(7b) (ké) bekezie kúsu ne lá, begyakyile ye álié ne ánwɔ

(instead of burying the cat, they left it in the compound)

Positive future tense II is characterized by the following features:

(i) Set I pronouns;

(ii) the tense prefix ke-; and it is to be noted that forms with the 1st pers. sing. pronoun are marked by two possible realizations of the tense prefix: (I) nwɔ in addition to (II) ke, the first usually occurring with verb syllables that are characterized by word or syllable w-prosody with the vowel element in the pronoun assimilating to this feature such that w-prosody is stable for at least the first three successive syllables; all other verb syllables-i.e. for which word

or syllable y-/ə-prosody is statable - select ke.
And with the 3rd pers. sing. pronoun ɔ, the front unrounded non-close vowel in the prefix ke- is realized as the back rounded non-close vowel /o, ɔ / (according to the vowel harmony) before verb syllables which are characterized by word or syllable w-prosody:

(8a) menwɔhɔ /mɔ̃ŋʂhɔ /

(I shall go)

(8b) menwɔnlɔ /mɔ̃ŋʂnlɔ̃ /

(I shall drink it)

(9a) ɔkehɔ / ɔkɔhɔ /

(he will go)

(9b) ɔkenlɔ / ɔkonlɔ̃ /

(he will drink it)

- (iii) Type B mutation as in the case of positive future I;
- (iv) and also like positive future I forms, a nominal phrase subject is not marked by a prefix;
- (v) the intonational feature consists of a low tone on the subject pronoun, followed by a low tone on the tense prefix with a pronoun subject but a high tone with a nominal phrase subject, low tones on the first and second verb syllables and a high tone on the third verb syllable. In respect of their intonational features, then, the positive forms of the two future tenses are alike in contexts where there is a nominal phrase subject, but are different in contexts where there is a subject pronoun.

B. Nominal Phrase Subject

- | | | |
|-----|------------------------------------|-----------------------------------|
| (1) | Kofí <u>énre</u> lá | 'Kofi will not sleep' |
| (2) | Sanéba <u>énre</u> zǝ senlé ne | 'Saneba will not light the fire' |
| (3) | nrenyá ne <u>énre</u> hákye | 'the man will not remember' |
| (4) | ε mǝ <u>énre</u> bía Ayke | 'mother will not wash Akye' |
| (5) | bedá ne <u>énre</u> mínli sánve ne | 'the child will not lose the key' |

The negative future tense II is characterized by:

- (i) the selection of Set I pronouns like the corresponding positive forms;
- (ii) the negative prefix nre-, and in forms with the 1st pers. sing. pronoun me 'I' as well as the 3rd pers. sing. pronoun ǝ 'he, she, it', the vowel in the negative prefix is realized as the back rounded non-close vowels /o, ɔ/ (rather than the front unrounded non-close vowels /e, ε /) before verb syllables which are characterized by word or syllable w-prosody and the vowel element in the 1st pers. sing. subject pronoun assimilates to this prosodic feature. In relation to the positive tense prefix ke- the negative prefix nre- may be regarded as historically derived as follows: N + ke- → ηγε (Type A mutation) → ηε (after loss of the voiced velar plosive in the consonant sequence);
- (iii) Type B mutation like the corresponding positive forms;
- (iv) the prefix ε- as a marker of a nominal phrase subject;

- (v) an intonational feature which, in contexts where there is a subject pronoun, consists of a low tone on the pronoun, a low tone (but also high tone in contexts of disagreement or certainty) on the negative prefix, a high tone on the first or only verb syllable followed by a low tone on the second and a high tone on the third verb syllable. In contexts where there is a nominal phrase subject, the prefix marker has a high tone and the negative prefix has always a low tone and the verb syllables have the same tonal pattern as in the case of a pronoun subject.

Positive: Tense 8. Perfect

A. Pronominal Subject

Sing.

1st pers.	mɛla	/mɛ̃la /	'I've slept (or I'm asleep)'
2nd "	wɔla	/wɔla /	'you've " (you're ")'
3rd "	yɛla	/jɛ̃la /	'he, she, it has slept (he, she, it is asleep)'

Plur.

1st pers.	yɛla	/jɛla /	'we've slept (we're asleep)'
2nd/3rd "	bɛla	/bɛla /	'you, they have slept (you, they are asleep)'

B. Nominal Phrase Subject

- | | | |
|-----|---------------------------------|---------------------------------|
| (1) | Kofí (ɛ̃)la. | 'Kofi has slept (or is asleep)' |
| (2) | Sanéba (ɛ̃)zɔ̃ senlé ne | 'Saneba has lit the fire' |
| (3) | eyevóle ne (ɛ̃)dunwue | 'the stranger has woken up' |
| (4) | raalé ne (ɛ̃)kpongba teladéé ne | 'the woman has sewn the dress' |
| (5) | ɛ mɔ (ɛ̃)bia Akyɛ | 'mother has bathed Akyɛ' |

One of the referential meanings of the positive perfect tense is past in present; that is, it denotes an action performed or completed in the past which has current or present relevance. The following paired clauses exemplifying the perfect and past tenses serve to distinguish the referential meanings of the two tense forms:

(6a) *egya éhɔ* Bolɔ fo

(my father has gone to Axim)

(6b) *egya hɔ́le* Bolɔ fo

(my father went to Axim)

(7a) *egya éli* evolé eya

(lit. my father has spent a 100 years.
my father's a 100 years old)

(7b) *egya líle* evolé eya

(my father was a 100)

The use of the perfect tense in (6a) denotes that the speaker's father is at present in Axim, whereas the use of the past tense in (6b) indicates that his father is not at present in Axim. Similarly, (7a) involving the use of the perfect tense denotes that the speaker's father is alive at the time of speaking, whereas (7b) involving the past tense denotes that his father is not alive at the moment of speaking.

In its reference to past time with current or present relevance, the perfect tense often collocates with such time adverbials of present reference as (i) *kekála (bíe)* 'only just (now)' and (ii) *ene* 'only to-day', as in:

(8a) *kekála (bíé)* á, Akyé éra a

(Akye has only just now arrived)

(8b) ené á, bezone Akyé á

(lit. it is only to-day they've baptized Akye.
Akye has been baptized only to-day)

It often co-occurs with the adverbial déba déba 'a long time ago':

(8c) Kofi mɔ éra déba débá

(Kofi and the others have arrived a long time ago)

Corresponding clauses with the past tense are unacceptable; thus alongside (8c) we shall not attest (8d) below:

(8d)* Kofi mɔ rale déba déba

(Kofi and the others came a long time ago)

A second possible meaning of the positive perfect tense is past in past, which is specifically introduced by the item ene with a preceding temporal clause in past tense or present tense:

(9a) mengólé la, ene Ákyé éla

(when I went, Akye was then asleep (or had slept))

(9b) mekó lá, ene Ákyé éla

(when I was leaving, Akye was then asleep)

In the above clauses, the conjunction ene introducing the main clause involving the perfect tense indicates that Akye's going to sleep took place before my going.

Thirdly, with a sub-class of intransitive verbs the perfect tense refers to present state resulting from past action or process, as in the following examples with the verb stems of the sub-class:

(i)nwa 'to grow lean', (ii)sia 'to be watery', (iii)doa 'to be wet',
and (iv)ti 'to be deaf':

(10a) ɔyé ne énwa

(his wife is/has grown lean)

(10b) abele éðoké ne ézia

(the corn dough is/has become watery)

(10c) me dúku ne éloa

(my headkerchief is/has become wet)

(10d) nrenyá ne ángo édi

(lit. the man's ears have become blocked, the man is deaf)

The positive perfect tense has the following characteristic features:

- (i) selection of Set II pronouns;
- (ii) absence of a tense prefix;
- (iii) characterization by Type B mutation; the influential V element being realized, in contexts with a subject pronoun, as the vowel of the pronoun or as vowel prefix marker in contexts with a nominal phrase subject;
- (iv) the prefix ɛ- as a marker of a nominal phrase subject;
- (v) an intonational feature which consists of a low tone on the first and second verb syllables and a high tone on the third. In contexts where there is a nominal phrase subject, the prefix marker has a high tone when realized in emphatic speech and the verb syllables have the same tonal pattern as in contexts with a pronominal subject.

It should also be mentioned that in the perfect tense the 3rd pers. sing. and plur. pronouns may be used as indefinite and unspecified

pronouns as exemplified in the following clauses:

(11a) yeha edweké ko

(it has remained one matter)

(11b) mennwunle ye lá, yeli evolé ko/ yehye

(it's a year ago/a long time, since I last saw him)

(12a) bébo done nsá

(lit. they've struck three bells. it's three o'clock)

(12b) bégya ye

(lit. they've married her. she's married)

We have already shown (in Chapter 2 and also in Chapter 3) that, although direct imperative clauses with 2nd pers. plur. subject pronoun and indicative mood clauses involving particularly monosyllabic verbs with 2nd/3rd pers. plur. subject pronouns are alike in respect of (a) presence of Type B mutation and (b) absence of a tense prefix, the two types of mood clauses are intonationally distinguished, and no more need be said here. We might, however, compare in greater detail the positive perfect tense and corresponding continuative and habitual tense forms.

The Positive Perfect V. The Positive Continuative

As already mentioned, dynamic verbal forms and other dynamic verbs are only possible in the active tenses which include the perfect tense, and their corresponding stative verbal forms and other stative verbs in the non-active tenses which include the continuative.

The positive perfect tense and continuative tenses are different in that the perfect tense (1a) selects Set II pronouns, (2a) is marked by a high tone prefix é- in contexts with a nominal phrase

subject, and (3a) has the basic meaning of past action with current or present relevance, whereas the continuative tense (1b) selects Set I pronouns, (2b) has no prefix with a nominal phrase subject, and (3b) has the basic meaning of reference to a state or static condition in the present or past. In spite of these differences, the two tenses are alike in the following respects:

- (i) absence of a tense prefix;
- (ii) presence of Type B mutation;
- (iii) a similar intonational pattern in contexts with a subject pronoun (although the final low in the perfect tense form seems lower than that of the corresponding syllable in the continuative tense form);

The perfect and continuative are the only tense forms with no affixal exponence which are marked by Type B mutation. One result of the morphological and phonological resemblances noted above is that clauses with the 1st pers. sing. and plur. and 2nd/3rd pers. plur. pronouns and involving verbs of adornment (e.g. 1.k_ye 'to put on (belt)', 2.k_eda 'to put on (cloth)', 3.b_o 'to put on (headkerchief)', 4.m_o 'to put on (loin cloth)', and 5.w_ula 'to put on (dress or ring)', are ambiguous as between a perfect tense interpretation and a continuative tense interpretation:

(13) meh_ye falé

- | | |
|--------------------------|----------------|
| (a) I am wearing a belt | (Continuative) |
| (b) I have put on a belt | (Perfect) |

- (14) beheda aboka
 (a) they are wearing Kente (Continuative)
 (b) they have put on Kente (Perfect)
- (15) yebo abotile
 (a) we are wearing turbans (Continuative)
 (b) we have put on turbans (Perfect)
 (c) we put on turbans (Habitual)

It should be noted that clauses such as (15) which involve a verb stem with an immutable stem-initial consonant may be three-ways ambiguous; that is, with an additional habitual tense interpretation. This type of ambiguity is partly resolvable by the different time adverbials with which the tense forms collocate.

There is, however, a semantic relationship between the positive perfect tense and the corresponding continuative tense, particularly in clauses which involve verbs of adornment and also verbs of location (e.g. 1. tenla 'to sit', 2. koto 'to kneel') such that between the perfect tense form of the dynamic verbal form and the continuative tense form of the corresponding stative verbal form there obtains a cause-and-effect relationship; that is, the perfect of the dynamic form implies the continuative of the stative verbal form, as the following examples illustrate:

Perfect tense form

(16a) yehye falé
 (she had put on a belt)

Continuative tense form

(16b) ohye falé
 (she is wearing a belt)

- | | |
|---|--|
| (17a) <u>y</u> eheda edanlé
(he has put on cloth) | (17b) <u>ɔ</u> heda edanlé
(he is wearing cloth) |
| (18a) <u>y</u> edenla wɔ ébía ne ázo
(he has sat on your chair) | (18b) <u>ɔ</u> de wɔ ébía ne ázo
(he is sitting on your chair) |
| (19a) <u>y</u> ehoto baká ne ánze
(he has knelt behind the tree) | (19b) <u>ɔ</u> hoto baká ne ánze
(he is kneeling behind the tree) |

The cause-and-effect relationship correlates with the common features of presence of Type B mutation and, possibly, absence of tense prefix and any differences in terms of past/non-pastness are syntactically marked by the selection, in the case of the (active, past) perfect tense, of Set II pronouns and of Set I pronouns in the case of the (non-active, non-past) continuative tense.

With the sub-class of 'verbal adjectives', the positive continuative tense¹ form (which is marked by Set I pronouns) expresses a state, condition or quality, whereas the corresponding dynamic verbal forms in the positive perfect tense (which is marked by Set II pronouns) denote the completion of the process of changing into the present state in question:

<u>Continuative tense form</u>		<u>Perfect tense form</u>	
(20a) ɔtele	'it is wide/broad'	(20b) yedele	'it has become wide/broad'
(21a) ɔdɔ	'it (the water) is hot'	(21b) yelɔ	'it has become hot'
(22a) ɔdu	'he is dark'	(22b) yelu	'he has become dark'
(23a) ɔtenre	'it is straight'	(23b) yedenre	'it has become straight'
(24a) ɔkyea	'it is bent/crooked'	(24b) yehyea	'it has become bent/crooked'

1. The continuative tense form of verbal adjectives have the same shape and intonation as the corresponding habitual tense form.

Lyons, J. (1968 : 301) has proposed a higher level category of state with two terms contingent and necessary: he states that "if we use the general term 'state' to refer to location, quality, condition, possession, etc, we can draw a distinction between those states which are seen as permanently (or necessarily) associated with particular persons and objects and those states which are regarded as only temporarily (or contingently) associated with them. Now the use of the dynamic form (expressing motion, change of condition, acquisition or loss) presupposes that the state in question is contingent (i.e. 'non-essential' or 'accidental'), rather than necessary".

In terms of the contingent/necessary distinction, we may regard, in the case of nominal pieces, inalienable nouns or possessions as necessarily or permanently associated with the possessor and syntactically marked by the selection of Set I possessive pronouns, and alienable possessions as contingently associated with the possessor and syntactically marked by the selection of Set II possessive pronouns.

Similarly, in the case of verbal pieces, we may regard the use of stative verbal adjectives in the continuative tense as expressing a necessary state, quality or condition which is marked by the selection of Set I pronouns without mutation, whereas the use of their dynamic forms with the perfect tense may be regarded as expressing a contingent state, condition or quality and is marked by the selection of Set II pronouns with Type B mutation.

Negative: Tense 8. Perfect

A. Pronominal Subject

Sing.

1st pers.	metɛdale	/mɛ̃tɛdáli	/ 'I've not slept (I'm not asleep)'
2nd "	ɛtɛdale	/ɛtɛdálɪ	/ 'you've " " (you're " ")'
3rd "	ɔtɛdale	/ɔtɛdálɪ	/ 'he, she, it has not slept (he, she, it is not asleep)'

Plur.

1st pers.	yɛtɛdale	/jɛtɛdálɪ	/ 'we've not slept (we're not asleep)'
2nd/3rd "	bɛtɛdale	/bɛtɛbálɪ	/ 'you, they have not slept (you, they are not asleep)'

B. Nominal Phrase Subject

- (1) Kofi (ɛ)tɛdále 'Kofi has not slept(or isn't asleep)'
- (2) Sanéba (ɛ)tɛsɔ́le senlé ne 'Saneba has not lit the fire'
- (3) eyevóɛ ne (ɛ)tɛtúnwuenlé 'the stranger hasn't woken up'
- (4) raalé ne (ɛ)tekpóngbale tɛladéé ne 'the woman hasn't sewn the dress'
- (5) ɛ mɔ (ɛ)tɛbíale Akyɛ. 'mother hasn't bathed Akyɛ'.

The use of the negative perfect tense indicates that, at the moment of speaking, the action described has not as yet been performed but leaves the question open whether the action may be performed later. Thus a clause such as:

(6a) Kofi ɛtɛtúale ye káké ne

(Kofi has not paid his debt)

indicates that Kofi has not, at the time of speaking, fulfilled his obligation of paying his debt, but may or may not pay later, whereas a corresponding clause in the negative past tense such as:

(6b) Kofí andúá ye káké ne

(Kofi did not pay his debt)

indicates that the non-fulfilment of his obligation is definite.

The use of the negative perfect tense in a main clause specifically introduced by ene, in relation to a preceding temporal clause which is marked by the particle la, denotes that the action had not yet been performed at the time of the past action described by the temporal clause:

(7) egya wúle la, ene bétawóle wɔ

(when my father died, you had then not been born)

The negative perfect tense is characterized by:

- (i) Set I pronouns, unlike the positive forms which select Set II pronouns;
- (ii) the negative prefix tɛ- (which has the same shape as the positive durative tense prefix) and the suffix -le; the two morphemes may be regarded as one and the same discontinuous negative prefix. With the 3rd pers. sing. subject pronoun ɔ 'he, she, it' the vowel in the syllable of the tense prefix is sometimes realized as the back rounded non-close vowels /o, ɔ/ before verb syllables which are characterized by word or syllable w-prosody, such that at least the first three successive syllables of the verb word consisting of the pronoun, the negative prefix and the first or only syllable of the verb are characterized by this prosodic feature;

- (iii) absence of a potential Type B mutation;
- (iv) presence, as in the corresponding positive forms, of the prefix ε in contexts where there is a nominal phrase subject;
- (v) an intonational feature, which consists of a low tone on the subject pronoun followed by another low tone on the negative prefix, a high tone on the first or only verb syllable, and the suffix - le occurring after a mono-syllabic verb stem (whether complementation occurs or not) has a low tone; but after the low tone of the second syllable of a disyllabic verb stem, the suffix has a high tone if no complement occurs, whereas in contexts where there is complementation the suffix (whose vowel element may not be pronounced in normal unemphatic speech) has a low tone. The prefix marker of a nominal phrase subject has a high tone and the tonal pattern of the negative prefix and the verb word including the suffix is the same as with a subject pronoun.

Positive: Tense 9. Past

A. Pronominal Subject

Sing.

1st pers.	menlale	/mɛnnalɪ	/' I slept'
2nd "	ɛlale	/ɛlalɪ	/' you " '
3rd "	ɔlale	/ɔlalɪ	/' he, she, it slept'

(9) Kofi déndele wiéle la, bebóle be sá nú

(after Kofi had finished speaking, they clapped)

The above sentence indicates that Kofi's speaking had taken place before the applause.

The past tense is used with verbs of location such as (a) da 'to lie', (b) wó 'to be in', and (c) tenla 'to live' to indicate past existence or location in a place or that the referent of the subject noun phrase used to be but is no longer in the place in question, as in:

(10a) ɔlale ekpónlé ne ázo

(it was (lying) on the table (but is no longer there))

(11a) ɔwale Bolófo

(he used to be in Axim)

(12a) nrenyá zsháne dénlanle Bolófo (bie)

(that man used to live in Axim (some time ago))

Such semi-transitive clauses are understood as being similar in meaning as clauses involving the corresponding stative verbal forms in the continuative tense with a preceding anré:

(10b) anré ɔla ekpónlé ne ázo

(it was (lying) on the table)

(11b) anré ɔwó Bolófo

(he used to be in Axim)

(12b) nrenyá zsháne anré ɔde Bolófo

(that man used to live in Axim)

It should also be noted that the 3rd pers. plur. pronoun may be used as an indefinite unspecified pronoun with the positive past tense:

(10) bewole me Yálé

(I was born on a Friday)

The positive past tense has the following characteristic features:

- (i) Selection of Set I pronouns, with the 1st pers. sing. pronoun realized as men 'I';
- (ii) presence of the suffix - le of the same shape as the negative perfect tense suffix; thus the positive past and the negative perfect tense, both of which are past, active tenses, are the only tense forms which have suffixal exponence.

Like the negative perfect tense prefix, the positive past tense suffix -le has the following characteristics:

- (a) it occurs nasalized when preceded by a nasalized verb syllable;
- (b) in pre-pause position, the suffix is fully pronounced with a final vowel which may be either (i) the front close vowel /i/ usually realized where the preceding vowel of the verb is the front or back close vowels /i,u/ or (ii) the front half-close vowel (ɪ) usually realized with preceding verb syllables containing all other vowels;
- (c) in clauses where the verb word is followed by an item, the final vowel of the suffix may not be realized in normal, unemphatic speech;

(d) in instances where a positive past or negative perfect tense verb is immediately followed by another verb word of a corresponding tense, the entire suffix of the first verb word is elided in normal, unemphatic speech;

(11a) εvale εhɔle /εvέ hɔlf / (positive past tense)
(you took it away with you)

(11b) ετεfale ετεkɔle /ετεfέ tekɔli / (negative perfect ")
(you haven't taken it away)

(12a) ɔvale ɔkpudale /ɔvó kpudalf / (positive past tense)
(he used it for washing it)

(12b) ɔτεfale ɔτεkpudale /ɔτεfó tekpúdalf / (negative perfect tense)
(he didn't use it for washing it)

(13a) yevale yehyele / jεv(ε)jéhyelf / (positive past tense)
(we turned it down)

(13b) yetefale yetekyele/jetef(é) jétekyéli/ (negative perfect tense)
(we haven't turned it down)

Clauses such as (11a-b) are interpreted as comitative and (12a-b) as instrumental.

(e) the closer vowel quality of the front half-close vowel /e/ occurring in the verb syllable immediately before the suffix -le is regularly realized as the opener vowel quality /ε/:

(14a) buke / buke / (open it)
(14b) ɔbukele / obukεlf / (he opened it)

(15a) kile / kɔle/ (show it)
(15b) ɔtekilele / otekɔlelf / (he hasn't shown it)

The assimilation of an H-type vowel or syllable to an L-type vowel in the environment of a following L-type suffix exemplified in the above positive past (14b) and negative perfect tense (15b) forms constitutes contrary evidence to the claim made by Schachter, P. (1971 : 37) who, drawing upon Stewart, J.M. (1967)¹, observes that "in typical African-language vowel-harmony systems, members of the lower, or more ~~forward~~^{retracted} set (i.e. ɪ, ε, a, ɔ, ʊ /) of vowels frequently assimilate to neighbouring members of the higher, or more forward set (i.e. i, e, æ, o, u / while members of the higher set never assimilate to neighbouring members of the lower set. This type of asymmetry, Stewart maintains, is characteristic of unmarked-marked oppositions."

- (iii) positive past tense forms with the 1st pers. sing. subject pronoun are marked by Type A mutation, the influential N element being realized as the final nasal consonant of the pronoun men 'I'; forms with all other pronouns are characterized by Type B mutation, the influential V element being realized as the vowel of the pronominal syllable;
- (iv) absence of a prefix in contexts with a nominal phrase subject;

1. Stewart, J.M. (1967 : 192) states "... Because the phonological relationship between unraisedness and raisedness shows a particular kind of asymmetry which is characteristic of unmarked/marked contrasts: unraised vowels are assimilated to neighbouring raised vowels on a large scale, while there appears to be no assimilation at all of raised vowels to neighbouring unraised vowels."

- (v) an intonational feature which consists, as always, of a low tone on the subject pronoun, and in contexts where there is a pronominal subject, low tones on the verb syllables, but with a nominal phrase subject, the first or only verb syllable carries a high tone followed by a low tone on the second verb syllable; the suffix has a high tone in contexts where no complementation occurs, but where there is a complement, the suffix realized in emphatic speech has regularly a low tone.

Negative: Tense 9. Past

A. pronominal Subject

Sing.

1st pers.	meanla / mǎnná	/'I didn't sleep'
2nd pers.	wǎanla / wanná	/'you " " '
3rd "	yeañla / janná	/'he, she, it didn't sleep'

Plur.

1st pers.	yeañla / janná	/'we didn't sleep'
2nd/3rd "	beañla / banná	/'you, they didn't sleep'

B. Nominal Phrase Subject

- | | | |
|-----|--------------------------------------|----------------------------------|
| (1) | Kofi <u>añlá</u> | 'Kofi didn't sleep' |
| (2) | Sanebá <u>anzó</u> sǎnlé ne | 'Saneba didn't light the fire' |
| (3) | nrenya ne <u>angyínlá</u> | 'the man didn't stop' |
| (4) | raalé ne <u>amkpóngbá</u> tɛladéé ne | 'the woman didn't sew the dress' |
| (5) | Akyé <u>ambíá</u> ɔ rá ne | 'Akyé didn't wash her child' |

As already mentioned, the use of the negative past, unlike the negative perfect, denotes that, at the time of speaking, the non-performance or non-occurrence of the action in question is definite. Thus (5), for example, indicates that the washing of the Akye's baby had definitely not taken place.

The negative past tense is characterized by:

- (i) Set II pronouns, unlike the positive forms which select I pronouns;
- (ii) presence of a negative prefix an-, as a comparison between forms with a nominal phrase subject and those with a subject pronoun clearly shows; and in forms with a subject pronoun the junction between the vowel in the syllable of the pronoun and the negative prefix is realized as the vowel of the prefix, which may be slightly lengthened in emphatic speech;
- (iii) Type A mutation, the influential N element being realized as the nasal consonant element in the negative prefix;
- (iv) absence of a prefix as a marker of the nominal phrase subject;
- (v) a low tone on the negative tense prefix with either a pronominal or a nominal phrase subject, followed by high tones on the verb syllables.

Positive: Tense 10. Consecutive

A. Pronominal Subject

Sing.

1st pers.	meala / mála / ' (so) that I may sleep'
2nd pers.	wɔala / wála / ' " " you " " ' "
3rd pers.	yeala / jála / ' " " he, she, it may sleep'

Plur.

1st pers.	yeala	/jála /	'(so) that we may sleep'
2nd/3rd "	beala	/ bála /	' " you/they " " '

B. Nominal Phrase Subject

- (1) Kofi zóale ye kyélé ne ná (ammá) ewiá angú yé
(Kofi wore his hat so that the sun may not scorch him)
- (2) Akyé éngó áwie ézene ná áwie áho yé édee
(Akye doesn't attend anybody's funeral nor should anybody attend hers)
- (3) mengole sukúlu ná Kófí áho
(I went to school before Kofi, (went))
- (4) eyevóle ne kpónde awie ádenla o nwó
(the stranger wants somebody to stay with him)

As already indicated, the form of the verb traditionally referred to as the consecutive tense cannot by itself constitute a sentence and may for that reason be regarded as non-finite. As (1-4) above show, the consecutive usually occurs in non-initial clauses and may be introduced by a conjunction, which may be (i) na (or ama) 'so that, in order that', (ii) na 'before', or (iii) na (eza) 'and then'.

The uses of the consecutive tense may, therefore, be described in terms of two main contexts: (A) where it is introduced by a conjunction and (B) where no introductory conjunction occurs.

(A) Contexts where an introductory conjunction occurs

Five different uses of the consecutive tense may be distinguished in contexts where it is introduced by a conjunction in a non-initial clause.

The first use is exemplified in:

(5a) Kofí tétéle adúobá dɔ́nwó ná/ama yeámaa Akyé b́e.

(Kofi plucked a lot of guavas so that he might give Akyé some).

(5b) mekɔ́ ndénde ná/ama meáhódo ye

(I'm going quickly so that I may go and meet him)

(5c) (Akyé źle ɔ́ rá ne ása ná/amma yeandó áze

(Akyé held her child's hand so that he (the child) might not fall)

In (5a-c) above, the action described in the subordinate clause introduced by na (or ama, which may be an Akan loan) and involving the consecutive tense is understood as the intended purpose of the action described in the preceding main clause. The conjunctions na and ama occur in free variation before clauses of positive polarity (5a-b), but in clauses of negative polarity (5c), na is in free variation with amma (which may be regarded as the negative form of ama).

The second use of the consecutive tense may be exemplified by:

(6a) ɔ́mkpólá awie ná áwie ákpola ye

(he doesn't visit anybody nor does anybody visit him)

(6b) ɔ́nvá áwie sénlé ná áwie áva yé dee

(she doesn't take anybody's fire nor does anybody take her fire)

In the type of construction exemplified in (6a-b), the preceding main clause and the subordinate clause introduced by na usually differ in polarity. Such constructions are usually understood as

expressing a natural or logical sequence; that is, the action described in the subordinate clause follows as the consequence of the action of the main clause.

The third use may be variously illustrated by the following:

(7a) di debíé ná wááhó

(eat before you go)

(7b) da na ehemá wááhó

(sleep and go to-morrow)

(8) nwonlomó mékpoa ewulá ná eza meááhó azule

(every morning I sweep and then go for water)

(9) Akyé h́sle ná Kófí áhakyé

(Akye went before Kofi remembered)

(10a) Kyéese Akyé dwázo ná meádwazo

(Akye should wake up before I wake up)

(10b) (Kyéese) ókó baka zó ná yeáli debíé

(he goes to the toilet before he eats (something))

(10c) Akyé dwázo ná Kófí ádwazo

(Akye wakes up before Kofi (wakes up))

Generally speaking, in clauses such as (7-10) the subordinate clause involving the consecutive denotes an action which, in respect of a temporal sequence, takes place after the action of the preceding main clause.

There may well be additional semantic implications with syntactic correlation which we need not go into.

The fourth use may be exemplified by:

(11a) óhyelé ná yeána

(lit. he kept long before coming. he was away a long time)

(11b) ɔngyé ná Kófí ázu

(lit. he doesn't take long before Kofi cries. Kofi cries easily)

(12) ɔhale ekyíí ná meádɔ aze

(lit. it left a little before I fell down. I nearly fell down)

Semantically, the above sentences are different in that the main clauses can hardly be said to denote the performance of an action; and (12) is different from (11a-b) in that the subject pronoun in the main clause is indefinite and non-specific.

The fifth possible use may be exemplified by:

(13) mengɔle na meandó yé

(I went but didn't see him)

(14) ɛ nwó yé fɛ na kenlamá á wɔanyé á

(lit. you may be handsome but you're not nice)

The clauses introduced by na in the above examples are usually negative.

(14) may be regarded more or less as a formulaic expression.

(B) Contexts where no introductory conjunction occurs

Three different contexts may be distinguished here. The first is exemplified by the (a) examples:

(15a) ɔtɔ́ dúku yemaa ɔ yé Ákyé (Present)

(lit. he's buying a headkerchief so that he may give it to his wife Akyé. he's buying a headkerchief for his wife Akyé).

(15b) yedɔ́ dúku yemaa ɔ yé Ákyé (Perfect)

(he has bought a headkerchief for his wife Akyé)

- (16a) Kofi élesí sua ámaa ɔ yé Ákyé (Progressive)
(Kofi is building a house for his wife Akye)
- (16b) Kofi síte sua maánle ɔ yé Ákyé (Past)
(Kofi built a house for his wife Akye)
- (17a) mebáhye anloma meámaa wɔ (Future I)
(I will catch a bird for you)
- (17b) mekéhye anloma mékemaa wɔ (Future II)
(I shall catch a bird for you)

The type of construction exemplified in the above (a) and (b) sentences have the following properties:

- (i) the subject noun phrase in the main clause is referentially identical with that in the subordinate clause;
- (ii) the verb in the subordinate clause is the same lexical item maa 'to give';
- (iii) a comparison between the (a) examples and the (b) examples shows that a consecutive tense occurs in the subordinate clause if the tense of the main clause is (I) present (15a), (II) progressive (16a), or (III) future I (17a); and that where the tense of the main clause is (i) perfect (15b), (ii) past (16b), (iii) future II (17b) etc, the subordinate clause concords in tense;
- (iv) the structure underlying such constructions may be presented, in the case of (17a) for example, as:
 - (17a.I) mebahye anloma
(I will catch a bird)
 - (17a.II) na meava anloma meamaa wɔ
(then I will give a bird to you)

- (v) semantically, in this type of construction, the action described in the main clause is understood as being performed for the benefit of the referent of the direct object of the subordinate clause.

The second use of the consecutive occurs in emphatic ventive- or itive- ingressive constructions. The examples below are itive- ingressive forms only:

- | | | |
|-------|----------------------------------|---------------|
| (18a) | ɔkɔ̃ <u>yeáhɔ̃la</u> | (Present) |
| | (He's going to go and sleep) | |
| (18b) | ɔkɔ̃ <u>ɔkɔ̃da</u> | (Habitual) |
| | (he goes and goes and sleep) | |
| (19a) | ɔlɛkɔ̃ <u>yeáhɔ̃la</u> | (Progressive) |
| | (he's going to go and sleep) | |
| (19b) | yehɔ̃ <u>yéhɔ̃la</u> | (Perfect) |
| | (he has gone and gone and slept) | |
| (20a) | ɔbáɔ̃ <u>yeáhɔ̃la</u> | (Future I) |
| | (he will go and go and sleep) | |
| (20b) | ɔkɛɔ̃ <u>ɔkɛɔ̃la</u> | (Future II) |
| | (he will go and go and sleep) | |

A comparison of the (a) and (b) examples shows, as in the previous sentences, (15-17(a-b)), that the consecutive tense form of the ingressive only occurs in the second constituent, if the tense form in the first constituent is realized as (I) present (18a), (II) progressive (19a) or (III) future I (20a), whereas in instances where the tense of the first constituent is none of these three tenses, the second constituent agrees in tense, which may be (IV) habitual (18b), (V)perfect (19b), or (VI)future II (20b).

On the basis of the occurrence or non-occurrence of the consecutive tense form, we may sub-classify the active tenses into (a) those such as the present, progressive and future I which co-occur with the consecutive and may be distinguished as the potential tenses and (b) those such as the habitual, future II, perfect and past tenses which do not co-occur with the consecutive and may be designated as the actual tenses.

The third use of the consecutive occurs, within a catenative piece, in the non-catenative verbal form after such catenative verbs as (i) bɔ mɔdenle 'to try', (ii) mia enyele 'to endeavour', (iii) kponde 'to want', (iv) dumua 'to go ahead', and (v) sale adenle 'to ask permission'. Thus with the catenative verb bɔ mɔdenle 'to try' in the potential tenses (e.g. present and progressive) we shall find:

- (21a) ɔbɔ mɔdenle yeádwazo (Present)
 (he's trying to stand up)
- (21b) ɔlébɔ mɔdenlé yeádwazo (Progressive)
 (he's trying to stand up)

But in the actual tenses (e.g. future II and past), we shall find:

- (22a) ɔkeɔ mɔdenlé ɔkedwazo. (Future II)
 (he'll try and stand up)
- (22b) ɔbole mɔdenlé ɔdwazolé (Past)
 (he tried and stood up)

The positive consecutive tense is characterized by :

- (i) Set II pronouns; and it is the only tense form whose positive ^{and} negative forms select Set II pronouns;

- (ii) a tense prefix a-, and the junction between the vowel of the pronominal syllable and the tense prefix is realized as the vowel of the prefix and may be slightly lengthened in emphatic speech;
- (iii) Type B mutation, the influential W element being realized as the vowel prefix;
- (iv) the presence of no other prefix than the tense prefix a- in contexts where there is a nominal phrase subject;
- (v) a high or rising tone on the first syllable of the verb word followed by low tones on the verb syllables.

Negative: Tense 10. Consecutive

A. Pronominal Subject

Sing.

1st pers.	meanla / mǎnná /	'(so) that I may not sleep'
2nd "	wǎanla / wanná /	" you " "
3rd "	yeañla / janná /	" he, she, it " "

Plur.

1st pers.	yeañla / janná /	" we " "
2nd/3rd "	bǎañla / banna' /	" you, they " "

A comparison between the negative consecutive and the corresponding negative past tense forms shows that the negative consecutive tense form has the same shape and the same characteristic features as the negative past tense.

Classification of the tenses

For ease of reference, the list of ten Nzema tenses is repeated below:

Tense 1 : Habitual	Tense 6 : Future I
2 : Present	7 : Future II
3 : Continuative	8 : Perfect
4 : Durative	9 : Past
5 : Progressive	10 : Consecutive

First of all, we may classify the ten tenses in terms of (A) Active, and (B) Non-active tenses. The active tenses are those in which dynamic verbal forms (e.g. (1a) gyinla 'to stand', stop', (2a) ténla 'to sit', (3a) dε 'to grasp, hold (in hand)', and other dynamic verbs (e.g. (4) kpuda 'to wash') can occur and they include Tenses (1-2) and Tenses (5-10).

The non-active tenses are those in which only stative verbal forms (e.g. (1b) gyi 'to be standing', (2b) te 'to be seated', (3b) lε 'to possess, have') and other stative verbs (e.g. (5) ze 'to know') can occur and include Tenses (3-4) : the continuative and durative tenses.

We may regard the distinction between the active and non-active tenses as one of aspect.

(A) The Active tenses

Leaving aside for the moment the non-finite consecutive tense (10), we may further sub-classify the active tenses into (A.I) Past, and (A.II) Non-past.

(A.I) The (Active) Past tenses

The (active) past tenses are the perfect (Tense 8) and past (Tense 9).

The two past tenses differ in the following respects :

- (a) the 1st pers. sing. pronoun with positive past tense forms is realized as men 'I' and marked by Type A mutation, whereas the corresponding pronoun in the perfect tense form is realized as me'I' and marked by Type B mutation;
- (b) the positive past tense forms select Set I subject pronouns and have the suffix -le, whereas the corresponding perfect tense forms select Set II pronouns and have no suffix;
- (c) the negative past tense forms select Set III pronouns and are marked by Type A mutation, whereas the corresponding negative perfect tense forms select Set I pronouns, marked by the absence of Type A mutation although the potentially favourable conditions obtain, and are further distinguished by a suffix -le, which together with the preceding prefix -te may be regarded as one discontinuous negative tense affix: te-le;
- (d) these formal differences may be regarded as correlating with differences in the referential meanings of the two past tenses; for whereas the past may refer to past action or event (e.g. phole anlómá 'he left yesterday') or past in past (e.g. xdenlanle Bolfo 'he used to live

in Axim'), the perfect tense may refer to past in present (e.g. yedenla aze 'he has sat down') or to present state resulting from past action (e.g. yeloa 'he is/has become wet').

In spite of these differences, the past and perfect tenses, regarded as the past (active) tenses, have the following common properties which serve to distinguish them from the non-past (active) tenses:

- (a) the past (positive) and the perfect (negative) are the only tenses which are characterized by a suffix : le; that is, the two past tenses are the only ones whose positive and negative tense forms are morphologically distinguished, in part at least, in terms of the presence or absence of this suffix;
- (b) the past and perfect tenses are also the only tenses whose positive and negative forms are distinguished in terms of the selection of either Set I or Set II pronouns; that is, the past tenses, as distinct from the non-past tenses, 'mix' Set I and Set II pronouns.

With particular reference to the non-finite consecutive tense, it is to be noted that it is more like the past tenses than the non-past tenses. Firstly, both its positive and negative forms select Set II pronouns; secondly, its positive forms are like the corresponding perfect tense forms not only in selecting Set II pronouns, but also in being marked by Type B mutation, although the positive consecutive is different in being characterized by a tense prefix -a;

and thirdly, the negative consecutive has the same shape as the negative past tense - that is, it resembles the negative past tense in not only selecting Set II pronouns, but also in being characterized by a prefix -an and Type A mutation.

On the basis of these resemblances between the consecutive and the past tenses, the non-finite consecutive tense may be classified along with the past tenses.

(A.II) The (Active) Non-past tenses

The (active) non-past tenses include: the habitual (Tense 1), present (Tense 2), progressive (Tense 5), future tense I (Tense 6) and future tense II (Tense 7) and are distinguished by the following characteristic properties:

- (a) both their positive and negative forms are characterized by the absence of a suffix;
- (b) both their positive and negative forms select Set I pronouns; that is, unlike the past tenses, the non-past tenses do not 'mix' Set I and Set II pronouns.

Before going on to further distinctions that might be made among the non-past tenses, I should like to discuss the possible correlation between the grammatical feature of the selection of a particular pronominal set and the feature of proximateness. It has already been mentioned that of the two paradigmatic sets of possessive pronouns that might be set up, members of Set I co-occur, in a nominal piece exemplifying a genitive construction, with inalienable nouns, whereas members of Set II co-occur with alienable nouns. In terms of markedness, we may regard alienable nouns as unmarked and inalienable nouns, which are about sixty in all, as the marked cases.

And of the corresponding sets of pronominal subjects distinguished, members of Set I are selected, in verbal pieces, by the positive and negative forms of the non-past tenses, whereas Set II pronouns are selected by the past tenses -i.e., the positive perfect tense and the negative past tense. In terms of markedness, we may accordingly regard the non-past tenses as the unmarked tense forms and the past as the marked cases.

If we also set up a deictic feature of proximity with the two terms: proximateness and non-proximateness, it is possible, in the case of nominal pieces, to regard inalienable nouns as having the deictic feature of spatio-temporal proximateness which is syntactically marked by the selection of Set I possessive pronouns, in contradistinction to alienable nouns which may be specified for the feature of non-proximateness syntactically marked by their selection of Set II possessive pronouns.

Similarly, we may, in the case of verbal pieces involving dynamic verbs, specify the non-past tenses as being characterized by the deictic feature of temporal proximateness or non-pastness (i.e. as indicating an action that is habitual, present, simultaneous, or future in relation to the time of speaking as a point of reference) which is syntactically marked by their selection of Set I subject pronouns in contradistinction to the specification of the past tenses as having the feature of non-proximateness or pastness (i.e. an action that took place before the time of speaking) which is syntactically marked by their selection of Set II subject pronouns.

And now to return to the (active) non-past tenses, which may further be sub-classified in terms of (A.II.i) the future tenses and (A.II.ii) the non-future tenses.

(A.II.i) The Future tenses

The (active, non-past) future tenses are future I (Tense 6) and future II (Tense 7) and are characterized by the following properties:

- (a) the positive forms of both future tenses are characterized by a tense prefix - i.e. - ba in the case of future I and -ke (or nwɔ with the 1st pers. sing. pronoun in the environment of a stem-initial syllable for which word/syllable w-prosody is statable);
- (b) Type B mutation; that is, there are no positive (non-past) tense forms which are marked by the presence of a tense prefix of the syllabic structure CE as well as by Type B mutation.

In addition to differences in the phonological shape of their positive and negative tense prefixes, the future tenses are different in that Future I is 'potential' and the negative future I is characterized by Type A mutation, whereas Future II is 'actual' and the corresponding negative future II is characterized by Type B mutation. Such differences may be regarded as correlating with differences in their referential meanings: future I refers to plain futurity, whereas future II has an additional implication of determination or definite decision.

(A.II.ii) The non-future tenses

The (active, non-past) non-future tenses are the habitual (Tense 1), present (Tense 2) and progressive (Tense 5), which are distinguished

by the following characteristics:

- (a) the positive forms of the non-future tenses (along with the two non-active tenses) share a common negative form;
- (b) the positive non-future tense forms, unlike the corresponding future tenses, are characterized by the absence of Type B mutation, although the favourable conditions are potentially present.

The non-future tenses might be further sub-classified in terms of (A.II.ii.a) the progressive and (A.II.ii.b) the non-progressive tenses. The positive progressive tense is the only non-future tense that is marked by a tense prefix le- and by the prefix ε- in contexts where there is a nominal phrase subject; the non-progressive tenses - i.e. the habitual (Tense 1) and present (Tense 2) - are distinguished by the absence of a tense prefix and a prefix marker of a nominal phrase subject.

Active tenses: potential/actual distinction

As already mentioned the active tenses may be sub-categorized into (i) the potential tenses which co-occur with the consecutive tense and include (a) the progressive, (b) present and (c) future tense I and (ii) the actual tenses which do not co-occur with the consecutive and include (d) the habitual, (e) future tense II, (f) perfect, and (g) past tense.

It may well be that the various sub-classes of tenses distinguished among the active tenses have aspectual implications.

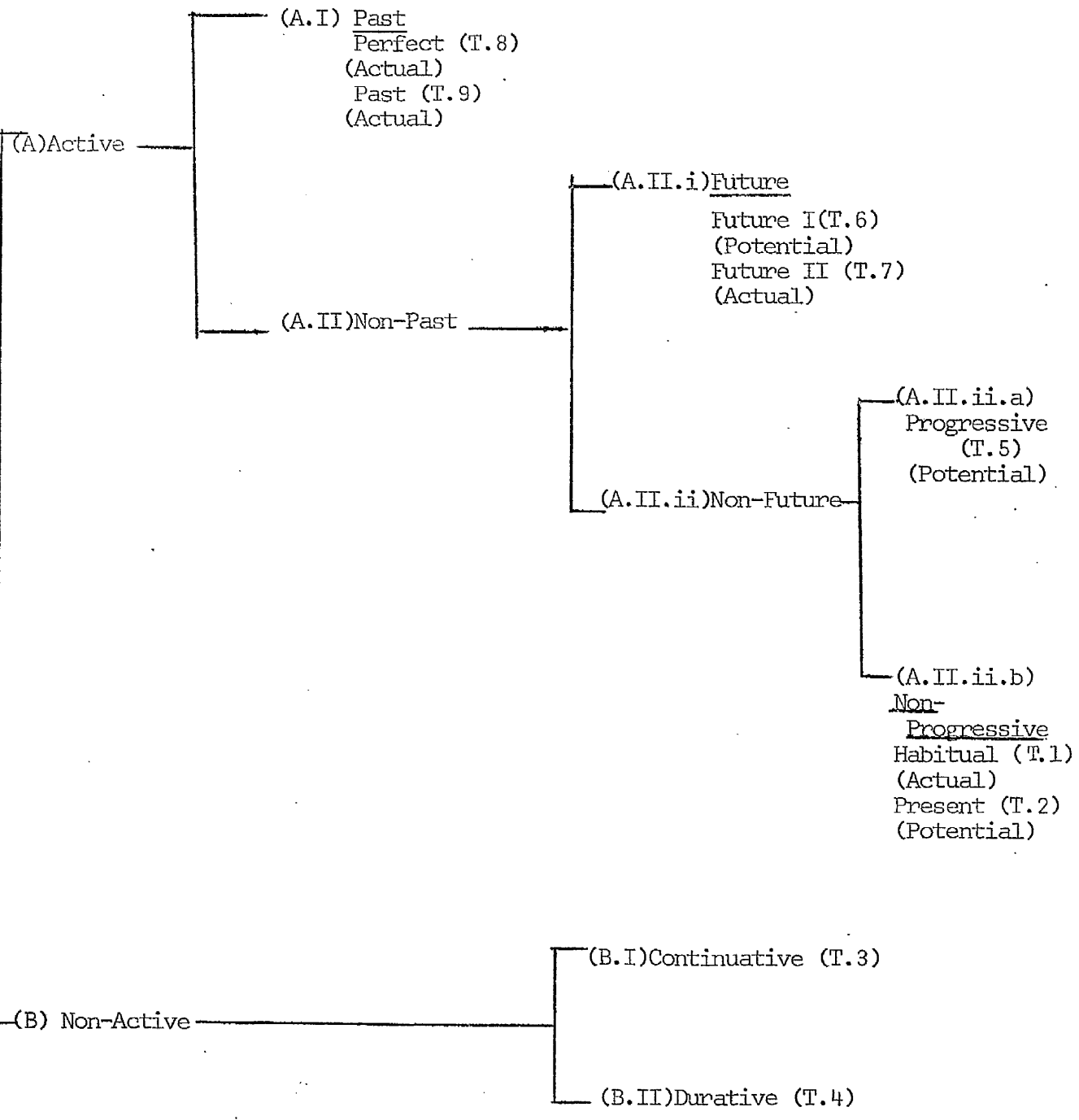
(B) The non-active tenses

As already indicated, the non-active tenses are the continuative (Tense 3) and the durative (Tense 4), which apart from being the favourite tenses of stative verbal forms and other stative verbs, have the following characteristics:

- (a) their positive forms select Set I subject pronouns;
- (b) they have no specific negative form and share, with the non-future tenses (i.e. habitual, present, and progressive), a common negative form involving Set I pronouns; that is, on the basis of a common negative form and the selection of Set I pronouns in their positive and negative forms, the non-active tenses are closely related to the non-future tenses.

The non-active positive durative tense, which is characterised by a prefix -te and the absence of a potential Type B mutation, is distinguished from the non-active continuative tense, which is marked by the absence of a prefix and the presence of Type B mutation; and, as already mentioned, the continuative tense refers to a state, whereas the durative tense refers to a continuing state or habitual action.

At this stage, the classification of the various tense forms (T.1-9) presented above (with the exception of the non-finite consecutive (T.10)) may be summarized as follows:



CHAPTER 5

Categories IV and V : Person and Number

It is convenient to treat together the two categories of person and number.

The category of person is set up for the verbal piece as well as for the nominal piece, and, in either case, a six-term closed system of personal pronouns is established. In the verbal piece, the forms of the terms are located in both the pronominal subject prefixes (graphologically attached to the verb word with or without prefixes) and in the graphologically separate pronominal objects. In the nominal piece, the forms of the terms are, syntactically, 'possessor' pronominal prefixes (albeit graphologically unattached) to the 'possessed' noun in a genitival construction. For ease of reference, the forms of the terms in the systems are repeated below:

Form I : Personal Pronoun (Unemphatic)

Possessive Pronoun

	<u>Set I</u>		<u>Set II</u>		<u>Set I</u>	<u>Set II</u>	
(1) 1st pers. sing.	me(n)	'I'	me	'I, me'	me	me	'my'
(2) 2nd " "	ε	'you'	wɔ	'you'	ε	wɔ	'your'
(3) 3rd " "	ɔ	'he, she, it'	ye	'he, she, it him,her, it'	ɔ	ye	'his, her, its'
(4) 1st pers. plur.	ye	'we'	ye	'we, us'	ye	ye	'our'
(5) 2nd " "	bε	'you'	bε	'you'	bε	bε	'your'
(6) 3rd " "	bε	'they'	bε	'they, them'	bε	bε	'their'

The above presentation shows that there are phonemic correspondences between the forms of the terms in the systems. There are also resemblances of a grammatical and a phonological nature, which include:

(i) the possibility of setting up, on the basis of grammatical function, two sets among either the personal pronouns or the possessive pronouns. As already noted, members of the paradigmatic Set I of the possessive pronouns only co-occur, in a genitive construction, with the possessed root forms of the sub-class of inalienable nouns, whereas members of Set II co-occur with the sub-class of alienable nouns. Similarly, members of the paradigmatic Set I of the personal pronouns have different grammatical functions from those of Set II. Members of Set I have the following functions:

- (a) pronominal subject in positive and negative forms of non-active and non-past active tenses;
- (b) pronominal subject in positive past tense forms and negative perfect forms;
- (c) precede the conjunctive neè 'and, with' or take first position within a conjunction of pronominal subjects occurring with a reciprocal verb;
- (d) pronominal subject in positive and negative (direct and indirect) imperative mood clauses.

By contrast, members of Set II are characterized by the following grammatical properties :

- (e) pronominal subject in positive perfect and negative past tense forms;
 - (f) pronominal subject in both positive and negative consecutive tense forms;
 - (g) take second position within a conjunction of pronominal subjects;
 - (h) direct object, indirect object, and complement (in equative relational clauses);
- (ii) phonologically, they may be regarded as neutral in respect of H-/L-type feature, but assimilate to the type of feature characteristic of the following syllable;
- (iii) the 1st pers. sing. subject or possessive pronoun, written as me(n), has at least two pairs of four phonetic values $i.m^{\text{h}}/m^{\text{h}}$, $ii.m^{\text{h}}/m^{\text{h}}$ in accordance with the vowel and labial harmony; the first pair $m^{\text{h}}/m^{\text{h}}$ involving unrounded vowels is realizable with stem-initial syllables for which word or syllable $y\text{-}/\text{a}\text{-}$ prosody or syllable-initial $y\text{-}$ prosody is storable:

(7a) meti /m^ht^h/

(I grind)

(8a) menye /m^hny^h/

(I've plucked)

(7b) me ti /m^h t^h/

(my head)

(8b) me nye /m^h ny^h/

(my eye)

- | | |
|---|-----------------------------------|
| (9a) mesa /m̩sa /
(I collect) | (9b) me sa /m̩ s̩ /
(my hand) |
| (10a) meye /m̩j̩ /
(I've removed it) | (10b) me ye /m̩ j̩ /
(my wife) |

and the second pair m̩/m̩ is realizable with stem-initial syllables for which word or syllable w-/ɥ-prosody or syllable-initial w-/ɥ-prosody is statable :

- | | |
|--|---|
| (11a) mesua /m̩suwa /
(I set it (a trap)) | (11b) me sua /m̩ s̩uwa /
(my house) |
| (12a) metoa /m̩t̩wa /
(I follow) | (12b) me toa /m̩ t̩wa /
(my penis) |
| (13a) mesonyi /m̩sony̩ /
(I sieve it) | (13b) me bonye /m̩ b̩ny̩ /
(my nose) |
| (14a) meko /m̩ko /
(I go) | (14b) me kome /m̩ k̩m /
(my neck) |
| (15a) mekpa /m̩kpa /
(I've shayed it) | (15b) me kpa /m̩ kpa /
(my bed) |
| (16a) metwe /m̩kyw̩ /
(I pull) | (16b) me twea / m̩ kyw̩ /
(my dog) |

- (iv) stem-initial consonant mutation, in particular Type B, may take place in the immediate environment of the preceding vowel in the personal or possessive pronoun, and this is another formal reason for regarding possessive pronouns as pronominal prefixes, although graphologically not prefixed to the possessed noun.

The phonemic correspondences as well as these resemblances of a grammatical and phonological nature are such as to justify the setting up of a category of person, rather than treating the items as separate lexemes.

The category of number has two terms: singular, which denotes 'one', and plural, which denotes 'two or more', and is established for both nominal and verbal pieces. A number of count nouns (except those with stem-initial or syllabic nasal consonants) as well as some 'non-essential' adjectives exhibit morphological number-variation; deictic determiners (e.g. *baka kpole ehye* 'this big tree' : *mbaka mgbole ehye mo* 'these big trees') concord in number; and pronouns of reference (e.g. *ahenle* 'somebody' : *ahenle mo* 'some persons') have appropriate singular and plural forms. In verbal pieces, the forms of the terms in the category of number are located in both the pronominal subjects and objects. Terms (1-3), of which some are a two-form term, are set up as the singular forms in contradistinction to terms (4-6), which are identical in shape, and are regarded as plural forms. Other formal criteria for distinguishing terms (4-6) as plural forms include:

- (i) the plural forms may co-occur, in either subject or object position, with the reduplicated forms of verbs. In clauses involving, for example, the verb *da* 'to sleep' (with the reduplicated form *deda*), we shall find with the 3rd pers. plur. pronominal subject either the reduplicated form:

(17a) bɛdɛda
(they're asleep)

or the simple verb stem:

(17b) bɛla
(they're asleep)

whereas with the 3rd pers. sing. pronominal subject,
we shall find only the simple verb stem:

(18a) yɛla
(he's asleep)

but not the reduplicated form:

(18b) *yɛdɛda

And with the verb tɪnwue 'to wake up' and its
reduplicated form tɪnwɛdɪnwue, the 3rd pers. plur.
pronominal object may co-occur with the reduplicated
form or the simple verb stem, as in:

(19a) mɛdɪnwɛdɪnwue bɛ
(I've woken them up)

(19b) mɛdɪnwue bɛ
(I've woken them up)

whereas with the corresponding singular pronominal object,
we shall find only the verb stem:

(20a) mɛdɪnwue yɛ
(I've woken him up)

but never the reduplicated form:

(20b) *mɛdɪnwɛdɪnwue yɛ

- (ii) only the plural subject pronouns can co-occur with the stative verbal form lua 'to be' followed by a cardinal numeral denoting two or more humans, as exemplified by:

(21a) ye/belua bulú
(we/they are ten)

The following clause (21b) is ungrammatical :

(21) *me/yelua ko
(I am/he is one)

- (iii) only the plural pronouns can be attested in clauses whose subject noun phrases contain the item muála 'all' or the item mé/mu 'set of' followed respectively by the appropriate cardinal numerals nsa/nwis 'three/two':

(22a) ye muála á yeholé a
(all of us went)

(22b) be muála béra
(all of them have come)

(23a) ye mé nsá á yeholé a
(all three of us went)

(23b) be mé nsá béra
(all three have come)

(24a) ye mú nwis á yeholé a
(both of us went)

(24b) be mú nwis béra
(both of them have come)

- (iv) in a reciprocal clause involving pronominal subject conjuncts, the pre-verbal subject pronoun (underlined) must be plural, even though the conjuncts may be singular:

(25a) me nee wɔ̃ yɛ̃gyale yɛ̃ nwɔ̃ lá
(when I and you we married ourselves)

(25b) me nee yɛ̃ yɛ̃gyale yɛ̃ nwɔ̃ lá
(when I and she we married ourselves)

(26a) ɛ̃ nee yɛ̃ bɛ̃gyale bɛ̃ nwɔ̃ lá
(when you and he/she you married yourselves)

(26b) ɔ̃ nee wɔ̃ bɛ̃gyale bɛ̃ nwɔ̃ lá
(when he/she and you you married yourselves)

As the above examples show, the possessive pronoun in the reciprocal complement (i.e. yɛ̃/bɛ̃ nwɔ̃ 'our/yourselves') is co-referent with the preverbal plural pronominal subject, and the selection of the plural subject pronoun is determined in such a way that 1st person takes precedence over 2nd or 3rd person (25a-b) and 2nd person takes precedence over 3rd person (26a-b);

- (v) in a ditransitive clause involving, for example, the simple verb stem maa 'to give (as a gift)' followed, in clause-final position, by the reduplicated form ngoko 'one each' (of the cardinal numeral (ɛ̃)ko 'one'), the indirect object can only be

plural but never singular:

(27a) Kofi maánle ye/be ngóko

(Kofi gave us/them one each).

Clause (27a) above is to be distinguished from (27b) below in which the singular pronoun is possible and the unreduplicated form of the numeral occurs;

(27b) Kofi maánle me bíála kó

(Kofi gave me one of each)

The category of number, then, combines with the personal pronouns (which may be regarded as syntactically equivalent to nouns), but in a different way from that of nouns; that is, pronouns do not exhibit morphologically-related number forms, as exemplified by: me 'I, me, my' / ye 'we, us, our' or ye 'he, him, his' / be 'they, them, their' in comparison with the typical regularity of morphological number-variation in the case of nouns: Daka 'tree' / mbaka 'trees' or sua 'house' / ázua 'houses'.

It should also be noted that of the categories that need be set up for a description of the verbal piece in Nzema, the two categories of person and number are different from the others in being statable for both verbal and nominal pieces. And the category of person is further different in being probably the only grammatical category that is definable in terms of the notion of participant roles or dependent to a large extent upon the meaning of the terms in the category: that is to say, person is probably the one linguistic category that has clearly defined reference to non-linguistic entities.

In what follows, the characteristic properties of the forms of the terms in the system of personal pronouns are discussed and particular attention drawn to their referential meanings and their relation to the category of number,

1st person pronouns

- (i) The 1st pers. sing. subject pronoun, as a member of Set I, is unique in having two forms: mén/me; the first possible form: mén with a final nasal consonant homorganic with the stem-initial consonant of the verb is realized, as already mentioned, with positive past tense forms, all other positive (and negative) tense forms selecting the alternative form me; the form mén is also realized, but not in contrast with me, in positive indirect imperative mood clauses and certain types of positive polar disjunctive interrogatives (e.g. mengó ú? 'may I go?').
- (ii) Forms with the 1st pers. sing. pronoun mén are necessarily characterized by Type A mutation, whereas forms in the same paradigm with the other persons are characterized by Type B mutation.
- (iii) ^{In}instances where the 1st pers. sing. pronominal form me is immediately followed by a morpheme (which may be a noun, verb or the future tense I prefix ba-) whose initial consonant element is a labial plosive or fricative, the vowel in the pronoun is usually reduced in duration, in unemphatic speech, with the result that a labial consonant sequence is realized.

- (iv) As already mentioned, positive future II is expounded by the tense prefix ke- and the corresponding negative form by the prefix me-. Forms with the 1st pers. sing. subject pronoun are distinguished by either prefix having two (tonally-differentiated) possible realizations : either as
- (a) me /ne, ne / before first or only verb syllables characterized by word or syllable y-/θ-prosody or as
- (b) mwɔ/no, no / before first or only verb syllables characterized by word or syllable w-prosody, and in the case of the latter realization, the vowel in the pronoun usually assimilates to the labialization feature statable in terms of w-prosody.
- (v) In other tense forms which have no prefixal exponence (i.e. positive or negative habitual, present and continuative as well as positive perfect and past), the 1st pers. sing. subject pronoun is unique in assimilating to the labialization feature of the following verb syllable statable either as word or syllable w-prosody or as syllable-initial w-/ɣ-prosody.
- (vi) In sentence-final position, the vowel in the 1st pers. sing. pronominal object me is usually elided in unemphatic speech resulting in a syllabic nasal :
- (28a) fa maa me / fa mǎ m(ɲ) /
(give it to me)
- (28b) fa medame / fa mǎdám(ɲ) /
(take me too)

- (vii) The 1st person pronouns necessarily refer to human beings; the singular is usually used by the speaker to refer to himself as a subject of discourse or identifies the speaker with a participant in the discourse's topic. The plural, on the other hand, may be interpreted as referring to me(n) 'I' in addition to one or more other persons, who may or may not include the addressee. It is in this sense of 'two or more' that ye 'we' is plural, but not morphologically the plural form of me(n) 'I'; that is to say, ye does not stand in the same relationship to me(n) as the singular noun nrenya 'man' does to its plural form mrenya 'men'.

2nd Person pronouns

- (i) The singular pronoun is a two-form term, the selection of either form being grammatically determined.
- (ii) In positive and negative direct imperative mood clauses, the plural, but not the singular, does have surface realization. The singular, however, has a phonological realization in certain contexts (for which see the section on direct imperatives in Chapter 3).

- (iii) The plural pronoun has the same shape as the 3rd pers. plur.
- (iv) In their referential meanings, the singular refers to one hearer and the plural to two or more hearers; and like the 1st pers. pronouns, the 2nd pers. pronouns necessarily refer to participant(s) in the situation of utterance, who are usually human beings. It is in this sense that ε/wɔ 'you' and bε 'you' are related as singular to plural.

3rd person pronouns

- (i) The 3rd pers. sing. pronoun, like the 2nd pers. sing. pronoun, is a two-form term (i.e. ɔ 'he, she, it' or ye 'he/him, she/her, it').
- (ii) In unemphatic speech, the vowel in the singular pronominal object ye 'him, her, it' occurring in pre-pausal position is usually elided.
- (iii) The 3rd pers. sing. pronoun ɔ is sometimes used as an indefinite or 'empty' subject with the copular verb ye followed by a complement denoting a physical condition or sensation, as in:

(1a) ɔye ɛhɔné

(lit. it's hunger. I'm hungry)

(1b) ɔye nafele

(I'm feeling sleepy)

or followed by an indirect object an essential 'sense-data' adjective complement (underlined) and a sentential complement introduced by ke 'that':

(2a) oye me fê ké wórá á

(lit. it's to me pleasant that you've come.
I'm pleased that you've come)

(2b) oye me nyáne ké wóambá á

(I'm sorry that you didn't come)

As an empty subject, the 3rd pers. sing. pronoun may also be used with the verb wó and the stative verbal form hia 'to be necessary' (of the dynamic verbal form kyia 'to be in need of'), followed by a ke-clause, as in:

(3a) wó ké yekó

(lit. it's necessary that we should go.
we ought to go)

(3b) hia ké yekó

(it's necessary that we should go)

And as an empty subject, the 3rd pers. sing. pronoun is usually used in the positive or negative perfect tense with the verb stems ka 'to remain' and kye 'to be long (time)':

(4a) yeha edwéke' ko

(lit. it has remained one matter. there's
one other matter.)

(4b) yeha ekyií ná meáwíe

(lit. it has remained a little before I finish.
I'm nearly finished)

(5a) membalé la, yehye

(lit. since I came, it has taken a long time.
I've been here a long time)

(5b) ɔhɔlé la, ɔtekyéle

(he has not been gone for long)

- (iv) The 3rd pers. plur. subject pronoun be 'they' is sometimes used in the habitual tense as the indefinite unspecified pronoun to refer to 'people in general', as in:

(6a) befele me Áka

(lit. they call me Aka. I'm called Aka)

(6b) bedi

(it's eaten/edible)

(6c) bakyi

(it's a taboo/not done)

It is also used in the past or perfect tense with an unspecified reference to an identifiable animate or human being and such constructions may be rendered in English by the passive, which Nzema does not have, as in:

(7a) bewole me Yálé

(lit. they borne me on a Friday. I was born
on a Friday)

(7b) begya ye

(lit. they have married her. She is married)

And also in the perfect tense, the 3rd pers. plur. pronoun may be used as empty subject, as in:

(8) bebɔ dɔne nsá

(lit. they've struck three bells.

It's three o'clock)

- (v) Generally speaking, the 3rd pers. sing. pronoun is used to refer to a human being, an animal or thing spoken about, and the plural form to two or more of such entities. Unlike 1st and 2nd pronouns, pronouns of the 3rd person do not necessarily refer to participants in the situation of utterance.
- (vi) It is to be noted, however, that these distinctions are syntactically neutralized in subject position; that is, a definite subject noun phrase, whether its referent is a human being, an animal or a thing, is pronominalizable by the same 3rd pers. pronoun. In object position, however, there is a syntactic distinction between animates and inanimates such that an animate definite object noun phrase is always pronominalizable, whereas a definite inanimate object noun phrase may or may not be pronominalizable: some transitive verbs favour pronominalization but others do not. The 3rd pers. sing. pronoun, in either subject or object position, makes no distinction, then, between animates and inanimates, human and non-human and is sex-neutral.

Emphatic pronouns

A word must be said about other sets of pronouns which may be provisionally termed 'emphatic' pronouns in contradistinction to the personal pronouns which may be regarded as unemphatic. Two sub-sets of emphatic pronouns are distinguished as intensive and contrastive:

Form II: Intensive Emphatic Pronouns Form III: Contrastive Emphatic Pronouns

1st pers. sing.	me-dá mé	má-me	'I'
2nd "	" ε-dá-wó	wó-me	'you'
3rd "	" ɔ-dá-yé	yé-me	'he, she, it'
1st " plur.	yε-dá-yé	yé-me	'we'
2nd/3rd "	bε-dá-bé	bé-me	'they'

The morphological constituency of the emphatic pronouns is relatable to the unemphatic personal pronouns. The constituent structure of the intensive set may be uniformly presented as:

Set I + dá + Set II; and in the case of the contrastive set, if the added affix is generalised as (ME), then the constituent structure of the 2nd pers. sing. - 3rd pers. plur. may be given as Set II + (ME)y/w. With particular reference to the 1st pers. sing., the normal arrangement of the constituent elements is reversed:

(ME)_a + Set II.

In strings where both emphatic and unemphatic pronouns co-occur, the normal linear ordering of the pronouns is emphatic before unemphatic, and among the emphatic pronouns, contrastive before intensive, as the following examples illustrate:

(31a) wómɔ́ édáwɔ́ ese ebábo mámé médámé

(lit. you yourself you say you will beat me myself)

(31b) ɔ́dáyé ɔ́ nwɔ́ édo ye

(he too he is unwell)

As a rule, pronouns cannot occur with determiners such as the definite article ne 'the' or with adjectives. The emphatic (intensive) pronouns are different from the unemphatic pronouns in that they may occur with the definite article or with an adjective:

(32a) ɔ́dáyé ne á lé éne

(that is so/the lot)

(32b) ɔ́dáyé kpányinlɛ nú

(old as he is)

It is also to be noted that in a narrative, the 3rd pers. sing. intensive pronoun may have anaphoric textual reference:

(33) "Medame noko mefua ɔ́ nzi ke bemaá yehoye ayia ne wɔ́eke.
(I also agree that we should go and hold the meeting there.)

Na yeha edweke ko noko mɔ́ɔ ɔ́wɔ́ ke yebɔ́ ye kpoke peneko a.
(But there remains one other matter that we ought to settle now.)

Yemɔ́ a le ke, kenle nzu nee donehwele ne boni

(That is/ ^{that} on which day and at what time)

yee ɔ́wɔ́ ke yeye ayia ne a?"¹

(ought we to hold the meeting?)

In the above text, the 3rd pers. sing. intensive pronoun yemɔ́ 'that' occurring in the third sentence refers anaphorically to the 'one other matter' mentioned in the second sentence.

1. The text is an extract (p.47) from a play in Nzema: J.K.Ellimah (1968). Ama Kodwo (Nwɔ́hoa Buluku), Accra ; Bureau of Ghana Languages.

C H A P T E R 6

CATEGORY VI: TRANSITIVITY

A set of seven kinds of syntactic relationship may be distinguished between the verb (with or without any affixes) and any items that may follow it in the same clause. These different syntactic relationships are dealt with by means of the seven terms: 1. transitive, 2. complex transitive, 3. intransitive, 4. complex semi-transitive, 5. semi-transitive, 6. ditransitive and 7. relational, set up within the category of transitivity.

Since the category is applicable to the verb and its grammatical relationship with any items that may follow it in the same clause, it would be unsatisfactory to refer to the verb as transitive, intransitive etc., except as an abbreviated reference, in this thesis or a lexicon of the language, to the grammatical relationships it may enter into with any items that follow it in the same clause.

The description presented here is necessarily restricted to the seven transitivity clause-types which involve either a single- or multi-word verb and excludes clauses which contain non-finite clause objects (or catenative pieces) or finite clause objects (variously referred to elsewhere in this study as subordinate nominal clause or sentential complementation).

The elements of clause structure abstracted from the various transitivity clause-types are: Subject, Verb, Object, Complement, Indirect Object¹ and Locative Adjunct, here abbreviated as S, V,

1. Sometimes also referred to as Dative in this thesis.

O, C, Ind. O and L respectively.

The different transitivity clause-types may be exemplified as follows:

- Type 1. Transitive: (1) eyevóle^S ne/sulo/^Vtweá^O ne
(the guest fears the dog)
- " 2. Complex
transitive: (2) be / fele / eyevóle^S ne / Kófi^C
(they call the guest Kofi)
- " 3. Intransitive: (3) Kofi^S / élesú^V /
(Kofi is crying)
- " 4. Complex
semi-transitive: (4) nrenyá^S ne / éwula^V / kúsu^O ne /
(the man has put the cat
kódokú^L ne ánu
in the sack)
- " 5. Semi-transitive: (5) tweá^S ne / éwolo^V / kodokú^L ne ánu
(the dog has gone into the sack)
- " 6. Ditransitive: (6) eyevóle^S ne / éhys^V / Kofi^{ind. O} / kúsu^O
(the guest has given Kofi a cat)
- " 7. Relational: (7a) tweá^S ne / lé^V / kpole^C
(the dog is fat)

(7b) S V C
e nwó / yé / se

(you are strong)

(7c) S V C
o ze / á le / Kofi

(his father is Kofi)

(7d) S V C
sysvóls ne / wó / abiales

(the guest is in the bathroom)

TYPE 1: TRANSITIVE CLAUSE (SVO)

The following clauses involving the verb stem kpónde 'to want, look for' exemplify one transitivity clause-type in which complementation occurs or the verb word is in syntactic relationship with any items that may follow in the same clause:

- (1a) S V O
nrenyá ne / kpónde / twea
(the man wants a dog)
- (1b) S V O
nrenyá ne / élskpónde / tweá ne
(the man is looking for the dog)
- (1c) S V O
nrenyá ne / élskpónde / ye twéa kpólé ne
(the man is looking for his big dog)
- (2) S V O
nrenyá ne / élskpónde / ye
(the man is looking for it)

In clauses (1a-c), the verb word is followed by one nominal object, albeit of different constituent structure in each case, and in (2) the verb word is followed by one pronominal object. Clauses like (1-2) in which the verb takes one nominal object as in (1a-c) or a pronominal object as in (2) are classified as transitive.

For present purposes, enough has already been said in the introductory chapter about complex verbs (e.g. si agole 'to perform a dance, to dance') which are analyzable as simple verb (si 'to perform') + object noun phrase (agole 'dance') or those like 2. tua zole 'to cover' which are analyzable as

simple verb (tua) + local inalienable noun phrase object (zole), and no more need be said here. The description of transitive clauses presented here is restricted to transitive clauses which involve 1) simple or single-word verbs and 2) verbal groups.

1. Transitive clauses with simple verbs

Generally speaking, object noun phrases occurring in transitive clauses may, on formal grounds, be sub-classified in terms of (a) animate and (b) inanimate, either of which may be specified as definite or indefinite.

(a) Animate noun phrase objects

As a rule, a definite animate noun phrase object is pronominalizable by ye 'him, her, it', whereas a corresponding animate noun phrase object which is indefinite is not pronominalizable, as the following pairs of transitive clauses illustrate:

(3a) Kofi élskpónde nrenyá / tweá ne
(Kofi is looking for the man/dog)

and

(3b) Kofi élskpónde ye
(Kofi is looking for him/it)

(4a) Akysé kponde nrenyá / twea
(Akysé wants a man/dog)

and

(4b)* Akysé kponde ye

- (5a) Kofí élekpónde raale ne
(Kofi is looking for the woman)

and

- (5b) Kofí élekpónde ye
(Kofi is looking for her)

- (6a) Kofí kpónde raale
(Kofi wants a woman)

- (6b) * Kofi kponds ye

In the transitive clauses (3a-b), the definite (i.e. post-modified by the definite article ne 'the') animate noun phrase, nrenya/twea ne 'the man/dog' in (3a) is replaced by the pronominal object ye 'him/it' in (3b). The corresponding indefinite (i.e. unmodified or modified by zero-article) animate object noun phrase, nrenya/twea 'a man/dog' in (4a) cannot be pronominalized, since alongside (4a) we shall never attest (4b).

Similarly, the definite animate nominal object raale ne 'the woman' in (5a) is pronominalizable as in (5b), whereas the corresponding indefinite nominal object in (6a) is not pronominalizable as the unacceptable clause (6b) confirms.

It is to be noted that the same object pronoun ye 'him, her, it' replaces a definite animate object noun phrase whose head noun is nrenya 'man' (3a), raale 'woman' (5a) and twea 'dog' (3a), which in English is pronominalized by him, her and it respectively. As already mentioned in Chapter 5, and the above examples confirm, in Nzema, unlike in English, the 3rd

pers. sing. object pronoun (as well as its corresponding subject and possessive pronoun) is sex-neutral and does not make a human/non-human (nor, after transitive verbs of sub-set A. II, an animate/inanimate) distinction.

Among transitive verbs which only take animate object noun phrases three sub-sets (I-III) may be set up in terms of

- (I) those which require an animate subject noun phrase;
- (II) those which require an inanimate subject noun phrase which may, on notional grounds, be either concrete or abstract;
- and (III) those which take personal pronoun object and require a subject noun phrase which is a genitive construction involving an animate possessive nominal and the possessed root form or the prefixed possessed form of an inalienable noun.

Sub-set I: Animate S + V + animate O

Members of this sub-set include:

- | | |
|------------------------|--------------------------------|
| 1. gya 'to marry' | 8. sisi 'to cheat' |
| 2. to 'to name after' | 9. belabela 'to deceive' |
| 3. sa 'to castrate' | 10. nwonlonwonlo 'to tickle' |
| 4. toa 'to report' | 11. nwunlonwunla 'to frighten' |
| 5. toa 'to stay with' | 12. boda 'to injure' |
| 6. yia 'to meet' | |
| 7. sukoka 'to imitate' | |

Taking item (7) as an example, we shall find :

(7a) Kofi élesúkoa eyevóle ne
(Kofi is imitating the guest)

(7b) Kofi élesúkoa ye/me)
(Kofi is imitating him/me

but not, with an inanimate object:

(7c)* Kofi elesukoa sanve ne
(Kofi is imitating the key)

Sub-set II: Inanimate S + V + Animate O

Member of this sub-set include:

1. kye 'to be tight for' (of dress)
2. mia 'to be tight for' (of dress)
3. kpolombolo 'to be loose for' (of dress)
4. ku 'to attack, affect'
5. ka 'to attack, affect'
6. tila 'to attack' (of measles, yaws)'
7. tu 'to attack' (of sore)'

Items (1-3) take concrete inanimate subjects, as in the following clauses with item (3):

(8a) teladéeé ne kpólombolo nrenyá ne
(the dress is loose for the man)

(8b) teladéeé ne kpólombolo ye/me
(the dress is loose for him/me)

Items (4-5), on the hand, take an inanimate subject noun phrase which refers to a psychological (or emotional) state:

- (9a) sya kú Kofí
(lit. anger has affected Kofi. Kofi is angry)

and

- (9b) ezulolé hánle ye
(fear attacked him)

or to a meteorological condition:

- (9c) syels kú bedá ne
(cold is affecting the child)

Such subject noun phrases as exemplified in (9a-c) above, may, by contrast with those in (8a-b), be regarded as abstract.

Items (6-7) take subjects whose referents are diseases or sickness of various kinds and may also be regarded as abstract, albeit observable:

- (10a) nzozoa édila o rá ne
(measles have attacked her child)
- (10b) hanlé édu Kofí
(a sore has affected Kofi)

Sub-set III: Genitive noun phrase + V + Animate O

Members of the third sub-set include:

1. ta 'to confuse'
2. ku 'to affect'
3. to 'to affect'
4. we 'to pain'
5. kpakye 'to ache'
6. bubu 'to weaken'
7. yelsyela 'to pain'
8. keka 'to itch'
9. tindi 'to itch'

Their use may be exemplified by items (1, 5, 9):

- (11a) Kofí ánye zo éda ye
(Kofi's eye has confused him. Kofi's confused)
- (11b) me tí élekpákye me
(my head is aching me)
- (11c) o nwó élstiíndi ye
(he is itching all over (to do something))

As the above examples (11a-c) show, in transitive clauses with verbs of this sub-set the possessive nominal in the subject noun phrase and the pronominal object are co-referential. Such clauses express a psychological state or sensation.

(b) Inanimate noun phrase objects

As a rule, an indefinite inanimate noun phrase object, like a corresponding animate object, occurring in a transitive clause is not pronominalizable,¹ as the following pairs of clauses illustrate:

- (1a) Kofí zé nwomá
(lit. Kofi knows learning, Kofi's learned)

1. In spite of this common feature, there are formal criteria which serve to distinguish animates from inanimates (for which see the section on identifying relational clauses).

(1b)* Kofi ze ye

(2a) o_{le} ezukoa

(he has money, he's rich)

(2b)* o_{le} ye

Indefinite inanimate pronoun object

Among transitive verbs a sub-class may be distinguished which may take an indefinite inanimate object pronoun expressed by the singular form debié 'something' and the suppletive plural form ninyené 'things'. The following clauses illustrate their use:

(3a) eysvóle ne élsdí debié

(the guest is eating (something))

and

(4a) Akýé tóne ninyené wo guá nú

(Akye sells things in the market)

Alongside (3a-4a) we shall not find:

(3b)* eysvole ne elsdi

(the guest is eating)

and

(4b)* Akýe tone wo gua nu

(Akye sells in the market)

Lakoff, G, (1970: 127) observes that after certain verbs (e.g. eat, drink) the indefinite direct object pronoun 'something' is optionally deletable. Generally speaking, this optional rule, which applies in English, does not apply to corresponding transitive clauses in Nzema; that is, the indefinite inanimate

pronoun debie 'something' as well as its plural form ninyene 'things' is not deletable (and, being indefinite, cannot be pronominalized) and we shall attest the above (a) examples, but not the (b) examples.

It is to be noted that the plural, but not the singular, form may be post-modified by the definite article ne 'things', and the object noun phrase ninyene + ne 'the things' may be pronominalized by the 3rd pers. sing. (rather than the plur.) pronoun, as in:

- (5a) yedone ninyené ne
(he has sold the things)
- (5b) yedone ye
(he has sold it)

Among transitive verbs which take the indefinite inanimate pronoun object three sub-sets (I-III) may be distinguished. Sub-set I consists of those verbs which co-occur only with the singular form. Members of this sub-set include:

- | | |
|-----------------|---------------------------|
| 1. di 'to eat' | 5. sukoa 'to learn' |
| 2. ys 'to do' | 6. sulo 'to be afraid of' |
| 3. to 'to cook' | 7. bolo 'to cover' |
| 4. ze 'to know' | 8. so 'to regard' |

Items (7-8) require a subject noun phrase which is a genitive construction involving the possessed form of the corporal inalienable noun enyele 'eye', as in:

- (6a) Kofi ánye bólo debié
(lit. Kofi's eye covets something. Kofi is covetous)

- (6b) o nyé énzɔ débié
 (he's disrespectful)

Item (8) sɔ 'to regard' usually occurs in a negative clause as in (6b) above, and may co-occur with the corresponding indefinite animate noun sonla 'person'; thus alongside (6b) we shall attest:

- (6c) o nyé énzɔ sɔnlá
 (lit. his eyes doesn't regard a person, he's
 disrespectful)

Positive transitive clauses involving the singular form debie 'something' have the syntactic property of being negated in at least two possible ways. Thus for the positive clause (7a) below with item (1) dí 'to eat':

- (7a) odi debié
 (he eats something)

we have the corresponding negative clauses (7b-c):

- (7b) onlí dēbié
 (he doesn't eat anything)

and

- (7c) onlí hwee
 (lit. he doesn't eat nothing, he eats nothing at all)

Similarly, corresponding to the positive clause (8a) below involving item (2) yɛ 'to do':

- (8a) eys debié
 (you do some (household) work)

we have the negative clauses (8b-c):

- (8b) enyé débié
(you don't do any work)

and

- (8c) enyé hwee
(you do no work at all)

In the above negative clauses (7-8(b-c)), the (b) examples are marked, in the verb word, by a negative prefix which, as already noted, is a nasal consonant homorganic with the stem-initial consonant of the verb stem. This first type of negative construction exemplified in the (b) examples is distinguished as the 'simple negative pattern'.

The alternative negative clauses exemplified in the (c) examples are marked by the same negative prefix occurring before the verb stem and, additionally, by the indefinite negative nominal hwee 'nothing', which functions in the (c) examples as object. This second type of negative construction is distinguished as the 'double negative pattern' and may be regarded as the marked form as distinct from the single negative pattern which is the unmarked form.

Sub-set II consists of transitive verbs which usually co-occur with the plural form ninyene 'things'. Members of the second sub-set include:

- | | |
|---------------------------|----------------------------|
| 1. kpuda 'to wash up' | 3. kpo 'to wash (clothes)' |
| 2. to 'to iron (clothes)' | 4. kela 'to order' |

The following positive and negative clauses with items (1-2) illustrate the use of members of sub-set II:

- (9a) olékpúda ninyené
(she is washing up (things))
- (9b) omkpúdá debié
(she is not washing up)
- (10a) olétó ninyené
(he's ironing (things))
- (10b) ondó débié
(he's not ironing anything)

On the basis of the above examples, we might say that positive clauses involving the plural indefinite object pronoun favour, in their corresponding negative clauses, the single negative pattern involving the singular object pronoun debie 'something' rather than the plural form ninyene 'things'. Sub-set III consists of transitive verbs like 1. kpomgba 'to sew' and 2. tone 'to sell' which may take either the singular or plural indefinite inanimate object pronoun, as in the following positive clause with item (2):

- (11a) ené Ákyé tóne debié/ninyené
(nowadays Akye sells something/things)

which has the corresponding negative form:

- (11b) ené Ákyé éndoné debié
(nowadays Akye does not sell anything)

As the above negative clause (11b) shows, positive clauses involving verbs which may take the singular or plural form also favour the single negative pattern involving the singular object pronoun rather than the plural form.

Definite Inanimate Noun Phrase Object

As regards definite inanimate noun phrase objects, it would appear that in a transitive clause the same definite inanimate object may be pronominalized after certain verb words but not after others. The illustrative pairs of clauses (1-4(a-b)) which follow involve four different verb stems (1. minli 'to lose', 2. kponds 'to look for', 3. nwu 'to find' and 4. fa 'to take') but two definite inanimate nominal objects: ezukoa ne 'the money' and sánve ne 'the key':

- (1a) Kofí éminli ezukoá ne
(Kofi has lost the money)
- (1b) Kofí éminli ye
(Kofi has lost it)
- (2a) Kofí élskponds ezukoá ne
(Kofi is looking for the money)
- (2b) Kofí élskponds
(Kofi is looking for it)
- (3a) Kofí énwu sánve ne
(Kofi has found the key)
- (3b) Kofí énwu ye
(Kofi has found it)
- (4a) Kofí éva sánve ne
(Kofi has taken the key)
- (4b) Kofí éva
(Kofi has taken it)

On the basis of the above clauses, the following descriptive statements can be made:

- (i) the definite inanimate object noun phrase ezukoa ne 'the money' occurring in (1a) after the verb stem 1. minli 'to lose' is pronominalizable as in (1b); but the same nominal object occurring in (2a) after the verb stem 2. knonds 'to look for' is not pronominalizable, or, in other words, is replaceable by a zero-pronominal object;
- (ii) similarly, the definite inanimate object noun phrase sanve ne 'the key' occurring after the verb stem 3. nwu 'to find' in (3a) is pronominalizable as in (3b), but after the verb stem 4. fa 'to take' in (4a), the same nominal object is not pronominalizable as in (4b).

It should be noted that Nzema clauses such as (2b) and (4b) above, which are relatable by pronominalization to corresponding transitive clauses, are not regarded as intransitive in relation to their English equivalents which are clearly transitive. And on kinaesthetic evidence, such clauses as (2b) and (4b), in which the pronominal object does not have surface realization or is replaced by zero-pronominal object, are characterized by a stronger glottal stop marked by creaky voice in pre-pause position than in corresponding clauses with a clause-final nominal or pronominal object.

In the discussion which follows an attempt is made to establish the conditions under which in transitive clauses a definite inanimate object may be pronominalized.

Mock, Carol G. (1969: 179) makes the following observation on this question: "This system (i.e. specifying the goal complement (Cg) as animate or inanimate) partially accounts for the deletion of the Cg which was mentioned earlier, because only inanimate Cg may be deleted. The actual conditions under which inanimate Cg is deleted, however, relates to factors outside transitivity: only when Cg is realized by an unemphatic pronoun and is also clause-final in a simple clause, is it deleted."

The absence, after a sub-class of transitive verbs, of a pronominal object in surface structure may perhaps be accounted for by two transformational rules:

(1) an optional rule which pronominalizes all definite inanimate nominal objects and (2) an optional rule which delete the resultant pronominal object. The present writer assumes that what she means is that the second deletion rule applies if (I) the pronominal object (in particular the 3rd pers. sing.) belongs to the set (i.e. Set II) of unemphatic pronouns, and (II) the pronominal object occurs in clause-final position in a simple clause.

We shall disregard the first condition which is not relevant since the emphatic (intensive or contrastive) pronouns do not replace noun phrases. As regards the second condition, it is, as a rule, the case that in a (simple) transitive clause the second rule applies to delete the pronominal object if it is clause-final.

Thus the first pronominalization rule operates on a structure such as:

- (5a) yekpomgba talades ne
 (she has sewn the dress)

to produce the intermediate string:

- (5b)* yekpomgba ye
 (she has sewn it)

in which the pronominal object, like its corresponding nominal object, is clause-final and on which the second deletion rule operates to produce the terminal string:

- (5c) yekpomgba
 (she has sewn it)

On the other hand, in the case of structures such as

- (6a) yekpomgba talades ne kenlema
 (she has sewn the dress nicely)

the pronominalization rule operates to produce:

- (6b) yekpomgba ye kenlema
 (she has sewn it nicely)

but the deletion rule is blocked since the pronominal object is not clause-final.

It is, however, not the case that the operation of the rules is restricted to simple clauses; they are equally applicable to clauses involving verbal groups (whether loose or close-knit collocations) as well as to catenative pieces and serial verbal constructions which may not be regarded as simple clauses since their underlying structure may be regarded as referable to a conjunction of clauses.

Thus the rules apply to a transitive clause involving a close-knit verbal group (e.g. die di 'to believe) such as:

- (7a) medie wo edweks ne médi
 (I believe your case)

to produce:

- (7b) medie medi
 (I believe it)

Similarly, the rules operate on a catenative piece such as

- (8a) mekpomgba telades ne méwie
 (lit. I have sewn the dress finished)

to produce:

- (8b) mekpomgha mewie
 (I have sewn it finished)

It is to be noted that in (7-8(a-b)), the deleted pronominal object does not take final position in the structure in which it occurs.

The catenative piece (8a) above may be recomposed as:

- (9a) mewie teladée ne kpómgba
 (lit. I have finished the dress sew)

on which the first pronominalization rule operates to produce:

- (9b) mewie ye kpómgba
 (I have finished sewing it)

but the second deletion rule is blocked.

And with particular reference to (8-9(a-b)), it is to be noted that the deletion rule is applicable in the case of (8a-b) where the deleted pronominal object occurs after the verb stem

kpomgba 'to sew' (which, as noted above (5a-b), favours deletion in a transitive clause), whereas the pronominal object replacing the same nominal object is not deleted in the case of (9a-b) where it occurs after the verb stem wie 'to finish'.

On the basis of the above evidence, it would appear that the deletion or retention of the inanimate pronominal object in surface structure is a feature of the particular verb stem which the object immediately ¹ follows in construction and such features of inanimate pronominal object deletion or retention should be indicated in the lexicon as part of the characteristic features associated with verbs capable of occurring in a transitive clause.

It was failure to realize this that led Carol Mock eventually to admit that "this system sub-classifying the complement (into animate and inanimate) is not completely satisfactory as it stands, because it does not account adequately for the occasional presence of a pronominal Cg with abstract reference" (181).

In respect of the feature of pronominal object deletion or retention, two main groups (A-B) may be set up among verbs which may, in a transitive clause, take a definite inanimate nominal object.

-
1. It is important to stipulate that the direct object noun phrase must immediately follow its verb, since in a ditransitive clause (e.g. yehile Kofi adenle ne 'he has shown Kofi the way') the direct object, which does not immediately follow its verb, is never pronominalizable.

Group A consists of transitive verbs (e.g. minli 'to lose' in (1a-b) and nwu 'to see' in (3a-b) after which a pronominal object replacing a definite inanimate object is retained. We shall refer to verbs of this group as transitive verbs which favour pronominalization.

Group B consists of those transitive verbs (e.g. kponds 'to look for' in (2a-b) and fa 'to take' in (4a-b) after which an inanimate pronominal object is deleted and, by way of contrast with members of Group A, we shall refer to verbs of Group B as transitive verbs which do not favour pronominalization.

Group A: Transitive Verbs Favouring Pronominalization

Two sub-sets (I-II) may be distinguished among verbs of Group A. Sub-set A.I consists of transitive verbs which only take an inanimate nominal object and favour its pronominalization. Sub-set A.II consists of transitive verbs which can take either an inanimate nominal object and favour its pronominalization or an animate nominal object which, as a rule, is pronominalizable.

Taking as an example of sub-set A.II the verb stem ske 'to spoil, destroy', we shall find with an inanimate object:

(10a) Kofi ézeke skpónlé ne
(Kofi has spoiled the table)

(10b) Kofi ézeke ye
(Kofi has spoiled it)

and with an animate object:

(11a) Kofi ézeke o rá raálé ne
(Kofi has spoiled his daughter)

(11b) Kofi ézeke ye
(Kofi has spoiled her)

Thus with transitive verbs of sub-set A.II, a transitive clause involving the pronominal object ye 'him, her, it' as in (10b, 11b) may, in isolation at least, be two-ways ambiguous as between an inanimate (10b) or an animate (11b) reference of the pronominal object. Verbs of sub-set A.II which favour the pronominalization of definite animate nominal objects as well as inanimate objects cannot serve to distinguish between animate and inanimate objects.

In the lists supplied below, members of each sub-set are further sub-divided in respect of a combination of syntactic and semantic features.

Sub-set A.I

Members of this sub-set include:

(1a) Ergative verbs of change of state

- | | | | |
|----|-----------------------------|-----|--|
| 1. | bo 'to break' | 7. | kpoto 'to make muddy
(of water)' |
| 2. | te 'to tear' | 8. | kpuke 'to burst' |
| 3. | sua 'to tear' | 9. | solo 'to make fade
(of cloth)' |
| 4. | bondò 'to dent' | 10. | tenda 'to make tangled
(of thread)' |
| 5. | fiti 'to make a
hole in' | | |
| 6. | kolo 'to melt' | 11. | pimgbi 'to crease' |

(1b) Ergative verbs of change of position

1. kenda 'to fasten'
2. minli 'to lose'

Sub-set A.II

Members of this sub-set include:

(1) Ergative verbs of change of state

1. sake 'to spoil'
2. doa 'to wet'
3. yela 'to burn'

(2) Catenative verbs

1. wie 'to exhaust, finish'
2. ze 'to know'

(3) Activity verbs of transitional events

1. nwu 'to find'
2. tone 'to sell'
3. kye 'to bind, catch'

Group B: Transitive Verbs not Favouring Pronominalization

As in the case of Group A verbs, two sub-sets (I-II) may be distinguished among verbs of Group B.

Sub-set B.I consists of transitive verbs which only take an inanimate nominal object and do not favour its pronominalization.

Sub-set B.II consists of transitive verbs which can take either an inanimate nominal object and do not favour its pronominalization or an animate nominal object which is usually pronominalizable.

Transitive verbs of sub-set B.II, unlike those of Sub-set

A.II, serve to distinguish animate from inanimate objects.

Thus with the verb stem kakye 'to remember' we shall find with an inanimate object:

(12a) mekakye edweké ne
(I remember the matter)

(12b) mekakye
(I remember it)

but with an animate object:

(13a) mekakye nrenyá ne
(I remember the man)

(13b) mekakye ye
(I remember him)

Sub-set B.I

Members of this sub-set include:

(1a) Activity verbs of change of state

- | | | | |
|----|---------------------------------------|-----|-------------------------|
| 1. | bɔ 'to weed' | 10. | sɔ 'to light' |
| 2. | dɔ 'to weed' | 11. | sɔ 'to solder' |
| 3. | pe 'to pound' | 12. | kpo 'to wash (clothes)' |
| 4. | ti 'to grind' | 13. | kpuda 'to wash up' |
| 5. | sinzi 'to peel' | 14. | kpomgba 'to sew' |
| 6. | tondo 'to toast' | 15. | wuda 'to blow' |
| 7. | kpomgbɔ 'to remove corn
off cob' | 16. | dua 'to sow' |
| 8. | si 'to pound' | | |
| 9. | kpɔlɔ 'to break open
(groundnuts)' | | |

(1b) Activity verbs of communication

- 17. kels 'to write'
- 18. kenga 'to read'
- 19. ka 'to say'

(1c) Activity verbs of transitional events

- 20. no 'to drink'
- 21. tie 'to listen'

Sub-set B.I

(1d) Other activity verbs of transitional events

- | | |
|---|---|
| 1. fe 'to struggle for:
to bale out water' | 9. filii 'to buy on
credit' |
| 2. fu 'to dig a hole' | 10. kpulu 'to spew out' |
| 3. gya 'to parcel out' | 11. wola 'to pour' |
| 4. nye 'to cut down | 12. tafe 'to lick' |
| 5. sa 'to hang up' | 13. rels 'to dry' |
| 6. to 'to throw' | 14. ye 'to remove' |
| 7. twe 'to pull' | 15. fula 'to collect |
| 8. fende 'to scatter' | 16. senza 'to change
(money, clothes)' |
| | 17. fa 'to take' |

(1e) Activity verbs of durational events

- 1. to 'to cook'
- 2. twe 'to gnaw'
- 3. kposa 'to chew'
- 4. tolo 'to descend'

(1f) Activity verbs of adornment

which may be used ditransitively

- | | | | |
|----|--------------------------|----|--------------------------|
| 1. | soa 'to wear (or carry) | 5. | bo 'to put on |
| | on head' | | (turban)' |
| 2. | keda 'to put on (cloth)' | 6. | mo 'to put on |
| | | | (loin cloth)' |
| 3. | kye 'to put on (belt)' | 7. | wula 'to put on (shoes)' |

As already mentioned, verbs of sub-set B.I do not, as a rule, favour pronominalization. With items (1-21), however, a pronominal object is realized in clauses where a manner adverbial (e.g. kénlema 'nicely', bo 'well', kpale 'very well' and moo 'very much') occurs in clause-final position. Thus with item (11) so 'to solder' we shall find, without a clause-final manner adverbial:

(14a) yezo kyénze ne
(he has soldered the pan)

(14b) yezo
(he has soldered it)

but, with a clause-final manner adverbial:

(15a) yezo kyénze ne kénlema
(he has soldered the pan nicely)

(15b) yezo ye kénlema
(he has soldered it nicely)

Sub-set B.II

Members of the sub-set include:

(1) Verbs of inert perception or cognition

which may take a ke 'that'-clause

1. kulo 'to like, love'
2. kakye 'to remember'

(2a) Activity verbs which may be
used ditransitively

1. biza 'to ask'
2. kile 'to show, point out'
3. die 'to receive, take'
4. sela 'to syringe, take enema'

(2b) Activity verbs of transitional events

1. di 'to eat, fuck'
2. so 'to peck (at)'
3. wua 'to steal'
4. kpoda 'to separate, pacify'
5. nea 'to look at/after'
6. baka 'to wind round'
7. kakyi 'to turn over'

(2c) Activity verbs of durational events

1. sukoa 'to learn, imitate'
2. kponde 'to look for'

2. Transitive clauses with verbal groups

The following (a) transitive clauses involve the four verbal groups: 1. bu sia 'to waylay; to rebound upon', 2. so nea 'to sample, taste, to test', 3. ta kpunla 'to flatulate at', and 4. to bo 'to throw at':

- (1a) yebu yézia nrenyá ne
(he has waylaid the man)

- (1b)* yebu (nrenya ne)
(1c)* yezia nrenya ne
(2a) yezo enkoáne ne yénlea
(she has tasted the soup)
(2b)* yezo enkoáne ne
(3a) yeda yékpunla nrenyá ne
(he has flatulated at the man)
(3b) yeda
(he has flatulated)
(4a) yedo bole yébo nrenyá ne
(he has thrown the stone at the man)
(4b) yedo bolé
(he has thrown a stone)

In clause (1a) involving the verbal group 1. bu sia 'to waylay', there is, and can only be, one object noun phrase which occurs after the auxiliary verbal element. Alongside (1a), we shall never find clause (1b), resulting from the deletion of the auxiliary constituent, nor clause (1c), resulting from the deletion of the principal constituent; that is, with a transitive verbal group such as bu sia 'to waylay', the omission of either constituent produces an unacceptable clause as in (1b-c). In clause (2a) involving the verbal group 2. so nea 'to taste', the only object noun phrase occurs after the principal verb. And alongside the transitive clause (2a), we shall never attest (2b), in which the auxiliary constituent has been omitted.

In clause (3a) with the verbal group 3. ta kpunla 'to flatulate at', however, the only object noun phrase occurs after the auxiliary verb, and alongside (3a) we shall find the acceptable clause (3b), in which the auxiliary constituent has been omitted.

Clause (4a) involving the verbal group 4. to bo 'to throw at' is different in that it contains two nominal objects: the first, an inanimate object noun phrase, occurs after the principal verb, and the second, an animate object noun phrase, occurs after the auxiliary verb. And as in the case of clause (3a), it is also possible with clause (4a) to omit the auxiliary constituent without producing an unacceptable clause, as the acceptable clause (4b) confirms.

On the basis of the different syntactic properties noted above, transitive verbal groups may be divided into two main groups (A-B).

Group A consists of verbal groups which can take only one object noun phrase and do not allow the omission of the auxiliary (or either) constituent. Group A may further be sub-divided into two sub-sets (I-II)

Sub-set A.I consists of verbal groups such as 1. bu sia 'to waylay' in (1a), whose object noun phrase occurs after the auxiliary verb; and Sub-set A.II consists of verbal groups like 2. so nea 'to taste', whose only object noun phrase occurs after the principal verb as in (2a). Verbal groups of Group A are regarded as exemplifying a close-knit collocation.

Group B consists of those transitive verbal groups which may take either one or two object noun phrases and allow the omission of the auxiliary constituent. Two sub-sets (I-II) may also be distinguished among members of Group B.

Sub-set B.I consists of verbal groups like 3. ta kpunla 'to flatulate at' occurring in (3a) which can only take one object noun phrase occurring after the auxiliary verb and allow the omission of the auxiliary constituent.

Members of sub-set B.II are those verbal groups like 4. to bɔ 'to throw at' in (4a) which take two object noun phrases, one occurring after the principal verb and the other after the auxiliary verb, and allow the omission of the auxiliary constituent. Verbal groups of Group B are regarded as exemplifying a loose collocation.

Sub-set A.I Transitive verbal groups

Members of this sub-set are rare and are represented by one item bu sia, which may mean (i) 'to waylay' or (ii) 'to rebound upon'. In its first sense, it takes an animate subject noun phrase and an animate object noun phrase as in:

- (1a) Kofí-ébu ézia nrenyá ne
(Kofi has waylaid the man)

In its second sense, it takes an inanimate subject noun phrase and an animate object noun phrase, which is usually a pronominal object, as in:

- (1b) wɔ áyilé ne bábu ázia wɔ
(your fetish will rebound upon you)

It is to be noted that in (1b) above, the possessive pronoun in the subject noun phrase and the pronominal object are co-referential, a syntactic property which further serves to distinguish the two senses of this verbal group.

This item, in either sense, is regarded as a close-knit collocation

Sub-set A.II. Transitive verbal groups

Members of this sub-set include:

1. twe sia 'to withdraw (statement)'
2. tu sie 'to postpone'
3. bo tela 'to step over'
4. so nea 'to taste, sample; to test'
5. die di 'to believe; to trust, believe in'
6. fa di 'not to pay debt; to go scot free'

In these verbal groups the principal verb, regarded as a simple verb, may be used transitively, whereas the auxiliary verb, as a simple verb, may occur in a intransitive clause (item 1), a complex semi-transitive (item 2) or a transitive clause (items 3-6) clause.

All the items take only an animate subject noun phrase. Items (1-2) take only an inanimate object noun phrase, as exemplified by

- (1) owo ké lóya Kofí twé ye édwské ne sía
(Lawyer Kofi ought to withdraw his statement)
- (2) bədu edwské ne bəzie
(they have postponed the case)

Item (3), on the other hand, may take an animate or inanimate object noun phrase:

- (3a) yebo nrenyá ne yédela
(he has stepped over the man)

(3b) yebo nzulé ne yédala

(he has stepped over the pool of water)

Items (4-5) have two slightly different meanings each depending on whether they take an animate or inanimate object noun phrase. Item (4), in its first sense of 'to taste sample', takes an inanimate object noun phrase, as in:

(4a) Akyé ézo enkoáné ne énléa

(Akye has tasted the soup)

And in its second sense of 'to test, examine', it takes an animate object noun phrase:

(4b) Akyé zóle nrenyá ne nléanlé

(Akye tested the man)

It is to be noted that the verbal group 4. so nea 'to test, examine' has the nominalized form sonéá 'examination', which is relatable to its second meaning.

Item (5) in its first sense of 'to believe' takes an inanimate object noun phrase:

(5a) medie wo nwórá ne médi

(I believe your story)

And with the second meaning of 'to trust, believe in', it takes an animate object noun phrase:

(5b) medie nrenyá ne médi

(I believe the man)

Item (4) has also the nominalized form diedi 'belief' which is relatable to its second meaning.

Item (6) in the sense of 'not to pay a debt' usually takes an inanimate object noun phrase, as in:

- (6a) nrenyá ne éva ezukoá ne éli
(the man did not pay the money (that he owed))

In the second sense of 'to go scot free', it is a reflexive verb:

- (6b) nrenyá ne éva o nwó éli
(the man has gone scot free)

and belongs to the sub-class of reflexive verbs whose reflexive complement does not contrast with a pronominal object, as the unacceptable clause (6c) below confirms:

- (6c)* nrenya ne eva ye eli

The characteristic properties of verbal groups of this sub-set include:

- (I) As noted above, members of this sub-set only take an animate subject noun phrase and one object noun phrase (animate or inanimate), which occurs after the principal (or first) verb.
- (II) Where the definite object noun phrase is inanimate it is not pronominalizable by ye 'it'.

Thus, for example, clause (2) above:

- (2) bedu edweké ne bézie
(they have postponed the case)

is relatable by the pronominalization of the object noun phrase to (2a) below:

- (2a) bedu bézie
(they have postponed it)

We shall never attest:

(2b) * bedu ye bezie

which contains the pronominal object ye 'it'.

We may, therefore, say that the principal verb in transitive verbal groups of this sub-set belongs to the sub-class of simple transitive verbs which do not favour the pronominalization of a definite inanimate object noun phrase.

(III) And as mentioned above, the omission of the auxiliary constituent (or of either constituent) results in an unacceptable clause. Thus alongside (2), we shall never find:

(2c) * bedu edweks ne

nor (2d) * bezie

(IV) Clauses involving verbal groups of this sub-set (A.II) as well as those of sub-set (A.I) are not derivable from underlying conjoined structures.

(V) The two verbs co-occurring within the verbal group are fused into a new idiomatic combination, the meaning of which is not deducible from its component parts: the entire verbal group has acquired a new meaning. Members of this sub-set exemplify a close-knit collocation.

Sub-set B.I: Transitive verbal group

Members of this sub-set are few and represented by the items 1. ta kpunla 'to flatulate at' and 2. di wula 'to instigate'.

(i) Both items take an animate subject noun phrase and one object noun phrase, which is animate and occurs after the auxiliary verb, as in:

(1) Akyé éda ékpunla nrenyá ne
(Akye has flatulated at the man)

(2) béli bégwula bédá né
(they have instigated the child)

(ii) With item (1), but not in the case of item (2), the omission of the auxiliary constituent does not result in an unacceptable clause. Thus alongside (1) we shall find, with the omission of the auxiliary constituent, the acceptable intransitive clause:

(1a) Akyé éda
(Akye has flatulated)

But alongside (2) we shall not find:

(2a) * béli

(iii) The structure underlying (1) above may be regarded as derivable from a pair of sentences of the type:

(1.I) Akys éda
(Akye has flatulated)

(1.II) *Akys ékpunla nrenya ne
(Akye has affected the man)

(iv) In view of their different characteristics, item (1) ta kpunla is regarded as a loose collocation, and item (2) as a close-knit collocation. Like other instances of close-knit collocation, item (2) has the nominalization diwúlá 'instigation'.

Sub-set B.II: Transitive verbal group

Members of this sub-set include:

1. tone maa 'to sell for (on behalf of)'
2. to bo 'to throw at'
3. to (edwene) sa 'to sing (a song) against'
4. ka (edweke) tia 'to say (something) against'

The following pairs of clauses involving items (1-2) illustrate:

- (1a) Akyé édone Kofi súá ne émaa ye
 (Akys has sold Kofi's house for him)
- (1b) Akyé édone ye émaa ye
 (Akys has sold it for him)
- (2a) yedo bolé ne yébo nrenyá ne
 (he has thrown the stone at the man)
- (2b) yedo yébo nrenyá ne
 (he has thrown it at the man)

With the verbal group 1. tone maa 'to sell for' in (1a-b), the indefinite inanimate object noun phrase occurring after the principal verb is pronominalizable by ye 'it' as in (1b), whereas in the case of item 2. to bo 'to throw at' in (2a-b), the principal verb does not favour the pronominalization of its definite inanimate object noun phrase, as in (2b).

The characteristic properties of members of this sub-set are:

- (I) Like members of Group A.II, members of this sub-set usually take an animate subject noun phrase. But unlike members of Group A, verbal groups of

this sub-set take two object noun phrases; the first¹, which is usually inanimate, occurs after the principal verb and the second occurring after the auxiliary verb is usually animate, but may be inanimate in the case of item (2), as exemplified in (3):

(3) yedo bolé ne yébo ahwehwé ne ánu
(he threw the stone at the mirror)

(II) The principal verb may or may not favour the pronominalization of a definite inanimate object noun phrase occurring after it as (1-2(a-b)) illustrate.

(III) And as noted above, the auxiliary constituent may be omitted without producing an unacceptable clause. Thus alongside (1a) and (2a) above, we find respectively:

(1c) Akyé édone Kofí súá ne
(Akye has sold Kofi's house)

and (2c) yedo bolé ne
(he has thrown the stone)

There are, of course, slight differences in meaning between the full clause and its corresponding reduced clause. Thus by (1a) we understand that 'Akye sold Kofi's house with Kofi's knowledge and consent', whereas (1c) means that 'Akye sold Kofi's house probably without Kofi's knowledge or consent'. And the full clause (2a) means that 'he threw a stone and the stone hit the man', whereas the reduced clause (2c) means that 'the stone which he threw may not have been directed at anybody'.

1. With items (3-4) the principal (or first) verb plus the inanimate nominal object may be regarded as constituting a complex verb.

(IV) Transitive clauses involving verbal groups of this sub-set, like those of sub-set B.I., may be regarded as derivable from a conjoined underlying structure made up of a pair of transitive clauses (or possibly a transitive and a ditransitive clause¹). Thus, it is suggested that (4) below:

(4) Akýs édo bols ébo nrenyá ne
(Akye has thrown a stone at the man)

is derivable from:

(4.I) Akye sdo bols
(Akye has thrown a stone)
(4.II) bols ébo nrenya ne
(a stone has hit the man)

Members of this sub-set (B.II), like those of sub-set (B.I), are regarded as loose collocations. The auxiliary verbs in such verbal groups roughly correspond to preposition in English and constitute a closed set. Each auxiliary verb may not co-occur with any other principal verb: we may, therefore, say that the auxiliary verbs are subject to rules of distributional restriction.

We might also include in this sub-set the compound verb 5. buke to nwols 'to open (and leave) ajar' (and its reduplicated form bukebuke gua nwols which usually takes a plural object noun phrase) as exemplified in:

-
1. Alternatively we may derive (4) from:
- (4.I) Akye sdo bols (Akye has thrown a stone)
(4.II) Akye ébo nrenya (Akye has hit the man with a stone)
be bols

- (5a) yebuke alénke ne yédo nwolé
(he has left the door ajar)
- (5b) yebuke yédo nwolé
(he has left it ajar)
- (6a) yebukebuke nlénke né mo yégua nwolé
(he has left the doors ajar)
- (6b) yebukebuke yégua nwolé
(he has left them ajar)

As the above examples show, both items take an animate subject noun phrase and the inanimate object noun phrase occurring after the principal verb is not pronominalizable by ye 'it' as in (5b) (nor by the plural pronominal object be 'them') as in (6b). And alongside, clauses (5a) and (6a) we shall find respectively:

- (5c) yebuke alénke ne
(he has opened the door)

and (6c) yebukebuke nlénke né mo
(he has opened the doors)

from which the auxiliary constituent has been omitted.

And (5a), for example, is derivable from a pair of underlying clauses of the type:

- (5a.I) yebuke alenke ne
(he has opened the door)
- (5a.II) yedo alenke ne nwolé
(he has left the door ajar)

The compound verbs 5a. buke to nwolé 'to open ajar' and 5b. buke-
buke gua nwolé 'to open ajar' are regarded as exemplifying a
loose collocation.

REFLEXIVE CLAUSES

Lyons, J. (1968: 361) defines a reflexive construction as "one in which the subject and the object refer to the same person (or thing)."

It should be noted, however, that it is not all constructions in which there is referential identity or co-referential relation between the subject and object noun phrase that may be classified as reflexive. Within the structure of the same (simple or multi verbal) clause, co-referential relation may exist between I) the subject noun phrase and the possessive pronoun in the object noun phrase, and II) the possessor noun phrase in the nominal phrase subject and the pronominal object.

Co-referentiality of the first type is exemplified by the following clauses (1-3):

- (1a) Kofí bía o nwó
 (Kofi washes himself)
- (1b.I) mebia me nwó
 (I wash myself)
- (1b.II) ebia e nwó
 (you wash yourself)
- (1b.III) obia o nwó
 (he/she washes him/self)
- (1b.IV) ysbia ye nwó
 (we wash ourselves)
- (1b.V) bebia be nwó
 (you/they wash your/themselves)

(2a) Kofí neé Akýé zoho be nwó
(Kofi and Akys resemble each other)

(2b.I) Yezoho ye nwó
(We resemble each other)

(2b.II) bezohó be nwó
(you/they resemble each other)

and

(3a) Kofí émua o nlóá
(lit. Kofi has shut his mouth. Kofi has shut up)

(3b) memua me nlóá
(I have shut up)

In the above clauses, the object noun phrase in each case is a genitive construction, in which a possessive pronoun (singular or plural) is in genitive relation with the possessed root form of an inalienable noun. In clauses (1a-b) and (2a-b), the object noun phrase is marked by the possessed root form nwo 'self' of the local inalienable noun nwolé 'exterior, self', whereas in (3), the object noun phrase contains the head-noun nloá, which is the possessed root form of the corporal inalienable noun enloánlè 'mouth'.

A comparison of (1a-b) and (2a-b) shows that in the former the subject noun phrase is either singular (1.b II-III) or plural (1.b IV-V), whereas in the latter, the subject noun phrase is necessarily plural; that is to say, in (1a-b) the verb word bia 'to wash' may take a singular or plural subject and in (2a-b) the verb word soho 'to resemble' necessarily requires a plural subject. Clauses such as (1a-b) in which I) the verb

word may take either a singular or plural subject, II) the subject noun phrase is co-referential with the possessive pronoun in the object noun phrase, and III) the object noun phrase is marked by nwo 'self' are classified as reflexive; and since it is the object noun phrase (rather than the subject noun phrase as in (4a-b) below) that contains the reflexive marker nwo, reflexive clauses exemplified by (1a-b) are distinguished as objective reflexive.

On the other hand, clauses such as (2a-b) in which I) the verb word obligatorily requires a plural subject noun phrase, II) the subject noun phrase is also co-referential with the possessive pronoun in the object noun phrase, and III) the object noun phrases is marked by nwo 'self' constitute one sub-type of reciprocal clauses, subsequently distinguished as the TUP (i.e. thematically undifferentiated pattern) + reciprocal complement.

Depending on the kind of clause of whose structure it is a part the object noun phrase marked by nwo 'self' is designated as a reflexive or reciprocal complement.

Clauses exemplified by (3a-b) are neither reflexive nor reciprocal, despite the co-referential relation between the subject noun phrase and the possessive pronoun in the nominal object. In (3) the verb mua 'to shut' plus the corporal inalienable noun enloanle 'mouth' make up a complex verb. Co-referentiality of the second type is exemplified in (4-5):

(4a) Kofi ánwò sdo ye

(lit. Kofi's self has diseased him. Kofi is ill)

(4b.I) me nwó édo me

(I am ill)

(4b.II) ɔ nwó édo ye

(he is ill)

(4b.III) ye nwó édo ye

(we are ill)

(4b.IV) be nwó édo be

(they are ill)

and

(5a) Kofí áti élékpákye ye

(lit. Kofi's head is aching him. Kofi's got a headache)

(5b) me tí élékpákye me

(I've got a headache)

In the above clauses, it is the subject noun phrase (and not the object noun phrase as in (1-3) above) that is a genitive construction. Clauses like (4a-b) in which the nominal subject is in genitive relation with the prefixed possessed form (anwo 'self' in (4a)) or the possessed root form (nwo 'self' in (4b)) of the reflexive marker nwole may be regarded as reflexive; and since it is the nominal subject (rather than the nominal object as in (1a-b)) that contains the reflexive marker, reflexive clauses exemplified by (4a-b) are designated as subjective reflexive in contradistinction to objective reflexive clauses exemplified in (1a-b)

On the other hand, clauses such as (5a-b), like clause

(3a-b), in which the possessive nominal is in genitive relation with the possessed form of a corporal inalienable noun (i.e. etile 'head') are not considered reflexive.

We sub-divide reflexive clauses, then, in terms of (1) objective reflexives and (2) subjective reflexives and in what follows verbs which may occur in each sub-type of reflexive clause are sub-classified.

1. Objective reflexives

Two main groups (A-B) of verbs capable of occurring in objective reflexive clauses may be distinguished.

Group A. Obligatorily reflexive verbs

Members of this group are characterized by the following syntactic properties: I) they obligatorily require the reflexive complement, and II) their reflexive complement does not contrast with a personal pronominal object (i.e. ye 'him/her' or be 'them'). Thus with the obligatorily reflexive verb nrinzi 'to wash' we shall attest the past tense paradigm:

(6a) menrinzinlè me nwó

(I washed myself)

(6b) enrinxinle e nwó

(you washed yourself)

(6c) onrinzinle o nwó

(he/she washed him/herself)

(6d) ynrinxinle ye nwó

(we washed ourselves)

(6e) bènrxinzinle be nwó

(you/they washed your/themselves)

This verb, however, does not allow the omission of the reflexive complement as the unacceptable clause (7a) indicates:

(7a)* onrinzinle
(he washed)

nor takes a personal pronominal object in contrast with the reflexive complement, as the ungrammatical clause (7b) below confirms:

(7b)* onrinzinle ye
(he washed him)

Other members of this group include:

1. kye file 'to unite', 2. tu 'to show off', 3. fele 'to show off', 4. bɛlɛ (aze) 'to humble', 5. nu 'to regret', 6. tenre 'to stretch oneself, have a lie-down', 7. ps 'to travel', 8. nyia 'to obtain (wealth)', 9. mia 'to endeavour', 10. gyinla 'to compose', 11. da (zo) 'to be naked', 12. kpa 'to undress', 13. ka 'to hurry', 14. ka 'to start', 15. fa di 'to go scot free', 16. fa maa 'to sacrifice oneself', 17. kyikyí 'to towel', 18. wowo 'to wash'

Of these obligatorily reflexive verbs, item (1) co-occurs with a plural subject noun phrase as in the imperative mood clause:

(8a) bemaá yéhye yé nwó fíle
(let us unite)

All others may take a singular or plural subject noun phrase.

Thus item (15) is possible with a singular subject noun phrase:

(9a) nrenyá ne éva ɔ nwó éli
(the man has gone scot free)

(9b) yeva ɔ nwó yéli
(he has gone scot free)

as well as with a plural subject noun phrase:

(10a) menli né mo éva be nwó éli
(the people have gone scot free)

(10b) beva be nwó béli
(they have gone scot free)

Items (17-18), which are fossilized reduplicated forms, are also possible with singular or plural subject noun phrase as in the following perfect tense paradigm involving kyikyí 'to towel':

(11a) mekyikyí me nwó
(I have towelled myself)

(11b) wokikyí e nwó
(you have towelled yourself)

(11c) yekikyí o nwó
(he has towelled himself)

(11d) yskyikyí ye nwó
(we have towelled ourselves)

(11e) bskyikyí be nwó
(they have towelled themselves)

Group B. Objective reflexive verbs

Two sub-sets (I-II) of Group B objective reflexive verbs may be distinguished.

Group B.I: Implicitly reflexive verbs

Reflexive verbs of this sub-set have the following characteristics:

- I) they allow the omission of the reflexive complement

without any change in the basic meaning of the clause; and II) as a rule, they may not take a personal pronominal object in contrast with the reflexive complement. Implicitly reflexive verbs in the language are few and include: 1. knuti 'to snatch (oneself) free', 2. tu 'to march, proceed (en masse)', 3. bia 'to wash', 4. kpokpa 'to be smear, anoint', 5. bo mōdenle 'to endeavour, try'. The use of items (1-3), for example, is exemplified by the following pairs of clauses:

(12a) yekputi o nwó
 (he has snatched himself free)

(12b) yekputi
 (he has snatched himself free)

(13a) ysdule ye nwó twí yéhole ské ne
 (we marched en masse (and) went there)

(13b) ysdule twí yéhole ské ne
 (we marched en masse (and) went there)

and (14a) mebia me nwó
 (I have washed myself)

(14b) mebia
 (I have washed)

With items (1-2), the reflexive complement can never contrast with a personal pronominal object. Thus alongside (12a), for example, we shall never find:

(12c) * yekputi ye
 (he has snatched him free)

With the implicitly reflexive verb bia in the sense of 'to bathe', the reflexive complement may contrast with a pronominal object;

thus alongside (14a-b) we shall find:

(14c) mebia ye

(I have bathed him/her)

We might, at this stage, distinguish the obligatorily reflexive verb nrinzi 'to wash' from the implicitly reflexive verb bia 'to wash, bathe'. With the verb nrinzi 'to wash', a clause such as

(15a) Akyé nrínzinle o nwó

(Akye washed herself/him)

is semantically two-ways ambiguous. In its reflexive interpretation it means 'Akye washed herself', and in its possible non-reflexive interpretation it means 'Akye washed somebody else', as the acceptable clause (15b) below confirms:

(15b) Akyé nrínzinle o rá Kófi ánwó

(Akye washed her son Kofi)

And as mentioned above, the reflexive complement is neither deletable nor contrasts with a non-co-referential pronominal object (7a-b).

With the verb bia 'to wash, bathe', however, only the reflexive interpretation is possible of clause (16) below correspondent to (15a) above:

(16) Akyé bíale o nwó

(Akye washed herself)

And as noted above, with this verb the reflexive complement is not only deletable but also contrasts with a non-co-referential personal pronoun object (14b-c).

Group B.II Optionally Reflexive Verbs

Members of this sub-set may take a reflexive complement to denote co-reference in contrast with a non-co-referential pronominal object. Thus the verb to alenks nu 'to lock up', for example, may take a reflexive complement:

- (13) yedo o nwó álénks nú
(he has locked himself up)

as well as a non-co-referential pronominal object:

- (14) yedo ye álénks nú
(he has locked him up)

In (13), the pronominal subject and the possessive pronoun in the reflexive complement are co-referents, whereas in (14) the pronominal subject and the pronominal object are not.

Other optionally reflexive verbs include: 1. nea 'to look after; take care of', 2. benle 'to make invulnerable', 3. sulo 'to be afraid of', 4. kulo 'to love', 5. maa zole 'to lift up', 6. fa sie 'to keep', 7. die di 'to believe', 8. sisi 'to cheat'.

2. Subjective Reflexives

Subjective reflexives clauses may be further exemplified by:

- (15a) nrènyá ne ánwo éhyele ye
(the man is in difficulty)
- (15b) me nwó éhyele me
(I am in difficulty)
- (15c) o nwó éhyele ye
(he is in difficulty)

- (15d) be nwó éhyele be
(they are in difficulty)

and

- (16a) bədá ne ánwo életé ye
(the child is enjoying himself)
- (16b) ɔ nwó életé ye
(he is enjoying himself)

As the above examples show, in a subjective reflexive clause, both the prefixed possessed form ánwo (15a, 16a) and the possessed root form nwo (15b-d), 16b) may occur, in complementary distribution, within the subject noun phrase.

By the way of contrast with (15-16) above, which are transitive clauses, subjective reflexive constructions may be relational clauses involving either the copular verb le 'to be', as in the following clause in the perfect tense:

- (17a) ɔ nwó éye ye wílúwílú
(lit. his self has become to him warm.
he is happy)

or the copular verb ye 'to be', as in

- (17b) ɔ nwó yé ye fé
(lit. his self is to him sweet. he enjoys sex)

It is to be noted that with the relational clauses (17a-b) there is co-referential relation between the possessive pronoun in the subject noun phrase and the dative pronoun.

Semantically, subjective reflexive clauses express psychological states. Subjective reflexive verbs which denote

psychological states include: 1. te 'to be enthused', 2. dwe 'to be out of trouble', 3. kye 'to be in difficulty', 4. to 'to be unwell', 5. dwene 'to be in pains', 6. wozo 'to shake, shiver', 7. golo 'to faint'.

Reflexive Nominalization

It should be mentioned that verbs which occur in objective or subjective clause are capable of a type of nominalization which may be provisionally termed 'reflexive' nominalization. The internal constituent elements of such nominalizations are: the prefixed possessed form anwo (of the reflexive marker nwole 'self') + the verb (underlined) + the nominalizing suffix -le, which may be omitted as in (19-20) below. The following examples illustrate:

<u>Nominalization</u>	<u>Underlying reflexive structure</u>
1. <u>Objective reflexive verbs</u>	
<u>Group A</u>	
(18) anwodúlé 'bragging' <u>otu</u> o nwo 'he shows off'	boastfulness'
(19) anwofámaá 'self- <u>ofa</u> o nwo <u>amaa</u> 'he sacrifices	sacrifice, himself'
	self-giving'
(20) anwónyíá 'wealth, <u>yenyia</u> o nwo 'he is rich/'	riches' wealthy'

Group B.I

- (21) anwomiálés 'endeavour' omia o nwo 'he makes an effort'

Group B.II

- (22) anwohúlólés 'self-love' okulo o nwo 'he loves himself'

2. Subjective reflexive verbs

- (23) anwodéslés 'enthusiasm' o nwo elats ye 'he is enthused'
- (24) anwodólés 'illness' o nwo edo ye 'he is ill'
- (25) anwogólólés 'fainting' o nwo egolo ye 'he has fainted'

Simple verb stem V. their Reduplicated Forms

The verb in a reflexive clause may be a reduplicated verbal form, and the capability of occurrence in a reflexive clause constitutes one synchronic means of distinguishing a simple verb stem from its reduplicated form.

Objective reflexive reduplicated verbs

With some verbs, the simple verb stem may not occur in a reflexive clause, whereas its reduplicated form may function as an obligatory reflexive verb. Thus with the pair of verbal forms: nya 'to bend (fish)'/nyenya 'to fold', the simple verb stem is used transitively, as in:

- (26a) Kofí énya fésé ne.
(Kofi has bent the fish)

whereas the reduplicated form may function as an obligatory reflexive verb:

(26b) Kofí ényenya o nwó

(Kofi has folded himself)

Other pairs similarly distinguished include: 1. kua 'to gather' /kuohua 'to prepare', 2. sie 'to keep' /siezie 'to dress up', 3. boa 'to gather' /booboa 'to prepare'.

Subjective reflexive reduplicated verbs

With other verbs, the simple verb stem may not occur in a reflexive but its reduplicated form may be possible in a subjective reflexive clause. Thus with the pair of verbal forms: ti/tindi 'to pinch', both the simple and the reduplicated forms may be used transitively as in:

(27a) yedi me

(he has pinched me)

(27b) olétíndi me

(he is pinching me)

but only the reduplicated form can occur in a subjective reflexive clause:

(27c) o nwó életíndi ye

(he is itching all over (to do something))

Other pairs of such verbal forms include: 1. ka/keka 'to bite', 2. fo/fofo 'to pain', 3. bu/bubu 'to break', 4. yela/yelayela 'to burn'. Some members of this sub-class are capable of reflexive nominalization. Thus for items (1-2), we shall find:

Nominalization

Underlying Subjective
Reflexive Structure

- | | |
|--|--|
| (28) anwokékálé 'bodily
irritation' | o nwo ekekeka ye 'he is
itching all over' |
| (29) anwofófólé 'bodily pain' | o nwo elefofo ye 'he is
in pains' |

Semantically, verbs of this sub-class denote bodily sensation.

Non-reflexive clauses

By way of contrast with objective and subjective reflexive clauses, attention is here drawn to two different constructions involving verb words which require the possessed forms of the inalienable noun nwole 'exterior, self' within I) the subject noun phrase, or II) the indirect object noun phrase.

Constructions of the first kind, which may be intransitive clauses, are exemplified by the following paradigm:

- (29a) m̀e nwó ézà
(I am cured)
- (29b) e nwó éza
(you are cured)
- (29c) o nwó éza
(he is cured)
- (29d) b̀e nwó éza
(they are cured)

Examples of such intransitive verbs include: 1. te 'to be clean', 2. nyia 'to be numb', 3. bela 'to come', 4. do 'to have a temperature', 5. ku 'to be dirty', 6. di 'to be in trouble', 7. du 'to be grimy', 8. kpolo 'to be bruised'.

Verbs of this sub-class are capable of (reflexive) nominalization. Thus for items (1-3), we shall find the following nominalizations:

<u>Nominalization</u>	<u>Underlying non-reflexive structure</u>
(30) anwodélé 'purity, holiness'	o nwo te 'he is clean'
(31) anwonyiálé 'numbness'	o nwo anyia 'he is benumbed'
(32) anworálé 'orgasm'	o nwo era 'he has come'. <i>i.e. he has had an orgasm.</i>

Construction of the first kind may also be transitive, as in the following paradigm involving the verb stem fonle 'to be disgusted with:

- (33a) Akyé ánwo évonle Kofi
(lit. Akye disgusts Kofi)
- (33b) me nwó évonle ye
(I disgust him)
- (33c) e nwó évonle me
(you disgust me)
- (33d) ye nwó évonle be
(we disgust them)

As the above paradigm clearly shows, the possessive nominal in the subject noun phrase is not co-referential with the object noun phrase.

Members of this sub-class are represented by the two items: 1. fonle 'to disgust', and 2. do 'to miss', and are not capable of (reflexive) nominalization.

Constructions of the second kind, which may be regarded

as ditransitive clauses, usually involve a complex verb (e.g. fa éya 'to be annoyed, angry') and may be exemplified by the following paradigm:

- (34a) Kofí éva Akyé ánwo éya
(Kofi is annoyed with Aky)
- (34b) yeva me nwó éya
(he is annoyed with me)
- (34c) meva e nwó éya
(I am annoyed with you)
- (34d) yeva be nwó éya
(he is annoyed with them)

As the above examples show, there is no co-referential relation between the subject noun phrase and the possessive nominal in the indirect object noun phrase. Complex verbs capable of occurring in this type of non-reflexive clause include: 1. ka elalee 'to dream', 2. bu mgbonda 'to make calculations, think about', 3. bo nzekue 'to make allegations about', and are not capable of (reflexive) nominalization.

TYPE 2: COMPLEX TRANSITIVE (S V O C)

The following (a) clauses exemplify the transitivity clause-type which is classified as complex transitive:

S V O C
(1a) Akys / éha / o sá áti / bílé
(Akys has coloured her finger nails black)

(1b) o sá áti éye bilé
(her finger nails have become black)

S V O C
(2a) be / fele / nrenyá ne / Áka
(lit. they call the man Aka)

(2b) nrenyá ne dúma á le Aka
(the man's name is Aka)

In the above (a) clauses, the verb word is followed by two nominal phrases. The first nominal phrase - i.e. o sá áti 'her finger nails' in (1a) or nrenyá ne 'the man' in (2a) - is distinguished as the direct object, and the second as the complement. In (1a) the complement bilé 'black' is an adjective and is distinguished as adjective phrase complement, whereas in (2a) the complement is realized by a noun word and is, accordingly, distinguished as noun phrase complement.

It is to be noted that the first syllable of the complement, whether it is an adjective or noun phrase, has regularly a high tone irrespective of its tonal pattern in isolation.

In the case of the complex transitive clause exemplified in (1a) above, the direct object and the adjective phrase complement correspond to an identifying type of relational clause

as in (1b) which involves the copular verb eye 'has become' (the positive perfect tense form of the identifying copular verb le/lɛ/ 'to be'); and in the identifying relational clause, the direct object fills subject position and the adjective phrase complement fills complement position.

In (2a), however, the direct object and the noun phrase complement correspond to the equative type of relational clause which is characterized by the copular verb le/lɛ/ 'to be, to be equated with' as in (2b) and in which the direct object occurs within the subject noun phrase in genitive relation with the head noun duma 'name' and the noun phrase complement functions as the complement.

Clauses such as (1a) and (2a) are classified as complex transitive and, generally speaking, have the following characteristic properties:

(i) The verb word is in syntactic relation with two nominal phrases, distinguished as direct object and complement, which may be an adjective or noun phrase; the direct object, but not the complement, may be pronominalizable;

(ii) The direct object and the complement correspond to either an identifying or equative type of relational clause, in which the direct object fills subject position or occurs within the subject noun phrase and the adjective or noun phrase complement fills complement position;

(iii) The first syllable of the adjective or noun phrase complement regularly bears a high tone;

(iv) Semantically, complex transitive clauses express either a 'resulting' (1a) or a 'current' (2a) meaning.

As mentioned above, the element of complex transitive clause-structure distinguished as complement may be realized by either an adjective (usually co-occurring with a 'resulting' verb) or a noun (co-occurring with a 'current' verb) and, on this basis, two main types (A-B) of complex transitive clauses may be distinguished.

Type A: Complex transitive clause

Verbs occurring in this type of complex transitive clause include 1. ka 'to colour, paint' and 2. twi 'to paint', which may be regarded as 'resulting' verbs since they denote processes productive of observable results. Such verbs usually co-occur, in a complex transitive clause, with an adjective phrase complement, as in:

- (1) Akye éha ɔ gyáke áti bílé (kisií)
(Akye has coloured her toe nails (jet) black)
- (2) Kofi éhwi ye súá ne ánwo kókole (soónwú)
(Kofi has painted his house (very) red)

Such complex transitive clauses have the following additional properties:

(i) The adjective phrase complement may be omitted without producing an unaccepted clause. Thus alongside the complex transitive clause (1) above, we may find, with the omission of the complement, the transitive clause:

- (1a) Akysé éha ɔ gyáke áti
(Akye has coloured her toe nails)

(ii) Type A complex transitive clauses are referable to or represent a fusion of a transitive clause and an identifying relational clause, in which the direct object noun phrase fills subject position and the adjective phrase complement fills complement position.

Thus the structure underlying (2) is referable to a pair of transitive and identifying relational clauses of the type:

(2.I) Kofi shwi ye sua ne anwo (transitive clause)
(Kofi has painted his house)

(2.II) ye sua ne anwo eye kòkòlè (relational " ")
(his house has become red)

(iii) The adjective phrase complement, even though it may have a morphologically-related plural form, never concords in plural number with the direct object which may be a plural noun phrase. Thus alongside (2), we may find with a plural direct object:

(2a) Kofi éwhi ye ázuá né mo ánwò kòkòlè
(Kofi has painted his houses red)

but not

(2b) * Kofi shwi ye azua ne mo anwo ngòkòlè
(Kofi has painted his houses red)

which is unacceptable because the adjective phrase complement has a plural form in number concord with the plural direct object.

(iv) The adjective phrase complement may be post-modified by such items as those enclosed in round brackets in (1-2) above.

Type B: Complex transitive clauses

Three sub-types (I-III) may be distinguished among Type B complex transitive clauses which are characterized by a noun phrase complement.

Type B.I

Complex transitives of this sub-type usually involve 'naming' verbs such as 1. to 'to name, christen' and 2. fɛlɛ 'to call'. The use of the first item may be illustrated by (1a-2a) below:

- (1a) Kofí dónle ɔ rá nrényá ne Áka
(Kofi named his son Aka)
- (1b) ɔ rá nrényá ne dúma á le Aka
(his son's name is Aka)
- (2a) nrenyá ne dónle ye námúlé ne Ábolokyi
(the man named his village Abolokyi)

The second item fɛlɛ 'to call' is usually used in the habitual tense with the indefinite 3rd person plural pronoun bɛ 'they' in its reference to 'people in general'. The following (a) clauses illustrate:

- (3a) bɛfɛlɛ ɔ yé ne Ákyé
(lit. they call his wife Akye. his wife is called Akye)
- (3b) ɔ yé ne dúma á le Akyé
(his wife's name is Akye)
- (4a) bɛfɛlɛ námúlé ne Édinlá
(the village is called Edinla)
- (4b) námúlé ne dúma á le Edinlá
(the name of the village is Edinla)

- (5a) bafels azulé ne Prá
(the river is known as Pra)
- (6a) benvélé wo Náná Bíle Kpóle bíeko
(they don't call you Nana Bile Kpole any longer)
- (6b) té wó dúma á le Naná Bíle Kpóle bíeko
(your name is no longer Nana Bile Kpole)

Type B.I complex transitive clauses are characterized by the following properties:

(I) The noun phrase complement occurring in this sub-type may be (a) a personal name such as Aka (1a) or Akye (3a), in which case the referent of the direct object is human or animate; (b) a geographical name, which specifically refers to either a city, town or village (e.g. Abolokyi (2a) and Edinla (4a)) or a river (e.g. Pra (5)), and the referent of the direct object is inanimate; and (c) the designation for a specific office as in (6a), the direct object referring also to a human.

(II) As the (b) clauses show, the direct object and the complement in this sub-type of complex transitive clause correspond to an equative relational clause involving the copular verb le/le/, in which the direct object occurs within the subject noun phrase in genitive relation with the head noun duma 'name' and the noun phrase complement functions as complement.

Also with the verb stem fels 'to call' we shall find (7a):

- (7a) menli moó (befele be mrále mrényá) lá
(people who (they call them men))

in which case the direct object and the complement of the complex transitive clause (enclosed within round brackets) correspond to an identifying (rather than an equative) relational clause involving the copular verb le/li/, as in:

- (7b) menli moó (bele mrále mrényá) lá
(people who (they are men))

It is to be noted that in clauses such as (7a) there is singular/plural number concord between the object and complement. Complex transitive clauses like (7a) express moral quality.

Type B.II

Verbs occurring in this sub-type of complex transitive clause include sie 'to elect, choose, make', as in (1a) below:

- (1a) yezie ye bélemgbunli
(we have chosen/made him chief)
- (1b) yezie belemgbunli
(we have chosen a chief)
- (1c) ole belemgbunli
(he is chief)

Complex transitive clauses of this sub-type have the following properties:

- (i) The direct object can be omitted as in (1b) without changing the basic meaning of the clause;
- (ii) The direct object and the complement correspond to an identifying relational clause;
- (iii) The noun phrase complement denotes a specific office or task.

Type B.III

Verbs which occur in this sub-type of complex transitive use include 1. bo 'to call', 2. fsle 'to call' and 3. bu 'to consider, take for', as exemplified in the (a) clauses below:

(1a) Kofi bóle me áyené/áwule

(Kofi called me a wizard/thief)

(1b) Kofi zéle me ké mele ayené/awule

(Kofi told me that I was a wizard/thief)

(2a) evelsle be áhodiawu

(you called them murderers)

(2b.I) ezele be ké bele ahodiawu

(you told them that they were murderers)

(2b.II) eyelsle be ké bele ahodiawu

(you called them that they were murderers)

Characteristic properties of this sub-type of complex transitive clause include:

(i) The noun phrase complement may be a singular noun as in (1a) or a plural noun as in (2a), and in either case the referent of the preceding direct object noun phrase is typically human.

With the verb stem bo 'to call' occurring in (1a), the direct object noun phrase may be singular as in (1a) or plural, but the noun phrase complement is always a singular noun (even though the noun word may have a regular plural form); that is, as in (1a) above, we shall attest:

(1c) Kofi bóle be áyené/áwule

(Kofi called them wizard/thief)

we shall not find:

(1d) * Kofi bole be nyane/nwule

(Kofi called them wizards/thieves)

With the verb bo, then, the direct object and complement may concord in singular number but never in plural number.

With the verb stems 2. fɛɛɛ 'to call' in (2a) and 3. bu 'to consider, take for', the noun phrase complement may be a singular (3a) or plural (2a) noun and there is singular/plural number concord between the direct object and complement. Thus alongside (2a) above in which the direct object and the complement are both plural, we shall find (2c) below:

(2c) eɛɛɛɛle ye kodiawu

(you called him a murderer)

in which there is singular number concord between the direct object and complement. We shall never find with fɛɛɛ:

(2d) * eɛɛɛɛle be kodiawu

(you called them a murderer)

The use of item (3) bu 'to consider' may be illustrated by:

(3a) Akɛ́ b́ wɔ́ kákula

(Akɛs considers you a child)

We might distinguish the complex transitive clause (3a) above from (4a) below, which may be regarded as a ditransitive clause:

(4a) Akɛ́ búle wɔ́ koásea

(Akɛs fooled you)

Alongside the complex transitive clause (3a) exemplifying singular number concord between the direct object and complement, we shall find:

(3b) Akysé bú ye ngákula

(Akysé considers us children)

in which there is object-complement plural concord. The ditransitive clause (4a) is different in that corresponding to (4a) we shall not find:

(4b) * Akysé bule ye ngoasea

but:

(4c) Akysé bule ye koasea

(Akysé fooled us)

The type of complex transitive clause exemplified in (3a) is further different in having a paraphrase which is a complex sentence of the type:

(3c) Akysé bú wó ké ele kakula

(Akysé thinks that you are a child)

The verb word in the complex transitive clause (3a) is a simple or single-word verb bu 'to consider', whereas the verb in the ditransitive clause (4a) is a complex lexical item bu koasea 'to fool'

(ii) As indicated above, complex transitive clauses of this sub-type have paraphrases which exemplify a complex sentence of the type in (1b), (2b), or (3c). In such complex sentences the finite clause object (or sentential complement) introduced by the subordinator ke 'that' is an identifying relational clause characterized by the copular verb le, and within the relational clause, the direct object functions as subject and the noun phrase complement as complement; that is to say, the direct object and the complement correspond to an

identifying relational clause which, within the paraphrase, is subordinated as a ke 'that'-clause to a reporting main clause containing the verb stem (1) se 'to tell' as in (1b) or (2b.I), (2) fəle 'to call' as in (2b.II) or (3) bu 'to consider, think' as in (3c).

(iii) Complex transitive clauses of this sub-type are used to report an abuse, allegation or an attitude.

TYPE 3: INTRANSITIVE CLAUSES (S V)

Clauses in which the verb is not necessarily followed by any nominal item are classified as intransitive. The following clauses are intransitive:

S V
(1) ɔ hu / éwu
(her husband is dead)

S V
(2) Kofi / éleséle
(Kofi is laughing)

We might distinguish intransitive clauses such as (1-2) above from such clauses as (3a) below:

(3a) Kofi élèkpónde
(Kofi is looking for it)

which is relatable to the corresponding transitive clause (3b):

(3b) Kofi élèkpónde sánve ne
(Kofi is looking for the key)

by the pronominalization of its definite inanimate object noun phrase. It was noted above that a sub-class of transitive verbs, members of which include the verb stem kponde 'to look for' occurring in (3a-b), do not favour the pronominalization of their definite inanimate object noun phrase. Clauses such as (3a) above without an overtly expressed pronominal object are, therefore, not regarded as intransitive and are distinguished from such 'pure' intransitive clauses as (1-2) above which are not relatable to corresponding transitive clauses.

Verbs which can occur in intransitive clauses may be

(A) simple or single-word verbs or (B) verbal groups.

A. Simple intransitive verbs

Five groups (I-V) may be distinguished among simple verbs which characteristically occur in intransitive clauses.

Group A.I: consists of verbs such as dafe 'to sleep' which can never take a nominal or pronominal object, as in:

- (4) eyevóls ne éledáfe
(the guest is sleeping)

Other intransitive verbs of this group are:

1. yalo 'to yawn'
2. yiko 'to belch'

Group A.II: consists of verbs which can be used intransitively as well as transitively with little or no difference in their lexical meanings. Note, however, the use of different (English) verbs to translate their use in intransitive and transitive clauses. An example of verbs of this group is tende 'to speak; to scold', as in:

- (4a) Akyé ó nli bádende (intransitive)
(lit. Akys her mother will talk)
- (4b) Akyé ó nli bádende ye (transitive)
(Akys's mother will scold her)

Other members of this group include:

	<u>Intransitive</u> <u>meaning</u>	<u>Transitive</u> <u>meaning</u>
1. su	'to cry, weep'	'to mourn, lament'
2. tia	'to walk'	'to tread on, kick'
3. tea	'to shout, quarrel'	'to scold'

		<u>Intransitive meaning</u>	<u>Transitive meaning</u>
4.	sele	'to laugh'	'to laugh at, mock'
5.	nriandi	'to run'	'to run away from'

It should be noted that in transitive clauses verbs of this group usually take animate subject and object noun phrases.

It is to be noted that in clauses (4a-b) above, the verb stem tendɛ does not exhibit any difference in shape which is relatable to its transitive/intransitive use.

Generally speaking, verb stems in the language do not exhibit differences in shape which are referable to the different syntactical relationships that hold between the verb and any items that may follow in the same clause.

There are, however, a limited number of morphologically-related pairs of verbal forms (listed in the introductory chapter) which can occur in corresponding transitive and intransitive clauses.

Group A.III: is represented by a pair of morphologically-related verbal forms: bɔ/bone, of which the verb stem bɔ 'to smell' is used intransitively and the suffixed verbal form bone 'to smell of' is used transitively, as in the following pairs of clauses:

- (5a) nrenyá ne ánwo bɔ (intransitive)
(the man smells)
- (5b) nrenyá ne ánwo bone nzá (transitive)
(the man smells of drink)

We shall also find in the language other pairs of verbal forms, either morphologically related by suffixation (e.g. sea 'to make

pass'/se 'to pass') or identical in shape (e.g. buke 'to open'), which can be used in syntactically (as well as semantically) related pairs of transitive and intransitive clauses. Such pairs of verbal forms which have been labelled ergative verbs are different from ba/bone exemplified in (5a-b) above in that they may be dealt with in terms of the causative/non-causative relationship discussed in Chapter 7.

Group A.IV: Verbal adjectives

Intransitive verbs of this group are distinguished by the following characteristic properties:

1. Generally speaking, intransitive clauses involving such verbs have constructional analogues which are identifying relational clauses containing the copular verb le 'to be' followed by a contingent adjective complement; hence the descriptive term 'verbal adjectives'¹. Thus corresponding to the intransitive clause (6a) with the verbal adjective dó 'to be hot':

(6a) nzulé ne dó
(the water is hot)

we shall find the identifying relational clause:

(6b) nzulé ne lé wulúwúlú
(the water is hot)

2. Such verbs can occur in the non-active tenses with stative aspect and also in the active tenses with dynamic aspect. In the non-active positive continuative tense as in (6a) they denote a state or quality. In the corresponding active progressive tense, as in:

1. I owe the descriptive term to Palmer, W.T. and Grant, F.C.F. (1942: 84)

(6c) nzulé ne éledó

(the water is becoming hot)

they express the notion of being in the process of changing into the particular state; and in the corresponding active perfect tense, they denote the completion of the process of changing into the state rather than the state itself, as in:

(6d) nzulé-ne éle

(the water has become hot)

Three sub-sets (a-c) of verbal adjectives may be distinguished.

Group A.IV (a): Pure Verbal Adjectives

Members of the first sub-set include (and their corresponding adjective complements, if any, are enclosed within round brackets):

1. do 'to be hot' (wuluwulu 'hot')
2. pi 'to be thick' (kputaa 'thick')

and may be regarded as the 'pure' verbal adjectives.

Group A.IV (b): Suffixed Verbal Adjectives

Members of the second sub-set are represented by the two items:

3. wale 'to be long, tall' (tendenle 'tall, long')
4. zonle 'to be plentiful, many' (doonwo/somaa 'many')

In addition to the general characteristics of verbal adjectives described above, members of this sub-set have two morphologically-related verbal forms. Their positive continuative form is morphologically related by suffixation (and, in the case of item (4),

also phonologically related by stem-initial Type B mutation) to the form they exhibit in the corresponding durative tense. In the common negative, and also in the positive and negative forms of the other tenses, only the verb stem or the non-suffixed form is possible. In view of the occurrence of a suffix in their positive continuative tense form, these items may be distinguished as suffixed verbal adjectives. The following clauses with item (4) illustrate:

- | | | |
|------|--------------------------------|---------------------|
| (7a) | nzulé ne <u>zónle</u> | (positive Conti- |
| | (the water is plentiful) | nuative) |
| (7b) | nzulé ne <u>téso</u> | (" Durative) |
| | (the water is still plentiful) | |
| (7c) | nzulé ne <u>anzó</u> | (common negative) |
| | (the water is not plentiful) | |
| (7d) | nzulé ne <u>bázo</u> | (positive Future I) |
| | (the water will be too much) | |

It is to be noted that the suffixed continuative tense form as well as the common negative form replicates the corresponding past tense forms of other (regular) verbs. In this connection, compare (7a) and (7c) above with the corresponding positive and negative past tense forms of the verb stem so 'to make (farm)':

- | | |
|------|------------------------------|
| (8a) | nrenyá ne <u>zónle</u> eyá |
| | (the man made a farm) |
| (8c) | nrenyá ne <u>anzó</u> eyá |
| | (the man didn't make a farm) |

Group A.IV (c): Verbal Adjectives

Members of the third sub-set of verbal adjectives include:

- | | | | |
|-----|--------------------|------------------------------------|------------------------|
| 5. | tenre ¹ | 'to be straight;
straighten' | (foonwo 'straight') |
| 6. | kyea | 'to be bent, crooked;
bend' | |
| 7. | kpo | 'to be bent, crooked;
bend' | |
| 8. | bolo | 'to be reddish;
reddden' | (kokole/weonwo 'red') |
| 9. | du | 'to be black, dark;
blacken' | (bile 'black, dark') |
| 10. | tsle | 'to be wide, broad;
spread out' | (faanwo 'wide, broad') |

In addition to their characteristics as verbal adjectives, members of this sub-set can be used transitively with dynamic aspect.

Thus with item (5), we find the intransitive clause:

- (9a) adenlé ne tenre (stative)
(the road is straight)

as well as the transitive clause:

- (9b) tenre bulalé ne (dynamic)
(straighten the iron rod)

Group A.V

Intransitive verbs of this group cannot occur in transitive clauses. Used intransitively in the positive perfect tense, they refer to a state which results from the completion of a process. Intransitive verbs of this group may be divided into four sub-sets (a-d).

-
1. Items (5-7) can function as ergative verbs or occur with dynamic aspect in corresponding transitive and intransitive clauses which may be handled in terms of the causative/non-causative relationship:

- (Ia) yedenre bulalé ne (transitive, causative, dynamic)
(he has straightened the iron rod)
(Ib) bulalé ne edenre (intransitive, non-causative,
(the iron rod has become straight) dynamic)

Group A.V (a): consists of intransitive verbs which may be adjectivized by the suffixation of -lira/-lera (according to the vowel harmony). In the examples which follow, the intransitive verb stem is supplied at (A) and the 3rd person singular positive perfect tense form at (B). It is to be noted that the English glosses of the clauses in the perfect tense are relational clauses involving the copula be or the 'resulting' copula become/grow followed by an adjective or participle.

	<u>Intransitive verb</u>		<u>Adjectivized form</u>	
1A)	wu	'to die, rot'		
1B)	yewu	'he's dead; it's rotten'	wu-lira	'rotten'
2A)	we	'to dry'		
2B)	yewe	'he's precocious; it's dry'	we-lera	'dry (of pepper)'
3A)	nwa	'to grow lean'		
3B)	yenwa	'he has grown lean'	nwa-lera	'lean (of person)'
4A)	kpolo	'to rot'		
4B)	yekpolo	'it has become rotten'	kpolo-lera	'rotten (of fruit)'

It is to be noted that the intransitive verbs (1-2) may take either an animate or inanimate subject noun phrase, whereas their adjectivized forms can only modify inanimate nouns; item (3) takes an animate subject noun phrase and its adjectivized form modifies animate nouns; on the other hand, item (4) takes an inanimate subject noun phrase and its adjectivized form can also only modify an inanimate noun.

Group A.V (b): consists of intransitive verbs which may be adjectivized either by suffixation, as in the case of items

(1-3) or by both prefixation and suffixation, as in the case of item (4). It is to be noted that the vowel quality in the affixes harmonizes with that in the following or preceding verb syllable.

	<u>Intransitive verb</u>		<u>Adjectivized form</u>
1A)	kete	'to stiffen, harden'	
1B)	yehete	'it has become stiff, hard'	kete-e 'hard, stiff'
2A)	wudu	'to swell'	
2B)	yewudu	'he/it has become bloated'	wudu-luu 'bloated, puffy'
3A)	gyibi	'to become foolish'	
3B)	yegyibi	'he's become foolish'	gyibi-lito 'foolish'
4A)	tili	'to become blunt'	
4B)	yetili	'it has become blunt'	ti-tili-i 'blunt; rough'

It is to be noted that intransitive verbs (1-2) take either animate or inanimate subject noun phrase, and their adjectivized forms may also modify animate or inanimate nouns; item (3) takes only an animate subject and its corresponding adjectivized form can only modify an animate noun; item (4), on the other hand, takes an inanimate subject and its adjectivized form accordingly modifies inanimate nouns.

It is also to be noted that item (4) belongs to the sub-class of verb stems whose voiceless stem-initial consonant is immutable.

Group A.V (c): consists of verb stems which in intransitive clauses take as subject noun phrase a genitive construction consisting of an animate or human possessive nominal and the possessed form of an inalienable noun. Each verb is restricted to a particular inalienable noun. Items (1-2) are capable of nominalization as indicated.

	<u>Intransitive verb</u>	<u>Nominalization</u>
1A)	si 'to be blind'	
1B)	e nyé ézi 'you're blind'	anye-zí-lírá-vóls 'blind person'
2A)	ti 'to be deaf'	
2B)	e nzó édi 'you're deaf'	anzo-dí-lírá-vóls 'deaf person'
3A)	fi 'to grow'	
3B)	e tí évi 'lit. your head is grown, your hair is grown'	
4A)	fi 'to grow'	
4B)	e nyé évi 'lit. your eye has grown. you're old (in years)'	
5A)	fo 'to be wet'	
5B)	o nwó évo 'he's disheartened'	
6A)	sa 'to be healed, cured'	
6B)	o nwó éza 'he's healed'	

It is to be noted that members of this sub-set are mono-syllabic verb stems.

Group A.V (d): consists of intransitive verbs which, like members of the other sub-sets, refer, in the positive perfect tense, to a state resulting from the completion of a process.

Members of this sub-set do not, however, share the morphological and syntactic features of the members of the other sub-sets.

A) <u>Intransitive verbs</u>		B) <u>Positive perfect tense form</u>	
1.	do 'to be full of fat'	yelo	'he/it is fatty/fatted'
2.	se 'to be mad'	yeze	'he's (gone) mad'
3.	kye 'to become fat'	yehye	'he has grown fat'
4.	fokye 'to fall ill'	yefokye	'he is ill'
5.	tifi 'to rot, go bad'	yetifi	'it's rotten, gone bad'
6.	ti 'to mature'	yedi	'it's mature (of coconut)'
7.	bolo 'to ripen'	yebolo	'it's ripe (of fruit)'
8.	fie 'to be well pounded, ground'	yevie	'it's well pounded ground'
9.	fo 'to tear easily'	yevo	'it tears easily (as a result of being water-logged)'
10.	do 'to become soft'	yelo	'it has become soft (of fruit)'
11.	dwo 'to grow cold'	yedwo	'it has gone cold (of hot liquid)'
12.	sia 'to become watery'	yezia	'it's watery (of dough)'
13.	senze 'to be tight'	yesenze	'it's tight (of padlock)'
14.	yi 'to become full'	yeyi	'it's full (of river, receptacle)'
15.	to 'to be over-ripe, foolish'	yedo	'it's over-ripe (of fruit)' 'he's foolish (of person)'

It is to be noted that items (1-4) take human or animate subject noun phrases; items (5-14), on the other hand, take only inanimate subject noun phrase, and item (15) may take either animate or inanimate subject.

Items (4-5) belong to the sub-class of verb stems whose voiceless stem-initial consonant is immutable.

Group B: Intransitive verbal group

Intransitive verbal groups include:

1. golo gua 'to collapse, fall down'
2. dwazo gyinla 'to stand up, rise; get up'
3. tu tenre 'to advance, set off, leave'
4. di sie 'to decide secretly, plan'
5. si da 'to take it easy'

It is to be noted that the principal verb in these verbal groups may, as a simple verb, take a nominal object noun phrase and the auxiliary verb, as a dynamic simple verb, may occur in a complex semi-transitive clause, except the auxiliary verb in item (3) which is used transitively as well as intransitively (see Intransitive simple verbs A.IV (c)). The following (a) clauses illustrate the use of the above intransitive verbal groups:

- (1a) suá ne égolo égua
(the house has collapsed)
- (1b) suá ne égolo
(the house has collapsed)
- (2a) mbié mo dwázo gyinla ná béténdé á..
(when some people get up to speak..)
- (2b) mbié mo dwázo ná béténdé á..
(when some people stand to speak..)

(3a) o nee o nwó ámra dúle dénrenlé
(he and his relatives set off)

(3b) o nee o nwó ámra dúlé
(he and his relatives left (the place))

(4a) belilé bézielé ké be mú nwio bábáho Koámesuazó
(they decided secretly that both of them will go to
the town of Koamesuazo)

(4b) *belile ké be mu nwio bsbaho Koamesuazo

(5a) yezi yéla
(he has taken it easy)

(5b) *yezi

With items (1-3), it is possible to omit the auxiliary verb without changing the basic meaning, as the (b) examples illustrate. Items (1-3) may therefore, be regarded as exemplifying a loose collocation. On the other hand, with items (4-5) the omission of the auxiliary verb produces an unacceptable clause; these two intransitive verbal groups exemplify a close-knit collocation.

As the above examples (1a-5a) illustrate, item (1) takes an inanimate subject noun phrase, items (2-5) take animate subject nouns and item (4) a conjunction of animate subject noun phrases or plural animate subjects.

RECIPROCAL CLAUSES

In this section, the different structural sub-types of reciprocal clauses are described and reciprocal verbs sub-classified on the basis of the particular sub-type in which they can occur. Reciprocal clauses regarded as instances of phrasal conjunction are distinguished from sentential conjunction, and finally, one particular sub-type of reciprocal clauses is contrasted with reflexive clauses which it structurally resembles.

Reciprocal clauses may be intransitive, as in (1-2(a-b)):

(1a) Kofí neé Akyé hónle
(Kofi and Akye fought)

(1b) ye/bshonlé
(we/they fought)

(2a) Kofí neé Akyé yíále
(Kofi and Akye met)

(2b) ye/beyialé
(we/they met)

Reciprocal clauses may also be transitive, as exemplified by (3a-b):

(3a) Kofí neé Akyé zóho bɛ nwó
(Kofi and Akye resemble each other)

(3b) ye/bɛzohó ye/bɛ nwó
(we/they resemble each other)

The above clauses (1-3(a-b)) constitute the possible structural sub-types of reciprocal clauses. Structurally, they are alike in having in subject position a conjunction of noun phrases as in the (a) examples, which is replaceable by a plural pronominal

subject, ye 'we' or be 'they', as in the (b) examples. In the transitive clause (3a-b), the object noun phrase, distinguished as reciprocal complement, is a genitive construction in which the plural possessive pronoun be 'their' (or ye 'our') is in genitive relationship with the possessed root form nwo 'self' of the 'local' inalienable noun nwols 'exterior, self'. The plural subject noun phrase is formally co-referential with the plural possessive pronoun in the reciprocal complement.

In respect of the constituents and tonal pattern of the complement and the co-referential relation between the subject noun phrase and the possessive pronoun within the complement, reciprocal clauses exemplified by the transitive clauses (3a-b) bear a close structural resemblance to reflexive clauses involving a plural subject noun phrase as in:

- (4a) Kofí neé Akysé ébia be nwó
(Kofi and Akys have washed themselves)
- (4b) ye/bebia ye/be nwó
(we/they have washed ourselves/themselves)

As regards the underlying structure of the reciprocal clauses (1a-3a), each of them is referable to a pair of sentences rather than to a co-ordinate conjunction of sentences. Thus the intransitive clause (1a) is derivable from a pair of sentences of the type:

- (5.I) Kofi nee Akys honle
(Kofi and Akys fought)
- (5.II) Akys nee Kofi honle
(Akys and Kofi fought)

The intransitive clause (2a), on the other hand, is derivable from a pair of sentences of the type:

(6.I) Kofi yiale Akys

(Kofi met Akys)

(6.II) Akys yiale Kofi

(Akys met Kofi)

Similarly, the transitive clause (3a) is derivable from the pair of underlying sentences:

(7.I) Kofi zoho Akys

(Kofi resembles Akys)

(7.II) Akys zoho Kofi

(Akys resembles Kofi)

Reciprocal clauses like (1a-3a) in which the verb word necessarily requires a plural subject or a conjunction of at least two noun phrases in subject position that is referable to a pair of sentences and not to a co-ordinate conjunction of a corresponding number of sentences have been distinguished as phrasal conjunction.

It might be useful to compare the reciprocal clause (1a) involving the verb stem ko 'to fight':

(1a) Kofi neé Akys hónle

(Kofi and Akys fought)

with (8a) below involving the verb stem su 'to weep':

(8a) Kofi neé Akys zúnle

(Kofi and Akys wept)

Both (1a) and (8a) are alike (I) in having in subject position a conjunction of two noun phrases and (II) in respect of their

elements of clause structure or the linear arrangement of their constituent elements. In spite of this structural resemblance, the two clauses are, however, different in at least two respects. In the first place, alongside the reciprocal clause (1a) we shall neither find:

(1a.I) *Kofi honle
(Kofi fought)

nor (1a.II) *Akye honle
(Akye fought)

On the other hand, alongside the different construction (8a), we shall attest:

(9a.I) Kofi zúnle
(Kofi wept)

and (9a.II) Akyé zúnle
(Akye wept)

Secondly, (8a) is different in being referable to a co-ordinate conjunction of two sentences:

(8a.III) Kofi zunle yee¹ Akye (noko) zunle
(Kofi wept and Akye (also) wept)

1. Generally speaking, the conjunctive yee 'and' co-ordinates clauses or sentences, whereas the conjunctive nee 'and / (with)' conjoins noun phrases. Between the penultimate and last items in a list, the two conjunctives may be in free variation as in:

I. beme a le Amenlema, Edumi, Amaaku, Mea nee Akpo (they are)

II. menli moo sha la a le Amenlema, Mea, Edumi, Akpo yee Kaku (those who are left are)

Constructions such as (8a) above which involve at least two conjoined noun phrases that are relatable to a co-ordinate conjunction containing a corresponding number of sentences have been designated as sentential conjunction in contradistinction to phrasal conjunction as exemplified in the reciprocal clause (1a).

It was noted above that in reciprocal clauses, the verb word necessarily requires a conjunction of noun phrases in subject position. The conjunction of noun phrases is not obligatorily required by the verb in the case of sentential conjunction and need not be subject; the conjoined nominal phrase may be nominal object as in (10) below involving the verb stem to 'to buy':

- (10) *sysvóls ne dóle kyels neé sdanlé*
 (the stranger bought a hat and a cloth)

which has as its underlying structure the co-ordinate sentence:

- (10.I) *sysvóls ne dóle kyels yes sysvóls ne dóle sdanlé*
 (the stranger bought a hat and the stranger bought
 a cloth)

The conjoined nominal phrase may also function as indirect object in a ditransitive clause as in (11) below involving the verb stem maa 'to give':

- (11) *sysvóls ne maánle Kofí neé Akys póné ngókó¹*
 (the stranger gave Kofi and Akys a pound each)

which is relatable to the co-ordinate sentence:

- (11.I) *sysvóls ne maanle Kofi póné ko yes sysvóls ne maanle*
 Akys (noko) póné ko
 (the stranger gave Kofi a pound and the stranger
 gave Akys ('too) a pound)

1. ngoko 'one each' is the reduplicated form of the numeral (e)ko 'one' occurring in the co-ordinate sentence (11.I)

The foregoing description shows that in the case of sentential conjunction, (I) the conjunction of noun phrases is relatable to a co-ordinate conjunction of a corresponding number of sentences of the same type; (II) the conjoined noun phrase, as one element of structure, may function as subject, object, indirect object (and, for that matter, as locative adjunct in a semi-transitive clause). These characteristic properties serve to distinguish sentential conjunction from phrasal conjunction as exemplified in the reciprocal clauses (1-3(a-b)). It is to be noted that the sentential interpretation would equally apply if the conjoined noun phrase, as one element of structure, was replaced by a plural noun such as mbedá né mo 'the children' or a plural pronoun, ye 'we(us)' or be 'they(them)'.
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Classification of reciprocal verbs

Reciprocal verbs may be sub-classified on the basis of the structural types in which they can occur.

- (12a) Kofí neé Akyé éya (thematically undifferen-
(Kofi and Akye are at tiated pattern)
loggerheads)
- (12b) *Kofi éya Akye
- (13a) Kofí neé Akyé yiále (thematically undifferen-
(Kofi and Akye met) tiated pattern)
- (13b) Kofí yiále Akyé (thematically differen-
(Kofi met Akye) tiated pattern)
- (14a) Kofí neé Akyé zóho be nwó (thematically undifferen-
(Kofi and Akye resemble tiated pattern + reci-
each other) procal complement)
- (14b) Kofí zóho Akyé (thematically differen-
(Kofi resembles Akye) tiated pattern)

In the above examples, the acceptable (b) transitive clauses are the synonymous paraphrases of the corresponding (a) reciprocal clauses. The construction exemplified by the intransitive clauses (12a) and (13a) and the transitive clause (14a), in which the conjunction of noun phrases, as one element of clause structure, precedes the verb word as subject and is replaceable by a plural noun or pronoun, has been distinguished as the thematically undifferentiated pattern¹ (TUP).

The different construction exemplified by the transitive clauses (13b) and (14b), in which the noun phrase conjuncts occur as two separate elements of clause structure - one noun phrase conjunct preceding the verb word as nominal subject and the other following the verb word as nominal object - has been designated as the thematically differentiated pattern¹ (TDP).

In the above examples, it is to be noted that the verb stem ya 'to be at loggerheads' occurring in (12a) is restricted to the TUP. The verb stem via 'to meet (by chance)' as in (13a-b) and soho 'to resemble' as in (14a-b) are, however, possible in the TUP as well as the TDP. These three verbs are representative members of the sub-classes of reciprocal verbs that may be set up.

Two main groups (A and B) of reciprocal verbs may be distinguished. Group A consists of such reciprocal verbs as ya 'to be at loggerheads' as in (12a), which can only occur in the TUP.

Group B consists of reciprocal verbs like via 'to meet (by chance)' as in (13a-b) and soho 'to resemble' in (14a-b), which

1. We borrow the terms from Huddleston, R.D. (1971: 75) without necessarily subscribing to their theoretical implications.

can occur in the TUP as well as the TDP. Statistically, reciprocal verbs of Group A are more numerous than those of Group B.

All reciprocal verbs, as clauses (12-14(a-b)) above show, are capable of occurring in the TUP, which for that reason may be regarded as the favourite or more normal structure for reciprocal verbs. In terms of markedness, then, TUP may be regarded as the unmarked structure as against the TDP which is marked.

Group A: Reciprocal Verbs

Group A reciprocal verbs are here roughly sub-divided, along some semantic parameters, into six sub-sets. The use of a selected number of verbs in each sub-set is exemplified by sentences which are either made up or taken from a play in Nzema¹ (with page references indicated in round brackets after each sentence).

Group A.I: Exchange of Communication Verbs

1. di adwelie 'to converse'

2. di amanes 'to exchange messages'

3. di fenle 'to share a jargon'

4. fa adwenle 'to confer'

1. di adwelie 'to converse'

(15) o yé kóla née ye dí adwelie (p. 42)

(his wife can with him converse)

2. di amanes 'to exchange messages'

(16) egya neé eyevóls ne éledí amanes

(my father and the stranger are exchanging messages)

1. Ellimah, J.K. (1968). Op. cit.

3. fa adwenle 'to confer'

- (17) o nlé sónlá moo ba nee ye fá adwénlé á
(he is not a person who you and he confer)

Group A.II: Verbs of Co-operation or Joint Effort

5. ba nu(hua) 'to join together, co-operate; to reconcile'
6. ko afea 'to conspire'
7. yia nu(hua) 'to hold a meeting; to have a child outside marriage'
8. su 'to compete (e.g. in games)'
9. dwudwu 'to compete (e.g. in dispute)'
10. futu 'to fight playfully'
11. ye adwenle 'to agree (in opinion), concur'
12. ye nrenya nee raals 'to have sexual intercourse with'
(lit. 'to act man and woman')

5. ba nu(hua) 'to join together, co-operate'

- (18) ye nee ba bó nú fá adwénlé (p. 19)
(we and they join together confer)

6. ko afea 'to conspire'

- (19) sonlá moo no nzá kpole lá, ba nee ye éngó áféá ó (p.22)
(a person who drinks wine too much, you and ye don't conspire)

7. yia nu(hua) 'to hold a meeting, confer'

- (20) shyemá me nee ba káyia nu (p. 76)
(tomorrow I and you will have a meeting)

11. ye nrenya nee 'to have sexual intercourse
raale with'

(21) snee yéhye wo, ó nee wo éye nrenyá neé raalé (p. 33)
(then he has caught you, he and you have had
sexual intercourse).

Group A.III: Verbs of Strained Human Relationship

- 13. ko 'to fight'
- 14. ya 'to be at loggerheads'
- 15. di butule 'to quarrel'
- 16. twe manzonle 'to have litigation with'

15. di butule 'to quarrel'

(22) Kofí neé Akysé élsdí butúle
(Kofi and Akysé are quarrelling)

16. twe manzonle 'to have litigation'

(23) me nee ye hwénle azelé ne ánwo mánzónle
(I and he had litigation about the land)

Group A.IV: Verbs of contact

- 17. yia nu(hua) 'to collide'
- 18. tu 'to associate with, have
contact with'
- 19. fa sluale 'make friends with, associate
with'
- 20. bo swene '(of places) to have a common
border'

18. tu 'to associate with, have
contact with'

(24) saa e nee mgbanyinlí tu á (p. 38)
(if you and elders associate)

19. fa eluale 'to make friends with,
associate with'

(25) oluak's me nee ye vále eluale la, yehye (p. 20)
(because since I and he became friends, it has
been long

20. bo swene '(of places) to have a common
border

(26) Ghána nee Tógóland bo swene
(Ghana and Togoland have a common border)

Group A.V: Verbs of Parting or Separation

21. di mgbakýenu 'to part, separate'

22. di nrelalee 'to bid farewell, say good-bye'

23. di koanekoa 'to miss each other, fail to
meet by going in opposite
direction'

22. di nrelalee 'to bid farewell, say good-bye'

(27) Kofi nee Akýs eli nrelalee
(Kofi and Akýs have bade each other farewell)

23. di koanekoa 'to miss each other'

(28) Kofi nee Akýs líle koanékoa
(Kofi and Akýs missed each other)

Group A.VI: Comparison of Equality Verbs

24. ss 'to be equal (e.g. in height,
age, size)'

(29) Kofi nee Akýs ss tendenle
(Kofi and Akýs are equal in height)

By way of contrast with Group A reciprocal verbs, there are other verbs which have two slightly different meanings, one of which is reciprocal and the other non-reciprocal; the reciprocal interpretation is realized in the TUP.

In the illustrative sentences which follow, the (a) examples are non-reciprocal whereas the (b) examples are reciprocal.

I. kye: (a) 'to divide among'; (b) 'share with'

(30a) Kofí shye ezukoá ne

(Kofi has divided the money)

(30b) Kofí neé Akye shye ezukoá ne

(Kofi and Akye have shared the money)

II. dwenle (nwols): (a) 'to think (about)';

(b) 'to confer with'

(31a) Akyé, dwenle nwolé boe

(Akye, think about it well)

(31b) me nee e nli yédwenle nwolé ke (p. 8)

(I and your mother have conferred about it that)

III. da: (a) 'to sleep'; (b) 'to sleep with'

(32a) Akyé lále

(Akye slept)

(32b) Kofí neé Akyé lále

(lit. Kofi and Akye slept. Kofi slept with Akye)

IV. tenla (and its stative form de): (a) 'to live, stay';

(b) 'to stay with'

(33a.I) yehódenla Bolófo

(he has gone to live in Axim)

- (33a.II) eńs óde Bolofo
(now he lives in Axim)
- (33b.I) ka kile ye maá mé nee ye édenlá
(lit. tell him so that I with him stay)
- (33b.II) me nee ye á de á
(I am staying with him)

V. le (stative verb): (a) 'to have'; (b) 'to have in
common'

- (34a) Kofi le ezukoa
(lit. Kofi has money. Kofi is rich)
- (34b.I) Kofi neé Akysé le mrale nsá
(Kofi and Akysé have three children (between them))
- (34b.II) me nee ye le mgbayelé (p. 27)
(I and he share a common jargon)
- (34.b.III) me nee ye le bie ká
(I and he have some (matter) to dispute)

The verbal form le 'to have' co-occurs with a preceding conjunction of noun phrases depending, so far as we can make out, on whether the object referent can possibly be possessed jointly between at least two persons.

The above items (I-V), in their reciprocal interpretation, may be subsumed under Group A.II (i.e. verbs of co-operation or joint effort).

VI. tea: (a) 'to shout'; (b) 'to quarrel'

- (38a) stea somaá
(you shout too much)
- (38b) Kofi neé Akysé életea
(Kofi and Akysé are quarrelling)

VII. di: (a) 'to eat'; (b) 'not to get on with
(negative)'

(39a) Kofí éledí debíé
(Kofi is eating (something))

(39b) Kofí neé Akysé énli
(Kofi and Akysé don't get on)

Items (VI-VII) above, in their reciprocal uses, may be included in Group A.III.

VIII. wale: (a) 'to be long' (of route); (b) 'to be
far apart'

(40a) adenlé ne wále
(the road is long)

(40b) Ghána nee Abolokyi wále
(Ghana and Europe are far apart)

The verbal adjective wale 'to be far apart', regarded as a reciprocal verb, would belong to Group A.V.

Mention should also be made of some verbs which express processes which may be looked upon as capable of (a) solo performance by one actant (i.e. woman) and (b) joint performance by two actants (i.e. man and woman) acting jointly. Examples of such verbs are (IX) wo and (X) nrenze

IX. wo: 'to bear child'

(41a) Akysé éwo (mrale) nsá
(Akysé has borne three (children))

(41b) Kofí neé Akysé éwo (mrale) nsá
(Kofi and Akysé have borne three (children))

- X. nrenze 'to be pregnant'
- (42a) Akýé élenrénze
 (Akys is pregnant)
- (42b) Kofí neé Akýé élenrénze
 (Kofi and Akys are starting a baby)

In their reciprocal uses, items (IX-X) belong to Group A.II. Finally, mention should be made of certain verbs which relate to the playing of games by two players or teams; such verbs may also take (a) a singular subject noun phrase, in which case they refer to one player's or team's performance or (b) a conjunction of noun phrases to denote a two-cornered match. In the latter case, such verbs may be regarded as being reciprocal and included in Group A.II.

- (43a) Kofí életó dáme/até
 (Kofi is playing draughts/marbles)
- (43b) Kofí nee Amá életó dáme/até
 (Kofi and Ama are playing draughts/marbles)
- (44a) anlómá Kotoko lile bóle moo
 (yesterday Kotoko played (foot)ball very well)
- (44b) anlómá Kotoko nee Dwárfis lile bóle
 (yesterday Kotoko and Dwarfs played a football match)

Group B: Reciprocal Verbs

For ease of reference clauses (12a-14a) are repeated here:

Group A:

- (12a) Kofí neé Akýé éya (TUP-reciprocal comple-
 (Kofi and Akys are at ment)
 loggerheads)

Group B.I

- (13a) Kofi neé Akys yiále (TUP-reciprocal complement)
(Kofi and Akys met)
- (13b) Kofi yiále Akys (TDP)
(Kofi met Akys)

Group B.II

- (14a) Kofi neé Akys zóho be (TUP + reciprocal complement
nwó)
(Kofi and Akys resemble each other)
- (14b) Kofi zóho Akys (TDP)
(Kofi resembles Akys)

It was noted above that Group B reciprocal verbs, as distinct from Group A reciprocal verbs which can only occur in the TUP, can occur in the TUP as well as in the TDP.

Two structural sub-types of the TUP may be set up on the basis of the occurrence or non-occurrence after the reciprocal verb of the reciprocal complement, be/(ye) nwó 'them/(our)selves'. Instances such as (12_a) and (13a) where no reciprocal complement occurs we distinguish as TUP - reciprocal complement in contrast to such instances as (14a) where the reciprocal complement occurs and are, therefore, characterized as TUP + reciprocal complement.

Within Group B reciprocal verbs two sub-sets (I-II) may be distinguished. Group B.I consists of reciprocal verbs like ya 'to meet' in (13a-b), which can occur in the TUP-reciprocal complement as well as in the TDP. And Group B.II consists of reciprocal verbs such as scho 'to resemble' in (14a-b), which can occur in the TUP + reciprocal complement as well as in the TDP.

In terms of distribution, the TUP + reciprocal complement may be regarded as marked vis-a-vis the TUP-reciprocal complement which is unmarked. The following list of Group B reciprocal verbs is further sub-divided along the same semantic parameters as those for Group A.

Group B.1

(a) Exchange of communication verbs

- | | | |
|----|------------|---------------------|
| 1. | bo nkomo | 'to converse' |
| 2. | su kpolera | 'to argue, dispute' |

(b) Verbs of contact

- | | | |
|----|----------------|--------------------------|
| 3. | ya | 'to meet by chance' |
| 4. | bikye | 'to be near' |
| 5. | soma (o sa nu) | 'to shake (by the hand)' |

Group B.II

(c) Verbs of co-operation or joint effort

- | | | |
|-----|-------------|----------------------------------|
| 6. | gya | 'to marry' |
| 7. | kulo | 'to love, like' |
| 8. | fa agonwole | 'to befriend, make friends with' |
| 9. | ze | 'to know, stick together' |
| 10. | nwu | 'to see, renew connection' |

(d) Verbs of comparison

- | | | |
|-----|------|---------------|
| 11. | scho | 'to resemble' |
|-----|------|---------------|

It should be mentioned that in the case of the complex verb fa agonwole 'to befriend, make friends with' (Group B.II, item 8) the occurrence of the reciprocal complement (after the verbal element fa) in the TUP is optional rather than

obligatory as the following sentences illustrate:

(45) Kofi neé Amá vále agonwolé (TUP-reciprocal complement)

(Kofi and Ama made friends)

(46a) Kofi neé Amá vále be nwó ágonwolé (TUP + reciprocal
complement)

Kofi and Ama befriended each other)

(46b) yevale ye nwó ágonwolé lá.... (p.30) (")

(since we befriended each other....)

The verb nwu (Group B.II item 9) may mean (I) 'to find' or (II) 'to see, renew acquaintance'. In the first sense, it is used transitively as in (47a):

(47a) Kofi énwu ye búlúku ne

(Kofi has found his book)

In the second sense, it may be regarded as a reciprocal verb requiring the TUP + reciprocal complement:

(47b) Kofi nee Akyé nwúnle be nwó lá, yehys

(lit. since Kofi and Akye saw each other, it has been long)

A second syntactic feature, which distinguishes reciprocal verbs of Group A and Group B.I on the one hand from reciprocal verbs of Group B.II on the other, relates to the optional or obligatory occurrence of a preverbal plural pronoun in the TUP involving either (a) a conjunction of a pronoun and a nominal phrase, or (b) pronominal conjuncts, in subject position. As a rule, the occurrence of a preverbal plural pronoun, ye 'we' or be

'they', is optional with Group A and Group B.I reciprocal verbs, as in the following clauses in the past tense:

Group A reciprocal verb: di amanee 'to exchange messages'

- (48a.I) me nee Akyé líle amanee
(I and Akye exchanged messages)
- (48a.II) me nee Akyé yélile amanee
(I and Akye we exchanged messages)
- (48b.I) ɔ nee ye líle amaneé
(he and she exchanged messages)
- (48b.II) ɔ nee ye bélile amanee
(he and she they exchanged messages)

Group B.I reciprocal verb: su kpolera 'to argue'

- (49a.I) me nee Akyé zúle kpolera
(I and Akye argued)
- (49a.II) me nee Akyé yézule kpolera
(I and Akye we argued)
- (49b.I) ɔ nee wɔ zúle kpolera
(he and you argued)
- (49b.II) ɔ nee wɔ bézule kpolera
(he and you they argued)

In the above reciprocal clauses (48-49(a-b)), all of which exemplify the TUP-reciprocal complement, the (I) examples are characterized by the absence of a preverbal plural pronoun, whereas the (II) examples are marked by the presence of the

preverbal plural pronoun (underlined), ye 'we' in the (a.II) examples or be 'they' in the (b.II) examples, which may be regarded as being in apposition¹ to the preceding plural subject.

With Group B.II reciprocal verbs the occurrence of a preverbal plural pronoun is obligatory in both contexts:

Group B.II reciprocal verb: fa agonwols 'to befriend'

(50a) me nee Akyé yévale ye nwó ágonwolé
(I and Akyé we befriended each other)

(50b.I) me nee ye yévale ye nwó agonwolé
(I and she we befriended each other)

(50b.II) o nee ye bévale be nwó ágonwolé
(he and she they befriended each other)

In the above clauses (50a-b) exemplifying the TUP + reciprocal complement, the obligatory preverbal plural pronoun is both appositional to the preceding plural subject and referentially identical with the possessive pronoun in the reciprocal complement. It is to be noted that the preceding pronominal conjuncts has each a low tone whereas the preverbal plural pronoun has a high tone.

1. Units in apposition are usually co-referential, although co-referents are not necessarily in apposition, particularly where they fulfil different syntactic functions; e.g. the plural subject of a reciprocal clause and the possessive pronoun in the reciprocal complement.

The Ordering Of Pronominal Conjuncts

The ordering of pronouns within acceptable conjunctions is constrained in such a way that only Set I pronominal forms can precede (i.e. occur in 1st position), whereas Set II ones follow (i.e. occur in 2nd position) the conjunctive nee 'and/with'. The phonological realizations of the pronominal forms may be different, depending on whether they occur in 1st or 2nd position. The following clauses (51-53) which involve the past tense form of the verb stems ko/kũ/'to fight', illustrate:

- (51a) me nee wo honle / mē nī wo hũnlĩ?/
(I and you fought)
- (51b) e nee me honle / ē nī m(ə) hũnlĩ?/
(you and me fought)
- (52a) me nee ye honle / mē nī: hũnlĩ?/
(I and he/she fought)
- (52b) o nee ye honle / ɔ nī: hũnlĩ?/
(he/she and he/she fought)
- (53a) ye nee be honle / je nī be hũnlĩ?/
(we and they fought)
- (53b) be nee ye honle / be:nje hũnlĩ?/
(they and we fought)

I) A comparison of (51a) and (51b) shows that the 1st pers. sing. pronoun me 'I' as a member of Set I is possible in 1st position (51a) and as a Set II pronoun in 2nd position (51b); in 1st position, the pronoun is said with a final nasalized vowel, which is different from its realization in 2nd position where the final vowel may not occur in normal speech.

In the case of the 2nd person singular pronoun, the Set I mono-phonemic form ɛ 'you' can only occur in 1st position where it is nasalized as in (51b) and the Set II bi-phonemic form wɔ 'you' is restricted to 2nd position as in (51a).

(II) A comparison of (52a) and (52b) shows that the Set I mono-phonemic form ɔ 'he, she' of the 3rd person singular pronoun only occurs in 1st position as in (52b) where it is nasalized, whereas the Set II bi-phonemic form ye 'he, she' is restricted to 2nd position as in (52a-b), and the junction between the conjunctive and the pronoun is realized as a prolongation of the final nasalized vowel - i.e. *nee ye/nĩ:/* as in (52a-b).

(III) And on the basis of a comparison between (53a) and (53b), it is clear that the 1st person plural pronoun ye 'we' and the 2nd/3rd person plural pronoun bɛ '(you)/they', like the 1st person singular pronoun, may occur in 1st position as Set I pronouns or 2nd position as Set II pronouns. When the 1st person plural pronoun ye 'we' is in 2nd position, the junction between the preceding conjunctive and the pronoun is realized as a palatalization of the initial alveolar nasal consonant of the conjunctive followed by the nasalized vowel of the pronoun - i.e. *nee ye/njẽ/* as in (53b).

As regards the tonal pattern, the conjunctive and the 1st or 2nd position pronoun are all on a low tone.

Reflexive Clauses VS. TUP + Reciprocal Complement

It was noted above that in both reflexive clauses and the sub-type of reciprocal clauses distinguished as the TUP + reciprocal complement, the subject noun phrase and the possessive pronoun in the complement are formally co-referential and that the reflexive complement, particularly if it co-occurs with a plural subject, and the reciprocal complement closely resemble each other in form, tonal pattern and constituency.¹

There are, however, clear formal criteria which serve to distinguish reflexive clauses and the TUP + reciprocal complement, both involving a plural pronominal subject, as in (54a-b) and (56a-b):

Reflexive clauses

- (54a) yebia ye nwó
(we wash ourselves)

-
1. English employs different complements: 'each other'/'one another' in reciprocal clauses as distinct from 'myself', 'ourselves, yourselves, himself, themselves' in reflexive clauses. It is this close resemblance, in both form and constituency, between reflexive and reciprocal complements in most West African languages coupled with the habit of transliteration from the first language that accounts for such deviant sentences widely attested in West African spoken and written English as:
- (I)* They resemble themselves (i.e. each other)
(II)* They love themselves (i.e. they are in love
(with each other))
(III)* We know ourselves (though what is meant is:
'we know each other')

- (54b) bebia be nwó
(they wash themselves)
- (55a) mebia me nwó
(I wash myself)
- (55b) ebia e nwó
(you wash yourself)
- (55c) obia o nwó
(he/she washes him/herself)

TUP + reciprocal complement

- (56a) yezoho ye nwó
(we resemble each other)
- (56b) bezoho be nwó
(they resemble each other)
- (57a)* mezoho me nwo
(I resemble myself)
- (57b)* ezoho e nwo
(you resemble yourself)
- (57c)* ozoho o nwo
(he/she resembles him/herself)

Reflexive clauses and the TUP + reciprocal complement are different in the following respects:

I) Reflexive clauses may have a singular or plural subject noun phrase. Thus alongside the reflexive clauses (54a-b) we shall attest the paradigm (55a-c) involving a singular pronominal subject. Reciprocal clauses, as noted above, are marked by a plural subject noun phrase and, therefore,

corresponding to (56a-b) we shall never find (57a-c) which involve a singular pronominal subject.

II) Generally speaking, reciprocal verbs capable of entry into the TUP + reciprocal complement can also take a personal pronominal object, ye 'him/her'; that is, the reciprocal complement, as a rule, contrasts with a personal pronominal object as in the pair of clauses:

(58a) yezoho ye nwo
(we resemble each other)

(58b) yezoho ye
(we resemble him/her)

The reflexive complement, depending on the sub-class of its verb, may or may not contrast with a personal pronominal object. With the reflexive verb bia 'to wash', for example, there is such a contrast:

(59a) obiale o nwó
(he washed himself)

(59b) obiale ye
(he washed him/her)

On the other hand, with the reflexive verb nrinzi 'to wash' there is no such contrast:

(60a) onrinzinle o nwó
(he washed himself)

(60b)* onrinzinle ye
(he washed him/her)

III) As a rule, the reciprocal complement is not omissible; that is to say, its omission usually results in an

unacceptable clause. Thus alongside (56a-b) we shall never find:

- (61) * ye/bezoho
 (we/they resemble)

As noted above, however, the reciprocal complex verb fa agonwolé 'to befriend' is exceptional in allowing the omission of the reciprocal complement without producing an unacceptable clause, as in:

- (62a) ysvale ye nwó ágonwolé
 (we befriended each other)
- (62b) ysvale agonwolé
 (we made friends)

On the other hand, with a sub-class of reflexive verbs the reflexive complement may be omitted without a meaning difference. Thus alongside (59a) involving the verb bia 'to wash', which favours the deletion of the reflexive complement, we shall find:

- (63) .. obialé
 (he washed)

And corresponding to (64a):

- (64a) bedule be nwó twí
 (they marched en masse)

we shall attest:

- (64b) bedule twí
 (they marched en masse)

Reflexive verbs which allow the deletion of the reflexive complement are rare and include 1. bia 'to wash', 2. tu 'to

march, proceed (en masse)', and 3. kruti 'to snatch oneself free'.

IV) The occurrence of reduplicated verbs in reflexive clauses can be attested and serves as one synchronic means of distinguishing some reduplicated verbs from their corresponding verb stems. Thus the verb stem boa 'to gather' does not function as a reflexive verb, but its reduplicated form booboa 'to get ready, prepare' may as in:

(65) oléboóboa o nwó

(he is getting (himself) ready)

Other pairs are 1. sie 'to keep' / siezie 'to dress up'; 2. nya 'to bend (fish) / nyenya 'to fold'; 3. kua 'to gather' / kuohua 'to prepare'. Reciprocal verbs of Group B.II (which can occur in the TUP + reciprocal complement) do not, as a rule, have reduplicated forms. Item (6) gya 'to marry' alone has a reduplicated form gyigyá 'to marry', which is not possible in the TUP + reciprocal complement.

Thus alongside (66a):

(66a) yegyale ye nwó lá

(when we got married)

we shall never find:

(66b)* yegyigyale ye nwo la

V) Finally, as noted above, some reflexive verbs are capable of reflexive nominalization. Generally speaking, reciprocal verbs of Group B.II do not allow such (reflexive) nominalizations. It should be noted that although the verb stem kulo 'to love' has a reflexive as well as a reciprocal use, its nominalized form anwohulólé 'self-love' is relatable to its reflexive use.

TYPE 4: COMPLEX SEMI-TRANSITIVE (SVOL) AND
TYPE 5: SEMI-TRANSITIVE CLAUSES (SVL)

The transitivity clause-type classified as complex semi-transitive may be exemplified by:

- | | | | | | | | |
|-----|----------|----|---------|-------|---------|---------|----------------|
| | S | | V | | O | | L |
| (1) | nrenyá | ne | / | éwula | / | kúsu ne | /kódokú ne ánu |
| | (the man | | has put | | the cat | | in the sack) |

and the different transitivity clause-type distinguished as semi-transitive may be exemplified by:

- | | | | | | |
|-----|----------|----|----------|-------|-----------------|
| | S | | V | | L |
| (2) | tweá | ne | / | éwolo | / kodokú ne ánu |
| | (the dog | | has gone | | into the sack) |

A comparison of clauses (1) and (2), in respect of the items which follow their respective verb words, shows that the verb word occurring in (1) is immediately followed by a nominal object (kúsu ne 'the cat'), which is excluded from the items following the verb word in (2). Both (1) and (2), however, have a corresponding element of clause-structure which is realized by the genitive noun phrase, kodokú ne ánu 'inside of the sack' and is here distinguished as the locative adjunct. The locative adjunct, as in the above clauses, denotes a place or location.

On the basis of the above clauses, we may say that the locative adjunct may occur in a clause without a direct object as in (2), but in instances where a direct object is present as in (1), the usual linear arrangement is that the direct object precedes the locative adjunct.

It is also to be noted that in clauses like (1) where a direct object occurs before the locative adjunct, the first syllable of the noun phrase realizing locative adjunct has regularly a high tone, whereas in clauses like (2) where the verb word is immediately followed by the locative adjunct, the corresponding first syllable has a low tone.

Clauses such as (1) in which the verb word is in relation with a direct object followed by a locative adjunct are classified as complex semi-transitive.

The different transitivity clause-type exemplified in (2) in which the verb word is in direct relationship with a locative adjunct is distinguished as semi-transitive.

The two transitivity clause-types are discussed separately, but attention is drawn to any relationships¹ that may obtain between verbal forms occurring in corresponding complex semi-transitive and semi-transitive clauses.

Type 4: Complex semi-transitive (S V O L)

Complex semi-transitive clauses may be further exemplified by the following:

	S	V	O	L
(1)	syevóls	ne /	édenla /	Akyé /kulobá ne ázo
	(the guest has sat Akye on the chamber-pot)			

1. Such relationships obtaining between verbal forms capable of occurring in corresponding complex semi-transitive and semi-transitive clauses are handled in terms of dynamic/stative aspect and causative/non-causative aspect discussed in detail in Chapter 7.

S V O L
(2a) Akyé / évola /kúsu ne / ékpónlé ne ázo
(Akye has made the cat climb on to the table)

S V O L
(2b) eysvóls ne / hwílile /boané ne / áze
(the guest dragged the goat along the ground)

S V O L
(3) nrenyá ne / éye /bulalé ne / sénlé ne ánu
(the man has removed the iron rod from the fire)

Complex semi-transitive clauses are characterized by the following properties:

(i) As already mentioned, the verb word occurring in complex semi-transitive clauses are in syntactic relationship with a direct object followed by a locative adjunct denoting a place or location.

(ii) As the above examples confirm, the first syllable of the noun phrase functioning as locative adjunct has regularly a high tone (and the different tonal patterns of the same items in construction and in isolation illustrate: (1) kúlobá ne ázo/kuloba, (2a) ékpónlé ne ázo/ékpónlé, (2b) áze/aze, (3) sénlé ne ánu/senlé).

(iii) Generally speaking, the direct object and the locative adjunct co-occurring within a complex semi-transitive clause correspond to a semi-transitive clause, in which the direct object functions as subject noun phrase and the locative adjunct occurs as locative adjunct after the semi-transitive verb. Thus the locative adjunct and the direct object in the complex semi-transitive clause (1) above: Akyé kúlobá ne ázo correspond to the semi-transitive clause (1b) below:

(1b) Akyé dé kulobá ne ázo

(Akye is sitting on the chamber-pot)

(iv) As a rule, in a complex semi-transitive clause a definite noun phrase, whether animate or inanimate, functioning as direct object is always pronominalizable. Thus the animate noun phrase object Akye occurring in (1) above is pronominalizable by the ye 'her', as in:

(1c) sɛvóls ne édenla ye kúlobá ne ázo

(the guest has sat her on the chamber-pot)

Similarly, the inanimate noun phrase object bulalé ne 'the iron rod' occurring in the complex semi-transitive clause (3) is pronominalizable by ye 'it', as in:

(3a) nrenyá ne éye ye sénlé ne ánu

(the man has removed it from the fire)

The corresponding transitive clause:

(4a) nrenyá ne éye bulalé ne

(the man has removed the iron rod)

is relatable by the pronominalization of the direct object to:

(4b) nrenyá ne éye

(the man has removed it)

in which the pronominal object is not overtly expressed.

It is to be noted that clauses such as (3a):

(3a) nrenyá ne éye ye sénlé ne ánu

(the man has removed him/it from the fire)

may be two-ways ambiguous as between an animate or inanimate reference of the pronominal object ye 'him/it'.

(v) On the basis of the relationship between such forms of the locative adjunct as nwólé ne ánu 'in the oil' / nú 'in it', exemplified in the pair of clauses:

(5a) yewula o sá nwólé ne ánu
(he has put his hand in the oil)

and

(5b) yewula o sá nú
(he has put his hand in it/inside)

we might say that the locative adjunct is reducible (or pronominalizable), particularly if the locative adjunct is realized by a genitive noun phrase consisting of a definite noun phrase as possessor plus, as head noun, the prefixed possessed root form of the three local inalienable nouns: (1) nuhuá 'interior, inside', (2) zolé 'top', and (3) nwólé 'exterior, outside'. This type of reduction (or pronominalization) would seem to be contextually determined, being realizable in contexts where the locative adjunct has previously been mentioned.

Classification of complex semi-transitive verbs

Semantically, complex semi-transitive clauses may express (A) the placing of the direct object referent in a position, as in (1) above; (B) the movement of the object referent in a certain direction as in (2a) or along a path as in (2b); or (C) the removal of the object referent away from a previous location. We may, therefore, sub-categorize complex semi-transitive clauses in terms of (A) locational, (B) directional, and (C) removal.

This tripartite sub-categorization, though semantic, has some syntactic correlation. On the basis of the sub-classes of

verbs which can occur in each type of complex semi-transitive clause, three main groups of complex semi-transitive verbs are distinguished: Group A: Locational verbs, Group B: Directional verbs, and Group C: Removal verbs.

The verb word in a complex semi-transitive clause may be either a simple (or single-word) verb or a verbal group (or a multi-word verb) and in the description, clauses involving simple verbs are dealt with separately from those involving verbal groups.

For a general description of complex semi-transitive clauses, whether they are characterized by locational, directional or removal verbs, three main participant roles may be set up and designated as (I) Agentive (Ag) - the typical function of the subject noun phrase which denotes the object or animate being that positions, moves or removes the direct object referent; (II) Affected (Af) - the typical function of the direct object which refers to the object or animate being that is positioned, moved or removed; and (III) Location (Loc) - the adverbial function of the locative adjunct which denotes the place where the object referent is positioned, the direction in which it is moved or the path along which it is moved, or the previous position from which it is removed as a result of the verb action. Thus all three participant roles are represented in the following complex semi-transitive clauses, which exemplify the directional as in:

	Ag	Af	Loc
(6a)	Akyé/édwula/Kofi/	áze	
	(Akys has set Kofi down)		

or the removal, as in:

- | | | | | | |
|------|------|---|------|---|------------------------|
| | Ag | | Af | | Loc |
| (7a) | Akyé | / | élie | / | dadeé ne / Kófi ása nu |
- (Akye has removed the knife from Kofi's hand)

Alongside clauses (6a-7a) above, we shall also find:

- | | | | |
|------|------|---|---------------|
| | Ag | | Af |
| (6b) | Akyé | / | édwula / Kofi |
- (Akye has set Kofi down)

- | | | | |
|------|------|---|-----------------|
| | Ag | | Af |
| (7b) | Akyé | / | élie / dadeé ne |
- (Akye has removed the knife)

in either of which the third participant role of location is not overtly expressed. In the interpretation of (6b-7b), however, we still understand that the verb action resulted, in the case of (6b), in the movement of the direct object referent (or the affected participant) in a certain direction, and in the case of (7b), in the removal of the direct object referent from a (previous) location.

Simple complex transitive verbs:

Group A: Locational verbs

Five sub-sets (I-V) of locational verbs may be distinguished. Generally speaking, complex semi-transitive clauses involving locational verbs are characterized by the following properties:

(I) The possibility of inserting the formative w before the locative adjunct, particularly if the noun phrase functioning as locative adjunct is definite. The formative w is regarded as an invariable verb or 'verbid'¹. Thus alongside the complex semi-transitive clauses (1a):

(1a) eyevóle ne égua ye édanlé ne ékpónlé ne ázo
(the stranger has put his cloth on the table)

we shall find (1b) involving the verbid w before the locative adjunct:

(1b) eyevóle ne égua ye édanlé ne w ékpónlé ne ázo
(the stranger has put his cloth on the table)

As (1b) illustrates, the verbid w has high tone and is followed by a low tone on the next syllable.

(II) As a rule, complex semi-transitive clauses involving locational verbs have paraphrases involving the verb fa 'to take'. Thus corresponding to (1a) above we have the fa-paraphrase (1c):

(1c) eyevóle ne éva ye édanlé ne égua ékpónlé ne ázo
(the stranger has taken his cloth (and) put it on the table)

1. For the syntactic features of the formative verb w termed as 'verbid' see P.534. We owe the term 'verbid' to Ansre, G. (1966).

In such fa-paraphrases as (1c) above, the verbid wo cannot occur before the locative adjunct.

It is to be noted that complex semi-transitive clauses involving the locational verbs 1. da 'to lay' and the dynamic/stative verbal forms 2. de/le 'to hold/to be holding or have' (see Group A.II below) do not have fa-paraphrases.

Group A.I: Locational verbs

Group A.I consists of two disyllabic verbal forms which are dynamic, and each has a mono-syllabic stative verbal form which is morphologically related to it by suffixation, as set out below:

	<u>Dynamic</u>	<u>Stative</u>	<u>Suffix</u>
1.	gyinla/gyēnlā/ 'to stand	gyi/gyi/ 'to be standing'	/-nlā/
2.	tenla /tēnlā / 'to sit'	te /tɪ / 'to be sitting'	/-nlā/

It is also to be noted that, in either case, both syllables of the dynamic verbal form are nasalized, whereas the corresponding stative verbal form is non-nasalized and in the case of item (2), the positive continuative tense form de of its stative verbal form te is phonologically related by stem-initial Type B mutation to the dynamic verbal form.

The dynamic verbal form of each pair can occur in a complex semi-transitive clause as well as in a semi-transitive clause, whereas the corresponding stative verbal form is only found in a semi-transitive clause. The complex semi-transitive clause involving the dynamic verbal form and the corresponding

semi-transitive clause involving the stative verbal form may be related as causative to non-causative. Thus with the first pair of verbal forms, we shall find the pair of complex semi-transitive (causative)/semi-transitive (non-causative) clauses:

- (1a) Akyé égyinla nysle ó nlóa anu (complex semi-transitive, dynamic, causative)
(Akye has stopped spittle in her mouth)
- (1b) nysle gyí o nlóa anu (semi-transitive stative, non-causative)
(there is spittle in her mouth)

And similarly with the second pair of verbal forms we shall find the pair of clauses:

- (2a) Akyé édenla o rá Kófí kúloba zó (complex semi-transitive, dynamic, causative)
(Akye has sat her son Kofi on a chamber-pot)
- (2b) o rá Kófí dé kuloba zó (semi-transitive, stative, non-causative)
(her son Kofi is sitting on a chamber-pot)

The dynamic form of each pair of verbal forms is also possible in a semi-transitive clause, as in (1c) and (2c) below:

- (1c) Akyé égyinla skpónlé ne ázo (semi-transitive, dynamic)
(Akye has stood on the table)
- and (2c) Akyé édenla skpónlé ne ázo (semi-transitive, dynamic)
(Akye has sat on the table)

Members of this sub-set are additionally characterized by the following properties:

- (i) As noted above, the verbid wo is possible before the locative adjunct in complex semi-transitive clauses involving such locational verbs. Thus corresponding to (1a) above we shall find:

(1d) Akysé égyinla nysle wó o nlóa anu

(Akye has stopped spittle in her mouth)

(ii) As mentioned above, complex semi-transitive clauses involving the dynamic verbal form have fa-paraphrases. Thus corresponding to the complex semi-transitive clause (1a) above involving the dynamic verbal form 1. gyinla 'to stop', we find:

(1e) Akysé éva nysle égyinla o nlóa anu

(Akye has taken spittle (and) stopped (it) in her mouth)

Similarly, alongside the complex semi-transitive clause (2a) involving the dynamic verbal form 2. tenla 'to sit' we attest:

(2d) Akysé éva o rá Kofi édenla kuloba zó

(Akye has taken her son Kofi (and) sat (him) on a chamber-pot)

(iii) The dynamic verbal forms denote the placing of the direct-object referent in a location and their common suffix /-nlā/ may be regarded as associated with location.

Group A.II

The second sub-set consists of two mono-syllabic dynamic verbal forms, each of which has a corresponding stative verbal form; the stative verbal form of each pair is phonologically related by stem-initial Type B mutation to the corresponding dynamic verbal form:

	<u>Dynamic</u>		<u>Stative</u>	
1.	da/da/	'to lay, sleep'	/la/	'to be lying'
2.	de/de/	'to hold, grasp'	/le/	'to be holding; to possess, have'

With the first pair of verbal forms, as distinct from the second, the dynamic verbal form can occur in a complex semi-transitive as well as in a semi-transitive clause; the corresponding stative form is only found in a semi-transitive clause which may be related as non-causative to the causative complex semi-transitive clause containing the dynamic verbal form:

- (1a) Akyé éla o rá Kófí ébía ne ánu (complex semi-transitive, dynamic causative)
(Akye has laid her son Kofi in the chair)
- (1b) o rá Kófí lá ebía ne ánu (semi-transitive, stative, non-causative)
(her son Kofi is lying in the chair)

The dynamic verbal form can also occur in a semi-transitive clause:

- (2a) Akyé éla ebía ne ánu
(Akye has slept in the chair)
- (2b) yelale Bolofó
(we spent the night at Axim)

With the second pair of verbal forms, however, both the dynamic and stative members are possible in a complex semi-transitive clause:

- (3a) ode ye nrélánde ne ó sá nú (complex semi-transitive, dynamic)
(he holds his cutlass in his hand)
- (3b) ole ye nrélánde ne ó sá nú (complex semi-transitive, stative)
(he's holding/has his cutlass in his hand)

The following are some characteristic properties of locational verbal forms of this sub-set.

(I) With verbal forms of this sub-set, the locative adjunct is more readily omitted. Thus alongside the complex semi-transitive clause (1a) above, we shall attest the transitive clause:

(1c) Akyé éla o rá Kófí

(Akye has put her son Kofi to sleep)

Similarly, corresponding to (3a) we have:

(3c) ode ye nrélánde ne

(he holds/grasps his cutlass)

(II) As noted above, the formative wó is possible before the locative adjunct. Thus if we take (3a) as an example, we shall find:

(3d) ode ye nrélánde ne wó o sá nú

(he holds his cutlass in his hand)

(III) In respect of their underlying structure, complex semi-transitive clauses involving locational verbs of this sub-set are more readily referable to an underlying structure which derives from a transitive clause and a semi-transitive clause. Thus clause (3a):

(3a) ode ye nrélánde ne ó sá nú

(he holds his cutlass in his hand)

is derivable from the underlying pair of clauses:

(3a.I) ode ye nrélande ne (transitive)

(he holds his cutlass)

(3a.II) ye nrélande ne wó o sa nu (semi-transitive)

(his cutlass is in his hand)

In such instances, the complex semi-transitive clause represents a fusion of a transitive clause and a semi-transitive clause in which the direct object occurs as subject.

(IV) And as mentioned above, it is a distinctive feature of complex semi-transitive clauses containing locational verbs of this sub-set that they do not have fa-paraphrases. Thus alongside (1a):

(1a) Akyé éla o rá Kófi ébía ne ánu

we shall never find the fa-paraphrase:

(4a) * Akye eva o ra Kofi éla ébia ne anu

Similarly, corresponding to (3a) above, we shall not find:

(4b) * ofa ye nrelande ne ode o sa nu

The relationship of complex semi-transitive clauses and possessive constructions

It would seem appropriate, at this stage, to say a word about the relationship between complex semi-transitive clauses involving the dynamic/stative verbal forms de/le and transitive clauses in which the stative verbal form is used to express possession.

It has long been observed (e.g. by Allen, W.S. (1964) and Lyons, J. (1967)) that in many languages, existential and possessive constructions derive, both synchronically and diachronically, from locatives (here referred to as complex semi-transitive or semi-transitive clauses), and that this relationship is probably a language universal.

In Nzema, there is such a synchronic relation, on the one hand, between I) existential constructions and locatives (or semi-transitive clauses) and between II) transitive clauses expressing possession and locatives (or complex semi-transitive clauses), on the other.

The first kind of relationship, which is dealt with later in the section on locational relational clause, may be illustrated by the use of the locational copular verb wɔ 'to be in, exist' in the locational relational (or semi-transitive) clause:

- (5a) ezukoá ne wɔ Kofí éke
(the money is with Kofi)

as well as in the existential construction:

- (5b) Nyamenlé wɔ eké
(lit. God is there there is a God/God exists)

The copular verb wɔ in (5a) and the verb wɔ in (5b) may be regarded as the same verb or different but homophonous verbs. Clause (5a) above expresses the existence of the subject referent in a particular location, whereas in (5b) the existence of the subject referent or an entity is asserted. And the relationship of the second type can be seen in the use of the same verb dɛ/ɛ 'to hold (in hand), to have or possess' in the pair of complex semi-transitive clauses (6a-b):

- (6a) ɔdɛ ye búlúku ne ó sá nú (Dynamic, Habitual
(he holds his book in tense)
his hand)
- (6b) ɔɛ ye búlúku ne ó sá nú (Stative, Continuative
(he is holding his book tense)
in his hand)

as well as in the pair of transitive clauses (7a-b):

- (7a) ɔtɛdɛ ezukoa (Stative, Durative
(lit. he still has money: tense)
he is still rich)

<u>Dynamic</u>	<u>Stative</u>
1. kenda/kēndā/ 'to hang'	/hēndā/ 'to be hanging'
2. kisa /kisa / 'to lean against'	/hisa / 'to be leaning'

With verbal forms of this sub-set, the dynamic form of each pair occurs in a complex semi-transitive clause, whereas the corresponding stative form occurs in a semi-transitive clause; the complex semi-transitive clause containing the dynamic verbal form may be related as causative to the non-causative semi-transitive clause involving the stative verbal form. Thus with the first pair of verbal forms we shall find the related pair of clauses:

- | | |
|--|--|
| (1a) Kofí <u>é</u> henda ye kyšlé ne
alénke ne ánze | (complex semi-transitive,
dynamic, causative) |
| (Kofi has hung his hat
behind the door) | |
| (1b) ye kyšlé ne <u>h</u> enda alénke
ne ánze | (semi-transitive,
stative, non-causative) |
| (his hat is hanging
behind the door) | |

Similarly, with the second verbal forms we shall find the related pair of clauses:

- | | |
|--|--|
| (2a) ye <u>h</u> isa ye kpómá ne alénke
ne ánze | (complex semi-transitive,
dynamic, causative) |
| (he has leaned his walking
stick behind the door) | |
| (2b) ye kpómá ne <u>h</u> isa alénke
ne ánze | (semi-transitive,
stative, non-causative) |
| (his walking stick is
leaning behind the door) | |

Locative verbs of this sub-set have the following properties:

(I) Locative verbs of this sub-set also co-occur with the formative verbid wó in a complex semi-transitive clause. Thus alongside (2a), for example, we shall find:

(2c) yehisa ye kpómá ne wó aleńks ne ánze
(he has leaned his walking stick behind the door)

(II) Complex semi-transitive clauses involving locational verbs of this sub-set have fa-paraphrases.

Thus corresponding to (2a), for example, we shall attest:

(2d) yeva ye kpómá ne yéhisa alénke ne ánze
(he has taken his walking stick (and) leaned (it) behind the door)

(III) The first dynamic verbal form can also occur in a semi-transitive clause as in:

(3) ye édanlé ne kénda eké ne dédeé álés kye
(his cloth hangs there until next morning)

And the second dynamic/stative verbal forms kisa/hisa 'to lean against' can be used transitively:

(4a) nrenyá ne shisa bané ne
(the man has leaned against the wall)

(4b) nrenyá ne hisa bané ne
(the man is leaning against the wall)

Group A.IV

Members of the fourth sub-set also consist of pairs of verbal forms, one of which is dynamic and the other is stative; but unlike verbal forms of Group A.II-III, the dynamic and stative forms of each pair have the same phonological shape.

Members of this sub-set include:

<u>Dynamic</u>		<u>Stative</u>
1. gua /gwæ /	'to place, put; pour'	/gwa / 'to be lying'
2. bea /b(ɪ)ja/	'to lay across'	/b(ɪ)ja/ 'to be lying across'
3. butu /butu /	'to place face down'	/butu / 'to be lying face down'
4. bikye/bikye/	'to push nearer, away'	/bikye / 'to push nearer away; to be near to'

As in the case of members of Group A.III, the dynamic form of each pair occurs in a complex semi-transitive clause and the corresponding stative form in a semi-transitive clause; the complex semi-transitive and the semi-transitive may be related in terms of causative/non-causative.

We attest the first pair of verbal forms in the pair of related clauses:

- (1a) eysvols ne égua edanlé ne (complex semi-transitive
ékpónlé ne ázo dynamic, causative)
(the stranger has put the
cloth on the table)
- (1b) edanlé ne gua skponle (semi-transitive, stative
ne ázo non-causative)
(the cloth is lying on
the table)

And the following complex semi-transitive clauses exemplify the use of the other locational verbs of the sub-set:

- (2a) yebea baká ne ádenlé ne ánu
(he has laid the tree across the path)

(3a) Akysé ébutu kyénze ne mókyéa ne ánze

(Akys has overturned the pan behind the hearth)

and (4a) bikye tobá ne éke

(push the bottle near here)

(I) Locational verbs of this sub-set are also characterized by the possibility of co-occurrence with the verbid wó. Thus alongside (2a-4a), we shall find respectively:

(2b) yebea baká ne wó adenlé ne ánu

(he has laid the tree across the path)

(3b) Akysé ébutu kyénze ne wó mokyéa ne ánze

(Akys has overturned the pan behind the hearth)

and (4b) bikye tobá ne wó eké

(push the bottle near here)

(II) And as with members of Group A.III, complex semi-transitive clauses involving the dynamic verbal form may have fa-paraphrases. Thus corresponding to (1a) we shall attest:

(1c) eysvóle ne éva édanlé ne égua ékpónlé ne ázo

(the stranger has taken the cloth (and) put (it) on the table)

Similarly, for (2a-4a) we shall find the corresponding fa-paraphrases:

(2c) yeva baká ne yébea adenlé ne ánu

(he has taken the tree (and) laid (it) across the path)

(3c) Akyé ɛva kyénze ne ébutu mokyéa ne ánze
(Akýe has taken the pan (and) placed (it) face
down behind the hearth)

(4c) fa tobá ne bíkye ské
(take the bottle (and) push (it) near here)

(III) The dynamic verbal forms of items (2-4) can be used transitively as in the following imperative mood clauses:

(5a) butu ye
(turn it face down)

(5b) bea ye
(lay it across)

(5c) bikye ye
(draw near to him)

Group A.V

Unlike the members of the sub-sets, Groups A.I-III, complex semi-transitive verbs of this sub-set are dynamic verbs which do not have corresponding stative forms morphologically and/or phonologically related to them; any related stative verbal forms capable of occurring in corresponding semi-transitive clauses are suppletive forms, as set out below:

<u>Dynamic verbs</u>		<u>Suppletive stative verbs</u>	
1.	sie 'to place, put'	gyi	'to be standing'
2.	to 'to put on/in'	la	'to be (lying) on/in'
3.	wula 'to put in'	wo	'to be in'

The use of the first pair of verbs is exemplified by the following related pair of complex semi-transitive and semi-transitive clauses:

- (1a) mezie nzule sɛnlé zó (complex semi-transitive,
(I've put water on fire) dynamic, causative)
- (1b) nzule gyi sɛnlé zó (semi-transitive, stative
(there is water standing non-causative)
on fire)

With the second pair of verbs we shall find the pair of related clauses:

- (2a) yedo sanvé ne ékpónlé ne ázo (complex semi-transitive,
(he has put the key on the dynamic, causative)
- (2b) sánve ne lá ékpónlé ne ázo (semi-transitive, stative
(the key is (lying) on the non-causative)
table)

And with the third pair of verbs we shall attest:

- (3a) yewula o sá mé kódoku nú (complex semi-transitive
(he has put his hand in my pocket) dynamic, causative)
- (3b) o sá wó me kódoku nú (semi-transitive stative
(his hand is in my pocket) non-causative)

(I) Like members of the sub-sets, Group A. III-IV, locational verbs of this sub-set can co-occur with the verbid wó. Thus alongside (2a-3a) above, we shall find respectively:

- (2c) yedo sánve ne wó ékpónlé ne ázo
(he has put the key on the table)

and (3c) yewula o sá wó me kódoku nú
(he has put his hand in my pocket)

(II) And we shall also attest fa-paraphrases for complex semi-transitive clauses involving locational verbs of this sub-set. Thus corresponding to (1a-3a) we have respectively:

(1d) meva nzule mézie senlé zó
(I have taken water (and) put (it) on fire)

(2d) yeva sánve ne yédo skpónlé ne ázo
(he has taken the key (and) put (it) on the table)

and (3d) yeva o sá yéwula me kódoku nú
(he has taken his hand (and) put (it) in my pocket)

We might distinguish the fa-paraphrase (3d) above from (4a) below:

(4a) yeva suá ne yéwula o sá nú
(lit. he has taken the house (and) put (it) in his
hand: he's entrusted the house to him)

Despite the resemblance between the fa-paraphrase (3d) and clause (4a) in respect of the linear arrangement of their constituent elements, (4a) is not a fa-paraphrase of a complex semi-transitive clause. Corresponding to (4a) we shall never attest the complex semi-transitive clause:

(4b) * yewula sua ne o sa nu.

We interpret (4a) as consisting of a verbal group fa wula 'to take (and) place' (which is a close-knit collocation) plus o sa nu 'in his hands' (which may be regarded as locative adjunct), the entire verbal piece being a fixed idiomatic expression meaning 'to entrust'.

Group B: Directional verbs

Directional verbs are dynamic verbs which either denote movement in an upward or downward direction or verbs of motion which allow a directional meaning. With directional verbs the locative adjunct refers to a direction/destination or a path rather than to a position as with locational verbs.

Three sub-sets (I-III) of directional verbs are distinguished and have the following properties:

(I) Some directional verbs such as 1. fola 'to lift up', 2. dwula 'to set down' may co-occur with the verbid wɔ, others like 3. wone 'to turn downwards' and 4. twili 'to drag' do not usually co-occur with wɔ. Thus alongside the complex semi-transitive (1a), which involves the verb stem 2. dwula:

(1a) Akysé édwula Kofí kumá ne ánu

(Akysé has put Kofi down into the hole)

we shall find (1b):

(1b) Akysé édwula Kofí wɔ kumá ne ánu

(Akysé has put Kofi down into the hole)

On the other hand, corresponding to the complex semi-transitive clause (2a) involving the verb stem 3. twili:

(2a) ɔhwilile boané ne áze

(he dragged the goat along the ground)

we shall never find:

(2b) * ɔhwilile boané ne wɔ áze

(II) As a rule, complex semi-transitive clauses involving directional verbs do not have fa-paraphrases. Thus alongside (1a) above, we shall never find:

(1c) * Akysé éva Kofí edwula kuma ne anu.

And similarly for (2a) above we shall never find:

(2c) * ɔvale boané ne ɔhwilile áze.

There are, therefore, formal criteria which serve to distinguish locational from directional verbs.

Group B.I: Directional verbs

Members of the first sub-set consist of two verbal forms which have a causative and non-causative verbal form, both forms of each pair being dynamic; the non-causative verbal form is morphologically related by suffixation to the causative form, as set out below:

	<u>Causative, dynamic</u>	<u>Non-causative, dynamic</u>	<u>Causative suffix</u>
1.	fola /fɛla / 'to lift up'	fo /fɔ / 'to climb'	/-la/
2.	dwula/gyɛla/ 'to set down'	dwu/gywu/ 'to descend'	/-la/

The causative verbal form of each pair of this sub-set can occur in a complex semi-transitive clause and the non-causative member in a semi-transitive clause. Thus with the first pair of verbal forms we shall find:

(1a) Kofí évola kúsu ne ékpónlé ne ázo (complex semi-transitive, causative, dynamic)
(Kofi has lifted the cat on to the table)

and (1b) kúsu ne évo ékpónlé ne ázo (semi-transitive, non-causative, dynamic)
(the cat has climbed on to the table)

And also with the second pair of verbal forms we shall find the related pair of complex semi-transitive and semi-transitive clauses:

(2a) Kofí édwula kúsu ne kúmá ne ánu (complex semi-transitive, causative, dynamic)
(Kofi has put the cat down into the hole)

- (2b) kúsu ne édwu kumá ne ánu (semi-transitive
(the cat has descended into non-causative,
the hole) dynamic)

(i) Complex semi-transitive verbs of this sub-set usually co-occur with wó particularly before a definite noun phrase functioning as locative adjunct. Thus alongside (1a) and (2a) above which involve a definite locative adjunct we shall find (1c) and (2c) respectively:

- (1c) Kofí évola kúsu ne wó skpónlé ne ázo
(Kofi has lifted the cat on to the table)

and (2c) Kofí édwula kúsu ne wó kumá ne ánu
(Kofi has put the cat down into the hole)

Where the locative adjunct is an indefinite noun phrase such as 1. anwuma 'up' or 2. aze 'down', the verbs do not usually co-occur with wó.

Thus alongside

- (3a) Kofí évola o rá ne ánwumá
(Kofi has lifted up his child)

we shall not attest:

- (3b) * Kofí évola o rá ne wó anwuma

Similarly, corresponding to (4a):

- (4a) Kofí édwula o rá ne áze
(Kofi has set his child down)

we shall not find (4b):

- (4b) * Kofí édwula o rá ne wó aze.

(ii) With directional verbs of this sub-set the locative adjunct is more readily omitted without changing the basic meaning of the clause. Thus we shall attest the following transitive imperative mood clauses which may be regarded as reductions:

(5a) fola ye
(lift him/her up)

(5b) dwula ye
(set him/her down)

It was indicated above that complex semi-transitive verbs are three - place predicates or require three participant roles. In interpreting clauses such as (5a-b) from which the third role of location is missing we still understand that the object referent was moved up (anwuma) as in (5a) or moved down (aze) as in (5b).

(iii) The structure underlying complex transitive clauses involving directional verbs of this sub-set is more readily represented as a fusion of a pair of a transitive clause and a semi-transitive clause. Thus the underlying structure of (2a):

(2a) Kofí édwula kúsu ne kúma ne ánu

may be presented as the pair of clauses:

(2a.I) Kofi edwula kusu ne (transitive)
(Kofi has set down the cat)

(2a.II) kusu ne wə kuma ne anu (semi-transitive)
(the cat is in the hole)

(iv) As noted above, complex semi-transitive clauses involving directional verbs do not, as a rule, have fa-paraphrases. Thus corresponding to (2a) above, we shall not find:

(6) * Kofi eva kusu ne edwula kuma ne anu.

(v) The two verbal forms of this sub-set express movement with reference to a vertical axis and contrast in terms of an upward or downward direction. Their causative suffix /-la/ may, therefore, be regarded as relating to direction in contra-

distinction to the causative suffix /-nlã/ occurring in the locational verbs: 1. gyinla 'to stand, stop' and 2. tenla 'to sit' (Group A.I) which may be associated with location or positioning.

We might also include in this group the complex verb maa zole 'to lift up' which denotes upward movement. This verb may take an animate object noun phrase, as in:

- (7a) yemaa nrenyá ne zó
(he has lifted the man up)

which is pronominalizable as in

- (7b) yemaa ye zó
(he has lifted him up)

or it may take an inanimate object noun phrase, as in the clause (8a):

- (8a) yemaa skpónlé ne zó
(he has lifted the table up)

which is relatable by the pronominalization of the object noun phrase to (8b):

- (8b) yemaa zo(lé)
(he has lifted it up)

Group B.II

The second sub-set of directional verbs consists of pairs of verbal forms, one of which can occur in a complex semi-transitive clause and the other in a semi-transitive clause; the complex semi-transitive clause and the corresponding semi-transitive clause may be related as causative to non-causative. Unlike the members of Group B.I, verbal forms of this sub-set are identical in phonological shape, as set out below:

	<u>Causative</u>		<u>Non-causative</u>
1.	te /te /	'to strike, drop'	/te /
2.	kponla/kpõnlã/	'to strike, plant'	/kpõnlã/
3.	wane /won(ĩ)/	'to turn (downward)'	/won(ĩ)/ 'to be downward'

The use of the first verbal forms is illustrated by the following pair of complex semi-transitive and semi-transitive clauses:

- | | | |
|------|---|---|
| (1a) | Akyé <u>éde</u> bedá ne áze
(Akye has dropped the child
down) | (complex semi-transitive, dynamic, causative) |
| (1b) | bedá ne <u>éde</u> aze
(the child has dropped down) | (semi-transitive, dynamic, non-causative) |

Similarly, with the second verbal forms we shall find the pair of clauses:

- | | | |
|------|--|---|
| (2a) | <u>yekponla</u> Akyé áti áze
(he has struck Akye's head
on the ground) | (complex semi-transitive, dynamic, causative) |
| (2b) | Akyé áti <u>ékponla</u> aze
(Akye's head has struck on
the ground) | (semi-transitive, dynamic, non-causative) |

The third pair of verbal forms are exemplified in the related pair of clauses:

- | | | |
|----------|---|---|
| (3a) | Akyé <u>éwone</u> bedá ne atí áze
(Akye has turned the child's
head downward) | (complex semi-transitive, causative, dynamic) |
| and (3b) | bedá ne áti <u>wone</u> aze
(the child's head is (turned)
downward) | (semi-transitive, non-causative, stative) |

It is to be noted that the non-causative verbal forms of items (1-2) is dynamic as in (1b) and (2b), whereas in the case of item (3) it is stative as in (3b).

We might also include in this sub-set the verb 4. twe 'to push', which is possible in a complex semi-transitive clause, as in the imperative clause:

- (4a) twe skpónlé ne éke/néháne
(push the table over here/there)

as well as in a semi-transitive clause:

- (4b) twe ské/neháne
(push over here/there)

With this verb, the complex semi-transitive clause and the semi-transitive clause are not related in terms of causative and non-causative. In both (4a) and (4b) the verb is dynamic.

Directional verbs of this sub-set are characterized by the following syntactic properties:

- (I) As noted above, verbs of this sub-set may co-occur with wó, particularly before a definite noun phrase functioning as locative adjunct. Thus alongside (4a):

- (4a) twe skpónlé ne éke/néháne
(push the table over here/there)

which involves the definite deictic adjunct éke 'here' / neháne 'there', we shall find:

- (5) twe skpónlé ne wó ské/neháne
(push the table over here/there)

On the other hand, alongside (3a):

(3a) Akyé éwone bedá ne áti áze

(Akye has turned the child's head downward)

which contains the indefinite locative adjunct áze 'down', we shall not find:

(6) * Akye swone beda ne ati wo aze.

(II) Complex semi-transitive clauses involving the causative verbal forms of this sub-set, like directional verbs of Group B.I, do not, as a rule, have fa-paraphrases. Thus alongside the complex semi-transitive clause (3a), for example, we shall not find:

(3c) * Akye eba beda ne ati swone aze.

It should be mentioned, however, that with the complex semi-transitive clause (2a) involving the causative verbal form kponla 'to strike' we shall find the acceptable fa-paraphrase:

(2c) yeva Akyé áti yékponla aze

(he has taken Akye's head (and) struck (it) on the ground)

By contrast, the complex semi-transitive clause (7a):

(7a) yekponla o tí áze

in which the pronominal subject and the possessive pronoun in the direct object are co-referential, does not have a fa-paraphrase:

(7b) * yeva o ti yekponla aze.

(III) Semantically, complex semi-transitive verbal forms (1-3) denote downward movement; they are, however, different in that items (1-2) imply contact with a surface whereas item (3) does not carry with it such a supposition. Item (4) which denotes movement along a horizontal axis also implies surface contact.

Group B. III

Directional verbs of this sub-set are represented by the dynamic verb twili 'to drag', which is possible in a complex semi-transitive clause:

- (1a) olétwili ye édanlé ne áze
(he is dragging his cloth along the ground)

as well as in a semi-transitive clause:

- (1b) ye édanlé ne éltwili aze
(his cloth is trailing on the ground)

(i) As in the above pair of examples, the complex semi-transitive clause and the semi-transitive clause involving this verb may be related in terms of causative/non-causative.

(i) With this verb there is no possibility of co-occurrence with wó nor of a fa-paraphrase. Thus alongside (1a) we shall neither find (1c) involving wó:

- (1c) * olstwili ye édanlé ne wó aze

nor the fa-paraphrase:

- (1d) * oléfa ye édanlé ne yeahwili aze

(iii) With directional verbs of this sub-set the locative adjunct denotes a path rather than a direction as in the case of the directional verbs of Group B. I-II.

Group C: Removal verbs

Removal verbs which necessarily occur in complex semi-transitive clauses are dynamic verbs and include:

1. ye 'to remove, take from/out of'
2. tu 'to remove (from office); to expel'
3. die 'to take from'
4. kpodi 'to snatch'

With removal verbs, the locative adjunct denotes the previous

location of the direct object referent. The following clause illustrates the use of item (1):

(1) yeye o sá mé kódoku ní

(he has removed his hand from my pocket)

Item (2) tu, as indicated above, may mean either I) 'to remove from (e.g. office)' or II) 'to expel'. In the first sense, it is only possible in a complex semi-transitive clause:

(2) yədu ye ébía ne ázo

(we have removed him from (the chief's) stool)

In the second sense of 'to expel', the verb tu is possible in a complex semi-transitive clause and a semi-transitive clause which may be related as causative to a non-causative. The following pair of clauses illustrate:

(3a) bədu nrenyá ne súá ne ázo (complex semi-transitive, dynamic, causative)
(they have expelled the man from the town)

(3b) nrenyá ne édu suá ne ázo (semi-transitive dynamic, non-causative)
(the man has left the town)

The following clauses exemplify the use of the other items:

(4) melie dadeé ne ó sá nú

(I have taken the knife from his hand)

(5) yekpodi felé ne mé sá nú

(he has snatched the fish from my hand)

Removal verbs are characterized by the following properties:

(I) Generally speaking, with removal verbs the verb fi 'to get out, from' is also possible before the locative

adjunct and is therefore in free variation with the more normal verbid wɔ. Thus alongside (3a):

(3a) bedu nrenyá ne suá ne ázo
(they have expelled the man from the town)

we shall attest both

(6a) bedu nrenyá ne bévi suá ne ázo
(they have expelled the man from the town)

and (6b) bedu nrenyá ne wó suá ne ázo
(they have expelled the man from the town)

As the above examples show, the verb fi in (6a) exhibits pronominal prefixation and (perfect) tense agreement with the first verb word bedu, whereas the verbid wɔ does not. Other possible differences¹ between the two formatives are illustrated by the following paired examples:

- | | |
|--|---------------------------|
| (7a) die dadeé ne <u>fi</u> o sá nú | (positive, 2nd per. sing. |
| (take the knife from his hand) | imperative) |
| (7b) die dadeé ne <u>wó</u> o sá nú | (positive 2nd per. sing. |
| (take the knife from his hand) | imperative) |
| (8a) belié dadeé ne <u>bévi</u> o sá nú | (positive, 2nd per. plur. |
| (take the knife from his hand) | imperative) |
| (8b) belié dadeé ne <u>wó</u> o sá nú | (positive, 2nd per. plur. |
| (take the knife from his hand) | imperative) |
| (9a) okelie dadeé ne <u>ókevi</u> o sá nú | (positive, 3rd per. sing. |
| (he will take the knife from
his hand) | Future II) |
| (9b) okelie dadeé ne <u>wó</u> o sá nú | (positive, 3rd per. sing. |
| (he will take the knife from
his hand) | Future II) |

1. In spite of these differences, both are alike in corresponding to the English preposition 'from'.

(10a) onrélié dadeé ne ónréví o sá nú (negative, 3rd per. sing.
(he won't take the knife from Future II)
his hand)

(10b) onrélié dadeé ne wó o sá nú (negative, 3rd per. sing.
(he won't take the knife from Future II)
his hand)

As the above examples show, the verb fi and the verbid wó differ in three important respects: I) on the basis of (8a-b), it is clear that the formative fi concords in mood with the first verb word, whereas the verbid wó does not; II) the former agrees in tense with the first verb word but the verbid wó does not, as in (9a-b); III) the former exhibits agreement in polarity whereas the verbid wó does not.

And it is because the formative wó, unlike its free variant fi, does not exhibit agreement in respect of person, mood, tense and polarity that it has been termed a verbid.

(II) With removal verbs, the locative adjunct can be more readily ellipted without changing the basic meaning of the clause. Thus the following reduced clauses, which may be regarded as transitive clauses, represent acceptable versions of the complex semi-transitive clauses

(1-2; 4-5) above:

- (1a) yéye o sá
(he has removed his hand)
- (2a) yédu ye
(we have removed him)
- (4a) melie dadeé ne
(I have taken the knife)
- (5a) yekpodi felé ne
(he has snatched the fish)

In interpreting such clauses from which the participant role of Location is omitted we still understand that the direct object referent was removed from a location it previously occupied.

(III) Complex semi-transitive clauses involving removal verbs are more readily referable to an underlying structure which represents a fusion of a pair of transitive and semi-transitive clause. Thus the complex semi-transitive clause (1):

(1) yeye o sa mé kódo ku nú

(he has removed his hand from my pocket)

is referable to the pair of underlying clauses:

1.I) yeye o sa (transitive)

(he has removed his hand)

1.II) o sa e vi me kódo ku nu (semi-transitive)

(his hand is out of my pocket)

(IV) Finally, complex semi-transitive clauses involving removal verbs do not have fa-paraphrases. Thus corresponding to (1) we shall not attest:

(11) * yeva o sa yeye me kódo ku nu

In this respect, removal verbs and directional verbs are alike but different from locational verbs.

Complex semi-transitive verbal groups

It was noted above that in a complex semi-transitive clause the direct object always precedes the locative adjunct. In a complex semi-transitive clause involving a verbal group, the direct object occurs after the principal verb (PV) and the locative adjunct after the auxiliary verb (AV). The following (a) clauses with the verbal groups: 1. wola gua 'to pour (into, on)', 2. fa fea 'to hide (in)', 3. soa ko 'to carry (to)', and 4. twe fi 'to remove, rescue (from)' illustrate:

S PV O AV L
(1a) Kofí /éwola /nzulé ne /égua /kyénze ne ánu
(Kofi has poured the water (and put it) into the pan)

S V O L
(1b) Kofí /égua /édanlé ne /kyénze ne ánu
(Kofi has put the cloth in the pan)

S PV O AV L
(2a) Kofí /éva /bulúku ne /évea /esumí ne ábo
(Kofi has hidden the book under the pillow)

S V L
(2b) Kofí /évea /ekpá ne ábo
(Kofi has hidden under the bed)

S PV O AV L
(3a) Kofí /ézoa /mbaká né mo /ého /sua zó
(Kofi has carried the sticks to the town)

S V L
(3b) Kofí /ého /sua zó
(Kofi has gone to town)

S PV O AV L
(4a) Kofí / éhwi / nrenyá ne / évi / munzule nú
(Kofi has rescued the man from danger)

S V L
(4b) Kofí / évi / aakó ne ánu
(Kofi has moved out of the household)

Generally speaking, complex semi-transitive clauses involving verbal groups, like those with simple verbs, may be locational as in (1a-2a), directional (3a) or removal (4a). With particular reference to the auxiliary verbs occurring within complex semi-transitive verbal groups, it is to be noted that the auxiliary verb gua in (1a) can, as a simple verb of dynamic aspect, occur in a complex semi-transitive clause as in (1b), whereas the auxiliary verbs fea in (2a), ko in (3a) and fi in (4a) can occur in semi-transitive clauses as in (2b), (3b) and (4b) respectively.

Among complex semi-transitive verbal groups, then two main groups (A-B) may be distinguished. Group A consists of verbal groups such as 1. wola gua 'to pour (into, on)' of which the auxiliary verb can occur, as a full verb, in a complex semi-transitive clause. Group A verbal groups are usually locational or involve auxiliary verbs which may be locational complex semi-transitive verbs (see Group A.IV-V).

Group B consists of verbal groups of which the auxiliary verb may occur in a semi-transitive clause. Verbal groups of Group B may be locational (e.g. 2. fa fea 'to hide in' (2a)), directional (e.g. soa ko 'to carry to' (3a)), or removal (e.g. twe fi 'to remove, rescue from' (4a)) or involve auxiliary verbs which may be locational, directional or removal semi-transitive verbs.

The auxiliary verbs in complex semi-transitive verbal
may be regarded as corresponding to English prepositions
(na 'into, on', ko 'to', fi 'from') used with locative
adjuncts.

Group A: Verbal groups

Members of this group include:

- | | | | |
|----|--------|-----|----------------------|
| 1. | wola | gua | 'to pour (into, on)' |
| 2. | to | " | 'to throw' |
| 3. | fuandi | " | 'to throw, cast' |
| 4. | tu | to | 'to uproot' |
| 5. | fuandi | " | 'to throw' |
| 6. | ka | " | 'to knock' |
| 7. | dwu | sie | 'to place' |

4) usually take inanimate direct object noun phrase.

of item (1), for example, may be illustrated by:

a) yewola nwole ne yégua tobá ne ánu

(he has poured the oil into the bottle)

relatable by the pronominalization of the object noun

to:

b) yewola yégua tobá ne ánu

(he has poured it into the bottle)

) above, the locative adjunct is realized by a genitive

case. The locative adjunct may, however, be a place

1 such as lo 'there, away' or aze 'down', as in the

pair of clauses (2a-b) in which (2b) is relatable by

pronominalization of the direct object noun phrase to (2a):

(2a) yewola nwolé ne yégua ye ló
(he has poured the oil away)

(2b) yewola yégua ye ló
(he has poured it away)

A comparison of (1a-b) and (2a-b) shows that in instances where the locative adjunct is realized by a place adverbial (2a-b) rather than by a genitive noun phrase, the pronominal object ye 'it (him/her)' occurs before the locative adjunct whether the object noun phrase is pronominalized or not.

Items (5-7) may take either an animate or inanimate object noun phrase. With item (7), for example, we shall find with an animate object:

(3a) yedwu bedá ne yézie ye áze
(he has set the child down)

and (3b) yedwu ye yézie (ye) aze
(he has set him down)

or with an inanimate object:

(4a) yedwu eléka ne yézie (ye) aze
(he has put the box down)

and (4b) yedwu yézie aze
(he has put it down)

(i) The above examples (1-4(a-b)) illustrate one characteristic property of verbal groups of Group A and that is that with such verbal groups the object noun phrase may recur in the auxiliary constituent in the form of the pronominal object ye. The conditions which determine the occurrence of the pronominal object are:

- (a) the realization of locative adjunct by a place adverbial;
- (b) with a principal verb which takes an inanimate object, the pronominal object is obligatory; but with a principal verb which may take either an animate or inanimate object, the occurrence of the pronominal object (particularly if the nominal object is present) is obligatory if the object is animate but optional if inanimate.

(ii) With Group A verbal groups the omission of the locative adjunct (whether it is a genitive construction or place adverbial) produces an unacceptable clause. Thus alongside (1a), for example, we shall not attest:

(1c) * yewola nwole ne yegua

(iii) The auxiliary constituent (with or without an object) can be omitted without producing an unacceptable clause; and the omission of the principal constituent, if a pronominal object is present, is also possible. Thus alongside (2a) we shall find, with the omission of the auxiliary constituent:

(2c) yewola nwolé ne
(he has poured the oil)

or with the omission of the principal constituent:

(2d) yegua ye lo
(he has poured it away)

(iv) Complex semi-transitive clauses involving Group A verbal groups are referable to an underlying structure deriving from a pair of transitive clause and a complex semi-transitive clause. Thus the structure underlying (2a), for example, is derivable from:

(2a.I) yewola nwole ne
(he has poured the oil)

(2a.II) yegua nwole ne lo
(he has poured the oil away)

It is suggested that the rules which may operate on the underlying structure are: (a) the obligatory pronominalization of the second nominal object occurring after the auxiliary verb; and (b) the deletion of the pronominal object; this rule is obligatory if the locative adjunct is a genitive construction but is blocked in the presence of a place adverbial.

(v) Generally speaking, Group A verbal groups are loose collocations.

(vi) As a rule, with verbal groups neither the occurrence of the verbid wo before the locative adjunct nor a fa-paraphrase is possible.

Group B: Verb groups

Three sub-sets (I-III) may be distinguished among Group B verbal groups.

Group B.I: Locational verbal groups

Members of the first sub-set include:

1. fa fea 'to hide'
2. fa tua 'to stick'
3. fa sia 'to stick'

and are characterized by fa 'to take' as a principal verb and by a dynamic auxiliary verbal form which has a stative verbal form capable of occurring in a semi-transitive clause. With members of this sub-set, we shall find corresponding pairs of a

complex semi-transitive clause containing the verbal group and a semi-transitive clause containing the stative verbal form of the dynamic auxiliary verb; such pairs of clauses may be related in terms of the causative/non-causative opposition. Thus with item (1), for example, we shall find the pair of clauses:

- (1a) yeva abúá ne yévea esumí ne ábo (complex semi-transitive, causative, dynamic)
(he has hidden the pipe under the pillow)
- (1b) abúá ne véa esumí ne ábo (semi-transitive, non-causative, stative)
(the pipe is hidden under the pillow)

With verbal groups of this sub-set, the omission of either constituent results in an unacceptable clause, and such verbal groups may be regarded as close-knit collocations.

We might also include here such compound verbs as 4. fa wula (ssale nu) 'to place (in one's hands), entrust' and 5. fa to (nyunlu) 'to place before'. Taking item (4) as an example, we shall find the pair of causative/non-causative clauses:

- (2a) mefa sánve ne méwula e sá nú (complex semi-transitive, causative, dynamic)
(I leave the key in your hands/care)
- (2b) sánve ne wó e sá nú (semi-transitive, non-causative, stative)
(the key is in your hands/care)

By contrast with (1a-b) above, the causative/non-causative relationship obtaining between the verbal group fa wula (2a) and the different lexical item wó (2b) may be regarded as effected by lexicalization.

Group B.II: Directional verbal groups

Members of this sub-set include:

1. soa ko 'to carry (to)'
2. twe finde 'to pull (to)'

and may be exemplified by:

(1a) nrenyá ne ézoa mbaka né mo ého sua zó
(the man has carried the sticks to the town)

and (1b) yehwe mbaká né mo yévinde sua zó
(he has moved the sticks to the town)

(i) With Group B.II verbal groups the locative adjunct is more readily omissible. Thus alongside (1b), for example, we shall attest:

(1c) yehwe mbaka ne mo yevinde
(he has moved the sticks out)

(ii) The auxiliary constituent can be omitted without producing an unacceptable clause. Thus with the omission of the auxiliary constituent from (1b), we shall find:

(1d) yehwe mbaká né mo
(he has moved the sticks out)

(iii) Complex semi-transitive clauses involving verbal groups of this sub-set may be regarded as derivable from a pair of clauses (one of which, unlike with Group A verbal groups, is not an acceptable surface clause). Thus the structure underlying (1b) is referable to:

(1b.I) yehwe mbaka ne mo
(he has moved the sticks out)

(1b.II)*yevinde mbaka ne mo sua zo
(he has taken the sticks to the town)

(iv) Group B.II verbal groups exemplify loose-collocation.

Group B.III: Removal verbal groups

Like simple removal verbs, removal verbal groups are few and include:

1. ye fi 'to remove, save (from)'
2. twe fi 'to pull out of, rescue (from)'

Their use may be illustrated by:

- (1a) Kofi éye o ze évi svele nú
(Kofi has saved his father from suffering)
- (1b) yehwe nrenyá ne yévi munzule nú
(he has rescued the man from danger)

It was noted above that with simple removal verbs the verbid wó or its variant full verb fi is possible before the locative adjunct; that is, alongside the following complex semi-transitive clause with the simple removal verb die 'to take, remove':

- (2a) yelie nrelánde ne ó sá nú
(he has taken the cutlass from his hand)

we shall find either (2b):

- (2b) yelie nrelánde ne wó o sá nú
(he has taken the cutlass from his hand)

or (2c):

- (2c) yelie nrelánde ne yévi o sá nú
(he has taken the cutlass from his hand)

(i) With verbal groups, the auxiliary verb fi (and no other verb seems possible as the auxiliary verb) cannot be replaced by the verbid wó. Thus alongside (1b) we shall not find:

- (1c) * yehwe nrenya ne wó munzule nu

And also with verbal groups the auxiliary verb fi is not omissible.

(ii) It was also noted above that with simple removal verbs, the locative adjunct is omissible. The omission of the locative adjunct, in the case of removal verbal groups, results in an unacceptable clause. Thus alongside (1b), for example, we shall not attest

(1d) * yehwe nrenya ne ye vi

(iii) The auxiliary, but not the principal, constituent is omissible; and complex semi-transitive clauses, e.g. (1b), involving removal verbal groups, like those with directional verbal groups (Group B.II), are referable to a pair of sentences of the type:

(1b.I) yehwe nrenya ne

(he has pulled the man)

(1b.II)*ye vi nrenya ne munzule nu

(he has taken the man out of danger)

(iv) Like directional verbal groups, removal verbal groups may be regarded as loose collocations.

TYPE 5: SEMI-TRANSITIVE CLAUSES

As mentioned above, clauses in which the verb word is in direct relationship with a locative adjunct are classified as semi-transitive and may be exemplified by clauses (1-3) below:

- (1a) S V L
ye / denla / ebía ne ázo
(he has sat on the chair)
- (1b) S V L
o / de / ebía ne ázo
(he is sitting on the chair)
- (2a) yeho Bolófo
(he has gone to Axim)
- (2b) wo édanlé ne életwíli aze
(your cloth is trailing on the ground)
- (2c) olua nyevilé zó
(he is proceeding on the sea)
- (3) yedu aakó ne ánu
(he has moved out of the household)

The verb in a semi-transitive clause may be dynamic as in (1a), (2a-b) and (3) or stative as in (1b) and (2c) and, generally speaking, the locative adjunct denotes a place in the sense of a position or location, a direction or destination, and a path or passage. In its semantic interpretation, a semi-transitive clause may express: A) the positioning (with dynamic verbs as in (1a) or the static existence (in the case of stative verbs as in (1b) of the subject referent in a location; B) the movement (with dynamic verbs of motion) of the subject referent towards a destination as in (2a) or the

motion (with dynamic verbs (2b) or stative verbs (2c)) of the subject referent along a path/passage; or C) the movement (with, as a rule, dynamic verbs as in (3)) of the subject referent from a previous location.

Semi-transitive verbs may accordingly be sub-classified in terms of A) locational, B) directional, and C) removal verbs

Semi-transitive clause V. Transitive clause

In both semi-transitive and transitive clauses, the verb word is in direct relationship with a noun phrase. In order to determine the characteristic properties of semi-transitive clauses, it might be useful to distinguish the two transitivity clause-types.

The same verb word (e.g. fo 'to climb') may function in a semi-transitive clause (1a):

- | | | | |
|------|---|--------------------|---|
| | S | V | L |
| (1a) | ye / vo / | <u>baká ne ázo</u> | |
| | (he has climbed to the top of the tree) | | |
| (1b) | yevo zo(lé) | | |
| | (he has climbed to the top of it) | | |

as well as in a transitive clause (2a):

- | | | | |
|------|---------------------------|----------------|---|
| | S | V | O |
| (2a) | ye / vo / | <u>baká ne</u> | |
| | (he has climbed the tree) | | |
| (2b) | yevo | | |

The above semi-transitive clause (1a) is relatable by pronominalization to clause (1b). The transitive clause (2a) is also relatable by the pronominalization of its nominal object to clause (2b), which is clearly different from (1b).

By way of contrast, the same lexical item, if a geographical name, (e.g. Bolofo 'Axim') may be nominal object in a transitive clause as in (3a) or locative adjunct in a semi-transitive clause as in (4a):

- (3a) oze Bolofo
(he knows Axim)
- (3b) oze namulé ne
(he knows the village)
- (3c) oze ye
(he knows it)
- (4a) olal(e) Bolofo
(he spent the night at Axim)
- (4b) olale namulé ne ázo
(he spent the night at the village)
- (4c) * olale zo(1e)

As nominal object in a transitive clause as in (3a), the item Bolofo is replaceable by another noun phrase, namule ne 'the village' as in (3b) which is pronominalizable by ye 'it' as in (3c). When the same item functions as locative adjunct in a semi-transitive clause as in (4a), it can only be replaced by another locative adjunct, e.g. namule ne azo 'at the village' as in (4b), which may not be pronominalizable as the unacceptable clause (4c) indicates.

If a different locative adjunct substitutes for Bolofo as in (5a):

- (5a) olale. sknónlé ne ázo
(he slept on top of the table)

the locative adjunct may be reducible (or pronominalizable), as in (5b):

- (5b) olale zo(lé).
(he slept on top of it)

The pronominal object ye can never replace a locative adjunct nor can the (possessed) root form zo or the absolute form of the local inalienable noun zolé 'top' replace a nominal object.

We shall also find the same item (e.g. Nzema), in different senses, functioning either as nominal object in a transitive clause (6a) or as locative adjunct in a semi-transitive clause (7a):

- (6a) bte Nzema
(they understand Nzema)
- (6b) bte Nzema áneé ne
(they understand the Nzema language)
- (7a) bedwu Nzema
(they have arrived in Nzema)
- (7b) bedwu Nzema máánlé nú
(they have arrived in Nzemaland)

As the above examples show, when the item Nzema, in the sense of 'the language', realizes nominal object in a transitive clause as in (6a) the clause may be expanded by the addition of the appositional noun phrase anes ne 'the language' as in (6b).

When the same item, in the sense of 'the ethnic area', functions as locative adjunct (7a), its clause may be extended by the addition of another locative adjunct as in (7b). There are, therefore, clear formal criteria for distinguishing the different transitivity clause-types.

- 4(a) solo (b) anwuma (lit. upper part);
(c) sbo nu (lit. in the forest) - 'the north'

the following sentences illustrate:

- (2a) azulé ne lá suá ne kándibá (moó kóne senzéndoles
néháne lá

(the river lies on the outskirts of the town,
which are towards the east over on the other
side of the town)

- (2b) Upper Volta la Ghána anwumá

(Upper Volta lies to the north of Ghána)

Sub-class A.III: Names of places

The locative adjunct may be the name of a place which may be: I) an institutional or functional building such as 1. sukulu 'a school', 2. asoniti 'hospital', 3. efiade 'shop, jail', 4. egyima 'office, work', 5. asone 'church'; II) part of a household such as 6. egyade 'kitchen', 7. asalo 'hall', 8. sua-kunlu 'bedroom' (lit. inner part of a house), 9. abiales 'bathroom'; and III) cosmological, such as 10. ewiade 'the world', 11. anwoma nyunlu 'sky, heavens', 12. ebolo 'the hereafter'.

The following clauses exemplify the use of members of this sub-class:

- (3a) oia ásopíti/efiádé

(he/she is in hospital/jail)

- (3b) owo egyádé/abiales

(he/she is in the kitchen/bathroom)

- (3c) beko ebóló á, bambá

(when one goes to the hereafter, one doesn't return)

Sub-class A.IV: Place adverbials

Place adverbials may be: a) deitic and definite, and contrast in terms of proximity to the speaker ('proximate') and remoteness from the speaker ('non-proximate') with reference to a horizontal axis:

	<u>Proximate</u>	<u>Non-proximate</u>
1.	ske 'here'	ske ne 'there'
2.	nehae 'this place'	nehane 'that place'

b) place adverbials which denote relative position such as 3. anwuma 'up' and 4. aze 'down, on the ground' which contrast along a vertical axis; and c) place adverbials which express the relative position of at least two or groups of persons or objects such as 5. amozí 'behind', 6. avinli 'between, in the midst of', 7. ahane 'aside' and 8. faako 'side of', 9. moa 'far', 10. lo 'there'.

The following clauses exemplify the use of place adverbials

- (4a) yera éke ,
(he has come here)
- (4b) yeho neháne/lo
(he has gone there)
- (5a) onlá áze
(lit. it is not lying down: it is not easy)
- (5b.) ogyi ahane
(he is standing to one side)

It should be noted that the locative adjunct may also be a combination consisting of members of AI-IV plus the deitic place adverbials (A.IV.a):

- (6) owo Tárkwá éke/néháne (A.I + A.IV.a)
(lit. he is in Tarkwa here/there)
- (7) azulé ne lá suá ne kándibá moó
kóne senzéndoles néháne lá (A.II + A.IV.a)
(the river lies on the outskirts
of the town which are towards
the east over on the other side
of the town)
- (8a) yeho efiádé ló (A.III + A.IV.a)
(he has gone to the shop there)
- (8b) yewole egyádé éké ne (")
(he has gone into the kitchen there)
- (9) gyinla ahane éke (A.IV.c + A.IV.a)
(stand on this side)

B. Noun phrase

The noun phrase functioning as locative adjunct may be a genitive construction which contains as head-noun (a) the possessed root, or (b) the prefixed possessed root of two sub-classes of inalienable nouns:

I. The three-form 'local' inalienable nouns:

1. zole 'superior, top, on'
2. nuhua 'interior, inside, in'
3. nwole 'exterior, outside, at/near'

The following clauses illustrate:

- (1a) ode ebía zó
(he is sitting on a chair)
- (1b) ode ebía ne ázo
(he is sitting on the chair)

- (2a) ogyi kumá nú
(he is standing in a hole)
- (2b) ogyi kumá ne ánu
(he is standing in the hole)
- (3a) namúlé ne lá azule nwó
(the village lies near a river)
- (3b) namúlé ne lá azulé ne ánwo
(the village lies near the river)

Some such genitive constructions involving the possessed root have almost fused into compound words or simple items:

- | | | | |
|-----|----------|---------------------|--------------------------|
| 4a. | baka zó | 'toilet' | (lit. on top of a tree) |
| 4b. | sua zó | 'town' | (lit. on top of house) |
| 4c. | enwea zó | 'seashore' | (lit. on top of sand) |
| 5a. | guá nú | 'market' | (lit. inside of trade) |
| 5b. | sua nú | 'home' | (lit. inside of a house) |
| 5c. | ebó nú | 'farm' | (lit. inside of forest) |
| 6. | alie nwó | 'outside, compound' | (lit. outside of house) |

II. The two-form inalienable nouns which denote parts of the human body but are also used to make 'local' distinctions:

- | | | |
|----|--------|-----------------|
| 1. | bo | 'under part' |
| 2. | nzi | 'back' |
| 3. | nyunlu | 'face, front' |
| 4. | kunlu | 'belly, inside' |

as exemplified in:

- (4a) ogyi baka bó
(he is standing under a tree)

(4b) *ola ekpónlé ne ábo*
(it is lying under the table)

(5a) *egyi me nyúnlú*
(you are standing in front of me)

(5b) *ogyi suá ne ányunlu*
(it is standing in front of the house)

Certain genitive constructions also involving two-form inalienable nouns have fused into compound words:

5. *anwoma nyúnlú* 'the sky' (lit. 'the face of the wind')
- 6a. *banekúnlú* 'bathroom' (lit. 'the inside of wall')
- 6b. *suakúnlú* 'bedroom' (lit. 'the inside of house')

And we shall also find combinations consisting of genitive constructions plus the deictic place adverbials; as in the following clauses:

(6a) *ola ekpónlé zó ló*
(lit. it is on the table there)

(6b) *owo guá nú néháne*
(he/she is in the market there)

(6c) *yeho sua fófóls nwó ló*
(he has gone near the new house there)

(7) *ogyi sua nzi éké ne*
(he/she is standing at the back of the house there)

Adjunctive nominal pieces

One characteristic property of locative adjuncts is their occurrence in nominal pieces provisionally termed 'adjunctive nominal pieces' and are exemplified by the following:

- (1) eké ázua
(lit. here houses: houses here)
- (2) Bolofo ácutú
(Axim oranges)
- (3) azule nú félé
(freshwater fish)

As the above examples show, such nominal pieces consist of a head noun (underlined) pre-modified by a locative adjunct. Irrespective of the tonal pattern of the head noun in isolation, it bears in such nominal pieces a high tone on its first syllable.

Such nominal pieces are referable to underlying structures which consist of the head noun post-modified by a relative clause which, apart from the discontinuous relative pronoun moo...la 'who, which', usually consists of one of a closed set of semi-transitive verbs (e.g. 1. wɔ 'to be in', 2. vi 'to be from', 3. gua 'to be lying', 4. kɔ 'to go' and 5. dua 'to proceed') plus the locative adjunct.

The following examples are grouped according to the semi-transitive verb involved in the underlying structure.

Group A: Locative copular wɔ:

(1)	<u>Nominal piece</u>	<u>Underlying structure</u>
(1)	eké <u>ázua</u> (houses here)	azua moo <u>wɔ</u> eke la (houses which are here)
(2)	neháne <u>ázua</u> (houses there)	azua moo <u>wɔ</u> nehane la (houses which are there)
(3)	ebo nú <u>náne</u> (wild animal)	nane moo <u>wɔ</u> ebo nu la (animal which is in the forest)

<u>Nominal piece</u>	<u>Underlying structure</u>
(4) sua nú éke <u>édweké</u> (domestic matter)	edweke moo <u>wo</u> sua nu eke la (matter which is this house)
<u>Group B: Verb vi:</u>	
(5) Bolófo ákutú (Axim oranges)	akutu moo <u>vi</u> Bolófo la (oranges which come from Axim)
(6) azulé nú félé (fresh-water fish)	fels moo <u>vi</u> azule nu la (fish which comes from river)
(7) nyevilé nú félé (sea-water fish)	fels moo <u>vi</u> nyevile nu la (fish which comes from the sea)
(8) me kúnjú rále (my own child)	rale moo <u>vi</u> me kunlu la (a child who comes from my stomach)
<u>Group C: Verb gua:</u>	
(9) me sá zó ámra (my relations/ dependants)	mrals moo <u>gua</u> me sa zo la (children who are on my hand)
(10) o bó ávilé (her waist beads)	avile moo <u>gua</u> o bo la (beads which are around her waist)
<u>Group D: Verb ko:</u>	
(11) sua zó ádenlé (homeward path)	adenle moo <u>ko</u> sua zo la (path which leads homeward)
(12) ebo nú ádenlé (path leading to the farm)	adenle moo <u>ko</u> ebo nu la (path which leads to the farm)
<u>Group E: Verb dua</u>	
(13) anwumá élene (an aeroplane)	elene moo <u>dua</u> anwuma la (a ship which flies in the sky)

We follow Lakoff, G. (1970: 122-3) in suggesting that the two rules which operate upon the underlying structure to produce the adjunctive nominal piece are (I) the optional WH-DELETION and (II) the obligatory ADJ (Adjunct)-SHIFT rule, in that order. Their operation on example (1) may be presented as follows:

- I) azua moo wo eke la ----> azua eke (by WH-DELETION)
(houses which are here) (houses here)
- II) azua eke -----> eke azua (by ADJ-SHIFT)
(houses here) (here houses)

Classification of semi-transitive verbs

As mentioned above, three main groups of semi-transitive verbs may be distinguished: A) locational verbs, B) directional verbs and C) removal verbs. The verb in a semi-transitive clause may be a simple verb or verbal group and will be treated separately.

Simple semi-transitive verbs:

Group A: Locational Verbs

Locational verbs may be dynamic or stative, and the locative adjunct co-occurring with such verbs, generally speaking, denotes a position or location rather than a destination or path. Six sub-sets (I-VI) of locational verbs may be distinguished.

Sub-set A.I

Members of the first sub-set consists of two pairs of verbal forms which have a dynamic and stative form; the stative verbal form is morphologically related by suffixation (and, in the case of the stative verbal form of item (2), its positive

continuative tense form is also phonologically related by Tyne B mutation to its dynamic form).

	<u>Dynamic</u>		<u>Stative</u>
1.	gyinla 'to stand; to stop'	gyi	'to be standing'
2.	tenla 'to stay; to sit'	te	'to be staying; to be sitting'

Both the dynamic and stative forms can occur in semi-transitive clauses; but the dynamic verbal form may also occur, as a causative verb, in a complex semi-transitive clause (see Group A.I complex semi-transitive verbs).

With the first pair of verbal forms in the sense of 'to stand' we shall find (1a-b) and (2a-b):

(1a) ogvinlanle ebía ne ázo
(he stood on the chair)

(1b) ogyi skpóníe ne ázo
(it is standing on the table)

and (2a) megyinla be gyáke ánu
(lit. I have stood in your leg: on your behalf)

(2b) megyi e nzí
(lit. I'm standing behind you: I support you)

And the second sense of 'to stop' may be exemplified by (3a-b):

(3a) yegyinlanle Bolófo
(we stopped at Axim)

(3b) yegyi eké ne dédeé dóné nsá
(we waited/stopped there till three o'clock)

The second pair of verbal forms in the sense of 'to stay' are exemplified by clauses (4a-b):

(4a) nrenyá ne dénlanle Bolofo (Fast tense)
(the man stayed/used to stay
in Axim)

(4b) nrenyá ne dé eké (Continuative ")
(the man lives/is staying here)

And in the sense of 'to sit' by (2a-b) and (3a-b)

(5a) Kofí édenla wo ébía ne ézo (Perfect tense)
(Kofi has sat on your chair)

(5b) Kofí dé wo ébía ne ézo (Continuative ")
(Kofi is sitting on your chair)

and (6a) nrenyá ne édenla aze (Perfect ")
(the man has sat down)

(6b.I) nrenyá ne dé aze (Continuative ")
(the man is alive)

(6b.II) nrenyá ne téte aze (Durative ")
(the man is still alive)

It should be mentioned in respect of (6a-b) that whereas (6a) expresses the positioning of the subject referent in a specific place, clauses (6b.I-II) express the existence of the subject referent. The synchronic relationship between (6a) and (6b) provides further evidence of the relation noted above of existential constructions to locatives (or semi-transitive clauses).

Sub-set A.II

Members of the second sub-set also consist of pairs of verbal forms, of which one is dynamic and the other stative; the stative verbal form of each pair is phonologically related by Type B stem-initial consonant mutation to the dynamic form:

	<u>Dynamic</u>		<u>Stative</u>
1.	da	'to spend the night'	la 'to be lying'
2.	di	'to be, occupy'	li 'to be, occupying'
3.	koto	'to kneel'	hoto 'to be kneeling'
4.	fea	'to hide'	vea 'to be hiding'

Also with members of this sub-set both the dynamic and stative forms are possible in semi-transitive clauses. The first pair of verbal forms are illustrated by:

- (1a) yelale Bolofó (dynamic)
(we spent the night at Axim)
- (1b) bulúku ne lá ekpónlé ne ázo (stative)
(the book is lying on the table)

With the stative member we shall also attest:

- (1c) azulé ne lá suá ne kándibá , (Continuative tense)
(the river lies on the outskirts
of the town)
- (1d) sné neé ene ála azulé ne téda
azua nwió ne ávinlí (Durative ")
(to this day the river still lies
between the two towns)

And with the verbal forms 2. di/li we shall find:

- (2a) (yekó sbo nú á) odi me nzi/nyúnlú
((when we are going to the farm) he walks behind/in
front of me)
- (2b) ene oli me nzi/nyúnlú
(then he was walking behind/in front of me)

Sub-set A.III

Locational verbs of this sub-set are stative verbal forms which are phonologically related by Type B stem-initial consonant mutation to their corresponding dynamic verbal forms which may be complex semi-transitive simple verbs (see Group A.III complex semi-transitive verbs) or verbal groups (Group B.I). Members of the sub-set (with their dynamic forms enclosed in round brackets) include:

1. henda (kenda) 'to hang'
2. hisa (kisa) 'to lean against'
3. zia (fa sia) 'to stick under/in'
4. dua (fa tua) 'to stick in'
5. vea (fa fea) 'to be hidden'

The following clauses (1-5) illustrate the use of each verb:

- (1) me dúku ne henda alénke ne ánze
(my headkerchief is hanging behind the door)
- (2) ye kpóma ne hisa alénke ne ánze
(his walking stick is leaning behind the door)
- (3) ye kyélé ne ziá o nvólomanu
(his hat is held under his armpit)
- (4) o sá dua o nlóa anu
(his/her hand is sticking in his/her mouth)
- (5) sánve ne vea alénke ne ábo
(the key is hidden under the door)

Sub-set A.IV

Members of the fourth sub-set are also stative verbal forms which have corresponding dynamic forms used in complex semi-transitive clauses (see Group A.IV complex semi-transitive verbs); the stative and dynamic verbal forms have the same phonological shape. Verbs of this sub-set include:

1. gua 'to be lying'
2. bea 'to be lying across'
3. butu 'to be lying face down'
4. bikye 'to push nearer/away; to be near to'

The use of items (1-3) may be exemplified by the following clauses:

- (1) ye édanlé ne guá ekpá ne ázo
(her cloth is lying on the bed)
- (2) ewole béa adenlé ne ánu
(there is a snake lying across the path)
- (3) kyénze ne bútu mokyéa ne ánze
(the pan is lying face down behind the hearth)

With the verb 4. bikye, the dynamic as well as the stative form is possible in a semi-transitive clause. The dynamic form is exemplified by the imperative mood clauses (4a-b).

- (4a) bikye eké
(come closer here)
- (4b) bikye neháne
(push over there)

The stative form occurs in (4c):

- (4c) namulé zóháne bikye Bolofo
(that particular village is near Axim)

Sub-set A.V.

Members of this sub-set consist of stative verbs which do not have corresponding dynamic verbal forms capable of occurring in complex semi-transitive clauses; they include: 1. tulu 'to float' and 2. the locational copular verb wó 'to be in/at'.

The first item may be exemplified by:

- (1) kysls bíe túlu azulé ne ánye
(there is a hat floating on the river)

The locational copular verb wó, which is dealt with in the section on relational clauses, may be here exemplified by:

- (2a) o rá raálé ne wó Bolófo
(her daughter is in Axim)
- (2b) otebo Bolófo
(she is still in Axim)
- (2c) owale Bolófo
(he used to be in Axim)

Group A.VI

This sub-set consists of dynamic verbs which include:

1. dwu 'to arrive', 2. kye 'to stay long', 3. ka 'to remain, be left', 4. to 'to fall', 5. sokos 'to settle, stay', 6. kpofo 'to squat' as in the following illustrative clauses:

- (1) odwule Bolófo ánlómá
(he arrived in Axim yesterday)
- (2) ohysle Abolokyi
(he stayed long in Europe)
- (3) me kyélé ne éha kále ne ánu
(lit. my hat has remained in the car: I've left my hat in the car)
- (4) nrenyá ne édo aze/búla ne ánu
(the man has fallen down/into the well)
- (5) yszokosle Kofí éke
(we stayed in Kofi's house)
- (6) Kofí ékpofó aze
(Kofi has squatted on the floor)

Group B: Directional verbs

Directional verbs used in semi-transitive clauses are dynamic verbs of motion which denote movement towards a destination or other verbs (dynamic or stative) which allow a directional meaning. The locative adjunct co-occurring with such verbs denotes a destination or path rather than a position.

Three sub-sets (I-III) may be distinguished:

Sub-set B.I

The first sub-set consists of two non-causative verbal forms with corresponding causative verbal forms used in complex semi-transitive (as well as transitive) clauses; the non-causative form of each pair is morphologically related by suffixation to the causative form (see complex semi-transitive verbs Group B.I)

	<u>Non-causative</u>		<u>Causative</u>
1. fo	'to climb'	fofa	'to lift up'
2. dwu	'to descend'	dwula	'to set down'

The following additional examples illustrate their use:

- (1) Kofí évo skpónlé ne ázo
(Kofi has climbed on to the table)
- (2) Kofí édwu kumá ne ánu
(Kofi has descended into the hole)

The first item fo 'to climb, but not the second, dwu 'to descend', may take a nominal object in a transitive clause as in:

- (3) Kofí évo baká/bóká ne
(Kofi has climbed the tree/hill)

Sub-set B.II

The second sub-set consists of verbal forms which are identical in shape with their corresponding verbal forms used in complex semi-transitive clauses; the semi-transitive verb and its corresponding complex semi-transitive verb may be related as non-causative to causative (see complex semi-transitive verbs Group B.II). They include:

	<u>Non-causative</u>		<u>Causative</u>	
1.	te		te	'to strike, drop'
2.	kponla		kponla	'to strike, plant'
3.	wone		wone	'to turn/be downward'

and are exemplified in the following clauses:

- (1) kekelebetelé ne éde aze
(the lizard has dropped to the ground)
- (2) o sá ékponla aze
(his hand has struck the ground)
- (3) o tí wone aze
(his head is turned downward)

The verb in (3) is stative, but those in (1-2) are dynamic.

We might also include in this sub-set the dynamic verb 4. twe/kywĩ/ 'to push' as exemplified in the imperative mood clause:

- (4) twe eké/neháne
(push over here/there)

Sub-set B.III

The third sub-set consists of dynamic verbs of motion which, unlike those of Group B.I-II, do not have corresponding verbal forms used in complex semi-transitive clauses; they

include: 1. wolo 'to enter', 2. noma 'to dive, sink', 3. salo 'to spread', 4. makyi 'to turn' 5. ko 'to go' and 6. bela 'to come'. Items (1-4) are exemplified by the following clauses:

- (1a) kilá ne éwolo boné ne ánu
(the mouse has gone into the hole)
- (2a) bedá ne énloma azulé ne ábo
(the child has sunk to the bottom of the river)
- (3a) edweské ne ésalo suá ne ázo
(the rumour has spread through the town)
- (4a) yemakyi o sá béné zó
(he has turned to the left)

And with items (5-6) we shall find:

- (5a) yeho guá nú/neháne
(he has gone to the market/there)
- (6a) yera sua nú/eké
(he has come home/here)

With verbs of this sub-set the locative adjunct can be more readily ellipted without changing the basic meaning. Thus alongside (1a-4a), for example, we shall find:

- (1b) o kómé ánze swolo
(the back of his neck has gone out of sight)
- (2b) elsné ne énloma
(the boat has sunk)
- (3b) edweské ne ésalo
(the rumour has spread)
- (4b) yemakyi
(he has turned)

And with items (5-6), we shall find, along with (5a-6a) above, the following clauses in which the locative adjunct has been omitted:

(5b) yeho
(he has gone)

(6b) yera
(he has come)

Clauses such as (5b-6b) may be used in contexts in which the locative adjunct has been previously mentioned.

In respect of the verb ko 'to go', however, it should be mentioned that it usually co-occurs with a set of non-omissible noun words which may be regarded as locative adjuncts of purpose. The verb ko 'to go' plus the locative adjunct may be regarded as complex verbs or fixed collocations.

Morphologically, two sub-sets of such locative adjuncts of purpose may be distinguished: (A) 'those like 1. awole 'child-bearing', 2. agyale 'marriage', 3. agyinla 'deliberation', 4. adidi 'pasturing', 5. mbubu 'raid', which are nominalizations from simple verbs (e.g. 1. wo 'to bear child', 2. gya 'to marry', 3. gyinla 'to deliberate') or reduplicated verbs (e.g. 4. didi 'to eat' and 5. bubu 'to break') and may be exemplified by:

(7a) o rá raálé ne hôle awole/agyale lá....
(when his daughter went for child-bearing/marriage)

(7b) boané ne ého adidi
(the goat has gone pasturing)

(7c) bsho agyinla
(they have gone for deliberation/to take counsel)

As (7c) shows, clauses involving agyinla usually have a plural subject.

(B) Those like 4. azule 'water' (cf. azule 'river'), 5. ayene

'firewood', 6. asawu 'fishing' (cf. asawu 'fishing net'),
7. anongonle 'temporary separation from husband', which are non-
derived formatives and are exemplified by:

(8a) yeho azule/ayene/asawu
(he has gone for water/firewood/fishing)

(8b) o yé ne ého anongónle
(his wife has gone away temporarily)

It should also be mentioned that the two verbs of motion:
5. ko 'to go' and 6. bsla 'to come' are deictic in their referen-
tial meaning and usually contrast in terms of motion away from
and towards the location of the speaker with reference to either
a vertical axis as in:

(9a) owulu óko anwumá
(he jumps he goes up)
(9b) owulu óba aze
(he jumps he comes down)

or a horizontal axis:

(10a) yeho o ze ánwó néháne (ló)
(lit. he has gone to his father's side (there))
(10b) yera me nwó éke
(lit. he has come to my side here)

In connexion with the deictic reference of these two verbs,
mention should here be made of the corresponding stative verbal
forms: 5a. kone 'approaching/towards the other side' and 6a. bane
'approaching/towards this side' - roughly equivalent in their
meaning to the prefixes ultra-/trans- 'on or to the other side
of' and cis- 'on this side of' of Latin origin - which are

respectively derived by the suffixation of -ne/-nĩ/ from the verbs 5. ko 'to go' and 6. ba 'to come' (the contracted form of bɛla 'to come').

The use of kone, for instance, is illustrated by the following sentences (without tonal marking) in which the relevant item occurs within the relative clauses enclosed within round brackets:

(11a) Edukusuzo wɔ Menwɔdɔbesuzo anzi (moo kone Enzemetianu nehane la)

(the town Edukusuzo is at the back of the town Menwɔdɔbesuzo (which is towards the other side of the town Enzemetianu))

(11b) azule ne la sua ne kandiba (moo kone senzendoles nehane la)

(the river lies on the outskirts of the town (which are towards the east over on the other side of the town))

(11c) Menwɔdɔbesuzo dule hole sua fofole ne foa ko ekyii (moo kone senzendudules la)

(The town Menwɔdɔbesuzo moved a little to the side of the new township (which is towards the west))

As against (11a-c), compare (12) in which the constituent relative clause contains the perfect tense form of the verb stem dwu 'to reach':

(12) Menwɔdɔbesuzo dule hole sua fofole ne (moo edsle dedee shɔdwu azule ne anloa la)

(The town Menwɔdɔbesuzo moved to the new township (which has spread and reached right up to the mouth of the river))

The above sentences (11a-c) illustrate some of the syntactic properties of the stative verbal form kone (and, for that matter, also of the other stative verbal form bane).

I) In all three sentences, the verb word kone occurs within a relative clause; its occurrence in any other structure has not so far been attested.

II) In the structure of which it is a constituent element it is usually in direct relationship with a locative adjunct and, therefore, functions like any semi-transitive verb such as dwu 'to reach' occurring in a similar grammatical context in (12), with which it may validly be compared.

III) In (12), the verb dwu is in the perfect tense and occurs after the main verbs dule hole 'moved and went' which are in the past tense. On the other hand, the verb word kone in (11c) does not exhibit perfect tense form, although it occurs after the same main verbs in the past tense; and it retains the same form in (11c) as in (11a-b) where it occurs after a main verb in the continuative tense. In relation to the verb dwu, the verb word kone may be described as invariable in respect of the category of tense. Such verbal forms as kone (and bane) which are invariable in respect of tense (and/or the categories of polarity, mood, person) have been designated as 'verbid' (Ansre, G: 1966).

IV) It was noted at (III) above that the verbid kone, like a semi-transitive main verb, is usually followed by a locative adjunct. It may, however, be followed by a temporal adjunct (e.g. alesbahye 'dawn') as in:

(13) bebole done nna (moo okone alesbahye la)
(when it struck 4 o'clock (as it was approaching dawn))

V) Like most verbs, the verbid kone may, in certain contexts, exhibit pronominal prefixation as in (13) above, though not in (11a-c).

VI) The suffix -ne/-nĩ/ occurring in the verbid kone and bane may be regarded as relating to the directional meaning associated with the verbs of motion ko 'to go' and bela 'to come'.

Sub-set B.IV

Members of this sub-set include the dynamic verbal form 1a) dua 'to proceed, walk, sail' and its stative verbal form 1b) lua 'to be proceeding' and the dynamic verb 2) twili 'to trail'. The first item is only used semi-transitively, but the second item in the sense of 'to drag' may occur in a complex semi-transitive clause.

With verbs of motion of this sub-set, the locative adjunct denotes a path or passage rather than a destination.

The dynamic verbal form dua is exemplified by the imperative mood clause:

(1a) dua adenlé nú
(walk along the main road)

and the indicative mood sentence:

(1b) (okó egyima á) o dua aze
(lit. (when he's going to work) he proceeds on ground. he walks)

With the stative verbal form lua we shall find:

- (1c) benwunle ké méli lua nyevilé zó
(they saw that a ship was sailing on the sea)

The use of the verb twili in a semi-transitive clause is illustrated by (2) below:

- (2) wo édanlé ne életwíli aze
(your cloth is trailing along the ground)

Group C: Removal verbs

'Removal' verbs include the dynamic verb 1. tu 'to leave, move from' (which has a corresponding causative verbal form used in a complex semi-transitive clause - see Group C) and the dynamic verbal form 2a) fi 'to leave, get out of' and its stative form 2b) vi.

With members of this sub-set, the locative adjunct denotes the previous location of the subject referent.

With the first item tu we shall find:

- (1) yedu aakó ne ánu
(he has left the household)

The dynamic verbal form fi is exemplified by the positive direct imperative mood clause, as in:

- (2a) fi belemgbunli sua nú éke
(leave the chief's house)

and the negative conditional clause:

- (2b) saa woanví éke kékála á...
(if you don't leave here now...)

The use of the stative verbal form vi which, in such sentences as (3) below, is roughly equivalent to the English preposition 'from' is illustrated by:

- (3) egya ví Abolokyi éra
(lit. my father leaving/from Europe has come. my father has come back from Europe).

The stative verbal form is used to express place of origin as in:

(4a) ovi Bolofó

(he comes from Axim)

(4b) me nee ye vi sua kó ázo

(I and he come from the same town)

Both verbs may occur without a locative adjunct. Thus alongside (1) above we shall attest:

(1a) yedu

(he has left/moved out)

And with the dynamic verbal form fi we shall find:

(5a) siané ne évi

(the moon has appeared)

and with its reduplicated form:

(5b) abelé ne éfifi

(the maize has germinated)

Semi-transitive verbal groups

Semi-transitive verbal groups are few and may, like simple verbs, be either locational like 1. bu sia 'to hide', 2. tu gua 'to boil over' or directional such as 3. sia ko 'to return (away from the speaker)', 4. sia bela 'to return (towards the speaker)'. Generally speaking, the auxiliary verb may, as a simple verb, occur in a semi-transitive clause.

The following clauses illustrate their characteristics:

(1a) yebu yézia kpoké ne anu

(he has hidden in the thicket)

(1b) yebu yézia

(he has hidden)

(1c)* yezia kpoke ne anu

(2a) yezia yého Ghána

(he has returned to Ghana)

(2b) yezia yého

(he has returned)

(2c) yehó Ghána

(he has gone to Ghana)

(2d) yezia

(he has returned)

(I) As the (a) clauses show, with verbal groups the locative adjunct occurs after the auxiliary verb; and the locative adjunct may be omitted, particularly in contexts where it has been previously referred to, as exemplified in the (b) examples.

(II) With the locational verbal group (item 1), the omission of the auxiliary (or either) constituent results in an unacceptable clause, as (1c) illustrates. On the other hand, with the directional verbal groups (items 2-4) the omission of either constituent does not result in an unacceptable clause, as (2c-d) illustrate.

(III) Clauses involving item (1) are not referable to an underlying conjoined structure. On the other hand, clauses involving items (2-3) may be regarded as derivable from an underlying conjoined structure. Thus the structure underlying (2a), for example, is derived from a pair of intransitive and semi-transitive clauses:

(2a.I) yezia
 (he has returned)

(2a.II) yeho Ghana
 (he has gone to Ghana)

On the basis of their different characteristics, item (1) is regarded as a close-knit collocation; and the semantic unity between the component verbal elements of this item is confirmed by the possibility of its substitution by the simple verb fea 'to hide'. Items (2-4) are, however, regarded as loose collocations.

TYPE 6: DITRANSITIVE CLAUSE (S V ind. O O)

Clauses such as:

- S V O
(1) Akyé / éheda / édanlé
 (Akye has put on a cloth)

in which the verb word is in syntactic relation with one (nominal or pronominal) object have been classified as transitive.

By way of contrast, the different transitivity clause-type illustrated by:

- S V ind.O O
(2a) Akyé / éheda / Kofí / édanlé
 (Akye has put on Kofi a cloth)

- S V ind.O O
(2b) Akyé / éheda / ye / édanlé
 (Akye has put on him a cloth)

- S V ind.O O
(3) eysvóle ne / éhys / Kofí / bóane
 (the guest has given Kofi a goat)

in which the verb word is in relation with two objects is distinguished as ditransitive.

The first nominal object (e.g. Kofi as in (2a)), which is characteristically human or animate (though this is not always the case) and pronominalizable as in (2b), is traditionally distinguished as indirect object. The second, clause-final nominal object which, as in (2-3), is indefinite, inanimate (2) or animate (3) and typically non-pronominalizable is distinguished as direct object. The first syllable of the direct noun phrase object, if it has a low tone in isolation or as a one-word sentence, regularly bears a high tone.

A comparison between the transitive clause (1) and the ditransitive clause (2), both of which involve the simple verb stem keda 'to put on', further indicates that a simple verb which takes an object need not also be followed by an indirect object, but in a ditransitive clause such as (2-3) where both direct and indirect object must be present, the usual linear arrangement of the objects is that the indirect object precedes the direct object.

It was mentioned above that the indirect object is characteristically human or animate. This is not always the case as for example in the ditransitive clauses (4-5(a-b)) below with the complex verb wula golu 'to score a goal'.

- (4a) Arsenal ewula Chelsea (golu) nsa
(Arsenal has scored Chelsea three (goals))
- (4b) Arsenal ewula be (golu) nsa
(Arsenal has scored them three (goals))
- (5a) Nigeria (ma) wulale Ghana (ma) (golu) nsa
(Nigeria(ns) scored Ghana(ians) three (goals))
- (5b) Nigeria(ma) wulale ye (golu) nsa
(Nigeria(ns) scored us three (goals))

In the above ditransitive clauses, the indirect object may be regarded as a collective noun which refers to a fixed number of persons united in a common endeavour and is pronominalizable by a plural pronoun, either be 'them' as in (4b) or ye 'us' as in (5b) where the speaker identifies with the group.

It was noted above that the direct object is usually an indefinite noun phrase as in (2-3) above and non-pronominalizable. With a sub-class of ditransitive verbs (e.g. kile 'to show, disclose') the direct noun phrase object may be definite as in:

(6a) Akýé shile Kofi sánvɛ ne

-- (Akyɛ has shown Kofi the key)

A definite noun phrase object occurring in a ditransitive clause with a simple verb is, however, not pronominalizable and alongside (6a) we shall not find:

(6b) * Akýɛ shile Kofi ye

(Akyɛ has shown Kofi it)

And corresponding to ditransitive clauses involving a sub-class of ditransitive simple verbs (e.g. kýe 'to give (as a gift)' we shall find fa-paraphrases. Thus alongside:

(7a) sýevóle ne shýɛ Akýé súa

(the guest has given Akyɛ a house)

we shall attest the fa-paraphrase:

(7b) sýevóle ne éva sua ne shýɛ Akýé

(lit. the guest has taken the house (and) given (it)
to Akyɛ: the guest has given the house to Akyɛ)

which is relatable by pronominalization to:

(7c) sýevóle ne éva shýɛ Akýé

(the guest has given it to Akyɛ)

in which the pronominal object is not overtly expressed since the verb stem fa belongs to the sub-class of verbs which do not favour pronominalization.

The fa-paraphrase (7b) differs from its corresponding ditransitive clause (7a) in at least two respects: (i) the direct object noun phrase is definite (i.e. post-modified by the definite article ne 'the') and (ii) the direct object precedes the indirect object.

We might, at this stage, compare equivalent English and Nzema ditransitive clauses (involving ditransitive simple verbs) in respect of the ordering of objects.

The English equivalent of the Nzema ditransitive clause (7a) may be given as:

(8a) The guest has given Akye a house

which has the prepositional paraphrase:

(8b) The guest has given a house to Akye

in which, like the Nzema fa-paraphrase (7b), the ordering of objects is 'direct object before indirect object'. On the basis of this resemblance, we might say that the Nzema fa-paraphrase corresponds to the English prepositional paraphrase and that the second (or the ditransitive) verb (e.g. shye in (7b-c)) occurring in the Nzema fa-paraphrase roughly corresponds to the English preposition 'to'.

Loosely, one might say that a ditransitive clause expresses the notion that the subject referent serves somebody (the indirect object) something (the direct object), whereas the corresponding (prepositional/fa-)paraphrase indicates that the subject referent serves something to somebody.

Transitive V. Ditransitive

There are clear formal distinctions as to whether the items following a verb word constitute one object in a transitive clause or two objects in a ditransitive clause. In the illustrative clauses (9a-b), both of which involve the complex verb bo amanee 'to give news', the (a) example is regarded as transitive and the (b) example as ditransitive.

S V O
(9a) Kofi / ebo / ye amaneɛ/ Kofí (é)bo já mǎn(ĩ)jě/
 (Kofi has given his news)

S V ind.O O
(9b) Kofi / ebo / ye / amaneɛ/ Kofí (é)bo j(ĩ), ámǎn(ĩ)jě/
 (Kofi has given him/her news)

In the transitive clause (9a) the possessive pronoun ye/ji/ 'his' and the following head noun amaneɛ/ámǎn(ĩ)jě/ 'news', which are in genitive relationship, constitute one nominal object; and the junction between the two constituent items is realized in normal speech as /já mǎn(ĩ)jě/ with a high-low tone sequence. Secondly, there can be no possibility of a pause between the items. And thirdly, the subject noun phrase and the possessive pronoun in the nominal object are co-referential.

In the ditransitive clause (9b), however, the pronoun ye 'him/her' is the indirect object, and the following noun word is regarded as the direct object; that is, the two items following the verb word in (9b) constitute two separate elements of clause-structure. In normal speech, the indirect (pronominal) object, ye/j(ĩ)/ 'him/her', may be said without the final vowel; and the junction between the two contiguous clause-elements is realized in normal speech as /j(ĩ), ámǎn(ĩ)jě/ with a low-high tone sequence, which is clearly different from the tonal realization of the different structure exemplified in (9a).

Secondly, a pause (indicated by a comma) is clearly noticeable after the indirect object. And thirdly, in the ditransitive clause (9b), there is not, and can never be, a co-referential relationship between the subject noun phrase and the indirect (pronominal) object.

Additional formal criteria may be adduced to distinguish between the nominal object-occurring in the transitive clause (10a) and the objects in the ditransitive clause (10b) below, both of which involve the complex verb tua kake 'to pay (debt/wages)', also analyzable as verb (tua 'to pay') + object noun phrase (kake 'debt/wages'):

S V O
(10a) Kofi / edua / ye kaks ne/ Kofí (é)duwa jə káké n(ĩ)/
(Kofi has paid his debt)

S V ind. O O
(10b) Kofi / edua / ye / kaks/ Kofí (é)duwa j(ĩ), káké/
(Kofi has paid him/her wages)

In the transitive clause (10a), the items following the verb word constitute one nominal object, in which the possessive pronoun ye/jə 'his' is in genitive relation with the head noun kake/káké 'debt', post-modified by the definite article ne/n(ĩ) 'the'. The genitive relationship is intonationally marked by the low-high tone sequence; and the possessive pronoun can never be said without the final vowel or with a pause after it. And as in the transitive clause (9a), the subject noun phrase and the possessive pronoun in the nominal object are co-referential.

In the ditransitive clause (10b), the items following the same verb word constitute two separate elements of clause-structure: the pronoun ye 'him/her' said differently as /j(ĩ)/ is the indirect object and the following noun word kake/káké 'wages' is the direct object. The direct object in the ditransitive clause is different since it is not post-modified, and the indirect (pronominal) object may be said without the final vowel but with a noticeable pause after it.

The similar intonational pattern correlates with different syntactic structures in the two clauses: a genitive relationship in the transitive clause (10a) and an indirect-direct object relationship in the ditransitive clause (10a). And the subject noun phrase and the indirect (pronominal) object are not co-referential.

The ditransitive clause (10b) might also be distinguished from the transitive clause (11a) below:

S V O
(11a) Kofí / édua / ye káké

(lit. Kofi has paid its price. Kofi has paid for it)

which is relatable by pronominalization to such a transitive clause as:

S V O
(11b) Kofí / édua / kúsu/bulúku ne káké

(Kofi has paid for the cat/book)

In addition to some of the differences noted above, the transitive clause (11a) is different from the ditransitive clause (10b) in that with the transitive clause the nominal object can be deleted without changing the basic meaning; thus alongside (11a-b) we shall attest:

(11c) Kofí édua

(Kofi has paid)

And although in the transitive and ditransitive clauses the subject noun phrase and the pronoun ye are not co-referential, the possessive pronoun in the transitive clause (11a) may have either animate or inanimate reference as in (11b), whereas the corresponding indirect pronominal object in the ditransitive clause (10b) can only have human reference.

Complex transitive V. Ditransitive

We have described as complex transitive those clauses in which the verb word is followed, as also in ditransitive clauses, by two objects distinguished as direct object and complement. The first syllable of the adjective or noun phrase complement in a complex transitive clause, like that of the object noun phrase in a ditransitive clause, regularly bears a high tone. In spite of these resemblances, there are formal criteria for distinguishing between the two transitivity clause-types.

(i) It was noted, in respect of complex transitive clauses, that certain verbs require that the direct object and the noun phrase complement should concord in number; there can never be a relationship of number concord between the indirect and direct objects in a ditransitive clause.

(ii) It was also mentioned, as a characteristic property of complex transitive clauses, that the direct object and the complement usually correspond to an identifying or equative relational clause. No such relation exists between the two objects in a ditransitive clause. By contrast, with members of a subclass of ditransitive verbal forms the indirect and direct object in a ditransitive clause correspond to subject and object noun phrase respectively in a transitive clause; such a ditransitive clause and the corresponding transitive clause may be related in terms of the causative/non-causative aspectual distinction. Thus, for example, the indirect and direct object occurring in the ditransitive clause:

Sub-class A:

With ditransitive simple verbs of this sub-class (e.g. wula 'to put on') the omission of the indirect object produces an acceptable transitive clause with a complete change in the basic meaning, as the following pair of clauses illustrates:

(1a) Akyé éwula Kofí téladéé
(Akye has put on Kofi a dress)

(1b) Akyé éwula téladéé
(Akye has put on a dress)

The difference in meaning between the ditransitive clause (1a) and the resultant transitive clause (1b) may be expressed in terms of the result of the verb action described: in the case of the ditransitive clause (1a), the verb action results in Kofi (the referent of the indirect object) wearing a dress, whereas in the case of the transitive clause (1b) the verb action results in Akye (the subject referent) wearing the dress. . .

Sub-class B:

With ditransitive simple verbs of sub-class B (e.g. kile 'to show, disclose') the omission of the indirect object results in an acceptable transitive clause without changing the basic meaning. The following pair of clauses illustrates:

(2a) Akyé éhile Kofí ézukoá ne
(Akye has shown Kofi the money)

(2b) Akyé éhile ezukoá ne
(Akye has shown the money)

Both the ditransitive clause (2a) and the resultant transitive clause (2b) indicate that Akye disclosed the (hidden or stolen) money to somebody, who is specified in the ditransitive clause (2a), but is unspecified in the transitive clause (2b).

Sub-class C:

On the other hand, with ditransitive simple verbs of sub-class C (e.g. bɛlɛ 'to bring (as a gift)') the omission of the indirect object results in a transitive clause that is simply unacceptable or only marginally acceptable, as in:

(3a) Akyé érele Kofí téladée
(Akye has brought Kofi a dress)

(3b) * Akye erele teladee
(Akye has brought a dress)

When the indirect object is omitted from the ditransitive clause (3a) involving a ditransitive simple verb such as bɛlɛ 'to bring (as a gift)', the resultant transitive clause is hardly acceptable as the unacceptable clause (3b) confirms.

The criterion of the possibility of omitting the indirect object will equally be applied in sub-classifying complex verbs and verbal groups capable of occurring in ditransitive clauses.

Sub-class A: Ditransitive simple verbs

Three sub-sets (I-III) may be distinguished among simple ditransitive verbs of sub-class A.

Sub-set A.I: Verbs of Adornment

Members of this sub-set constitute a closed set of six dynamic verbal forms, each of which has a stative verbal form. The following list gives the dynamic verbal form at (a) and the corresponding stative verbal form at (b) and the noun word with which each pair of verbal forms habitually collocates as direct object:

	<u>Verbal forms</u>		<u>Noun words</u>	
(1a)	soa 'to wear/carry on head'	(I)	<u>kysle</u>	'hat'
(1b)	zo 'to be wearing/ carrying on head'	(II)	<u>eyene</u>	'firewood'
(2a)	keda 'to put on'	(I)	<u>edanlé</u>	'cloth'
(2b)	heda 'to be wearing'			
(3a)	kye 'to put on, tie'	(I)	<u>falé</u>	'ladies' belt'
(3b)	hye 'to be wearing'			
(4a)	bo 'to put on, tie'	(I)	<u>dúku</u>	'headkerchief'
		(II)	<u>abotile</u>	'turban'
(4b)	bo 'to be wearing'	(III)	<u>abamó</u>	'beads for twins'
(5a)	mo 'to put on, tie'	(I)	<u>sialé</u>	'women's loin cloth'
		(II)	<u>abelako</u>	'old men's loin cloth'
(5b)	mo 'to be wearing'			
(6a)	wula 'to put on'	(I)	<u>tsladés</u>	'dress'
(6b)	wula 'to be wearing'	(II)	<u>mgbolaboa</u>	'shoes'
		(III)	<u>ngsba</u>	'ring'
		(IV)	<u>asomadés</u>	'ear-rings'
		(V)	<u>ndweabáne</u>	'necklace'

It is to be noted that in the case of the first pair of verbal forms (1) soa/zo, the stative verbal form (1b) zo 'to be wearing/carrying (on the head)' is morphologically related by suffixation as well as phonologically related by Type B stem-initial mutation to the dynamic verbal form (1a) soa 'to put on/carry (on the head)'. Of the remaining pairs of verbal forms,

the stative verbal forms (2b-3b) are only phonologically related by Type B mutation to their respective dynamic verbal forms (2a-3a); and the stative verbal forms (4b-6b) are neither morphologically nor phonologically distinguished from their dynamic verbal forms (4a-6a).

Verbs of adornment are characterized by the following properties:

(i) The dynamic verbal form in each pair of verbal forms can occur in a ditransitive clause as well as in a transitive clause, but the stative verbal form is only used in a transitive clause. Thus with the first pair of verbal forms we shall find:

- (4a) Akyé sóa Kofí kyéle (ditransitive, dynamic)
(Akye puts on Kofi a hat)
- (4b) Akyé sóa kyéle (transitive, ")
(Akye puts on a hat)
- (4c) Akyé zó kyéle (" stative)
(Akye is wearing a hat)

And also with the second pair of verbal forms keda/heda we shall find:

- (5a) Akyé éheda Kofí édanlé (ditransitive, dynamic)
(Akye has put on Kofi a cloth)
- (5b) Akyé éheda édanlé (transitive, ")
(Akye has put on cloth)
- (5c) Akyé héda édanlé (" stative)
(Akye is wearing cloth)

(ii) Transitive clauses involving the stative verbal forms have constructional analogues in which the subject and object are permuted. Thus alongside (5c) above, for example, we shall find:

- (5d) edanlé heda Akysé/ye
(there is a cloth on Akysé/her)

And also with the stative verbal forms (4b) bo and (6b) wula we shall find the following pair of clauses in which the (a) clauses are transitive and the (b) clauses are the corresponding analogues:

- (6a) Kofí bó abotile (transitive, stative)
(Kofi is wearing a turban)
- (6b) abotile bó Kofí/ye/ó tí (analogue ")
(there is a turban on
Kofi/him/his head)
- and (7a) Kofí wúla ngsba (transitive ")
(Kofi is wearing a ring)
- (7b) ngsba wúla Kofí/ye/ó sá (analogue ")
(there is a ring on Kofi/
him/his finger)

In the constructional analogues, for example (6b-7b) above, the noun phrase following the stative verbal form may be a proper name, a pronoun or a genitive construction in which the possessive nominal is in genitive relation with the possessed form of a corporal inalienable noun specifying the body-part where the article of adornment is worn. With particular reference to the stative verbal form wula, it should be noted that when it

collocates in such analogues with subject noun phrases whose referents are articles of jewellery, it may be replaced by the stative verbal form la 'to be (lying) on' (whose corresponding dynamic verbal form is da). Thus alongside (7b) we shall find with la:

- (7c) ngeba lá Kofí ása/o sá
 (there's a ring on Kofi's/his finger)

The suppletive stative verbal form la is obligatorily followed by a genitive construction.

(iii) With members of this sub-set, the dynamic verbal form occurring in a ditransitive clause and the stative verbal form occurring in a syntactically-(as well as semantically-) related transitive clause may be handled in terms of the causative/non-causative aspectual distinction. Thus with the first pair of verbal forms soa/zo, we shall find:

- (8a) Akyé ézoa Kofí kyéls (ditransitive, causative,
 (Akyé has made Kofi put dynamic)
 on a hat)
- (8b) Kofí zó kyéls (transitive, non-causative,
 'Kofi is wearing a hat) stative)

(iv) Ditransitive clauses involving the dynamic verbal forms have fa-paraphrases. Thus alongside (8a) above we shall attest the fa-paraphrase:

- (8c) Akyé éva kyéls (ne) ézoa Kofí
 (Akyé has put a hat on Kofi)

It is to be noted that the indefinite nominal object in the ditransitive clause (8a) may, in the corresponding fa-paraphrase (8c), be post-modified by the definite article ne 'the'.

Sub-set A.II: Verbs of Medication

Members of this sub-set also constitute a close set of six verbs which, unlike verbs of adornment, can only occur with dynamic aspect. Almost all verbs of medication may collocate with the noun ayile 'medicine', and in the list below only those nouns are supplied with which a particular verb specifically collocates:

<u>Verbs of medication</u>		<u>Noun words</u>	
1.	bia 'to bathe, wash'		
2.	tua 'to insert in anus'	<u>dazia</u>	'pepper'
3.	gua ¹ 'to pour into nose'		
4.	sela 'to give enema'	<u>dazia</u>	'pepper'
5.	twi 'to daub, besmear'	<u>ezakpa</u>	'Guinea grains'
6.	noa/(no) 'to make drink'	(I) <u>nzule</u>	'water'
		(II) <u>nyefonle</u>	'breast-milk'

Members of this sub-set are characterized by the following properties:

(i) As a rule, they can occur in a ditransitive² as well as in a transitive clause and in either clause only with dynamic aspect. Thus with items (1-2), we shall find the pairs of clauses:

-
1. The verb gua also collocates with the noun word asela 'snuff', but usually in a transitive clause.
 2. The ditransitive use of verbs of medication is, as a rule, socially conditioned in the sense that the verb action is performed by an adult (e.g. mother) for a child or a healthy person for a sick person.

- (1a) Kofí ó ze ébia ye áyilé (ditransitive, dynamic)
 (lit. Kofi's father has bathed
 him (with) medicine)
- (1b) Kofí ébia ayilé (transitive ")
 (Kofi has bathed medicine)
- and (2a) Akyé édua Kofí dáziá (ditransitive ")
 (lit. Akye has inserted in
 Kofi's anus pepper)
- (2b) Akyé édua daziá (transitive ")
 (Akye has inserted pepper
 in her anus)

With the morphologically-related pair of verbal forms 6. noa/no, however, the suffixed verbal form noa is used in a ditransitive clause and the verb stem no in a transitive clause, as in:

- (3a) Akyé énloa Kofí nyéfónle (ditransitive, dynamic)
 (Akye has given Kofi breast-
 milk)
- (3b) Akyé énlo nyéfónle (transitive ")
 (Akye has drunk breast-milk)

It was noted above, as a general characteristic of ditransitive simple verbs of Sub-set A, that with such verbs the omission of the indirect object results in an acceptable transitive clause which represents a complete meaning difference.

With the verbal form noa/nŭwã/ 'to give to/make drink' (which is morphologically different from all other members of the sub-set in being marked by a causative suffix /-wã/), however, the omission of the indirect object results in an unacceptable clause. Thus alongside (3a) above, for example, we shall never find, with the omission of the indirect object, (3c) below:

- (3c) * Akye enloa nyefonle

(ii) Like verbs of adornment, verbs of medication can occur in syntactically-(as well as semantically-)related ditransitive and transitive clauses which may be handled in terms of the causative/non-causative aspectual distinction. Thus with items (5-6) we shall attest the related pairs of ditransitive and transitive clauses:

(5a) Sanéba énlóa Kofí áyilé (ditransitive, causative, dynamic)
(Saneba has made Kofi take (some) medicine)

(5b) Kofí enlo ayilé (transitive, causative, dynamic)
(Kofi has taken some medicine)

and (6a) Akýé éhwi Kofí áyilé (ditransitive, causative, dynamic)
(Akýe has daubed Kofi (with) medicine)

(6b) Kofí éhwi ayilé (transitive, non-causative, dynamic)
(Kofi has daubed medicine)

Verbs of medication are, however, different from verbs of adornment in that the verbal form occurring in the ditransitive clause and that in the corresponding transitive clause (whether the verbal forms are identical in shape or morphologically related) are both of dynamic aspect.

(iii) Ditransitive clauses involving verbs of medication, unlike those involving verbs of adornment, do not have fa-paraphrases. Thus alongside (6a) above we shall not find:

(6c) * Akýe éva ayilé éhwi Kofi

(Akýe has daubed Kofi (with) medicine)

We shall, however, attest such serial verbal constructions as (7a):

(7a) meva ye áyilé ne méhwi ye

(lit. I've used his medicine and daubed him with it)

which also involves the verb fa, but such constructions are not interpreted as fa-paraphrases of ditransitive clauses; and alongside (7a) we shall not find the potentially correspondent ditransitive clause:

(7b) * mewhi ye ye ayile ne

(I've daubed him (with) his medicine)

(iv) The direct object in transitive clauses with verbs of medication may be front-shifted by topicalization, if (a) the direct object is the noun phrase ayile ne 'the medicine', (b) the transitive clause is in the habitual tense, and (c) the subject is the impersonal 3rd person plural pronoun be 'they'. Thus alongside :

(8a) beno ayilé ne

(they drink the medicine)

we shall attest by topicalization:

(8b) ayilé ne beno

(lit. the medicine they drink it ~~it~~ *they drink the medicine*)

Such clauses as (8) are used to express directions as to how to administer the medicine in question.

Sub-set A.III: Verbs of Cognition

Membership of this sub-set is represented by the item kakye, which may mean either (I) 'to remind' or (II) 'to remember'

Characteristics of the members of Sub-set A.III include:

(i) In its first sense, the verb kakye can occur in a

ditransitive clause and in its second sense in a transitive clause, and such a ditransitive clause and the syntactically- (as well as semantically-) related transitive clause may be handled in terms of the causative/non-causative aspectual distinction:

(1a) Akys' shakye Kofi' alobole' edwaka' (ditransitive,
(Akye has reminded Kofi of a sorrowful matter) causative, dynamic)

(1b) Kofi' shakye alobole' edwaka' (transitive, non-
(Kofi has remembered a sorrowful matter) causative, dynamic)

(ii) Verbs of cognition characteristically take a finite clause object (or sentential complement) introduced by the subordinator ke 'that', as in:

(2a) Akys' shakye me ke shema' obaho
(Akye has reminded me that she would leave tomorrow)

(iii) With verbs of cognition the indirect object as well as the direct object (whether a noun phrase or a finite clause) can be omitted without changing the basic meaning. Thus alongside the ditransitive clause (1a) we shall attest, with the omission of the direct object, the acceptable transitive clause (1c) below:

(1c) Akys' shakye Kofi'
(Akye has reminded Kofi)

And also alongside the complex sentence (2a) we shall attest, with the omission of the finite clause object, (2b) below:

(2b) Akys' shakye me
(Akye has reminded me)

It should be mentioned that a transitive such as (1c) above, in which the nominal object is human, may be two-ways ambiguous; that is, in addition to its meaning exemplified in (1c), the transitive clause may also mean: 'Akye has remembered Kofi', the source of this ambiguity being the two possible meanings of the verb as indicated above.

(iv) Ditransitive clauses involving verbs of this sub-set do not have fa-paraphrases. Thus alongside the ditransitive clause (1a) above we shall not find:

(1d) * Akye e va alobole edweke ehakye Kofi.

Sub-Class B: Ditransitive simple verbs

Three sub-sets (I-III) may be distinguished among ditransitive simple verbs of sub-class B.

Sub-set B.I

Members of this sub-set include: 1. biza 'to ask (about)' and 2. kile 'to disclose (hidden or stolen article)'. Their use may be illustrated by:

- (1) Kofi ébiza Akyé édweké ne
(Kofi has asked Akye (about) the matter)
- (2) Kofi éhile Akyé ézukoá ne
(Kofi has disclosed to Akye the money)

Characteristic properties of members of this sub-set include:

(i) Verbs of this sub-set usually take a definite object noun phrase as exemplified in (1-2) above.

(ii) With verbs of this sub-set the indirect object as well as the direct object can be omitted without changing the basic meaning. Thus alongside (1), for example, we shall attest, with the omission of the indirect object, the transitive clause (1a):

(1a) Kofí ébiza edweké ne

(Kofi has asked about the matter)

Both (1) and (1a) indicate that Kofi asked somebody about the matter in question, the person of whom the matter was asked being specified in (1), but not in (1a).

And with the omission of the direct object we shall attest the equally acceptable transitive clause:

(1b) Kofí ébiza Akyé

(Kofi has asked Akyé)

which, like the ditransitive clause (2), indicates that Kofi asked Akyé about something.

(iii) Ditransitive clauses involving verbs of this sub-set have fa-paraphrases; and corresponding to the ditransitive clause (1) above, for example, we shall attest the fa-paraphrase:

(1c) Kofí éva edweké ne ébiza Akyé

(Kofi has asked Akyé about the matter)

Similarly, alongside the ditransitive clause (2) above we shall find the fa-paraphrase:

(2a) Kofí éva ezukoá ne éhile Akyé

(Kofi has disclosed the money to Akyé)

We might distinguish the above fa-paraphrase (2a) from the following ditransitive clause with the verbal group fa kile 'to show, exhibit for inspection':

(3a) Kofí éva ye búluku fofóls ne éhile Akyé

(Kofi has shown his new book to Akyé)

Clause (3a) involving the verbal group is not interpreted as the fa-paraphrase of a ditransitive clause involving the ditransitive simple verb kile 'to show'; and alongside (3a) we shall not attest the potentially correspondent ditransitive clause:

(3b) * Kofi ehile Akys ye buluku fofole ne

Sub-set B.II

Members of this sub-set include: 1. die 'to collect , take from', 2. kile 'to show, to point out', 3. biza 'to ask (of)', and 4. ssele 'to beg for'.

Their use may be illustrated by:

- (1) yelie me póne ko
(he has collected from me a pound)
- (2) yehile syevóle ne ádenlé ne
(he has shown the stranger the way)
- (3) membizale ye édweké
(I asked him a question)
- (4) Akysé zéléle nrenyá ne ézukoa
(Akys begged the man for money)

Characteristic properties of members of this sub-set (B.II) include:

(i) With ditransitive verbs of this sub-set the direct object (as well as the indirect object) can be omitted without changing the basic meaning. Taking (1-2) as examples, we shall find, with the omission of the direct object, the acceptable transitive clauses (1a) and (2a) respectively:

(1a) yelie me
(he has collected from me)

and (2a) yehile syevóle ne
(he has shown the stranger)

(ii) Ditransitive clauses involving verbs of this sub-set do not have fa-paraphrases, and alongside (4) above, for example, we shall not find:

(4a) * Akys sva ezukoa ne ssele nrenya ne.

Sub-set B.III

Members of this sub-set include: 1. gyakyi 'to leave (to, for)', 2. ka 'to say, tell', 3. kile 'to teach, give lessons in'. Their use may be illustrated by:

- (1) egya gyákyile me ézukoa
(my father left me (some) money)
- (2) yeha wo édweké
(he has told you (an important) matter)
- (3) Akyé kíle ye mgbóndabulé
(Akye teaches us Arithmetic)

(i) Like members of sub-set B.I-II, the omission of the indirect object produces an acceptable transitive clause. Thus alongside (3) above, for example, we shall find (3a) below:

- (3a) Akyé kíle mgbóndabulé
(Akye teaches Arithmetic)

(ii) Members of this sub-set do not share the other characteristics of members of Sub-set B.I-II; that is, they do not allow the omission of the direct object nor do they have fa-paraphrases.

Sub-class C: Ditransitive simple verbs

Ditransitive simple verbs of sub-class C include such verbs of 'giving' as 1. sie 'to leave (for)', 2. bele 'to bring (as a gift)', 3. kye 'to give (as a gift)', 4. nwa 'to remit' and 5. maa 'to give (as a gift)', and 6. kile 'to show'.

(i) As already mentioned, with such verbs the omission of the indirect object results in a transitive clause which is

which is to be distinguished from the ditransitive clause (2) below with the verbal group fa sie 'to keep for':

- (2) e mo éva Akyé búlúku ne ézie ye
(mother has kept Akys's book for her)

Alongside (2), which is marked by a co-referential relation between the possessive nominal Akys and the clause-final indirect pronominal object, we shall not attest the potentially correspondent ditransitive clause:

- (2a) * e mo szie Akys ye buluku ne

Ditransitive clauses involving such verbal groups (1a-6a) are not interpreted as fa-paraphrases.

In spite of the common characteristics noted above, there are differences which justify the setting-up of at least three sub-sets (I-III) among ditransitive simple verbs of sub-class C.

Sub-set C.I

Members of the first sub-set include items (1-3): 1. sie 'to leave (to, for)', 2. bsle 'to bring (as a gift)' and 3. kye 'to give (as a gift)'.

Their use may be illustrated by:

- (3) oziele me nzulé ne bíe
(he left me some of the water)
- (4) Kofi érele Akys éyene
(Kofi has brought Akys (some) firewood)
- (5) eysvóle ne éhye Kofi búlúku
(the guest has given Kofi a book)

(i) Ditransitive clauses involving verbs of this sub-set usually have fa-paraphrases. Thus corresponding to (5) above, for example, we have:

- (5a) eyevóle ne éva bulúku ne shye Kofi
(the guest has given the book to Kofi)

In such fa-paraphrases, the direct object noun phrase occurring after the first verb word fa 'to take' is usually definite, although it is indefinite in the original ditransitive clause as in (5) above.

In spite of the identify of the verbal elements, such a fa-paraphrase as (5a) is to be distinguished from the following ditransitive clause (5b) which involves the verbal group fa kye 'to forgive':

- (5b) eyevóle ne éva Kofi étane shye ye
(the guest has forgiven Kofi for his offence)

The ditransitive clause (5b) differs from the fa-paraphrase (5a) in at least two respects: (i) the possessive nominal (e.g. Kofi) occurring in the object noun phrase is co-referential with the clause-final indirect pronominal object; and (ii) alongside a ditransitive clause such as (5b) we shall not attest the potentially correspondent ditransitive clause with a simple verb such as:

- (5c) * eyevóle ne shye Kofi ye étane

Sub-set C.II

The second sub-set includes item (4) nwa 'to remit, send (as a gift)', the use of which may be illustrated by:

(6a) siane bíála, ménwa egya ézukoa
(every month, I remit my father money)

(7a) onwanle me édanlé
(he remitted me cloth)

(i) With members of this sub-set the direct object can be omitted without changing the basic meaning. Thus corresponding to (6a-7a) respectively we shall find with the omission of the direct object:

(6b) siane bíála, ménwa egya
(every month, I remit my father)

(7b) onwanle me
(he remitted me)

(ii) Ditransitive clauses with members of this sub-set, unlike those with verbs of sub-set C.I, do not have fa-paraphrases, and therefore such a ditransitive clause as:

(8) ovale sdanlé ne ónwanle me
(he sent the cloth to me)

can only be interpreted as involving the verbal group fa nwa 'to send to'.

Sub-set C.III

Members of this sub-set include items (5-6): 5. maa 'to give (as a gift)' and 6. kile 'to show, teach', as exemplified in:

(9a) omaanle Kofi póné ko
(he gave Kofi a pound)

(9b) omaanle me ayilé ngakyile nsa
(he gave me three different kinds of medicine)

and (10a) wohile me nrélebe
(you have taught me sense/a lesson)

(i) Verbs of this sub-set co-occur as auxiliary verbs with other principal verbs than fa 'to take' in ditransitive verbal groups; the first item maa usually co-occurs with 'service' verbs like (1) tɔ 'to buy' or (5) tɔne 'to sell' as in the ditransitive verbal groups (1a) tɔ maa 'to buy for' and (2a) tɔne maa 'to sell to', whereas the second item kile co-occurs with verbs of communication like (3) ka 'to say' and (4) kenga 'to read' as in the ditransitive verbal groups (3a) ka kile 'to say to, tell' and (4a) kenga kile 'to read to'.

(ii) Like ditransitive simple verbs of sub-set C.II, verbs of this sub-set do not have fa-paraphrases; and consequently, ditransitive clauses with the verbal groups fa maa 'to give' and fa kile 'to show, exhibit for inspection' such as:

(11a) yeva bulúku ne yémaa me

(he has given the book to me)

and (11b) yeva ye búlúku ne yéhile me

(he has shown his book to me)

are not interpreted as fa-paraphrases of ditransitive clauses involving verbs of this sub-set.

(iii) Verbs of this sub-set, unlike those of sub-set C.II, do not allow the omission of the direct object. Thus alongside (10a) above we shall never find, with the omission of the direct object, the transitive clause (10b):

(10b) *wɔhile me

(you have taught me)

2. Ditransitive Complex verbs

The complex verbs we are dealing with here are analyzable as verb (usually of CV structure) plus a noun phrase, which may be regarded as the object and is usually indefinite and inanimate. Clauses involving such complex verbs can admit, between the verb and the nominal object, an additional noun phrase which (in the case of most ditransitive complex verbs is usually human or animate) may be regarded as the indirect object. Thus with the complex verb bo swoke 'to make a promise' we shall find the pair of clauses:

- (1) Kofi bóle swoke
(Kofi made a promise)
- (2) Kofi bóle Akysé éwóke
(Kofi made Akysé a promise)

of which (1) may be regarded as a transitive clause and (2) as a ditransitive clause. It is to be noted that the first syllable of the noun phrase object in such a ditransitive clause as (2), as also in the case of a ditransitive clause with a simple verb, has regularly a high tone, irrespective of its low tone in isolation in the transitive clause (1).

Like ditransitive clauses with simple verbs, ditransitive clauses involving complex verbs may be related to their corresponding transitive clauses in terms of the causative/non-causative aspectual distinction, as exemplified by the following pair of ditransitive and transitive clauses with the complex verb kye ehone 'to starve, to fast':

- (3a) Akyé hyéle Kofí éhóné (ditransitive,
(Akye starved Kofi) causative, dynamic)
- (3b) Kofí hyéle shóné (transitive,
(Kofi fasted) non-causative, dynamic)

It is to be noted that the complex verb occurs with dynamic aspect in the causative ditransitive clause as well as in the non-causative transitive clause.

Unlike ditransitive clauses involving some ditransitive simple verbs, ditransitive clauses involving complex verbs do not have fa-paraphrases; thus alongside (3a) above we shall never find:

- (3c) * Akye vale shone hyele Kofi

Classification of Ditransitive complex verbs

As in the case of ditransitive simple verbs, three sub-classes (A-C) may be distinguished among ditransitive complex verbs on the same basis of the possibility of omitting the indirect object (or the dative reflexive object in the case of complex verbs of sub-set A.II).

Sub-class A:

With ditransitive complex verbs of this sub-class (e.g. kye shone 'to starve, to fast'), as with ditransitive simple verbs of sub-class A, the omission of the indirect object results in an acceptable transitive clause with a complete meaning difference, as the following pair of clauses illustrates:

- (1a) Akyé hyéle ó rá ne éhóné
(Akye starved her child)
- (1b) Akyé hyéle shóné
(Akye fasted)

The meaning difference between the ditransitive clause (1a) and the equally acceptable transitive clause (1b) may be expressed in terms of the person who experienced the pangs of hunger: in (1a), it is Akye's child (the indirect object referent) who was made to suffer the pangs of hunger, whereas in (1b), it is Akye herself (the subject referent) who suffered the pangs of hunger.

Two sub-sets (I-II) may be set up among ditransitive complex verbs of sub-class A.

Sub-set A.I

Members of this sub-set include:

1. kye shone 'to starve; to fast'
2. kye nvoninli 'to take a photograph of;
to have one's photograph
taken'
3. bo anyiemgba 'to disgrace; to be disgraced'
4. bo bosea 'to lend; to borrow'
5. bo kake 'to impose a fine on; to
incur debt'

Characteristic properties of members of this sub-set include:

(i) With complex verbs of this sub-set the causative/non-causative relationship is storable for corresponding ditransitive and transitive clauses. Thus with item (4), for example, we shall find:

- | | | |
|------|-------------------------|---------------------|
| (1a) | Kofi bóle Akyé bóséá | (ditransitive, |
| | (Kofi gave Akye a loan) | causative, dynamic) |
| (1b) | Akyé bole boséá | (transitive, non- |
| | (Akye took a loan) | causative, dynamic) |

And also with item (5) we shall find the following pair of ditransitive and transitive clauses between which the same syntactic (as well as semantic) relationship holds:

(2a) bebo eysvóls ne káké (ditransitive,
(they have imposed a fine on the stranger) causative, dynamic)

(2b) eysvóls ne ébo kaké (transitive, non-
(the stranger has incurred a debt) causative, dynamic)

(ii) The verbal element in complex verbs of this sub-set is restricted to the mono-syllabic verbs: (i) kye (items 1-2) and (ii) bo (items 3-5).

Sub-set A.II

Members of this sub-set include:

1. ka elalee 'to dream'
2. fa eya 'to get angry, to be annoyed'
3. bo nzekue 'to gossip'
4. bu mgbonda 'to think (about)'

Their use may be illustrated by the following paradigm with item (1):

- (1a) Kofí hánle Akyé ánwo élalée
(Kofi dreamt about Akye)
- (1b) Kofí hánle o nwó élalée
(Kofi dreamt about her)
- (1c) Kofí hánle me nwó élalée
(Kofi dreamt about me)

(i) As mentioned in the introductory chapter (see complex verbs (verb + alienable nouns) of Group B.II), complex verbs of this sub-set characteristically admit an indirect object noun phrase which may be a genitive construction consisting of a possessive nominal in genitive relation with the possessed form of the inalienable noun nwols 'outside, self'. Such indirect object noun phrases¹ involving the reflexive marker nwols is provisionally termed reflexive dative.

And as the above clauses (1a-c) show, the subject and the possessive nominal in the reflexive dative are not co-referents.

With item (1), but not the others, we shall also find alongside such clauses as (1a-c):

(1d) Kofi hánle nwolés élales
(Kofi dreamt about it)

(ii) With complex verbs of this sub-set the causative/non-causative distinction is not statable for ditransitive and transitive clauses in which the verbs may occur.

Sub-set B

With ditransitive complex verbs of this sub-class, the indirect object can be omitted without any change in the basic

1. It may well be that the indirect object (or reflexive dative) and the direct object in such clauses constitute a genitive noun phrase functioning as one nominal object in a transitive clause.

meaning of the clause. Thus with the complex verb kpa kyels 'to beg, entreat' we shall find the ditransitive clause:

- (1a) Kofi kpále Akyé kyéls
(Kofi begged Akye)

as well as the equally acceptable transitive clause:

- (1b) Kofi kpále kyels
(Kofi begged)

and both clauses express the same notion that Kofi begged somebody, who is specified by name in (1a) but not in (1b).

Among ditransitive complex verbs of sub-class B, two sub-sets may, on formal grounds, be distinguished. It should be mentioned, however, that members of this sub-class are by far the most numerous and the sub-sets distinguished are by no means exhaustive.

Sub-set B.I: Discourse or Communication verbs

Members of this sub-set include such 'discourse' verbs as:

- | | | |
|----|-----------|---------------------------|
| 1. | bo swoke | 'to make a promise' |
| 2. | bo amanes | 'to give news' |
| 3. | to agyiba | 'to trick, deceive' |
| 4. | bu ersle | 'to give/quote a proverb' |
| 5. | kile bo | 'to explain' |
| 6. | ye aysle | 'to praise' |

as well as such communications verbs as:

- | | | |
|-----|---------------|----------------------|
| 7. | kela nrelales | 'to send a message' |
| 8. | kele kelata | 'to write a letter' |
| 9. | ye tengilamo | 'to send a telegram' |
| 10. | fsle telefuu | 'to give a ring' |

The common characteristic of both discourse and communication verbs is that they can take finite clause object introduced by the subordinator ke 'that', which, as a rule, is non-omissible. Thus with items (1) and (7) we shall find:

- (1) egya ébo Akyé éwoke ké obádo ye súkúlu
(father has made Akye a promise that he'll send her to school)
- (2) egya éhela Akyé nrélales ké ɔrelá
(father has sent Akye a message that she should come)

Sub-set B.II: Performative verbs:

- | | | |
|----|---------------|------------------------------------|
| 1. | ye mo | 'to give thanks' |
| 2. | ye amasiela | 'to give thanks (for hospitality)' |
| 3. | ye akoaba | 'to make welcome' |
| 4. | biza ahe/anlu | 'to bid good morning/evening' |
| 5. | ye awosi | 'to bid good evening (in reply)' |
| 6. | da ase | 'to give thanks' |
| 7. | kpa kyele | 'to beg, entreat' |

Ditransitive clauses involving the sub-set of complex verbs here termed 'performative' verbs have alternative stereotyped formulae which are usually verbless sentences consisting of the object noun phrase with or without a following particle.

The formulaic expression, which may substitute for ditransitive clauses with items (1-3), may be a one-word sentence consisting of the nominal object. Thus with item (3) we shall find alongside the ditransitive clause:

- (1a) meyé wo ákoába
(I bid you welcome)

the formulaic expression:

- (1b) akóába/akoábá ó
(welcome)

The formulaic expression used in place of ditransitive clauses with items (4-6) usually consist of the nominal object followed by a vowel particle, as in:

- (2a) yedá wo áse
(we give you thanks)
- (2b) ase a
(thanks)

The use of item (7) may be illustrated by:

- (3a) yekpá wo kyéle
(lit. we doff (our) hat to you: we beg you)
- (3b) kyéle á lé é
(lit. here is our hat)

Among the remaining ditransitive complex verbs of sub-class B, four other sub-sets may be set up along some rough semantic parameters.

Sub-set B.III: Attitudinal verbs

1. se nyiane 'to respect, to be bashful'
2. se anwuvone 'to show pity'

Sub-set B.IV: Verbs of Abuse or Offence

1. ye/bó aholeba 'to insult, abuse'
2. bu anyehoanle 'to look askance at'
3. wo safule 'to insult, abuse'

- | | | |
|----|------------|-------------------|
| 4. | si amgbu | 'to scoff, sneer' |
| 5. | ye etane | 'to offend' |
| 6. | ka sya | 'to annoy' |
| 7. | wa amonle | 'to curse' |
| 8. | ye amunwio | 'to maltreat' |

Sub-set B.V: Verbs of Medication

- | | | |
|----|-----------|-----------------------|
| 1. | wo aguyia | 'to give injection' |
| 2. | bo sili | 'to give vaccination' |

Sub-set B.VI: Verbs of games

- | | | |
|----|-----------|-------------------|
| 1. | wula голу | 'to score a goal' |
|----|-----------|-------------------|

Other complex verbs of Sub-class B

- | | | |
|-----|-------------|------------------------------------|
| 1. | to kele | 'to give a blow' |
| 2. | to etu | 'to shoot a gun' |
| 3. | sua ehane | 'to set a trap' |
| 4. | yia adenle | 'to meet (at station)' |
| 5. | sale adenle | 'to ask permission to leave' |
| 6. | su nza | 'to pour out (drink)' |
| 7. | to duma | 'to give a name' |
| 8. | ka nrohoa | 'to make (child) merry by
play' |
| 9. | tua kake | 'to owe' |
| 10. | tua kake | 'to pay wages; to punish' |

Sub-class C

Complex verbs of this sub-class do not usually allow the omission of the indirect object and include:

- | | | |
|----|-------------|----------------------|
| 1. | to ezonle | 'to make accusation' |
| 2. | die atofole | 'to wed' |

- | | | | |
|----|----|---------|-------------------------|
| 3. | fa | ekpòlè | 'to hate' |
| 4. | ye | sysvòlè | 'to entertain guest' |
| 5. | ye | nzonlè | 'to identify by a mark' |
| 6. | ye | asiane | 'to cause mishap' |

With item (1), for example, we shall find the ditransitive clause:

- (1a) Kofí édo me ézonlè
(Kofi has made an accusation against me)

but not:

- (1b) * Kofi edo azonle

3. Ditransitive verbal groups

The following general statements can be made about verbal groups which can occur in the type of construction which may be regarded as ditransitive.

(a) The auxiliary verb in ditransitive verbal groups is restricted to a closed set of eight verbs which as simple verbs can occur in ditransitive clauses. They are (with cross-references to the sub-sets to which they belong): 1. die 'to collect, take from' (B.II), 2. gyakyi 'to leave to, for' (B.III), verbs of 'giving' such as 3. sie 'to leave for' (C.I), 4. bèlè 'to bring to' (C.I), 5. kysè 'to give to' (C.I), 6. nwa 'to remit, send to' (C.II) and 7. maa 'to give to' (C.III) and 8. kilè 'to show to' (C.III).

And as indicated above, all these auxiliary verbs (except 1. die) can co-occur with fa 'to take' as a principal verb in the verbal groups:

- (2a) fa gyakyi 'to leave with' (3a) fa sie 'to keep for'
(4a) fa bɛlɛ 'to bring to' (5a) fa kye 'to forgive'
(6a) fa nwa 'to send to' (7a) fa maa 'to give/
hand to'

(8a) fa kile 'to show, exhibit for inspection; to introduce to
Verbal groups involving fa as the principal verb are distinguished as 'verbs of giving'.

The auxiliary verbs (7-8) can co-occur with principal verbs other than fa: 7. maa 'to give/hand to' usually co-occurs with simple verbs (e.g. (I) to 'to buy' and (II) to 'to throw') as in the verbal groups:

(7.I) to maa 'to buy for'

(7.II) to maa 'to throw to',

and 8. kile co-occurs with principal verbs which may be either simple (e.g. (I) kenga 'to read') or complex (e.g. (II) fete zole 'to broach') as in the verbal groups:

(8.I) kenga kile 'to read to'

(8.II) fete zole kile 'to broach to'.

Verbal groups involving 7. maa as the auxiliary verb are designated as 'service verbs' in contradistinction to verbal groups involving 8. kile which are regarded as 'communication verbs'.

The verb 1. die 'to collect, take from' as an auxiliary verb is restricted to the principal verb sa as in the verbal group sa die 'to deprive, rob of'.

(b) It was noted above that in ditransitive clauses involving a simple verb or complex verb, the normal ordering of objects is 'indirect object before direct object.' In a ditransitive clause involving a verbal group, the direct object (occurring after the principal verb) normally precedes the indirect object (occurring after the auxiliary verb), as the following example with the verbal group to maa 'to buy for' illustrates:

(1) yedo bulúku ne yémaa Kofí

(he has bought the book for Kofi)

With the verbal group sa die 'to deprive, rob of', however, it is the alternative ordering that obtains; that is, the indirect object (occurring after the principal verb) precedes the direct object (occurring after the auxiliary verb), as (2) below illustrates:

(2) yeza Kofí yélie bulúku ne

(he has deprived Kofi of the book)

As a rule, then, ditransitive clauses with verbal groups replicate the ordering of objects - i.e. 'direct object before indirect object' - characteristic of the fa-paraphrases of ditransitive clauses with a sub-class of ditransitive simple verbs.

(c) Ditransitive clauses involving verbal groups are like ditransitive clauses with complex verbs in not having fa-paraphrases.

(d) Unlike ditransitive clauses involving either simple or complex verbs, ditransitive clauses involving verbal groups

do not have corresponding transitive clauses which may be related in terms of the causative/non-causative aspectual distinction.

(e) Generally speaking, ditransitive verbal groups are loose collocations, except fa kye which is a close-knit collocation.

We might, at this stage, compare some English ditransitive clauses with their Nzema equivalents involving verbal groups.

In English we shall attest a ditransitive clause such as:

(3a) he sold me the house

in which the ordering of objects is 'indirect before direct object'. We shall refer to English ditransitive clauses such as (3a) which are characterized by this ordering of objects as 'standard structure'. Ditransitive clauses such as (3a) above have a prepositional paraphrase:

(3b) he sold the house to me

in which the direct object occurs before the indirect object which is preceded by a preposition.

The Nzema equivalent involving the verbal group tone maa 'to sell to' is:

(4a) yedone suá ne yémaa me

(he sold the house (and he gave it) to me)

in which the ordering of objects is the same as in the English prepositional paraphrase (3b) above.

With the verbal group sa die 'to deprive, rob of' as in (2) above, the ordering of objects is also the same as in the equivalent English clause which has no prepositional paraphrase.

On the basis of this comparison, we might say that the auxiliary verb in Nzema ditransitive clauses with verbal groups corresponds to the English prepositions 'to, for, with, of'.

Classification of ditransitive verbal groups

Ditransitive verbal groups may be sub-classified on the basis of a number of possible criteria, which include:

- (i) the ordering of objects which they favour;
 - (ii) the type of verb which occurs as the auxiliary verb within the verbal group; or alternatively, the type of verb which occurs as the principal verb;
 - (iii) the type of collocation, whether loose or close-knit, which the verbal group exemplifies;
 - (iv) the possibility of omitting the (auxiliary) constituent involving the indirect object;
- or (v) the underlying structure.

Some of these criteria may produce the same results. To bring the description of ditransitive clauses with verbal groups in line with those involving simple or complex verbs, the same criterion of the possibility of omitting the auxiliary (or principal) constituent involving the indirect object is used to distinguish two (rather than three, as in the case of ditransitive simple or complex verbs) main sub-classes (A-B).

Sub-class A: Ditransitive verbal groups

With ditransitive verbal groups of this sub-class (e.g. toa kile 'to report to') the omission of the auxiliary (or principal) constituent involving the indirect object results in an acceptable transitive clause without changing the basic meaning. Thus alongside (1a) below:

(1a) Kofí édoá me éhile egya

(Kofi has reported me to father)

we shall attest, with the omission of the auxiliary constituent, the acceptable transitive clause:

(1b) Kofí édoá me

(Kofi has reported me)

Both the ditransitive clause (1a) and the resultant transitive clause (1b) are alike in their basic meaning and indicate that Kofi reported me to somebody, who is mentioned in (1a) but not in (1b). In respect of the possibility of omitting the indirect object, then, ditransitive verbal groups of sub-class A function like ditransitive simple or complex verbs of sub-class B. Four sub-sets (I-IV) may be distinguished among ditransitive verbal groups of sub-set A.

Sub-set A.I

Members of the sub-set include: 1. tone maa 'to sell to' as in:

(1a) Kofí édone Akye súá ne émaa me

(Kofi has sold Akye's house to me)

(i) With members of this sub-set an indefinite inanimate object is pronominalizable. Thus alongside (1a) above, we shall find:

(1b) Kofí édone ye émaa mé

(Kofi has sold it to me)

We might distinguish the ditransitive clause (1a) above from the transitive clause (2) below which involves the verbal group tone maa 'to sell for/on behalf of':

- (2) Kofí édone Akyé suá ne émaa ye
(Kofi has sold Akye's house for me)

The above transitive clause, which contains two objects, is different in that the possessive nominal Akye in the first nominal object occurring after the principal verb is co-referential with the second pronominal object occurring in clause-final position after the auxiliary verb.

And loosely, one might say that the transitive clause (2) above presupposes that Kofi sold Akye's property with the owner's consent or approval, whereas the ditransitive clause (1) may not have such a presupposition.

(ii) The structure underlying ditransitive clauses involving verbal groups of this sub-set is referable to a pair of transitive clause and (possibly) a fa-paraphrase both of which may be attested in surface structure. Thus the structure underlying (1) above may be regarded as derivable from:

- (1.I) Kofi edone Akye sua ne
(Kofi has sold Akye's house)
(1.II) Kofi eva Akye sua ne émaa me
(Kofi has given Akye's house to me)

We might include in this sub-set the verbal group kele (kelata) maa 'to write (letter) to', as in:

- (3a) mehele keláta mehómaa Kofí
(lit. I've written a letter and gone and given
it to Kofi. I've written a letter to Kofi)

This verbal group has the distinctive characteristic of requiring the itive-ingressive aspect marker in the auxiliary verb word. Secondly, alongside (3) we shall attest the synonymous ditransitive clause:

- (3b) mehəls Kofi kéláta
(I've written Kofi a letter)

as well as the transitive clause:

- (3c) mehəls Kofi
(I've written Kofi)

Thirdly, all three clauses (3a-c) may be followed by a ke 'that'-clause:

- (3d) mehəls ksláta mehómaa Kofi ké ommába
(I've written a letter to Kofi that he shouldn't come)

Sub-set A.II: Verbs of Communication

Members of this sub-set which may be designated as verbs of communication are more numerous and include:

- | | | | |
|----|----------------|------|---------------------------|
| 1. | toa | kile | 'to report to' |
| 2. | ka (edweks) | kile | 'to say/tell to' |
| 3. | ka (nohals ne) | kile | 'to speak (the truth) to' |
| 4. | bo (adals) | kile | 'to tell (a lie) to' |
| 5. | bo zols | kile | 'to mention to' |
| 6. | fete zols | kile | 'to mention to' |
| 7. | to (nworá) | kile | 'to tell (a story) to' |
| 8. | kenga (kelata) | kile | 'to read (letter) to' |
| 9. | ye (nvoninli) | kile | 'to show (film) to' |

Their use may be illustrated by the following clauses with items (1-2):

(1) Akys' édoa Kofí éhile eyesvóls ne
(Akys has reported Kofi to the guest)

(2) eyesvóls ne éha edweské ne éhile egya
(the guest has reported the matter to father)

Verbs of this sub-set have the following characteristics:

(i) Verbs of this sub-set are characterized by kile as the auxiliary verb.

(ii) The principal verb occurring within verbal groups of this sub-set may be either simple verbs as in item (1) or complex verbs as in items (2-9).

(iii) The structure underlying ditransitive clauses involving verbal groups of this sub-set are also referable to a pair of transitive clause and a fa-paraphrase which cannot be attested in surface structure. Thus the structure underlying (2) above, for example, may be regarded as derivable from a pair of clauses of the type:

(2.I) eyesvóls ne éha edweské ne
(the guest has reported the matter)

(2.II)*eyesvóls ne éva edweské ne éhile egya
(the guest has shown the matter to father)

(iv) Generally speaking, verbal groups of this sub-set denote verbal communication.

We might perhaps group together items (1-3) which are different in being capable of taking a ke 'that'-clause as in the following example with item (3):

(3) yéha nohalé ne yéhile me ké odáyé á ovalé a
(he has told me the truth that he took it)

Sub-set A.III: Verbs of Deprivation

Membership of this sub-set is represented by the item
1. sa die 'to deprive, rob of; to take from', and its use may be illustrated by:

(1a) Kofí éza me élie ezukoá ne

(Kofi has robbed me of the money)

(1b) nrenyá ne éza Kofí élie o gónwó raálé ne

(the man has deprived Kofi of his girl friend)

(1c) beza o yé ne bélie suá ne

(they have taken from his wife the house)

Characteristics of members of this sub-set include:

(i) Members of this sub-set are different from all other ditransitive verbal groups in favouring the ordering of objects: 'indirect before direct object'.

(ii) With verbal groups of this sub-set the omission of the principal (rather than the auxiliary) constituent results in an acceptable clause without changing the basic meaning. Thus alongside (1c) we shall find, with the omission of the principal constituent containing the indirect object, the acceptable transitive clause:

(1d) belie suá ne

(they have taken the house)

(iii) The structure underlying a ditransitive clause such as (1c) above is referable to a pair of clauses one of which cannot be attested in surface structure and none of which is a fa-paraphrase:

(1c.I) * beza o ye ne

(they have got hold of his wife)

(1c.II) belie sua ne

(they have taken the house)

Sub-class B

With verbal groups of this sub-class the omission of the auxiliary constituent containing the indirect object results in a transitive clause which may be acceptable but represents a slight meaning difference or is simply unacceptable.

Three sub-sets (I-III) may be distinguished among ditransitive verbal groups of this sub-class.

Sub-set B.I: Verbs of Service

Members of this sub-set include:

1. to maa 'to buy for'
2. to/fuandi maa 'to throw to'
3. kye maa 'to catch for'
4. kela maa 'to order for'

Their use may be illustrated with items (1) and (4) by:

(1) Kofí édo sua émaa o yé Akyé

(Kofi has bought a house for his wife Akye)

(2) nrenyá ne éhela teladéé émaa o rá ne

(the man has ordered a dress for his child)

And with the omission of the auxiliary constituent from (1), for example, we shall find the acceptable transitive clause:

(1a) Akyé édo sua

(Akye has bought a house)

The ditransitive clause (1) above indicates that Kofi bought a house and gave it to his wife for her own use; the resultant transitive clause (1a) is, however, different since it indicates that Kofi bought a house, possibly for his own use or for somebody else's.

Characteristic properties of members of this sub-set include:

(i) The auxiliary verb occurring in verbal groups of this sub-set is restricted to maa which as a simple verb can occur in a ditransitive clause.

(ii) Ditransitive clauses involving verbal groups of this sub-set are more readily referable to an underlying structure derived from a pair of transitive clause and fa-paraphrase both of which may be attested in surface structure. Thus (1) above may be regarded as derivable from a pair of clauses of the type:

(1.I) Kofi edo sua

(Kofi has bought a house)

(1.II) Kofi eva sua smaa o ye Akye

(Kofi has given his wife Akye a house)

(iii) Verbal groups of this sub-set denote the performance of a service.

Sub-set B.II: Verbs of Giving

Members of this sub-set include:

- | | | | |
|----|----|--------|--|
| 1. | fa | nwa | 'to send to' |
| 2. | fa | bsle | 'to bring to' |
| 3. | fa | gyakyi | 'to leave with' |
| 4. | fa | sie | 'to keep for' |
| 5. | fa | maa | 'to give to' |
| 6. | fa | kile | 'to show to, to exhibit for inspection; to introduce to' |

Their use may be illustrated by the following clauses with items (1) and (6):

- (1) Kofi éva bulúku ne énwá Sanéba
(lit. Kofi has taken the book and sent it to
Saneba. Kofi has sent the book to Saneba)
- (2) Akyé éva ye édanlé fofóls ne éhile Kofi
(Akye has shown her new cloth to Kofi)

With verbal groups of this sub-set, as with those of sub-set B.I, the omission of the auxiliary constituent results in an acceptable clause which represents a slight meaning difference. Thus the omission of the auxiliary constituent from (1) above produces the acceptable transitive clause:

- (1a) yeva bulúku ne
(he has taken the book)

In relation to the original ditransitive clause (1), which indicates that Kofi sent the book to Saneba, the resultant transitive clause (1a) merely states that Kofi took the book without any indication that he sent it on.

Characteristics of verbal groups of this sub-set include:

(i) Verbal groups of this sub-set are characterized by the agentive verb fa 'to take' as the principal verb, and as already mentioned ditransitive clauses involving verbal groups of this sub-set are not interpreted as fa-paraphrases.

(ii) Ditransitive clauses involving verbal groups of this sub-set are referable to a pair of transitive and ditransitive clause, of which the latter may not be attested in surface structure. Thus the structure underlying (1) may be regarded as derivable from:

(1.I) Kofi eba buluku ne
(Kofi has taken the book)

(1.II)*Kofi enwa Saneba buluku ne
(Kofi has sent Saneba the book)

Sub-set B.III

Membership of this sub-set is represented by the item

1. fa kye 'to forgive' and its use illustrated by:

(1) mefa wo étane mékys wo
(I forgive you your offence)

With verbs of this sub-set the omission of the auxiliary constituent results in a clause that is simply unacceptable. Thus the omission of the auxiliary constituent from (1) produces the unacceptable clause:

(1a) * mefa wo etane
(I take your offence)

Characteristic properties of members of this sub-set include:

(i) In ditransitive clauses with this item, the indirect object is usually a personal pronoun, and the possessive nominal in the direct object is co-referential with the indirect pronominal object.

(ii) This item is the only close-knit collocation among ditransitive verbal groups, and has the nominalization fakysé 'forgiveness':

(2) fakysé fá kpale bá sua zó
(forgiveness brings happiness into a town)

TYPE 7: RELATIONAL CLAUSES (S V C)

The typical verb in a relational clause is the copular verb, which is stative. Relational clauses are exemplified by:

S V C
(1a) nrenyá ne / lé / kpole
(the man is fat)

S V C
(1b) subé ne / yé / fe
(the soup is nice)

S V C
(1c) me ze á / le / Kofi
(my father is Kofi)

S V C
(1d) me ze / wó / Bolofó
(my father is in Axim)

On the basis of the type of copular verb characterizing a relational clause, we distinguish four main sub-types of relational clauses: (I) relational clauses containing the copular verb le/li/ 'to be, to be identified as' and exemplified in (1a) are distinguished as identifying; (II) those like (1b) which involve the copular verb ye/je/ 'to be, to have the essence of being, to have the attribute of being' are distinguished as attributive; (III) relational clauses exemplified in (1c) and involving the copular verb le/le/ 'to be, can be equated with, to be identified as', which is always preceded by the vowel particle a, are classified as equative; and (IV) relational clauses exemplified in (1d) and involving the locational copular verb wó 'to be in, can be found or located in, happens in, exist' are classified as locational relational clause.

The element of relational clause structure which necessarily follows the copular verb is here referred to as the complement. Leaving aside for the moment equative relational clauses (sub-type III) and locational relational clauses (sub-type IV), the complement in an identifying (sub-type I) relational clause may be A) a noun phrase, B) a numeral and C) an adjective, whereas in an attributive clause (sub-type II) the complement may be a numeral or an adjective.

The following structural frames may, therefore, be set up as the characteristic syntactic contexts in which the identifying copular verb le and the attributive copular verb ye can occur:

	<u>Subject</u>	<u>Copular Verb</u>	<u>Complement</u>
A)	Noun phrase	le	noun phrase
B)	Noun phrase	le/ye	numeral
C)	Noun phrase	le/ye	adjective
A)	<u>Complement noun phrase</u>		

For a description of noun phrases functioning as complement in identifying relational clauses, the following binary features, arranged in a hierachical order, may be set up:

I.	Definiteness:	Definite/Indefinite
II.	Animacy:	Human/Non-human
III.	Sex:	Male/Female
IV.	Number:	Singular/Plural
V.	Location:	Locative/Non-locative
VI.	Time:	Temporal/Non-temporal

B) Numeral complement

The category of number with its two terms of singular and plural is also stated for cardinal numeral complements occurring either in an identifying or attributive relational clause.

C) Adjective complement

For adjective complements in identifying or attributive relational clauses the following features may be set up:

- I. State: Contingent/Essential
- II. Pluralizability: Pluralizable/Non-pluralizable.

Sub-type I: Identifying relational clause

Identifying relational clause may be exemplified by the following:

- (1a) nrenyá ne lé eyevóle
(the man is a stranger)
- (1b) nrenyá ne lé kpole
(the man is fat)

The copular verb le 'to be', which occurs in the above identifying clauses is stative, and the particular form which it exhibits in (1a-b) is the positive continuative form. It has a corresponding positive durative form de, as in:

- (1c) nrenyá ne téde kpole
(the man is still fat)

The copular verb le 'to be', then, belongs to the sub-class of stative verbal forms whose positive continuative tense form is phonologically related by stem-initial consonant mutation to their corresponding positive durative tense form. It is suggested that in the lexicon, the positive durative tense form de, which may be regarded as the base form, should be listed.

The common negative form for the positive continuative form le and the positive durative tense form de is written as nle, as in the negative polarity clause (1d):

- (1d) nrenyá ne énle kpóle
(the man is not fat)

In the positive active tenses, the identifying copular verb is complemented by the suppletive verbal form ye 'to become', as in the following paradigm:

- (2a) nrenyá ne éye kpole (positive, perfect)
(the man has become fat)
- (2b) nrenyá ne étáyéle kpole (negative, ")
(the man has not become fat)
- (2c) nrenyá ne yéle kpole (positive, past)
(the man became fat)

The suppletive form ye is also the form which the identifying copular verb exhibits in imperative mood clauses:

- (3a) ye koonwu (positive, 2nd. pers.
(do be quiet) sing. imper.)
- (3b) mmaye koonwu (negative, 2nd pers.
(don't keep quiet) sing. imper.)

In the descriptive statement which follows, brief comments will be made on the relevance of the binary features to the syntax of the identifying relational clause involving the copular verb de.

I. Definiteness: Definite/Indefinite

There are clear formal criteria for distinguishing definite from indefinite noun phrases.

Definite noun phrases include:

- I) proper names of animate beings, e.g. Kofi, Akye;
- II) names of non-human animals personified in folktales, e.g. Kendebe 'Spider';
- III) geographical names of places, e.g. Bolofo 'Axim', Nzandela 'Ashanti';
- IV) deictic place adverbials, e.g. ske 'here', nehane, 'there';
- V) names of the months, days of the week;
- VI) deictic time adverbials such as ene 'today', shema, 'tomorrow';
- VII) noun words post-modified by a determiner (e.g. the definite article ne 'the', the deictic determiners: eyeka 'this', shendes ne 'that'; or the non-deictic determiners: biala 'every', bie 'a certain') or by an adjective;
- VIII) a genitive construction (e.g. with the possessed form of an inalienable noun as head noun).

Indefinite noun phrases include:

- I) personal pronouns;
- II) an unmodified noun word other than members of I-IV above.

Syntactic criteria which distinguish definite from indefinite noun phrases include:

- (a) in a genitive construction with an inalienable noun as the possessed noun, definite noun phrases require the prefixed possessed form of the inalienable noun:

- (4a) Kofi ábo
(Kofi's under part)
- (4b) Kendebeba ábo
(Spider's under part)
- (4c) suá ne wó Bolofo ábo
(the town is under Axim)
- (4d) suá ne wó ské ábo
(the town is under this place)
- (4e) nrenyá ne wó suá ne ábo
(the man is under the house)
- (4f) ezukoá ne véa o sá ábo
(the money is under his hand)

In a similar construction, an indefinite noun phrase co-occurs with the possessed root form of the inalienable noun:

- (5a) megyi o bó
(I am standing under it)
- (5b) megyi sua bó
(I am standing under a house)

- (b) And as already mentioned above, in a transitive clause a definite object noun phrase, if animate, is always pronominalizable; but, if inanimate, may or may not be pronominalizable. Indefinite object noun phrases, animate or inanimate, are not pronominalizable.

In respect of the feature specification of 'definiteness', three types of structural relationships between the subject noun phrase and the complement may be set up as the characteristic property of identifying relational clauses, and presented as:

Structure I.	Definite	copular <u>le</u>	Definite
Structure II.	Definite	"	Indefinite
Structure III.	Indefinite	"	Indefinite

In addition, it should be noted that a definite proper name and an indefinite personal pronoun cannot function as complement in an identifying relational clause.

Structure I. Definite copular le Definite

Structural relationship of this first type may be exemplified by the identifying relational clause:

(6) Kofi lé belemgbunli mgbanyimá né mo kó
(Kofi is one of the chief's elders)

In the above clause (6), the definite subject noun phrase is related to the definite complement noun phrase as a member to a class, and the semantic interpretation of the clause may be glossed as: 'Kofi belongs to the class of people who make up the chief's council of elders'.

In addition to class-membership, structure I may also be used to express possession. In such possessive constructions, the definite complement noun phrase is a genitive construction consisting of a proper name, a definite noun phrase, or a pronoun in genitive relation with the noun-head édeé 'own':

(7a) edanlé ne lé Kofi édeé
(lit. the cloth is Kofi's own: the cloth belongs to Kofi)

- (7b) edanlé ne lé eyevóls ne édes
(the cloth belongs to the stranger)
- (7c) edanlé ne lé me édes
(the cloth is mine)

The above relational clauses are possible answers to the question:

- (8a) edanlé ne lé nwáne édes?
(the cloth, whose is it?)

Alongside (8a), we shall also find the verbless version which is marked by a final particle:

- (8b) nwáne édanlé é?
(whose cloth is this?)

which may elicit the corresponding verbless answer forms:

- (9a) Kofí édeé ó
(it's Kofi's)
- (9b) eyevóls ne édeé ó
(it's the stranger's)
- (9c) me édeé ó
(it's mine)

Other relational clauses which exemplify the definite/definite agreement are:

- (10a) nrenyá ne lé sonlá kpale
(the man is a good man)
- (10b) edweké ne lé edweké moo chia á
(the matter is an important one)

In (10a), there is human agreement between the subject noun phrase and the complement noun phrase, and in (10b), there is a corresponding non-human agreement.

Structure II. Definite copular le Indefinite

Identifying clauses exemplifying structure II are favourite constructions for expressing a person's function or profession:

(11a) Kofí lé dwinvolé
(Kofi is a goldsmith)

(11b) o rá ne lé sófo
(his son is a priest)

Identifying clauses expressing a profession have constructional analogues, which involve the verb di 'to engage in'. Thus alongside (11a-b), we shall find:

(12a) Kofí dí adwinli
(Kofi is a goldsmith)

(12b) o rá ne dí sófo
(his son is a priest)

Identifying clauses exemplifying structure II may also express place of origin:

(13a) o yé ne lé Bolofonlí
(his wife comes from Axim)

(13b) o hú ne lé Sandenlí
(her husband is an Ashanti)

(13c) nrenyá ne lé Ghánanlí
(the man is a Ghanaian)

Identifying clauses expressing place or country of origin have also constructional analogues, which are semi-transitive clauses involving the stative verbal form vi, 'to come from' followed by the geographical place name as the locative adjunct. Thus corresponding to (13a-c) above we shall find respectively:

- (14a) o yé ne ví Bolofó
 (his wife comes from Axim)
- (14b) o hú ne ví Nzandele
 (her husband comes from Ashanti)
- (14c) nrenyá ne ví Ghána
 (the man comes from Ghana)

Identifying relational clauses may also be used to express membership of a clan:

- (15a) egya lé Tweanlí
 (my father is a member of the Twea clan)
- (15b) Kofí neé Akyé lé Ahwea
 (Kofi and Akye are members of the Twea clan)

Identifying relational clauses of structure II, which express profession, place or country of origin, or membership of a clan, also exemplify class-membership.

Identifying relational clauses may also express kinship relationship:

- (16a) Akyé neé Amá lé mediema
 (Akye and Ama are sisters)
- (16b) Akyé neé Amá lé mɛzeamra
 (Akye and Ama are siblings of the same
 father)
- (16c) Akyé neé Sanéba lé mshola
 (Akye and Saneba are co-wives)

In the above relational clauses (11-16), the definite subject noun phrases and the indefinite complement noun phrases agree in number (singular or plural) and also in the feature 'human'. Identifying relational clauses may also express status or age-group:

- (17a) Kofí tède kpavols
(Kofi is still a young man)
- (17b) Akyé lé belérá
(Akye is a young woman)
- (17c) Akyé neé Sanéba lé mbelérá
(Akye and Saneba are young women)
- (17d) Akyé éye erelera
(Akye is now an old woman)

In the above clauses (17a-d), the subject and complement noun phrases concord not only in number and human, but also in the biological gender of sex.

We shall also attest an identifying clause of structure II, in which the definite subject noun phrase and the indefinite complement noun phrase agree not only in number but also in the feature 'non-human':

- (18) edwekéne éye edweké
(the case turned out to be a different case)

Structure III. Indefinite copular le Indefinite

Identifying clauses exemplifying structure III may be illustrated by:

- (19a) sonlá lé sonlá
(man is human)
- (19b) medámé (nókó) méle sonlá
(I (too) I am a human being)
- (19c) o le nrénya
(he is a man)

Identifying relational clauses exemplified in (19a-c) express moral quality.

II. Animacy: Animate (human/non-human)/Inanimate

Nzema, unlike English, employs other criteria than the 3rd person singular pronoun to distinguish animates (e.g. eyevole 'guest, stranger' and twea 'dog') from inanimates (e.g. skponle 'table', and sua 'house').

- (a) As noted above in the section on transitive clauses, in a transitive clause a definite object noun phrase whose referent is animate is always pronominalizable whereas a definite object noun phrase whose referent is inanimate may not be pronominalizable, as the following examples further illustrate:

(20a) Akyé élekpónde eyevóle ne
(Akye is looking for the guest)

(20b) Akyé élekpónde ye
(Akye is looking for him)

(21a) Akyé élekpónde tweá ne
(Akye is looking for the dog)

(21b) Akyé élekpónde ye
(Akye is looking for it)

(22a) Akyé élekpónde skpónlé ne
(Akye is looking for the table)

(22b) Akyé élekpónde
(Akye is looking for it)

- (b) With a complex verb such as maa zole 'to lift up' (consisting of the simple verb maa and the local

inalienable noun zole) a definite animate noun phrase is pronominalizable by ye and the inalienable noun retains the (possessed) root form zo:

(23a) Akyé émaa eyevóle ne zó
(Akye has lifted the guest up)

(23b) Akyé émaa ye zó
(Akye has lifted him up)

(24a) Akyé émaa tweá ne zó
(Akye has lifted the dog up)

(24b) Akyé émaa ye zó
(Akye has lifted it up)

A definite inanimate noun phrase is, however, not pronominalized and the inalienable noun is realized either as the (possessed) root form zo or the absolute form zole:

(25a) Akyé émaa ekpónlé ne zó
(Akye has lifted the table up)

(25b) Akyé émaa zo(lé)
(Akye has lifted it up)

(c) Animate and inanimate object noun phrases are clearly distinguished in the following (b) clauses which are relatable by pronominalization to the corresponding (a) clauses:

(26a) Kofí ékpa eyevóle ne ánwó
(Kofi has passed the guest)

(26b) Kofí ékpa o nwó
(Kofi has passed him)

(27a) Kofí ékpa tweá ne ánwó
(Kofi has passed the dog)

(27b) Kofí ékpa o nwó

(Kofi has passed it)

(28a) Kofí ékpa suá ne ánwó

(Kofi has gone past the house)

(28b) Kofí ékpa nwolé

(Kofi has gone past it)

(d) A fourth possible distinction, on formal grounds, between animate and inanimate noun phrases may be illustrated by the following sentences in which the antecedent noun phrase is marked off by a slash from the post-modifying genitive relative clause introduced by the relative pronoun móó 'whose (or who)':

(29a) éyevóle ne/móó anwo (o nwó) éye evinlí la...

(the guest/whose person (who his person)
has become dirty...)

(29b) tweá ne/móó ánwó (o nwó) éye evinlí la...

(the dog/whose outside (or who its outside)
has become dirty...)

(29c) suá ne/móó nwolé éye evinlí la...

(the house/whose outside has become dirty...)

As the above examples show, with an animate noun phrase as the antecedent (29a-b), the possessed inalienable noun nwolé 'person, outside' occurring within the genitive relative clause is realized as the prefixed possessed form anwo (or the possessed root form nwo in a genitive construction with a possessive pronoun); with an inanimate antecedent noun phrase (29c) only the absolute form nwolé of the possessed inalienable noun is possible.

It is also to be noted that within the genitive relative clause, the absolute form zole 'top' may substitute for nwole with an inanimate antecedent noun phrase, as in:

- (30a) suá ne / móó zolé éye evinlí la
(the house/whose top has become dirty)

With an animate antecedent noun phrase we shall never attest the possessed prefixed form azo or the genitive construction o zo:

- (30b) * eyevóle ne / móo azo (o zo) eye evinli la...

Semantically, we might say that inanimates can, but animates cannot, be possessors of zole 'top'.

There are, therefore, formal reasons for distinguishing between animates and inanimates and for sub-classifying animates, by means of biological sex, into human and non-human. Sex among humans is lexically indicated by the adjectives (1a) nrenya 'male' and (2a) raale 'female', as in:

- (31a) rale / (atofolé) nrenyá 'son / (bridegroom)'

- (32a) rale / (atofolé) raále 'daughter / (bride)'

whereas among non-humans the corresponding sex-differentiating adjectives are (1b) nyinli 'male' and (2b) belle 'female', as in:

- (31b) akólé nyinlí 'cock'

- (32b) akólé béle 'hen'

In an identifying type of relational clause, the subject noun phrase and the complement must concord in terms of the animacy feature animate/inanimate. Thus we shall attest:

- (33a) nrenyá ne lé eyevóle
(the man is a stranger)

- (33b) Kofí lé aboloba
(Kofi is an educated person)

(33c) o hú ne lé sonlá kpale
(her husband is a good person)

(33d) ewolé ne lé ewobilé
(the snake is a spitting cobra)

which exemplify animate concord between the subject and complement noun phrases. There is a corresponding inanimate concord as in:

(34a) edweké ne lé edweké moo ohia á
(the matter is an important matter)

(34b) ye édanlé ne lé Nzandele áboka
(his cloth is an Ashanti kente cloth)

By contrast with the acceptable clauses (33-34) above, the following clauses are unacceptable, since there is no animacy concord between the subject and complement noun phrases:

(35a) * ekponle ne le aboloba
(the table is an educated person)

(35b) * twea ne le sonla kpale
(the dog is a good person)

III. Sex: Male/Female

The following clauses:

(36a) * Kofi le belera
(Kofi is a young woman)

(36b) * Akye le kpavole
(Akye is a young man)

are unacceptable, since there is no subject-complement concord of biological or natural sex gender although the subject and

complement concord in respect of the feature human. The above clauses serve to show that in an identifying relational clause subject-complement concord of sex is necessary. One may assume, however, that such restrictions are not language-specific.

IV. Number: Singular/Plural

As already mentioned in Chapter 5, Nzema has a two-term number category: singular and plural, and a number of nouns and adjectives exhibit morphological number-variation. In an identifying relational clause, subject-complement concord of number is necessary. We shall, therefore, attest the following clauses in which there is singular/plural contrast between the (a) and (b) examples:

- (37a) nrenyá ne lé eysvóls
(the man is a stranger)
- (37b) menlí né mo lé nysvóls
(the people are strangers)
- (38a) o le Semanlí / Sandenlí
(he is an Nzema / Ashanti man)
- (38b) bele Nzema / Nzandele
(they are Nzemas / Ashantis)

We shall not find:

- (39a) * nrenya ne le nysvols
(the man is strangers)
- (39b) * o le Nzema / Nzandele
(he is Nzemas / Ashantis)

in which the subject noun phrase, which is singular, does not concord in number with the complement which is plural.

V. Location: Locative/Non-locative

As noted in the section on complex semi-transitive and semi-transitive clauses, noun words or phrases which denote location function as locative adjuncts in such clauses; non-locational noun phrases cannot function as locative adjuncts.

In identifying clauses, a locative adjunct functioning as complement usually selects as subject a noun word or phrase capable of functioning as a locative adjunct.

- (40) ské lé abiales
(this place is a bathroom)

It is to be noted that (40) above preserves the definite/indefinite relationship of structure III.

VI. Time: Temporal/Non-temporal

For immediate purposes, we shall distinguish three main groups of temporal noun phrases:

Group A: Time 'WHEN' Adjuncts

Two sub-sets may be distinguished:

Group A.I: Deictic temporal nouns

Members of this closed sub-set can serve as a response to a non-disjunctive interrogative involving the Q-item kenle nzu 'when'; they denote a point of time and their meanings contain a deictic reference to 'this, 'next' and 'last'. Members of the sub-set include:

1. ené 'today, this day'
2. shemá 'tomorrow, next day'
3. anlómá 'yesterday, the previous day'
4. anlómá áanzi 'the day before'
(lit. 'the back of yesterday')

Group A.II: Names of the days of the week

Members of this closed sub-set may be post-modified by the article ne 'the' when used in answer to a kenle nzu 'when'-question:

- (41a) *ɛrale kenle nzú?*
(when did you come?)
- (41b) *membale Mólɛ/Kenlezilé/Dwɛkɛ/Maanlé ne*
(I came last Sunday/Monday/Tuesday/Wednesday)
- (42a) *bewole wɔ kɛnle nzú?*
(on which day were you born?)
- (42b) *bewole me Kúlɛ/Yálɛ/Fólɛ*
(I was born on a Thursday/Friday/Saturday)

Group B: Names of Festivals

Members of this group include:

1. Bolonyia 'Christmas'
2. Kundum 'Kundum Festival'

and may occur in such a genitive construction as bolonyia ne anu 'during the Christmas' which can serve as an answer to a kenle nzu 'when'-question:

- (42c) *ɛyiale Kofí kɛnle nzú?*
(when did you meet Kofi?)
- (42d) *menyiale ye Bólónyia ne ánu*
(I met him during Christmas)

Temporal nouns of this group, like those of Group C, may be post-modified by the determiner biala 'every'.

Group C: Durational temporal nouns

Durational temporal nouns include:

1. kenle 'day'
2. dapéné 'week'
3. siane 'month'
4. evolé 'year'

and are usually post-modified by a cardinal numeral when they serve as a response to a non-disjunctive interrogative involving a Q-element consisting of a durational temporal noun plus the Q-item nye 'how many', the verb word in such an interrogative being either di or nyia 'to spend':

(43a) slile kenle/evolé nyé wo Abolokyi?

(how many days/years did you spend in Europe?)

(43b) menlile kenle/evolé nsa

(I spent three days/years)

Durational temporal nouns denote a measurable length of time.

Temporal nouns of Group A.I are regarded, on formal grounds, as definite as distinct from all other temporal nouns which are indefinite.

In an identifying relational clause, deictic temporal nouns of Group A.I may function as subject and co-occur with a complement noun phrase which involves temporal nouns of the other groups. Thus we shall find:

(44a) shemá lé Móle

(tomorrow is Sunday)

and (45a) ené lé Bolónyia

(today is Christmas)

both of which exemplify the definite-indefinite relationship, the indefinite temporal noun functioning as complement being a member of Group A.II (55a) or Group B (45a). In normal speech, the copular verb in such constructions can be deleted. Thus corresponding to (44a-45a), we shall attest:

(44b) *shemá Mólé*
(tomorrow (is) Sunday)

(45b) *ené Bólónyia*
(today (is) Christmas)

A comparison of (45a) and (45b) shows that, in such reductions as (44b-45b), the first low-tone syllable, of the complement noun word is realized as a high tone having assimilated the high tone of the deleted copular verb.

With a complement noun phrase involving members of Group C, we shall attest:

(46a) *ené lé ye kénle nsá*
(lit. today is its three days: it's three days today)

and (46b) *shemá lé ye évolé ko*
(it's a year tomorrow)

which may be regarded as exemplifying the definite-definite relationship. The copular verb is not deletable in this type of identifying clause.

B. Numeral: Singular/Plural

As a rule, in an identifying clause there is number concord between a cardinal numeral functioning as complement and the subject noun phrase or pronoun. The cardinal numeral (é)ko 'one' functioning as complement co-occurs with a singular subject

and is regarded as singular; all other numerals are regarded as plural and when they occur as complement select plural subject noun phrase or pronoun, as in:

(47a) o rá nrényá lé ko

(lit. her son is one. she has one son)

(48a) ye mraálé lé bulú

(lit. his women are ten. he has ten wives)

In identifying clauses such as (47a-48a) in which the subject is a noun phrase, the copular verb is also deletable in normal speech. Thus corresponding to the above clauses, we shall attest:

(47b) o rá nrényá kó

(her son (is) one)

(48b) ye mraálé bulú

(his wives (are) ten)

As noted above, with the deletion of the copular verb, the first syllable of the (numeral) complement assimilates the high tone of the copular verb.

We shall also find identifying clauses such as the (a) example below in which the subject is a pronoun:

(49a) o le bulú

(lit. it is ten: there are ten)

(49b) bulú

(ten)

Clauses like (49a) or the corresponding one-word sentence (49b) may be used in response to a non-disjunctive question involving the Q-item nye 'how many' such as o le nyé é? 'lit. it is how many? how many are there?' or to report the findings of an

enumeration, if the objects enumerated are inanimate. If animate, the response (to the appropriate question: bəle/lua nys ɛ? 'how many are there?') or the report will be:

(50a) bəle/lua bulú
(they are ten)

(50b) bulú
(ten)

It is to be noted that in (50a) where the reference is to animates, as distinct from (49a) which refers to inanimates, there is subject-complement concord of number and the stative verbal form lua 'to be' is possible as a free variant of the copular verb.

Similarly, the question: ɔ múala le nys ɛ? 'how many are there in all?', in the case of inanimate objects, may elicit as an answer the identifying clause:

(51a) ɔ múala lé bulú
(there are ten in all)

And the corresponding question: bɛ muala bəle/lua nys ɛ? 'how many (persons) are there in all?', in the case of animates, may be appropriately answered by:

(51b) ys múala yéle/lua bulú
(we are ten in all)

which is additionally different from (51a) in respect of the repetition of the plural pronoun ys.

Another type of identifying clause whose complement noun phrase involves a numeral may be exemplified by:

(52a) eyéká lé wɔ nsá
(this is your third (time))

or the noun they modify in a nominal piece, whereas non-pluralizable adjectives are invariable in respect of the two terms singular/plural within the category of number and do not concord in number.

Generally speaking, contingent adjectives are pluralizable or non-pluralizable, whereas essential adjectives are non-pluralizable.

In the following identifying clauses, in which there is subject-complement concord of number, the (a) examples are singular and the (b) examples are plural:

(53a) baká ne lé kpole

(the tree is big)

(53b) mbaká né mo lé mgbole

(the trees are big)

(54a) o rá ne lé kòkole

(her child is fair)

(54b) o mrá né mo lé ngòkole

(her children are fair)

Other contingent adjectives which exhibit morphological number variation include (1) tendenle/ndendenle 'tall'; (2) kenlema/ngenlema 'beautiful, nice'; (3) koasea/ahoasea 'foolish'; (4) sikalé/azikalé 'short'; (5) ekyii/ngvikyi 'small'; (6) ezinraa/nzirenzira 'short'; (7) kahelee/kekahelee 'hard, stiff'; (8) koonwu/ngungoonwu 'quiet'.

Non-pluralizable contingent adjectives may be non-derived and include such 'colour' adjectives as (1) bile 'dark' (2) fufule 'white'; 'size' adjectives: (3) nreteé 'small', (4) belane

'fat, big'; 'direction' adjectives: (5) bene 'left', (6) fema 'right'; 'state' adjectives: (7) fofole 'new', (8) deba 'old', (9) amole 'fresh (of fish)', (10) doma 'fresh (of corn)', (11) aguane 'fresh (of coconut)', (12) evinli 'dirty', and 'quality' adjectives: (13) kpale 'good' and (14) stane 'bad'.

Non-pluralizable contingent adjectives may be derived, such as (1) wu-lira 'rotten' and (2) we-lera, which are formed from verbs (underlined) by the suffixation of -lira/-lera; others such as (3) ndondo 'toasted' and (4) ngyehye 'roasted' are formed by the prefixing a nasal consonant to the reduplicated verb (i.e. tondo and kyehye respectively).

The following clauses exemplify non-pluralizable contingent adjectives:

(55a) o rá ne lé bilé

(her child is dark)

(55b) o mrá né mo lé bilé

(her children are dark)

It is to be noted, as a characteristic feature of the identifying copular verb, that in the active tenses it may be reduplicated in a plural context, as in the following positive perfect tense examples:

(56a) o rá ne éye kpanyinlí

(her child has grown up)

(56b) o mrá né mo éyeye mgbanyinlí

(her children have grown up)

and

(57a) me édanlé ne éye evinlí

(my cloth has become dirty)

(57b) me ndanlé né mo éyeye evinlí

(my cloths have become dirty)

Co-ordination of identifying clauses

A co-ordinate conjunction of identifying clauses involving contingent adjectives as complements may be reduced, the complement in such reductions being realized as a sequence of adjectives. The co-occurring complements in the co-ordinate construction are restricted to adjectives which denote (A) colour (e.g. 1. bile 'dark', 2. kokole 'fair'); (B) height (e.g. 3. tendenle 'tall', 4. ezinraa 'short') and (C) size (e.g. 6. belane 'fat', 7. kpole 'big, fat', 8. ekyii 'small, little'). Thus corresponding to such co-ordinate conjunctions of identifying clauses as:

(58a) nrenyá ne lé bilé éza óle tendenle
(the man is dark and he is tall)

(59a) ole kokole éza óle belané
(she is fat and she is short)

we shall attest:

(58b) nrenyá ne lé bilé tendenle
(the man is dark (and) tall)

(59b) ole kokole bélané
(his wife is fat (and) short)

A comparison of the (a) sentences and their corresponding (b) reductions show that in the reduced clause the first syllable of the second adjective complement has a high tone if the preceding syllable (i.e. the last syllable of the first adjective complement) has a low tone.

The conditions which favour this kind of reduction are:

- (I) the subject noun phrases must be referentially identical;

- (II) the verb in the co-ordinated clauses must be the same identifying copular verb;
- (III) the adjective complement in the second conjoined clause must not be an adjective denoting size which can also function as an adverb (i.e. such adjectives of size as kpole 'big (or very)' and ekyii 'small (or little)' which can function as adverbs are excluded from complement position in the second conjunct clause);
- (IV) the non-occurrence in the first or both conjunct clauses of an (ideophonic) adverb which modifies the adjective complement.

The operation of the third condition may be illustrated by the relation of the co-ordinate conjunction:

(60a) ole tendenle (yeé) eza óle kpole
(he is tall and he is big)

to its potentially reduced form:

(60b) ole tendenle kpóle
(he is very tall)

Clauses such as (60b) above are not usually understood as a reduced conjunction but rather as a straight-forward identifying clause in which the clause-final item kpole 'very' functions as an adverb. If, however, the adjective complements co-occurring in the co-ordinate conjunction (60a) are permuted, we shall attest the corresponding reduced clause:

(60c) ole kpole téndenle
(he is big (and) tall)

In respect of the fourth condition, co-ordinate conjunctions such as:

- (61a) ole belané tufuu éza óle tendenle wéledódó
(he is very fat and he is very tall)

in which the clause-final item (underlined) in each conjunct functions as an adverb, cannot be reduced and we shall never find:

- (61b) * ole belane tufuu tendenle wéledódo
(he is very fat (and) very tall)

Identifying clauses with a dative noun phrase

Identifying clauses involving a limited number of adjective complements (e.g. kenlema, 'nice') may admit a dative noun phrase. Thus alongside:

- (62a) suá ne lé kenlema
(the house is nice)

we shall attest the following clause with a dative noun phrase (underlined):

- (62b) suá ne yé Kofí kénlema
(the house looks nice to Kofi)

With the occurrence of a dative noun phrase, the identifying copular verb le is realized as ye, which may be regarded as the corresponding attributive copular verb. The dative noun phrase in such clauses as (62b) above refers to the animate or human individual who perceives the quality described by the complement.

Finally, the complement in the identifying clause may be the item zo(háne) 'so' with anaphoric reference:

- (63a) ole zo(háne)
(it is so)

Such clauses may also admit a dative noun phrase with the consequent realization of the copular verb as ye, as in:

- (63b) oye me zo(háne)
(it seems so to me)

Sub-type II: Attributive relational clauses

The characteristic copular verb in an attributive type of relational clause is ye¹/je/ 'to be, to have the essence/attribute of being', which is also stative, as in the following clause in the positive continuative tense:

- (1a) eké yé eyele
(this place is cold)

The corresponding durative tense form is attested as:

- (1b) eké téye eyele
(this place is still cold)

The common present negative form is regular and realized as nye/nyje/, as in:

- (1c) eké énye éyele
(this place is not cold)

And unlike the identifying copular verb which is complemented by a suppletive verbal form in the active tenses, the attributive copular verb has the same shape in the positive and negative forms of the non-active as well as the active tenses, as the following active tense paradigm shows:

-
1. The attributive copular verb is to be distinguished from various homophonous lexical items used, for example, (1) transitively as in Kofi ye egyima 'Kofi does work' and (2) ditransitively as in Kofi yele Aka mó 'Kofi congratulated Aka'.

- (2) ské éleyé syele (positive Progressive)
(this place is becoming cold)
- (3a) ské báye syele (" Future I)
(this place will become cold)
- (3b) ské émbánye syele (Negative ")
(this place will not become cold)

Numeral complement

The complement in an attributive clause may be a cardinal numeral, usually above one, as in:

- (4a) be/oyé bulú
(they make/it makes ten)

An attributive clause such as (4a) is usually used to express the sum of an addition (as distinct from expressing the findings of an enumeration by the use of a corresponding identifying clause). The related mathematical question involving the Q-item nye 'how many' and the attributive copular verb is attested as:

- (4b) menli/wó débié nnú ná éfa nnu éboka nwo á,
(five persons/your five things if you add five,)
be/oyé nyé?
(they make/it makes how many?)

It is to be noted that in the case of an addition of animates, there is subject-complement concord of number.

3.	aso	'lucky, attended by luck'	Animate Adjective	
4.	fe	'sweet, nice; handsome; amusing'	Animacy	"
5.	se	'hard, difficult; high (of price); strong'	"	"
6.	nde	'quick, fast, smart'	"	"
7.	nyane	'painful'	"	"
8.	elomos	'heavy'	"	"
9(a)	alsra	'noisy'	"	"
9(b)	dede	'noisy'	"	"

Group A adjectives express essence and are distinguished as sense-data adjectives. Items (1-2) denote essential qualities which can only be predicated of an inanimate noun phrase and are designated inanimate. Their use may be exemplified by:

- (6a) ayilé ne yé enwonle
(the medicine is bitter)
- (6b) dadeé ne (anloa) yé na
(the (edge of the) knife is sharp)

Item (3), on the other hand, denotes a quality which can only be predicated of an animate noun phrase and is, accordingly, distinguished as animate. The following attributive clauses illustrate its use:

- (7a) o nwó yé asó
(lit. his person is attended by luck: he is attended by good luck)
- (7b) Kofí ánwo yé asó
(Kofi's attended by good luck)

By way of contrast with (6a-b), it is to be noted that the animate subject noun phrase in (7a-b), which is a genitive construction, involves either the possessed root form nwo (7a) or the prefixed possessed form anwo (7b) of the inalienable noun nwole 'outside, person'.

Items (4-9) of Group A denote qualities which may be regarded as primarily associated with inanimates but are predicable of animates and are accordingly termed animacy adjectives.

(i) When the animacy adjectives (4-9) are predicated of animate subject referents, they require, as a rule, the occurrence of nwo/anwo in the subject noun phrase. Thus with item (2) fe, we shall attest:

(8a) o nwó yé fe
(he is handsome)

(8b) Kofí ánwo yé fe
(Kofi is handsome)

but not (8c) * o/Kofi ye fe
(he/Kofi is handsome)

Its corresponding use with an inanimate subject referent may be exemplified by:

(9a) egyegyé ne yé fe
(the chewing-stick is sweet)

(9b) oye fe
(it is sweet)

(ii) Attributive clauses involving as complements sense-data adjectives can, as a rule, admit a dative noun phrase irrespective of whether the subject noun phrase contains the possessed terms nwo/anwo or not. Thus with item (1) fe we shall attest the following paradigm:

- (10a) oye fe
(it is sweet)
- (10b) oye me fé
(it is sweet to me)
- (10c) o nwó yé fe
(he is handsome)
- (10d) o nwó yé me fé
(he looks handsome to me/he seems entertaining to me)
- (10e) Kofí ánwó yé me fé
(Kofi seems entertaining to me)

It is to be noted that in instances such as (10b) and (10d-e) where the possessed form nwo/anwo occurs in the subject noun phrase, the animate subject and dative are usually non-co-referential.

(iii) In attributive clauses involving a dative noun phrase, the possessed root form or the prefixed possessed form of other, usually, corporal inalienable nouns is also possible and in such clauses, the animate subject and dative are usually co-referential. Thus with item (1) fe we shall find:

- (11a) ené me nlóá nu ényé me fé
(today I don't have an appetite)

and (11b) e nzó nú yé wo fé
(you like entertaining conversation)

but not:

- (11c)* e nzo nu ye me fe

And with nyane 'painful', we shall attest:

(12a) o sá yé ye nyáne
(his hand is paining him)

(12b) e tí yé wo nyáne
(your head is aching you)

but not (12c) * e ti ye ye nyane
(your head is aching him)

The dative noun phrase in such constructions refers to the animate individual who experiences the psychological state or sensation described by the adjective complement.

(iv) Non-pluralizable adjective complements

As already mentioned essential adjectives, as distinct from contingent adjectives, are non-pluralizable:

(13a) baká ne yé se
(the tree is hard)

(13b) mbaká né mo yé se
(the trees are hard)

Compare with (13(a-b)) above, the following identifying clauses with a pluralizable contingent adjective:

(14a) baká né lé kenlɛma
(the tree is nice)

(14b) mbaká né mo lé ngenlɛma
(the trees are nice)

(v) Dispensability of the identifying or attributive copular verb

The attributive copular, like the identifying copular, verb is dispensable. The dispensability of the identifying copular can be seen in the relation of the following pairs of structures:

(15a) baka moo le kpole la
(a tree that is big)

and (15b) baka kpóle
(a big tree)

(16a) nrenya ne moo ati le kpole la
(the man whose head is big)

and (16b) nrenyá áti kpólé ne
(the big-headed man)

The dispensability of the attributive copular verb may be illustrated by the relation of the following pairs of structures:

(17a) bole moo ys slomoe la
(a stone which is heavy)

and (17b) bole élomoe
(a heavy stone)

(18a) nrenya ne moo ati ys se la
(the man who is wicked)

and (18b) nrenya atissesebe ne
(the strong man)

A comparison of (16b) and (18b) shows that with certain sense-data adjectives of Group A the omission of the attributive copula requires a morphological expansion of the attributive adjective complement. Other pairs of sense-data adjectives morphologically-related in this way are:

(1) fa/feleko 'sweet' and (2) nda/ndende 'quick, fast'.

(vi) There is a regular transformational relation of equivalence between comparative constructions involving attributive clauses and similar constructions involving identifying clauses without

the adjective complement. The equivalence only applies if the subject referent of the attributive clause is inanimate. The following pairs of comparative constructions, in which the (a) examples involve attributive clauses and the (b) examples identifying clauses, exemplify:

- (19a) aduoba ne ye fs ke dodo
(the guava is as sweet as honey)
- (19b) aduoba ne le ke dodo
(the guava is like honey)
- (20a) oye se ke bole
(it is as hard as stone)
- (20b) ole ke bole
(it is like stone)

We may handle such equivalence by a general rule:

S + ye + Comp + ke + Noun -----> S + le + ke + Noun

Group B: Psychological Adjective complements

Members of this group include:

- | | | |
|-----|-------------|----------------------------|
| 1. | eya | 'annoying, irritating' |
| 2. | nyiane | 'disgraceful, bashful' |
| 3. | evels | 'tiresome, troublesome' |
| 4. | ezulole | 'frightening, amazing' |
| 5. | ezeleke | 'amusing, entertaining' |
| 6. | anwunvone | 'pitiable, miserable' |
| 7. | alobole | 'pitiable' |
| 8. | abodele | 'worrisome, worrying' |
| 9. | ahometels | 'troublesome, distressing' |
| 10. | ahonlendule | 'frightening' |

11.	ahunlungale	'sickening, bellyaching'
12.	ahomeka	'pleasing, pleasant'
13.	anika	'entertaining'
14.	ahi	'disgusting'

Members of this group are characterized by the following properties.

(i) Unlike members of Groups A and C, most items of Group B are nominalizations¹ from simple or complex verbs. The following derivational sources of items (3-5) and (7-11) illustrate:

	<u>Verbal piece</u>		<u>Nominalization</u>	
3.	fs	'to tire'	s-vs-le	'tiresome'
4.	sulo	'to fear'	s-zulo-lé	'frightening'
5.	sele	'to laugh'	s-zele-ké	'amusing'
7.	bo rsle	'to excite pity'	a-lo-bo-le	'pitiable'
8.	te sbole	'to harass'	a-bo-de-le	'worrisome'
9.	te ahonle	'to distress'	a-hom-te-le	'troublesome'
10.	tu ahonle	'to frighten'	a-honle-n-dú-lé	'frightening'
11.	ka kunlu	'to affect belly'	a-hunlu-n-gá-lé	'sickening'

1. Items (12-14) may be Akan loans and, according to Christaller (1933), are nominalizations or (to use his own term) 'infinitives':

	<u>Source</u>		<u>Nominalization</u>	
12.	ne home akã ne ho (he is pleased with himself)		ahõmekã	'satisfaction, gladness'
13.	n'a ni kã (his eye is amused)		aní-kã	'joy, gladness'
14.	perhaps an infinitive of <u>hĩ</u>		ahĩ	'to provoke, excite disgust, indignation'

(ii) Most members of Group B, like members of Group C, have nominal function. Some items can function as subject in a transitive clause involving the verb (a) ku 'to affect, attack' or (b) ka 'to affect, attack', either of which takes an animate object noun phrase:

(1a) sya kú ye

(lit. anger is affecting him: he's angry)

(1b) szuloló ésha ye

(lit. fear has affected him: he's frightened)

Other items which can fill subject position in (1a) include:

nyiane 'disgrace' (2), szeleke 'laughter' (5), alobole 'pity' (7), abodele 'worry' (8) and ahi 'disgust' (14). The item szeleke (5) may also occur as subject in (1b).

The items: sya 'anger' (1) and ahomeka 'health; happiness' (12) can function as object after the verb nyia 'to get' in a transitive clause with an animate subject noun phrase:

(2a) nrenyá ne ényia sya

(lit. the man has got anger: he's angry)

(2b) nrenyá ne ényia ahomeka

(the man is happy/has recovered)

The items nyiane 'bashfulness; respect' (2) and anwunvone 'pity' (6) may function as direct object in a (a) transitive or (b) ditransitive clause involving the verb se 'show' and in either clause-type with an animate or human subject noun phrase: and human indirect object:

(3a) ose nyiané

(lit. he shows bashfulness. he's bashful)

(3b) mese nyiáné

(lit. I show you respect. I respect you)

- and (4a) ose anwunvóné
(he is merciful)
(4b) mese ye ánwunvóné
(I pity him)

And the items eya 'anger' (1), ezulole 'fear' (4), szeleke 'laughter' (5), and ahi 'envy' (14) may function as direct object in a ditransitive clause with the verb ka 'to excite, provoke' as in the following negative direct imperative clauses:

- (5a) mmáka me éya
(lit. don't provoke me to anger: don't annoy me)
(5b) mmáka me ézeleke
(don't make me laugh)

Semantically, adjectives of Group B denote emotional or psychological states usually associated with animates or humans which may be due to external, usually inanimate, stimuli and are, accordingly, distinguished as 'psychological' (or emotional) adjectives.

Psychological adjective complements have similar characteristics to sense-data adjectives (Group A) and in the description which follows attention is drawn to such common properties and any differences.

(i) When predicated of animate subjects, psychological adjectives usually require, like sense-data adjectives, the occurrence of the prefixed possessed form anwo or the possessed root form nwo (of the inalienable noun nwole, but, as a rule, of none other) in the subject noun phrase. Thus with ezeleke 'amusing, entertaining' (5), we shall find, in the case of an inanimate subject:

(6a) edwéké ne ye szeleké
(the matter is amusing)

(6b) oye szeleke
(it is amusing)

but, in the case of an animate subject:

(7a) Kofí ánwó yé szeleké
(Kofi is entertaining)

(7b) o nwó yé szeleké
(he is entertaining)

(ii) As in the case of sense-data adjectives, attributive clauses involving psychological adjectives as complements can usually admit a dative noun whether the subject noun contains anwo/nwo or not. Thus with eya 'annoying' (1) we shall attest the paradigm:

(8a) oye eya
(it is annoying)

(8b) oye me éya
(it is annoying to me)

(8c) o nwó yé eya
(he is annoying)

(8d) o nwó yé me éya
(he is annoying to me)

And, as with sense-data adjectives, the subject and dative nominals are non-co-referential. The dative nominal in clauses such as (8b) and (8d) refers to the animate or human individual who experiences the psychological or emotional state, whereas the subject referent is the external stimulus or cause of the psychological state or event denoted by the adjective complement.

(iii) And also like sense-data adjectives, psychological adjectives are non-pluralizable:

(9a) o rá ne ánwó yé ahometele
(her child is troublesome)

(9b) o mrá né mọ ánwó yé ahometele
(her children are troublesome)

(iv) With psychological as with sense-data adjectives, the attributive copular may be dispensable, as exemplified by the relation of such a nominal piece as:

(10a) kakula mọ anwó ye éwéle la
(a child who is troublesome)

to (10b) kakula ánwó éwéle
(a troublesome child)

Psychological adjectives are, however, different in that with an inanimate head noun (e.g. edweke 'matter'), psychological adjectives may take first position (i.e. pre-modification), second position (i.e. post-modification) or first/second position within the terminal nominal piece.

Pre-modifiers include nyiane 'disgraceful', ewele 'tiresome', abodele 'worrisome', ahometele 'troublesome' and ahi 'disgusting' and may be exemplified by the relation of:

(11a) edweke mọ ye ahi la
(matter which is disgusting)

to (11b) ahi édwéké
(disgusting matter)

Post-modifiers include eya 'annoying', ezulole 'frightening', and ezeleke 'amusing' and may be exemplified by the related strings:

(12a) edweke moo ye szulole la
(matter which is frightening)

(12b) edweké szulolé
(frightening matter)

Pre-or post-modification may be exemplified by the relation of
(13):

to (13) edweke moo ye alobole la
(matter which is pitiful)

to either (13a) or (13b):

(13a) alobole édweké
(pitiful matter)

(13b) edweké alobole
(pitiful matter)

(v) With certain adjective complements, identifying and attributive clauses may be followed by subordinate nominal clauses introduced by the subordinator ke 'that':

(14a) ole kpale ké woandé á
(it is good that you didn't hear it)

(14b) ole nohalé ké woandé
(it is true that you didn't hear it)

(15a) oye (me) nyáne ké woandé á
(it pains me that you didn't hear it)

(15b) oye (me) szulolé ké woandé á
(it is amazing that you didn't hear it)

Differences between identifying and attributive clauses, in this type of construction, include: (1) the possibility of a dative in the attributive main clause but not in the identifying;

(2) a sentence-final vowel particle a, though possible with an identifying main clause, is obligatory with an attributive main clause; (3) the relation of the ke 'that'-clause to the rest of the sentence is, notionally (but not, syntactically, in Nzema), that of a subject of the identifying main clause, whereas it is that of a quasi-agent expressing cause in the case of an attributive main clause. The subject in (14-15) is the indefinite 3rd person singular pronoun o 'it'.

Group C: Adjective complements

Among adjective complements of this group two sub-sets (I-II) may, on formal grounds, be distinguished as set out below:

Sub-set C.I: Meteorological adjectives

- | | | |
|----|--------------------|-------------|
| 1. | eyele | 'cold' |
| 2. | wuluwulu | 'warm, hot' |
| 3. | shyew ¹ | 'warm' |

Sub-set C.II: Adjectives of physical condition

- | | | |
|----|---------------------|--------------------|
| 4. | ewia | 'sunny, the sun' |
| 5. | shone | 'starving, hunger' |
| 6. | nafels ² | 'sleepy, sleep' |
| 7. | aniha ³ | 'boring, boredom' |

-
1. Final /w/ marks this item as a loanword, possibly from Akan (Fante).
 2. This item is a nominalization from the intransitive verb dafe 'to sleep': n-(d)afe-le.
 3. An Akan loanword which is a nominalization from the structure n'ani aha(w) lit. 'his eye is bored'.

Meteorological adjectives V. Adjectives of physical condition

(a) The use of the meteorological adjectives (C.I) may be exemplified by:

(1a) ené maánlé nú yé eysle
(today the weather is cold)

(1b) ené óye eysle
(today it is cold)

and that of adjectives of physical condition (C.II) by:

(2a)* ene maanle nu ye ewia
(today the weather is sunny)

(2b) ené óye ewia
(today it is sunny)

As the above examples show, the use of the 3rd person singular subject pronoun ə 'it' with meteorological adjectives pronominalizes the subject noun phrase maanle nu 'the weather' as in (1a), whereas with adjectives of physical condition the same pronoun is not related by pronominalization to a corresponding subject noun phrase and may be regarded as an empty subject. This feature serves to distinguish members of Sub-set C.I from those of Sub-set C.II.

(b) Secondly, members of Sub-set C.I adjectives are different from those of Sub-set C.II in that with meteorological adjectives of Sub-set C.I as complement we shall find the non-active as well as the active tense forms of the copular ye. Thus alongside:

(3a) oye eyels (Continuative)
(it is cold)

we shall find the non-active durative tense form:

(3b) otaye eyels (Durative)
(it is still cold)

as well as the following clauses in the active tenses usually used to make weather reports:

(3c) obáye eyels (Future I)
(it will be cold)

(3d) oyele eyels (Past)
(it was cold)

With adjectives of physical condition of Sub-set C.II we shall only attest the non-active continuative tense but not the durative nor the active tense forms. Thus alongside:

(4a) oye ewiá (Continuative)
(it is sunny)

we shall not find:

(4b) * otaye ewia (Durative)
(it is still sunny)

(4c) * obaye ewia (Future I)
(it will be sunny)

(4d) * oyele ewia (Past)
(it was sunny)

(c) Thirdly, with members of Sub-set C.I, but not with those of Sub-set C.II, we shall attest such locational relational clauses (or possibly existential constructions) as:

- (5a) sɛslɛ wɔ̃ nu
(lit. there is cold in it: it is cold)
- (5b) wuluwulu wɔ̃ nu
(it is warm)

There are, therefore, formal criteria for setting up two sub-sets among Group C items. In spite of these distinctions, members of Sub-sets C.I and C.II are alike in not sharing the characteristic properties of members of Groups A and B.

Members of Group C have in common the following properties which serve to distinguish them from members of Groups A-B.

(i) Members of Group C can function as subject in a transitive clause¹ involving the verb ku 'to affect, attack' which takes an animate object noun phrase, as in the following examples with members of Sub-set C.I:

- (6a) sɛslɛ kú Kofi
(lit. cold is affecting Kofi: Kofi is cold)
- (6b) wuluwulu kú me
(I am hot/boiling)

and the following examples with Sub-set C.II items:

- (7) ewiá kú ye
(the sun is scorching him)
- (8a) shoné kú me
(I am hungry)
- (8b) nafelé kú me
(I am sleepy)

Transitive clauses such as (8a-b), in which the subject position

1. As noted above, some items of Group B (e.g. ɛya 'anger', nyiane 'shyness') can also occur as subject in such a transitive clause, involving the verb ku.

is filled by Sub-set C.II items and the pronominal object is the first person singular, are usually understood as being synonymous with the corresponding attributive clauses involving the empty subject:

- (9a) oye shané
(lit. it is hunger(-causing). I am hungry)
- (9b) oye nafelé
(I am sleepy)

(ii) With members of Group C as complement, the subject position may be filled by a noun word or phrase capable of functioning as locative adjunct in a semi-transitive clause or complement in a locational relational clause (Sub-type IV), as in:

- (10a) Abolokyi yé eyele
(Europe is cold)
- (10b) ské ne yé ewiá
(that place is sunny)

Classes such as (10a-b) have constructional analogues which are locational relational clauses in which the subject and complement are permuted:

- (11a) eyele wó Abolokyi
(there is cold in Europe)
- (11b) ewiá wó ské ne
(the sun is in that place)

Groups A-B items may co-occur with locative adjuncts in subject position as in (10a-b); such clauses, however, do not allow the type of analogue exemplified in (11a-b). Thus we shall find:

- (12a) ské ne ye alera/ezulole
(that place is noisy/frightening)

but not: (12b) *alera/ezulole wo ské ne

Sub-type III: Equative relational clauses

The following are some examples of the equative type of relational clause:

- (1a) me ze á le Kofí
(lit. my father is Kofi. Kofi is my father)
- (1b) me búsuánlí a le wó
(you are my clansman)
- (1c) ó ye a le ekyíí ne
(his wife is the younger one)

In the above clauses, the equative copular verb may be regarded as the low-tone item le/le/, which is always preceded by the vowel particle a¹; this particle may carry a high tone (1a) or a low tone (1b). As in the other types of relational clause, the characteristic copular verb in an equative relational clause is stative in the continuative tense. Unlike the other copular verbs, however, the equative copular verb does not have any other (non-active or active) tense than the continuative.

Corresponding to the positive clauses (1a-c) above, we shall attest the following negative forms:

- (2a) té mé ze á le Kofí
(lit. not my father is Kofi. Kofi is not father)
- (2b) té mé búsuánlí a le wó
(you're not my clansman)
- (2c) té ó yé á le ekyíí ne
(his wife is not the younger one)

1. Alternatively, we may regard a + le as one lexical item (equivalent to Akan ne/nye); although graphologically separated.

As the above examples show, a negative equative clause is marked by the clause-initial negative item te 'not'¹ which has a high tone, and this way of negating a positive equative clause constitutes another distinctive feature of the equative type of relational clause.

An equative clause may serve as an answer to a non-disjunctive question involving the Q-item nwane 'who'. Thus the following question involving, in clause-final position, the Q-item nwane and the equative copular verb le/le/:

(3a) be kilehilévóle á le nwane?
(who is your teacher?)

may elicit as an appropriate answer the equative clause:

(3b) ye kilehilévóle a le ye ménle Míéza
(our teacher is Mr. Mieza)

We might compare the above question and answer with the following question, in which the Q-item nwane is clause-initial and the verb is the identifying copular verb le/li/:

(4a) nwane á le be kilehilévóle a?
(who is your teacher?)

and its corresponding answer, which is an identifying clause:

(4b) ye ménle Míéza á le ye kilehilévóle a
(Mr. Mieza is our teacher)

The equative type of response (3b), which is characterized by the equative copular le/le/, and the identifying type of response (4b) characterized by the identifying copular verb le/li/ are additionally different² in the following respects: (1) the subject and complement noun phrases in (3b) are permuted in

1. The Akan equivalent is nyé

2. Both clause are negated in the same way by pre-posing te 'not'.

(4b); (2) the identifying clause (4b) is marked by a clause-final vowel particle a which is absent from the equative clause (3b). These differences are referable to the original questions.

An equative clause can also serve as the response to a non-disjunctive question involving the Q-item boni 'which'. Thus the following question in which the Q-item is clause-final:

(5a) e hu á le boní?
(which one is your husband?)

may be appropriately answered by the equative clause:

(5b) me hu á le ekyíí ne
(my husband is the younger one)

We shall also attest the 'identification' or 'picture' question in which the Q-item is clause-initial:

(6a) boní á le e hu?
(which is your husband?)

and may elicit as the appropriate answer the equative clause:

(6b) me hu á le eyéká
(my husband is this one)

As already mentioned in Chapter 3, the use of the Q-item boni 'which' in (5a-6a) above indicates, and the appropriate answers confirm, that the domain of choice is limited.

The complement in equative clauses

It was noted above that the characteristic complement in an identifying relational clause may be a noun phrase, a numeral or an adjective and that, in an attributive clause, the complement may be a numeral or an adjective.

In an equative clause, the characteristic complement cannot be an adjective or numeral but may, among others, be (a) a proper name or (b) a pronoun, which classes of items are precluded from complement position in either an identifying or attributive clause. In what follows, equative classes are discussed with particular reference to their characteristic complements.

Proper name as complement

A proper name as complement in an equative relational clause may be a personal name, as in:

(7a) me gónwó zóháne á le Kofí
(that friend of mine is Kofi)

(7b) syevóle ne dúma á le Aka
(the name of the guest is Aka)

a geographical name or the name of an inanimate object:

(7c) azulé ne dúma á le Pra
(the name of the river is Pra)

(7d) ye áyilé á le ngyenlé
(the medicine for it is salt)

In the above clauses (7-8(a-b)), there is subject-complement concord of animacy as well as of singular number.

Equative clauses such as (7a-c) have constructional analogues which are complex transitive clauses involving the verb stem fsle 'call' and the unspecified 3rd person plural subject pronoun be 'they'; thus corresponding to (7b-c) above, we shall find:

(8a) bafele eyevóle ne Áka

(lit. they call the guest Aka. the guest
is called Aka)

(8b) bafele azulé ne Prá

(the river is known as Pra)

In equative clauses where the complement is realized by a proper name, the subject noun phrase, if animate, may be the indefinite singular noun sonlá 'person' or its plural form menli 'persons' post-modified by a relative clause introduced by moo 'who' (enclosed in round brackets).

The singular form may be exemplified by:

(9a) sonlá (moo báye belemgbunli sua nú néavóle lá) á' le Aka

(the person/one (who will be the caretaker of the chief's house) is Aka)

(9b) sonlá (moo me ádwénlé wó o nwó zó lá) yemo á le Amá Kódwó

(the person/one (whom I have in mind) he is Ama Kodwo)

The plural form is exemplified by:

(10a) menli (moo sha lá) á le Edumí, Kaku yéé Amá

(the persons/those (who are left) are Edumi, Kaku and Ama)

In clauses where the complement is a list of proper names, the subject may be realized by the 3rd person plural contrastive emphatic (rather than the emphatic intensive or the unemphatic) pronoun, as in:

- (10b) béme á le: Edumí, Kaku yé Amá
(they are Edumi, Kaku and Ama)

The indefinite subject noun phrases sonla/menli (as well as the pronoun béme (10b)) of human reference correspond to the Q-item nwane (singular)/nwane mo (plural) 'who'.

In instances where the complement noun phrase denotes an inanimate object, we shall find as head noun of the subject noun phrase the indefinite inanimate noun debie 'thing' or its plural form ninyene 'things' corresponding to the Q-item nzone 'what'.

The use of the singular form may be exemplified by:

- (11a) debié (moó me tí ákunlu éra zo lá) yémo á le awulé
bólo

(the thing (which I long for) it is rice kenkey)

in which the complement denotes an inanimate object and there is animacy as well as number concord between the subject and complement. Also with the singular head noun debie 'thing', the complement may denote an activity expressed by the nominalization of a verb word, as in:

- (11b) debié (moó Aka zé ye yé lá) á le knolera ézulé
(the thing (which Aka knows how to do) is arguing)

- (11c) ye débié kó (moó medwenle nwolé lá) yémo á le ye
nzá énlónlé ne

(his one thing (which I think about) it is his
wine drinking)

It is to be noted that the emphatic contrastive 3rd person singular pronoun yémo 'he, she, it' has anaphoric reference to the animate (9b) or inanimate (11a; 11c) subject.

With the plural form ninyene 'things' the complement may be realized by a list, as in:

(12) ninyené (moo yefá yeákpoto amonlé ne lá) á le
nzá, baná....

(the things (which we are going to use for mixing
the oath) are wine, plantain....)

It would seem that the class of indefinite inanimate head nouns
is open-ended. A possible member is the non-pluralizable noun
edweke 'matter' which corresponds to the Q-item nzone 'what' or
boni 'what', as in:

(13a) edweké ko nókó (moo odáyé óhyia kpale lá) á le
(one other matter (which is very important) is
awie moo Amá kádenla o nwó....

(somebody with whom Ama is going to stay....)

Pronouns as complement

As already indicated, another distinctive property of
equative clauses is the possibility of the complement being
realized by a pronoun, which may be of the unemphatic Set II
pronouns or of the intensive emphatic set, and in such contexts
there is subject-complement concord of number and animacy.

In the case of unemphatic pronominal complements, we shall
attest the following clauses which exemplify singular number
concord:

(14a) nuhuá kó á le ye

(lit. one of them is he: he is one of them)

(14b) me búsuánlí a le wo

(you are my clansman)

as well as the following pair of clauses which contrast in terms
of singular/plural:

(15a) me díema á le ye
(he is my brother)

and (15b) me médiema á le be
(they are my brothers/sisters)

Equative clauses of the type exemplified in (14-15(a-b)) above usually have constructional analogues which are identifying clauses in which the subject noun phrase and the pronominal complement are permuted. Thus corresponding to the (b) examples, we shall find the identifying clauses:

(14c) ele me búsuánlí
(you are my clansman)

(15c) bale me médiema
(they are my bothers)

We may find in complement position the demonstrative pronoun eyeka 'this' (which has also nominal or determinative function), as in (16a) where it has anaphoric reference:

(16a) asoo ebela kpálé ne bíe á le syéka?
(is this an example of the good life?)

and also in the possible answer to an 'identification' question with boni 'which':

(16b) me hu á le syéka
(my husband is this one)

Another characteristic feature which serves to distinguish the equative from the other types of relational clause is that unemphatic pronouns can function as subject in the other types of relational clause but not in an equative clause.

Put in conditional clauses marked by the introductory conjunction se 'if' and by a clause-final vowel particle a, the subject may be realized by an emphatic intensive pronoun and the complement by an unemphatic pronoun, as in:

- (17) se medámé á le wó a....
(if I were you....)

The complement in an equative clause may also be an emphatic intensive pronoun:

- (18) rale nrényá ne bíc á le odáyé
(lit. some man is he too: he too is a man)

Definite noun phrase as complement

The characteristic complement in an equative clause may be a definite noun phrase (i.e. adjective/noun + ne 'the'), as in:

- (19a) me yé á le kpanyinlí ne
(my wife is the eldest)
- (19b) Akyé ó ze á le sófó ne
(Akye's father is the priest)

which, as indicated above, may serve as appropriate answers to a question involving in clause-final position the Q-item boni 'which'.

The equative copular verb is not dispensable, unlike the identifying, attributive and locational copular verbs.

Subordinate nominal clause as complement

The Nzema texts examined contained many instances of equative clauses in which the complement is realized by a subordinate nominal clause introduced by the subordinator ke 'that'.

Further investigation is required for a description of such uses of the equative clause. For present purposes, a few textual¹ examples are provided (without tonal marking) of such equative clauses in which the ke-clause is enclosed in round brackets:

- (20a) ye kolakola a le (ke Ama Kodwo e va
(the resume of our message is (that Ama Kodwo has
brought
basabasa e ye le erado sua ye azo
(evil doing into this town))
- (20b) me edwεke ne adwulales a le (ke bemaa
(the conclusion of my advice is (that we should
yεgyakyi Ama Kodwo shunle ne)
(desist from the killing of Ama Kodwo))
- (20c) ye sikale nu a le (ke me nee be keho)
(the end of the matter is (that I will go with them)
- (20d) Mehile done bulu nee ko, o bo a le ke² saa
(I have suggested 11 o'clock, because if
yεyia ndende ekyii a....
(we meet a little earlier....)
- (21) o gonwo mo...dule ye fols. Be edes a le (ke,
(his friends....gave him advice. Their (own)
advice was (that
raale ko sisi nrenya)³
(one wife cheats her husband))

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1. Ellimah, J.K. (1968) op. cit.
 2. Usually written as one word but analyzable as o bo a le ke
'its explanation is that'
 3. Sslev. Essuah, J.A. (1967). Fa Edwεke Kye ('Forgive')
Accra: Bureau of Ghana Languages.

It was noted above that an identifying or attributive clause may function as the main clause in a complex sentence followed by a ke 'that'-clause or sentential complement, and that the ke 'that'-clause is differently related to each type of main clause; that is, the relationship of the ke 'that'-clause is notionally that of subject to the identifying main clause whereas it is that of a quasi-agent expressing cause in the case of an attributive main clause.

As a rule, an equative relational clause cannot function as main clause in a complex sentence. In equative clauses such as (20-21) above, in which the complement is realized by a ke 'that'-clause (and for that matter in equative clauses in which the complement is realized by a proper name, pronoun or definite noun phrase), the subject noun phrase and the complement are related to each other as the two terms in a mathematical equation, in which the rightmost term serves to identify the leftmost term (i.e. $S = C$).

Sub-type IV: Locational relational clause

The locational type of relational clause may be exemplified by:

- (1a) o rá nrényá ne wó Abolokyi
(his son is in Europe)
- (1b) egya wó abiales
(father is in the bathroom)

The typical verb in a locational clause is the copular verb wó 'to be in or at, can be found or located in, to happen in, to exist in'. Like the other copular verbs, the verbal form wó, which is the continuative tense form, is stative. The durative tense form is realized as bó. Thus corresponding to (1a) in the positive continuative tense, we shall find the corresponding durative tense form:

- (2a) o rá nrényá ne tébo Abolokyi
(his son is still in Europe)

As in the case of the identifying copular verbal form le/de 'to be', the continuative tense form wó is phonologically related by Type B mutation to the durative tense form bó¹, which is regarded as the base or absolute form and should be listed in the lexicon.

The locational copular verb shares a common negative form nle with the identifying copular verb (and for this reason the two items may be regarded as being in complementary distribution). The common negative form of (1a) in the positive continuative and (2a) in the positive durative tense is realized as:

1. For the b/w mutation before back rounded vowels (e.g. bóle 'stone'/awóle 'stones') see Chapter 2 under 'Consonant mutation'.

- (2b) o rá nrényá ne énle Ábolokyi
(his son is not in Europe)

In the positive past tense, the locational copular verb is complemented by the suppletive verbal form wále 'used to be in or on', as in:

- (3a) nrenyá zóháne wále Bolofo
(that particular man used to be in Axim)
- (3b) sánve ne wále nvonínlí ne ánze
(the key was behind the picture a while ago)

We shall not find the corresponding negative past tense form nor the other active tense forms, positive or negative. The locational type of relational clause is characterized by the following properties:

(i) Locational relational clauses can serve as an appropriate response to a non-disjunctive question involving the Q-item ni/nienwu/nienka 'where'. Thus the question:

- (4a) e ze wo ni?
(lit. your father is where? Where is your father?)

may be appropriately answered by the locational relational clause:

- (4b) owo abialee
(he is in the bathroom)

(ii) The characteristic complement in a locational relational clause is a noun word or phrase which can function as locative adjunct in a semi-transitive clause. A classified list of such locative adjuncts has been provided in the section on semi-transitive clauses and need not be repeated here. The

following examples (with cross references enclosed in round brackets) serve to indicate the sub-sets members of which can function as complement in a locational relational clause:

- (5a) ásopíti wo Bolofo (A. I)
(there is a hospital in Axim)
- (5b) Kumásé wó Nzema ébo nú (A. II)
(Kumasi is north of Nzemaland)
- (5c) Akyé wó egyádé (A. III)
(Akys is in the kitchen)
- (6a) e hu wó ské (A. IV)
(your husband is here)
- (6b) wo ndélebebó wo moá (")
(lit. your understanding is far)
- (6c) Aka wó amozi (")
(Aka is behind)
- (7a) Aka wó nu (B. I)
(Aka is among/(one of) them)
- (7b) yewo nwo(lé) (")
(we are on it)
- (7c) Kofi wó baka zó (")
(Kofi is in the toilet)
- (7d) namúlé ne wó ye nyúnlú (B. II)
(the village is ahead of us)

(iii) Between the perfect tense form of dynamic semi-transitive 'directional' verbs (of Group B.III, e.g. 1. ko 'to go', 2. bela 'to come', 3. wolo 'to enter, go into') which denote movement towards an intended location or destination and the stative locational copular verb wo a cause-and-effect relationship obtains, as the following examples illustrate:

	<u>Dynamic directional verb</u>		<u>Stative locational copular</u>
(8a)	Kofí <u>sho</u> Bolofo as a result: (Kofi has gone to Axim)		(8b) Kofí <u>wó</u> Bolofo (Kofi is in Axim)
(9a)	Kofí <u>é</u> ra ské " (Kofi has come here)		(9b) Kofí <u>wó</u> ské (Kofi is here)
(10a)	kúsu ne <u>éwolo</u> boné ne ánu (the cat has gone into the hole)	(10b)	kúsu ne <u>wó</u> boné ne ánu (the cat is in the hole)

(iv) The locational, like the identifying or attributive, copular verb is dispensable. This feature of dispensability can be seen in the relation of structures such as (11a-12a) below, in which the post-modifying moo 'which'-relative clause involves a locational complement (underlined):

- (11a) baka moo wo ébo nu la
(a tree that is in the forest)
- (12a) azua moo wo éke la
(houses which are here)

to their corresponding 'adjunctive' nominal pieces:

- (11b) ébo nú báka
(forest/wild tree)
- (12b) éke ázua
(houses here)

A comparison with corresponding pairs of related structures of identifying cases:

- (13a) baka moo le kpole la
(a tree that is big)
- (13b) baka kpóle
(a big tree)

or attributive cases:

(14a) baka mɔɔ ye, slomɔɔ la
(a tree that is heavy)

(14b) baka slomɔɔ
(a heavy tree)

shows that in the terminal nominal pieces, locational complements function as pre-modifiers (11b-12b), whereas identifying (13b) or attributive (14b) complements usually function as post-modifiers.

(v) Semantically, a locational relational clause denotes the static condition of the existence of the subject referent in a particular place.

The locational copular verb may also be used to draw attention to the presence of something, as in the following text:

(15) be súá ne á wɔ ské la....
(there is your house)

It is to be noted that in such clauses as the above, the copular verb is preceded by a vowel particle a, the following locative adjunct does not refer to a particular place and the clause is marked by the clause-final particle la.

Existential constructions

It was mentioned in the section on complex semi-transitive clauses that in Nzema, as in many other languages, existential- (as well as possessive) constructions are related to locatives (referred to here as a locational relational or semi-transitive clause). This relationship is partly attested in Nzema by the

use of the verbal form wɔ 'to exist', which may be regarded as grammatically and semantically related to the homophonous locational copular verb wɔ 'to be in or at', in such existential constructions as:

(16) Nyamenlé wɔ ské
(lit. God is there: there is a God/God exists)

(17a) nrenyá bíe neé o yé wɔ ské
(there was once a certain man and his wife)

(17b) agonwolé nwio bíe wɔ ské
(there were once some two friends)

and (18) yswɔ ské
(lit. we are there: I'm fine)

usually used in answer to the phatic communion question:

(19) wɔ ákpòke nú é?
(how are you?)

We shall distinguish the stative verbal form wɔ 'to exist' occurring in the above clauses (16-18) as the existential copula. Existential constructions are synchronically different from locational clauses in the following respects.

Firstly, unlike the locational copular verb, the existential copula does not, as a rule, have the corresponding positive durative tense form bɔ, although the durative form of (16) above may be used as a jocular or ironic comment:

(16a) Nyamenlé tsbɔ ské
(there is still a God)

Secondly, we shall not, as a rule, find the corresponding negative form of clauses (17-18). Clause (16) is, however, different in having a negative form, as in:

- (16b) mbié mo sé Nyamenlé énle (é)ke
(some say there is no God)

Thirdly, we shall never find the positive past tense form of the existential copula.

Fourthly, the locational, but not the existential, copula may reduplicate in a plural construction as in:

- (20) bedwu azua moó wowo adenlé nú lá
(when they get to the towns which are
along the way)

As in the case of the locational copular verb, the existential copular verb is usually followed by the item (é)ke 'there', which may be regarded as the characteristic locational complement in an existential construction (but is to be distinguished from the deictic place adverbial (é)ke ne 'there, that place', which may fill complement position in a locational or semi-transitive clause).

But unlike the characteristic complement in a relational clause which, as already mentioned, denotes a particular place, the existential complement éke 'there!' makes no reference to a particular place.

Clauses such as (16-18) which are characterized by these properties are distinguished as existential constructions and express the notion of the existence (or non-existence) of some entity or entities.

By way of contrast, mention should be made of such complex sentences as:

- (21a) owo ké yeko
 (lit. it is necessary that we go. We ought to go)
- (21b) owo ké Kofí kó
 (Kofi ought to go)
- (21c) onlé ké yeko
 (we oughtn't to go)

in which the main clause consists of the indefinite 3rd person singular subject pronoun o 'it' and the verb wo, which is homophonous with the locational (or existential) copular verb wo 'to be in, exist'. Like the locational copular verb, the verb wo exemplified in (21a) above is (i) stative in the continuative tense; and (ii) has a corresponding negative form nle as in (21c). It is however, different in not having a positive durative tense form bo or a corresponding past tense form.

It is also to be noted, as the characteristic properties of the type of complex sentence exemplified in (21a-c) above, that the verbal piece constituting the main clause is always in the continuative tense and may be of positive (21a-b) or negative (21c) polarity; on the other hand, the verbal piece in the ke 'that'-clause is always of positive polarity and may be regarded as the habitual tense form (with present or future time reference) and cannot be any other. Reference to past time is indicated by the introductory item anee if positive:

- (21d) anee ówo ké yeko
 (it was necessary that we went)

or by anres if negative:

- (21e) anrés onlé ké yeko
 (we shouldn't have gone)

C H A P T E R 7

CATEGORY VII: ASPECT

For a description of the verbal piece in Nzema, the setting-up of the category of aspect is analytically necessary and marks another dimension of the analysis, in formal terms, of this area of the grammar.

Three aspectual distinctions, hierarchically ordered, are established with two main terms each, as set out below:

1. Ingressivity: Ingressive/Normal,
 2. Stativity: Dynamic/Stative,
- and
3. Causativity: Causative/Non-causative.

Of these three aspectual features, that of ingressivity is different in being expounded by the presence or absence of a specific morpheme or prefix in the same verb word. The ingressive prefix has two different forms, which are relatable to the directional verbs of motion: ko 'to go' and bela 'to come' (or its contracted form ba), and are accordingly distinguished as itive-('going'-)ingressive and ventive-('coming'-)ingressive. Among structures which are characterized by ingressive aspect we shall distinguish between emphatic and unemphatic forms.

By contrast, the dynamic/stative distinction as well as the causative/non-causative distinction may be stated for pairs of verbal forms which are (a) morphologically related by suffixation; (b) phonologically related by stem-initial Type B mutation and/or morphologically related, or (c) identical in

shape. And whereas the pairs of verbal forms which may be handled in terms of the dynamic/stative relationship can occur in pairs of clauses of the same transitivity type, the pairs of verbal forms which may be handled in terms of the causative/non-causative relationship occur in corresponding pairs of clauses of different transitivity types; that is, causative verbal forms require one place more than their corresponding non-causative verbal forms.

The three aspectual features together with the systems of their terms intersect. It will be shown, for example, that ingressivity and stativity combine in so far as verbs of dynamic aspect can, as a rule, occur with ingressive and normal aspect, whereas verbs of stative aspect can only occur with normal aspect; and since it is normal for verbs to be dynamic¹, a majority of verbs can occur with ingressive aspect.

Causativity and stativity also intersect in so far as causative verbal forms are characteristically dynamic, whereas non-causative verbal forms may be of dynamic or stative aspect. Statistically, verbal forms for which the dynamic/stative distinction is stable are limited in number and are included among the sub-class of verbal forms which may be handled in terms of the causative/non-causative distinction.

As already mentioned in Chapter 4, the dynamic/stative distinction is relatable to the active/non-active tense distinction and may be regarded as more fundamental than the causative/non-causative distinction.

1. Although it is convenient to speak of 'dynamic' and 'stative' verbs, it would be more accurate to speak of verbs of 'dynamic' and 'stative' aspect or the 'dynamic' and 'stative' uses of verbs in certain cases (e.g. verbal adjectives).

Aspect 1: Ingressivity: Ingressive/Normal

The aspect of ingressivity with its two terms, ingressive and normal (or non-ingressive), is set up to handle such differences as those between the following intransitive clauses involving the verb stem da 'to sleep' with the 1st person singular subject pronoun in the habitual tense:

- (1) meda (Normal, Habitual tense)
 (I sleep)
- (2a) mekóda (Itive-ingressive, Habitual tense)
 (I go and sleep)
- (2b) mebáda (Ventive-ingressive, Habitual tense)
 (I come and
 sleep)

Clauses such as (1) above are specified as being of normal aspect, and all the tense paradigms discussed in Chapter 4 are of normal aspect. In relation to clauses of normal aspect, clauses such as (2a-b) are regarded as exemplifying ingressive aspect and are characterized by the presence of the prefixes: (i) ko 'to go (in order) to' or 'to go and' in the case of the itive-ingressive (2a) and (ii) ba 'to come (in order) to' or 'to come and' in the case of the ventive-ingressive (2b). Clauses such as (2a-b), which exemplify ingressive aspect, are usually used to indicate a previous going or coming required for the action described by the verb stem.

Clauses such as (2a-b) above may be regarded as unemphatic forms. Their corresponding emphatic forms are attested as:

- (3a) meko mékóda (emphatic, itive-ingressive)
 (I go and go
 and sleep)

- (3b) meba mébáda (emphatic ventive-ingressive)
(I come and come
and sleep)

Emphatic ingressive forms such as (2a-b) resemble serial verbal constructions in that the first and second constituents agree in respect of person, mood, polarity and tense. In spite of this resemblance, however, structures such as (3a-b) which are characterized by the co-occurrence of the ingressive prefix in both the first and second constituents and involve only one verb stem are not interpretable as serial verbal constructions, which involve two or more verb words and are additionally different in not having corresponding emphatic and unemphatic forms. And as noted in introductory chapter, verbs in a serial verbal construction may each be characterized by ingressive aspect.

It should also be mentioned that other directional verbs of motion (e.g. (1) wolo 'to go in', (2) dwazo 'to get up' and (3) nriandi 'to run') may substitute for the ingressive morpheme or prefix occurring in the first constituent of emphatic structures exemplified in (3a-b) above. Thus alongside:

- (4a) yeho yéhóla
(he has gone and gone and slept)
- (4b) yera yérála
(he has come and come and slept)

we shall find with other verbs of motion:

- (4c) yewolo yéhóla
(he has gone in and gone and slept)
- (4d) yedwazo yéhóla
(he has got up and gone and slept)
- (4e) yenriandi yehóla
(he has run and gone and slept)

Instances such as (4c-e) are different from serial verbal constructions in that the ingressive prefix cannot occur in the first constituent as well as in the second constituent. On the basis of the paradigmatic relationship between (4a-b) and (4c-e), we might say that the previous 'going' and 'coming' denoted by the ingressive prefix occurring in the first constituent of emphatic forms may be expressed by other directional verbs of motion.

It was mentioned above that the two aspectual features of ingressivity and stativity are interconnected in so far as verbs of dynamic aspect may be characterized by ingressive or normal aspect, whereas verbs of stative aspect can only be of normal aspect.

But even among dynamic verbs, there is a sub-class which includes such simple verbs or verbal groups as (1) fe 'to vomit', (2) tia 'to count', (3) keda 'to put on (cloth)', (4) kends 'to wait', (5) senza 'to change' and (6) so nea 'to taste, sample' that can occur with ingressive aspect as the following transitive clauses with item (2) in the 3rd person singular positive perfect tense illustrate:

- | | | |
|------|--|----------------------|
| (5a) | yedia ezukoá ne
(he has counted the money) | (Normal) |
| (5b) | yehódia ezukoá ne
(he has gone and counted the money) | (Itive-ingressive) |
| (5c) | yerádia ezukoá ne
(he has come and counted the money) | (Ventive-ingressive) |

Another sub-class of dynamic verbs may, however, be distinguished which are not possible with ingressive aspect and include such

items as (7) wu 'to die', (8) tia 'to walk', (9) yalo 'to yawn', (10) tends 'to scold', (11) die di 'to believe', (12) ba 'to call' and (13) fa kye 'to forgive'. Taking as an example item (8), we shall attest the following clause in which it occurs with normal aspect:

- (6a) yedia
(he has walked)

but not the corresponding clauses of itive-/ventive-ingressive aspect:

- (6b) *yehodia
(he has gone and walked)
- (6c) *yeradia
(he has come and walked)

Items (7-13) may be used in an intransitive (7-9), transitive (10-11), complex transitive (12) or ditransitive (13) clause, and it would be interesting to investigate the syntactic and semantic properties which correlate with the sub-classes of dynamic verbs that may be set up on the basis of the ingressive/normal aspectual distinction. It would appear that dynamic verbs that can occur with ingressive aspect denote actions that can significantly be preceded by a previous 'going' or 'coming' in order to perform the action described.

The aspectual feature of ingressivity is applicable to indicative, interrogative and imperative mood clauses, which may be of positive or negative polarity. For convenience, ingressivity is exemplified in indicative and imperative mood clauses only. Ingressivity together with the system of its terms combines with indicative and interrogative mood clauses in a

different way from that of imperative mood clauses. In the case of indicative and interrogative mood clauses, which may contain dynamic and stative verbs, the aspectual distinction of ingressive/normal is only statable for those which involve dynamic verbs in the active tenses (i.e. Habitual (Tense 1), Present (Tense 2), Progressive (Tense 5), Future I (Tense 6), Future II (Tense 7), Perfect (Tense 8), Past (Tense 9) and Consecutive (Tense 10)), whereas those indicative and interrogative clauses which involve stative verbs in the non-active tenses (i.e. Continuative (Tense 3) and Durative (Tense 4)) are of normal aspect only. On the other hand, imperative mood clauses, which involve only dynamic verbs, may be distinguished in terms of the ingressive/normal opposition.

As a rule, clauses which are characterized by ingressive aspect require an animate or human subject noun phrase.

We may, however, attest unemphatic ingressive forms such as (7) below in which the subject noun phrase is inanimate:

- (7) bóle ne shódo búla ne ánu
(the ball has gone and fallen into the well)

but we shall not find the corresponding emphatic form:

- (8) * bole ne sho shodo bula ne anu
(the ball has gone and gone and fallen into the well)

Semantically, we might say that the voluntary action of going or coming denoted by the ingressive prefixes is usually understood as capable of performance by animates or humans.

Emphatic and Unemphatic Ingressives

The description presented here deals mainly with unemphatic register. A word must, however, be said about the

structural relationship of unemphatic ingressive forms to their corresponding emphatic forms, as exemplified in the following 2nd person singular positive direct imperative clauses:

- (9a) kɔ kólí debié (Itive-ingressive, emphatic)
(go and eat)
- (9b) kólí debié (" " un-emphatic)
(go and eat)
- (10a) bɛla bálí debié (Ventive-ingressive, emphatic)
(come and eat)
- (10b) balí debié (" " un-emphatic)
(come and eat)

As the above examples show, the emphatic form is partly distinguished from the unemphatic form by the occurrence of the ingressive prefix (Ing. Pre.) in its first and second constituent (Const.) elements.

The unemphatic form may be regarded as transformationally related to the corresponding emphatic form by the deletion, from the second constituent, of grammatically identical elements. Thus if the constituent structure of the emphatic ingressives exemplified in the above (a) clauses is represented as:

1st Const. = (Ing. Pre₁) + 2nd Const. = (Ing. Pre₂ + Vb)

and that of the corresponding unemphatic form exemplified in the above (b) clauses as:

Ing. Pre₁ + Vb

the derivation of the unemphatic form may be handled by a transformational rule of the type:

Ing. Pre₁ + Ing. Pre₂ + Vb \rightarrow Ing. Pre₁ + Vb (by
the deletion of Ing. Pre₂).

It is to be noted that the unemphatic form, as a terminal string, closely resembles the second constituent of the emphatic form in phonological shape and the ordering of elements.

This type of reduction can only take place if the first constituent is immediately followed by the second constituent. Thus emphatic structures such as:

- (9c) ko sua nu kólí debié
(go home and go and eat)

in which the locative adjunct sua nu 'home' follows the first constituent or intervenes between the first and second constituents, cannot be reduced. We shall never attest:

- (9d) * ko sua nu li debie.

The following clauses are the corresponding negative (Neg.) forms of the positive direct imperative clauses (9-10(a-b)) above:

- | | | |
|-------|---------------------------|--------------------------------|
| (11a) | mmáko <u>g</u> kódi debié | (Itive-ingressive, emphatic) |
| | (don't go and eat) | |
| (11b) | mmákódi debié | (" " unemphatic) |
| | (don't go and eat) | |
| (12a) | mmába <u>g</u> bádi debié | (Ventive-ingressive, emphatic) |
| | (don't come and eat) | |
| (12b) | mmábádi debié | (" " unemphatic) |
| | (don't come and eat) | |

One significant difference between the unemphatic and emphatic forms of ingressive negative direct imperatives is the realization, in surface structure, of the 2nd person singular subject pronoun (Prn.) g 'you', which occurs in the second constituent of the emphatic form.

The constituent structure of the emphatic form is represented as:

1st Const. = (Neg. Pre + Ing. Pre₁) + 2nd Const. = (Prn + Ing. Pre₂ + Vb)

and that of the corresponding unemphatic form as:

Neg. Pre + Ing. Pre₁ + Vb

and the stages of the derivation of the unemphatic form may be presented as follows:

I) Neg. Pre + Ing. Pre₁ + Prn + Ing. Pre₂ + Vb → Neg. Pre + Ing. Pre₁ + Prn + Vb (by the deletion of Ing. Pre₂)

II) Neg. Pre + Ing. Pre₁ + Prn + Vb → Neg. Pre + Ing. Pre₁ + Vb (by the deletion of Prn).

As already mentioned in Chapter 4, the active tenses may, on the basis of the occurrence or non-occurrence of the consecutive tense form in the second constituent of emphatic ingressive forms, be sub-classified in terms of:

a. potential tenses (i.e. Present (Tense 2), Progressive (Tense 5) and Future I (Tense 6)) which co-occur with consecutive tense forms; and

b. actual tenses (i.e. Habitual (Tense 1), Future II (Tense 7), Perfect (Tense 8) and Past (Tense 9)) which do not co-occur with consecutive tense forms.

The following indicative mood clauses in the 3rd person singular Future I illustrate the relationship, in the case of the potential tenses, of the unemphatic to the emphatic ingressive:

- (13a) obáho yeáhóla (Itive-ingressive, emphatic)
(he'll go and sleep)
- (13b) obáhóla (" " unemphatic)
(he'll go and sleep)

- | | | |
|-------|--|-------------------------------------|
| (14a) | <u>ob</u> ára ye <u>á</u> rála
(he'll come and sleep) | (Ventive-ingressive,
emphatic) |
| (14b) | <u>ob</u> arála
(he'll come and sleep) | (Ventive-ingressive,
unemphatic) |

And the corresponding Future II forms illustrate the relationship of the unemphatic to the emphatic ingressive in the case of the actual tenses:

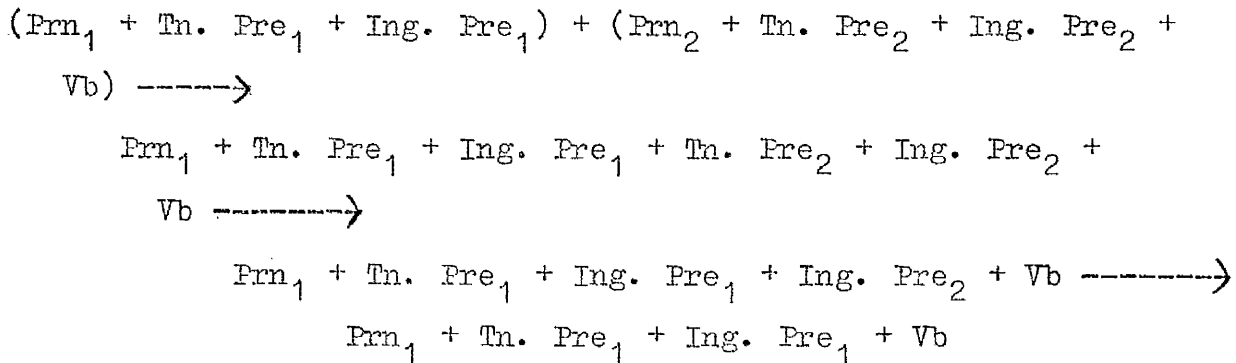
- | | | |
|-------|---|-------------------------------------|
| (15a) | <u>ok</u> sho <u>ok</u> éhóla
(he'll go and sleep) | (Itive-ingressive, emphatic) |
| (15b) | <u>ok</u> éhóla
(he'll go and sleep) | (" " unemphatic) |
| (16a) | <u>ok</u> era <u>ók</u> érála
(he'll come and sleep) | (Ventive-ingressive,
emphatic) |
| (16b) | <u>ok</u> érála
(he'll come and sleep) | (Ventive-ingressive,
unemphatic) |

It is to be noted that in the case of indicative (and, for that matter, also in the case of the interrogative) mood clauses, the subject pronoun as well as the ingressive prefix occurring in the first constituent is repeated¹ in the second constituent of the emphatic ingressive. And a comparison of the emphatic ingressive forms of the positive potential (13-14 (a-b)) and the actual (15-16(a-b)) tenses shows that the potential tenses are different in that the co-occurring pronominal forms, which are referentially identical, belong to different pronominal sets, whereas in the case of the corresponding actual tenses (as well as in the case of the non-finite consecutive tense) the

1. Nzema differs from Akan in this respect, since only the 1st person singular subject pronoun is repeated in Akan: c.f. mereko makofa 'I'm going to take it' with preko akofa 'he's going to take it'.

repeated pronouns belong to the same pronominal set - i.e. either Set I or Set II. The tense prefixes, in the case of the actual tenses, are also repeated in the second constituent, whereas, in the case of the potential tenses, the consecutive tense prefix a - occurring in the second constituent may be regarded as substituting for any tense prefix occurring in the first constituent.

Taking (15-16(a-b)) as an example, we may represent the transformational relationship of the unemphatic to the emphatic, in the case of indicative mood clauses, as follows:



It is to be noted that in respect of its phonological shape and the linear arrangement of constituent elements, the unemphatic form of the actual tenses as in the case of positive direct imperative clauses (9-10) replicates the second constituent of the emphatic form, whereas the unemphatic form of the potential tenses has a different shape and constituency from that of the corresponding second constituent.

The following paradigms with subject pronouns exemplify unemphatic imperative and indicative mood clauses with ingressive aspect. As in previous paradigms, only the verb stem da 'to sleep' is used in the following examples, of which the (A) clauses are itive-ingressives and the (B) clauses are ventive-ingressives.

Imperative Mood Clauses: Itive-/Ventive-Ingressive Aspect

Type of Imperative	Positive	Negative
DIRECT	(A) kola /kolá / (go and sleep)	mmakoda /mákóda / (don't go and sleep)
	(B) bala /balá / (come and sleep)	mmabada /mábáda / (don't come and sleep)
	(A) behola/bó:la / (go and sleep, all of you)	bemmakoda/bemákóda / (don't come and sleep, all of you)
	(B) berala/bá:la / (come and sleep, all of you)	bemabada/bemábáda / (don't come and sleep, all of you)
INDIRECT	(A) maa ohola/mó:la (let him go and sleep)	mmamaa okoda/mámókóda/ (don't let him go and sleep)
	(B) maa orala/mórala/ (let him come and sleep)	mmamaa obada/mámóbáda/ (don't let him come and sleep)

Indicative Mood Clauses: Itive-/Ventive-Ingressive Aspect

Tenses	Positive	Negative
1. Habitual	(A) okoda /okóda / (he goes and sleeps)	ongonla /ɔŋɔ́nná / (he doesn't go and sleep)
	(B) obada /obáda / (he comes and sleeps)	ombanla /ɔ́mmánná / (he doesn't come and sleep)
2. Present or	(A) okala /okála (he's going to sleep)	" "
5. Progres- sive	(B) obala /obála / (he's coming to sleep)	" "
6. Future I	(A) obahola /obwá:la / (he'll go and sleep)	ombangonla ¹ (he won't go and sleep)
	(B) obarala /obá:la / (he'll come and sleep)	ombambanla (he won't come and sleep)
7. Future II	(A) okshola /okó:la / (he'll go and sleep)	onrehola /ɔŋɔ́:lá / (he won't go and sleep)
	(B) okerala /oká:la / (he'll come and sleep)	onrerala /ɔŋá:lá / (he won't come and sleep)
8. Perfect	(A) yehola /jirwóla / (he has gone and slept)	ɔ́tekoðale /ɔ́tekoðáali / (he hasn't gone and slept)
	(B) yerala /jirála / (he has come and slept)	ɔ́tebadale /ɔ́tebadáali / (he hasn't come and slept)
9. Past	(A) oholale /o:lalí / (he went and slept)	yeangonla /jaŋɔ́nná / (he didn't go and sleep)
	(B) oralale /orálalí / (he came and slept)	yeambanla /jammánná / (he didn't come and sleep)
10. Consecu- tive	(A) (na) yeahola/já(w)óla/ ((so that) he may go go and sleep)	(na) yeangonla/jaŋɔ́nná/ ((so that) he may not go go and sleep)
	(B) (na) yearala/já:la / ((so that) he may come and sleep)	(na) yeambanla/jammánná/ ((so that) he may not come and sleep)

1. The unemphatic negative Future I ingressive forms supplied here are taken from Essuah, J.A. (1965); they do not occur in my speech.

On the basis of the above paradigms of positive and negative imperative and indicative mood clauses which are characterized by ingressive aspect, the following general statements of a phonological nature can be made:

(i) in imperative and indicative mood clauses other than the 2nd person singular positive direct imperative, if the consonant element of the ingressive prefix undergoes Type A or B mutation, the stem-initial consonant of the following verb stem exhibits the same type of mutation; in 2nd person singular positive direct imperatives, however, the consonant element of the ingressive prefix, being the absolute form, does not undergo mutation, whereas the stem-initial consonant of the following verb stem exhibits Type B mutation;

(ii) generally speaking, the ingressive prefix has a high or rising tone except in 2nd person singular positive direct imperative clauses where the ingressive prefix has a low tone;

(iii) the vowels in the ingressive prefixes, like those in the syllable of the tense prefix and subject pronoun, assimilate to the vowel quality of the following verb syllable.

Aspect 2: Stativity: Dynamic/Stative

The second aspectual feature, that of stativity, with its two terms: dynamic and stative, is set up to handle such differences as those between the pairs of verbal forms occurring in the following paired clauses:

- | | | |
|----------|---|-------------------------------|
| (1a) | Kofí <u>ténla</u> skpónlé ne ázo
(Kofi sits down on the table) | (dynamic, Habitual Tense) |
| (1b) | Kofí <u>dé</u> skpónlé ne ázo
(Kofi is sitting on the table) | (stative, Continuative Tense) |
| (2a) | Kofí <u>gyinla</u> ebía ne ázo
(Kofi stands on the chair) | (dynamic, Habitual) |
| (2b) | Kofí <u>gyi</u> ebía ne ázo
(Kofi is standing on the chair) | (stative, Continuative) |
| and (3a) | Kofí <u>féa</u> skpá ne ábo
(Kofi hides under the bed) | (dynamic, Habitual) |
| (3b) | Kofí <u>yéa</u> skpá ne ábo
(Kofi is hiding under the bed) | (stative, Continuative) |

In the above set of semantically-related pairs of semi-transitive clauses, the verbal form in the continuative tense in each (b) clause exhibits a different shape from that of the verbal form in the habitual tense occurring in the corresponding (a) clause. In the first pair of clauses (1a-b), the verbal form in (1b) is both morphologically related by suffixation and phonologically related by Type B stem-initial consonant mutation to the verbal form occurring in (1a).

In the second pair of clauses (2a-b), the verbal form in (2b) is only morphologically related by suffixation to the verbal form in the corresponding clause (2a).

And in the third pair of clauses (3a-b), the verbal form in (3b) is phonologically related by stem-initial consonant mutation to the corresponding verbal form in (3a).

The verbal forms occurring in the (b) clauses which are phonologically and/or morphologically related to their corresponding verbal forms in the (a) clauses are distinguished as stative and those in the (a) clauses as dynamic.

The dynamic/stative distinction also accounts for such differences as those obtaining between pairs of verbal forms which can occur in related pairs of transitive clauses as in:

- | | | |
|----------|--|------------------------------|
| (4a) | Akyé <u>só</u> a kyelɛ/sysne
(Akye puts on a hat/carries
firewood) | (dynamic, Habitual) |
| (4b) | Akyé <u>z</u> ó kyelɛ/sysne
(Akye is wearing a hat/
carrying firewood) | (stative, Continua-
tive) |
| (5a) | Akyé <u>ky</u> é falé
(Akye puts on a belt) | (dynamic, Habitual) |
| (5b) | Akyé <u>hy</u> é falé
(Akye is wearing a belt) | (stative, Continua-
tive) |
| and (6a) | Akyé <u>m</u> ó sialé
(Akye puts on a loin cloth) | (dynamic, Habitual) |
| (6b) | Akyé <u>m</u> ó sialé
(Akye is wearing a loin cloth) | (stative, Continua-
tive) |

As in the case of (1-2(a-b)) above, the verbal forms in each pair of clauses (4-5(a-b)) have different shapes. In the case of (4a-b), the verbal form in the transitive clause (4b), which is regarded as stative, is morphologically related by suffixation as well as phonologically related by stem-initial consonant mutation to its corresponding dynamic verbal form occurring in

(4a). In (5a-b), the stative verbal form occurring in (5b) is only phonologically related by stem-initial consonant mutation to its corresponding dynamic verbal form in (5a). Unlike in clauses (4-5(a-b)), the verbal forms in (6a-b) have identical shape. By analogy, however, with (5a-b) the verbal form in (6a) is accounted dynamic and its corresponding verbal form in (6b) as stative.

In addition to the phonological and/or morphological features described above, there are other formal properties which serve to distinguish dynamic from stative verbs.

I) Occurrence in the Active/non-Active tenses

As already noted, the dynamic/stative distinction intersects with the active/non-active distinction set up among the ten tenses of the language in such a way that dynamic verbs occur in the active tenses, whereas stative verbs, as a rule, are only possible in the non-active tenses.

Thus with the dynamic verbal form tenla 'to sit' we shall find, for example, the following paradigm of the positive active tenses:

- | | | |
|------|------------------------------|------------|
| (7a) | <u>otenla</u> ebía ne ázo | (Habitual) |
| | (he sits on the chair) | |
| (7b) | <u>obádenla</u> ebía ne ázo | (Future I) |
| | (he will sit on the chair) | |
| (7c) | <u>yedenla</u> ebía ne ázo | (Perfect) |
| | (he has sat on the chair) | |
| (7d) | <u>odenlanle</u> ebía ne ázo | (Past) |
| | (he sat on the chair) | |

But the corresponding stative verbal form can only occur in the non-active tenses, as in the following positive indicative clauses

- (8a) ode ebíá ne ázo (Continuative)
(he is sitting on the chair)
- (8b) otete ebíá ne ázo (Durative)
(he is still sitting on the
chair)

There are some stative verbs, however, which can occur in the continuative but not in the durative tense. Thus the stative verb ze 'to know' can occur in the continuative tense as in the transitive clause:

- (9a) oze nrelebe (stative, Continua-
(lit. he knows/has sense. tive)
he's wise)

but is not possible in the durative tense; thus alongside (9a) we shall never find:

- (9b) * otese/oteze nrelebe
(he is still wise)

In the active tenses, the verb ze is complemented by the suppletive form nwu 'to acquire' as in the following positive tenses:

- (9c) obánwu nrelebe (Future I)
(lit. he will acquire sense)
- (9d) onwunle nrelebe (Past)
(lit. he acquired sense)

Unlike the stative verb ze 'to know', the stative verbal form le 'to have, possess, own' can occur in the continuative as well as in the durative tense:

- (10a) ole ezukoa (Continuative)
(lit. he has money. he's rich)
- (10b) oteds ezukoa (Durative)
(he is still rich)

Like the stative verb ze 'to know', however, the stative verb le 'to have', is complemented, in the active tenses, by the suppletive verbal form nyia 'to acquire, get'. Thus alongside (10a-b) we shall find:

- (10c) obányia ezukoa (Future I)
(lit. he will get money,
he'll be rich)
- (10d) yenyia ezukoa (Perfect)
(he has become rich)
- (10e) onyianle ezukoa (Past)
(he became rich)

In respect of their verbal forms, the identifying copular verb le 'to be' and the locational copular verb wo 'to be in' are more like le 'to have' than ze 'to know'; that is, both copular verbs (which, as mentioned in the previous chapter, are stative) are possible in the continuative tense:

- (11a) ole kpole (Continuative)
(it is big)
- (12a) owo Bolofó (")
(he is in Axim)

as well as in the durative tense:

- (11b) otede kpole (Durative)
(it is still big)
- (12b) otébo Bolofó (")
(he is still in Axim)

In the active tenses, they have suppletive forms, as exemplified in:

- (11c) oyele kpole (Past)
(it was/became big)
- (12c) owale Bolofó (")
(he used to be in Axim)

In respect, then, of the category of tense, stative verbal forms may be defined in a wider sense as those (e.g. 1. gyi 'to be standing', 2. te 'to be sitting') which are possible in the continuative as well as the durative tense; and in a narrower sense, as those (e.g. 1. zo 'to be wearing/carrying on the head' and 2. ze 'to know') which can only occur in the continuative tense.

Semantically, dynamic verbs or clauses involving dynamic verbs denote an action, event or process whereas stative verbs refer to a state, static condition or quality. And in view of the co-occurrence relation between dynamic verbs and the active tenses and that between stative verbs and the non-active tenses on the other, it would seem that in addition to the temporal reference associated with the tenses, the tenses of the language have aspectual implications in so far as they express, in the case of dynamic verbs, such notions as activity (which may be habitual, present, simultaneous, future, or past) and state in the case of stative verbs.

II) Imperative Mood

As already mentioned, dynamic verbal forms and other dynamic verbs can occur in imperative mood clauses, whereas corresponding stative verbal forms and other stative verbs cannot do so. Thus with the dynamic verbal form gyinla 'to stand' we shall find the direct imperative mood clauses:

(13a) gyinla ebía ne ázo (positive)
(stand on the chair)

(13b) mmá gyinla ebía ne ázo (negative)
(don't stand on the chair)

With the stative verbal form gyi 'to be standing', we shall never find corresponding direct imperative mood clauses:

(14a)* gyi ebia ne azo (positive)

(14b)* mma gyi ebia ne azo (durative)

III) Interconnection between Stativity and Ingressivity

As already indicated, the two aspectual features of stativity and ingressivity together with the systems of their terms are interconnected in such a way that indicative as well as interrogative mood clauses involving dynamic verbs can occur with both ingressive and normal aspect, whereas such mood clauses containing stative verbs can only occur with normal aspect. Thus alongside the indicative clause (15) of normal aspect:

(15) Kofi soa kysle (Habitual)
(Kofi puts on a hat)

which contains the dynamic verbal form soa 'to put on', we shall attest the following clauses of itive-ingressive aspect:

(15a) Kofi kosoa kysle (Habitual)
(Kofi goes and puts on a hat)

(15b) Kofi shozoa kysle (Perfect)
(Kofi has gone and put on a hat)

as well as the following clauses of ventive-ingressive aspect:

(15c) Kofi basoa kysle (Habitual)
(Kofi comes and puts on a hat)

(15d) Kofi grazoa kysle (Perfect)
(Kofi has come and put on a hat)

With the stative verbal form zo 'to wear', we shall find such an indicative clause of normal aspect as:

- (16) Kofi zó kysle
(Kofi is wearing a hat)

but not the corresponding clauses of either itive-ingressive aspect:

- (16a) *Kofi kozo kysle
(16b) *Kofi shozo kysle

or ventive-ingressive aspect:

- (16c) *Kofi bazo kysle
(16d) *Kofi srazo kysle

IV) Occurrence in catenative pieces

In catenative pieces, dynamic verbs may occur as the non-finite verbal form following the catenative verb; their corresponding stative verbs are not possible in a corresponding position in such pieces.

For example, the dynamic verbal form tenla 'to sit' can co-occur with the catenative verb ze 'to know' as in:

- (17a) Akyé zé kuloba zó ténla
(Akye knows how to sit on a chamber-pot)

We shall never find the stative verbal form te 'to be sitting' in a corresponding position in a catenative piece:

- (17b) *Akye ze kuloba zo te

Similarly, the dynamic verbal form soa 'to carry' can co-occur as the non-finite verb with the catenative verb wie 'to finish':

- (18a) yewie mbaká né mo sóa
(he has finished carrying the boards).

With the stative verbal form zo 'to be carrying' we shall not attest a similar construction:

- (18b) *yewie mbaka ne mo zo.

The non-finite verbal form of the dynamic verbal forms:

(a) soa 'to put on' and (b) gyinla 'to stand, stop', can co-occur within a catenative piece, with the catenative verb nyia 'to be fond/in the habit of', as in:

(19a) wonyia kyels nzóae
(you're fond of putting on a hat)

(19b) wonyia adenlé nù ngyinlae
(you're fond of standing in the way)

We shall never find catenative pieces involving corresponding verbal forms of the stative verbal forms zo 'to be wearing' and gyi 'to be standing':

(20a) *wonyia kyels nzoe

(20b) *wonyia adenle nu ngyii

The non-finite consecutive tense form of dynamic verbs is realized in a catenative piece after the potential tense forms of such catenative verbs as (a) kponde 'to want' and (b) bo modenle 'to try'. Thus with the dynamic verbal form gyinla 'to stop', we shall attest:

(21a) mekponde meágyinla
(I want to stop)

(21b) mebabo modénlé meágyinla ekpónlé ne ázo
(I shall try and stand on the table)

Stative verbs are not possible in the consecutive tense and cannot co-occur with such catenative verbs in a similar structure.

The dynamic, but not the stative, verbal form may follow the actual tense form of such verbs as bo modenle 'to try' in the type of construction exemplified in:

- (22a) obole modénlé ógyinlanle ekpónlé ne ázo
(he tried and stood on the table)

or in a clause introduced by ke, as in:

- (22b) obole modénlé ke ógyinla ekpónlé ne ázo
(he tried to stand on the table)

V) Possibility of fa-paraphrases

The dynamic, but not the stative, verbal form may co-occur with the agentive verb fa 'to take'. Thus alongside (23a) below:

- (23a) Kofi soa ye kyéle ne
(Kofi puts on his hat)

which involves the dynamic verbal form soa 'to put on (hat)', we shall attest the fa-paraphrase:

- (23b) Kofi fa ye kyéle ne soa
(Kofi takes his hat and puts it on)

With the stative verbal zo 'to be wearing' as in

- (24a) Kofi zo ye kyéle ne
(Kofi is wearing his hat)

we shall never find a corresponding fa-paraphrase:

- (24b)* Kofi fa ye kyéle ne zo

VI) Occurrence within verbal groups:

As a rule, only dynamic verbal forms and other dynamic verbs can occur, within a verbal group, either as the principal or auxiliary verb such that verbal groups are characteristically dynamic. Thus although we shall attest the dynamic verbal form gyinla 'to stand' as the auxiliary verb in the verbal group dwazo gyinla 'to stand up' as exemplified in the direct imperative mood clause:

- (25a) dwazo gyinla
(stand up)

we shall never find the stative verbal form gyi 'to be standing' in a corresponding position within a verbal group and a similar mood clause involving the stative verbal form such as:

(25b) *dwazo gyi

is clearly unacceptable.

And as already mentioned, verbal adjectives (e.g. tenre 'to be straight') usually occur as simple verbs in the continuative tense with stative aspect and denote an essential quality or static condition, as in:

(26a) nrenyá ne ánye ténre

(lit. the man's eye is straight. the man is a good shot)

Such verbs may occur within a verbal group such as:

tu tenre 'to set off' with dynamic aspect as the following clause in the active past tense illustrates:

(26b) nrenyá ne neé o nwó ámra dúle dénrsnlé

(the man and his relations set off)

VII) Nominalization

Dynamic verbal forms (27a-c) and other dynamic verbs (27d-e) are capable of the type of nominalization formed by the prefixation of the vowel prefix a-, as exemplified in:

	<u>Dynamic verb</u>	<u>Nominalization</u>
27 (a)	gyinla 'to stand'	agyinla 'deliberation; suspending in water'
(b)	soa 'to carry on head'	asoa 'carrying things; head-money'
(c)	fea 'to hide'	afea 'hiding; conspi- racy'
(d)	yia 'to meet'	ayia 'meeting'
(e)	sande 'to scatter'	asande 'scattering; dis- persion'

Corresponding stative verbal forms and other stative verbs are precluded from such nominalization.

Classification of Stative Verbs

As it is normal for verbs to be dynamic and dynamic verbs, consequently, preponderate, the classification, in formal terms, presented here is orientated towards stative verbs.

Group A: Stative verbal forms morphologically and/or phonologically related to their corresponding dynamic verbal forms:

	<u>Stative</u>		<u>Dynamic</u>
1.	te(or de)	'to be sitting/ living'	tenla 'to sit/live'
2.	gyi	'to be standing'	gyinla 'to stand/ stop'
3.	zo	'to be wearing/ carrying'	soa 'to put on/ carry(on the head)'

Group B: Stative verbal forms phonologically related to their corresponding dynamic verbal forms

Group B.I Semi-transitive

	<u>Stative</u>		<u>Dynamic</u>
1.	li	'to be occupying'	di 'to occupy'
2.	lua	'to be walking'	dua 'to walk, proceed'
3.	la	'to be lying on'	da 'to lie on'
4.	hoto	'to be kneeling'	koto 'to kneel'
5.	vi	'to be from'	fi 'to come out of'
6.	vea	'to be hidden'	fea 'to hide'

Group B.II: Transitive

	<u>Stative</u>		<u>Dynamic</u>
7.	hisa 'to be leaning against'		kisa 'to lean against'
8.	via 'to be carrying'		fia 'to carry (baby)'
9.	zoho 'to resemble'		soho 'to resemble'
10.	hyia 'to be in need of'		kyia 'to need'
11.	heda 'to be wearing'		keda 'to put on (cloth)'
12.	hye 'to be wearing'		kye 'to put on (belt)'

Group C: Stative/dynamic verbal forms not
phonologically distinguished

Transitive verbs of adornment

	<u>Stative</u>		<u>Dynamic</u>
1.	bo 'to be wearing'		bo 'to put on (turban)'
2.	mo 'to be wearing'		mo 'to put on (loin cloth)'
3.	wula 'to be wearing'		wula 'to put on (shoe, dress)'

Group D: Stative verbs with suppletive verbal forms
in the Active tenses

	<u>Non-active tense forms</u>		<u>Active tense forms</u>
1.	le (durative form <u>de</u>) 'to have'		nyia 'to acquire'
2.	ze (no durative) 'to know'		nwu 'to get/acquire'

Group E: Relational verbs

Group E.I: Copular verbs

	<u>Non-active tense forms</u>	<u>Active tense forms</u>
1.	le (durative de) 'to be'	ye 'to become'
2.	wə (" bə) 'to be in'	wale 'used to be in'
3.	ye 'to be'	
4.	le 'to be' (equative copula):	

Group E.II: Reciprocal verbs

5.	ya	'to be at loggerheads'
6.	di	'to agree with; to suit'
7.	zohə	'to resemble'
8.	bə swene	'to border/share a common border'

Group E.III Verbs of comparison

9.	bə	'to exceed'
10.	tsla	'to surpass'
11.	se	'to be equal'
12.	asolo	'to be different'

Group F: Verbal adjectives

Group F.I: Suffixed verbal adjectives

1.	wale (stem <u>wa</u>)	'to be tall/long'
2.	zonle (" <u>so</u>)	'to be plentiful/many'

Group F.II: Non-suffixed verbal adjectives

3.	də	'to be hot'
4.	pi	'to be thick'
5.	tsle	'to be broad/wide'
6.	kyea	'to be bent/crooked'

- | | | |
|----|-------|---------------------|
| 7. | tenre | 'to be straight' |
| 8. | du | 'to be dark/black' |
| 9. | bolo | 'to be red/reddish' |

Group G: Verbs of inert perception and cognition which
characteristically take a subordinate noun
clause introduced by ke 'that'

- | | | |
|-----|-----------|----------------------|
| 10. | kulo | 'to like/love' |
| 11. | kyi | 'to hate/dislike' |
| 12. | die di | 'to believe' |
| 13. | te (o bo) | 'to understand' |
| 14. | kakye | 'to remember' |
| 15. | sulo | 'to be afraid/timid' |
| 16. | bolo | 'to covet' |
| 17. | ze | 'to know' |

Aspect 3: Causativity: Causative/non-causative

Within the third aspectual feature, that of causativity, the two terms, causative/non-causative, are set up to handle pairs of verbal forms which may occur in related pairs of (A) complex semi-transitive and semi-transitive clauses, (B) ditransitive and transitive clauses and (C) transitive and intransitive clauses, and are dealt with in that order.

(A) Complex semi-transitive and Semi-transitive clauses

The two terms causative and non-causative are set up to handle such differences as those between the pairs of verbal forms occurring in the following corresponding (a) complex semi-transitive and (b) semi-transitive clauses:

- | | |
|--|---|
| (1a) Akysé <u>fóla</u> Kofí skpónlé ne ázo | (complex semi-transitive, causative, dynamic) |
| (Akye makes Kofi climb on to the table) | |
| (1b) Kofí <u>fó</u> skpónlé ne ázo | (semi-transitive non-causative, dynamic) |
| (Kofi climbs on to the table) | |
| (2a) Akysé <u>ténla</u> Kofí kúlóba zó | (complex semi-transitive, causative, dynamic) |
| (Akye sits Kofi on a chamber-pot) | |
| (2b) Kofí <u>dé</u> kuloba zó | (semi-transitive non-causative, stative) |
| (Kofi is sitting on a chamber-pot) | |

In the above examples, the clauses in each pair are syntactically as well as semantically related. Syntactically, the members of each pair are related in such a way that the object noun phrase in each (a) complex semi-transitive clause recurs as the subject noun phrase in the corresponding (b) semi-transitive clause.

The verbal forms in the (b) clauses, which may be regarded as the verb stems, are morphologically related by suffixation to the verbal forms in the corresponding (a) clauses. And in respect of the number of places, the suffixed verbal forms occurring in the complex semi-transitive clauses require three places, whereas the corresponding verbal forms occurring in the related semi-transitive clauses are two-place verb stems or require one place less than their morphologically-related suffixed verbal forms.

It is to be noted that the suffixed verbal forms occurring in the (a) clauses are dynamic, whereas the corresponding verb stems occurring in the (b) clauses may be dynamic (1b) or stative (2b).

On these 'morphosyntactic' grounds, we shall regard the three-place, suffixed verbal form occurring in the (a) complex semi-transitive clauses as causative in contradistinction to the two-place verbal form occurring in the (b) semi-transitive clauses which are regarded as non-causative.

Other morphologically-related causative/non-causative verbal forms occurring in corresponding complex semi-transitive and semi-transitive clauses are: (1) dwula/dwu 'to make descend/to descend' and (2) gyinla/gyi 'to stand, stop/to be standing', of which the members of the first pair are dynamic, whereas those of the second pair contrast in terms of the dynamic/stative distinction.

By analogy with (1-2(a-b)) above, the dynamic/stative pairs of verbal forms occurring in the following pairs of clauses between which the same syntactic (and semantic) relationship

holds may be handled in terms of the causative/non-causative distinction:

- | | | |
|------|---|---|
| (3a) | Akyé <u>kénda</u> sdanlé ne nyémá
ne ázo
(Akye hangs the cloth on the
line) | (complex semi-transi-
sitive, causative,
dynamic) |
| (3b) | sdanlé ne <u>héndá</u> nyemá ne ázo
(the cloth is hanging on
the line) | (semi-transitive, n
causative, stativ |
| (4a) | Akyé <u>fá</u> sdanlé ne <u>féa</u> esumí
ne ábo
(Akye hides the cloth under
the pillow) | (complex semi-tran
sitive, causative,
dynamic) |
| (4b) | sdanlé ne <u>véa</u> esumí ne ábo
(the cloth is hidden under
the pillow) | (semi-transitive, n
causative, stativ |

It is to be noted that the non-causative, stative verbal form in the continuative tense occurring in (3b) is phonologically related by Type B mutation to the corresponding causative, dynamic verbal form in the habitual tense occurring in (4a) and the causative verb in (4a) is a verbal group of which the auxiliary member fea is the dynamic verbal form of the phonologically-related stative non-causative verbal form vea in (4b).

By contrast with the morphological causativization exemplified in (1-2(a-b)), the causative/non-causative relationship manifest in such instances as (3-4(a-b)) is provisionally termed as phonological causativization.

As already mentioned in respect of causative/non-causative verbal forms which are related in terms of the dynamic/stative distinction, the perfect tense form of the (causative) dynamic

verbal form implies the continuative tense form of the (non-causative) stative verbal form, as the following examples illustrate:

<u>Perfect tense form of the dynamic</u>	<u>Continuative tense form of the stative</u>
(5a) Akyé <u>édenla</u> Kofí kúloba zó implies/and as a result (Akye has sat Kofi on a chamber-pot)	(5b) Kofí <u>dé</u> kúloba zó (Kofi is sitting on a chamber-pot)
(6a) Akyé <u>éhenda</u> edanlé ne nyéma ne ázo implies/and as a result (Akye has hung the cloth on the line)	(6b) edanlé ne <u>héndá</u> nyemá ne ázo (the cloth is hanging on the line)

We shall also find pairs of verbal forms, identical in phonological shape, between which the same syntactic (and semantic) relationship holds in corresponding complex semi-transitive and semi-transitive clauses, as in the following paired example with the verb stem tu 'to expel or leave':

(7a) Naná <u>édu</u> Akyé suá ne ázo (the chief has expelled Akye from the town)	(complex semi-transitive, causative, dynamic)
(7b) Akyé <u>édu</u> suá ne ázo (Akye has left the town)	(semi-transitive, non- causative, dynamic)

Such instances may, by analogy with such previous examples as (1-2(a-b)), be handled in terms of the causative/non-causative aspectual opposition. The causative/non-causative verbal forms, which exhibit similar phonological shape, may be both dynamic as in (7a-b) above or contrast in terms of the dynamic/stative distinction as in (8a-b) below:

- (8a) Akys éguá edanlé ne ékpónlé ne ázo (complex semi-transitive, causative, dynamic)
(Akys has put the cloth on the table)
- (8b) edanlé ne guá skpónlé ne ázo (semi-transitive, non-causative, stative)
(the cloth is (lying) on the table)

And in relation to the cases of morphological causativization exemplified in (1-2(a-b)), the causative verbal forms like those in (7a-8a) may be regarded as derived from the corresponding non-causative verbal forms in (7b-8b) by means of a morphological process of zero-modification, and instances such as (7-8(a-b)) are distinguished as zero causativization.

The above examples (1-4(a-b)) and (7-8(a-b)) illustrate the various ways in which pairs of verbal forms, different or identical in shape, between which the same syntactic (as well as semantic) relationship holds in corresponding complex semi-transitive and semi-transitive clauses, may be handled in terms of the aspectual feature of causativity.

We shall, however, also attest in corresponding complex semi-transitive and semi-transitive pairs of different verb words between which the same syntactic (and semantic) relationship obtains. The causative/non-causative distinction may also serve to handle such cases, which are exemplified in:

- (9a) Akys ézié kyénze ne ékpónlé ne ázo (complex semi-transitive, causative, dynamic)
(Akys has placed the pan on the table)
- (9b) kyénze ne gyí skpónlé ne ázo (semi-transitive, non-causative, stative)
(the pan is (standing) on the table)

and

- (10a) Akys édo kyelé ne ékpónlé ne ázo (complex semi-transitive, causative, dynamic)
(Akys has put the hat on the table)

- (10b) kyelís ne lá skpónlé ne ázo (semi-transitive, non-
(the hat is (lying) on the causative, stative)
table)

As in the previous examples, the causative verb stems: sie 'to place' (9a) and to 'to put/place' (10a) occurring in the complex semi-transitive clauses are dynamic, whereas the non-causative verbal forms: gyi 'to be standing' (9b) and la 'to be lying on' (10b) occurring in the corresponding semi-transitive clauses are stative; and such stative verbal forms may have dynamic verbal forms (i.e. gyinla 'to stand' and da 'to lay' respectively) which may be causative in a complex semi-transitive clause.

The dynamic causative verb word in such cases may be a verbal group (e.g. fa wula 'to place in'):

- (11a) mefa suá ne méwula e sá nú (complex semi-transitive,
(lit. I place the house in your causative, dynamic)
hands/care. I entrust the
house to you)

- (11b) suá ne wó e sá nú (semi-transitive, non-
(lit. the house is in your causative, stative)
hands/care. The house is
entrusted to you)

The causative/non-causative relationship manifest in such instances as (9-11(a-b)) is lexicalized in the pairs of different lexical items: sie/gyi (9a-b), to/la (10a-b) and fa wula/wó (11a-b) and, by contrast with the other cases, is distinguished as lexical causativization.

On the basis of the above analysis, four main groups (A-D) may be set up among verbal forms which are related in terms of causative/non-causative in corresponding complex semi-morphologically related causative/non-causative verbal forms or morphologically related causative/non-causative verbal forms or cases of morphological causativization. Within Group A, two sub-sets (I-II) are set up on the formal basis of whether the non-causative verbal form is dynamic (A.I) or stative (A.II), this distinction correlates with the variant causative suffix in the causative verbal form.

Group B consists of phonologically related causative/non-causative verbal forms exemplifying phonological causativization.

Group C consists of verbal forms of identical shape which are related in terms of causative/non-causative, i.e. zero causativization; two sub-sets (I-II) are distinguished on the basis of whether the non-causative verbal form may be specified as dynamic or stative.

Group D consists of examples of lexical causativization.

Group A: Morphological causativization

Group A.I:

	<u>Causative dynamic</u>	<u>Non-causative dynamic</u>	<u>Causative suffix</u>
1.	<u>fo</u> /fəla / 'to make climb'	<u>fo</u> /fʊ / 'to climb'	/-la /
2.	<u>dwula</u> /gywəla/ 'to make descend'	<u>dwu</u> /gywu/ 'to descend'	/-la /

Group A. II

	<u>Causative dynamic</u>	<u>Non-causative stative</u>	<u>Causative suffix</u>
3.	tenla/tɛnlã / 'to sit'	te /tɪ / 'to be sitting'	/-nlã /
4.	gyinla/gyɛnlã/ 'to stop, stand'	gyi /gyi / 'to be standing'	/-nlã /

Group B: Phonological causativization

	<u>Causative dynamic</u>		<u>Non-Causative stative</u>
5.	kenda 'to hang'		henda 'to be hanging'
6.	kisa 'to lean against'		hisa 'to be leaning against'
7.	da 'to lay'		la 'to be lying on'
8.	fa fea 'to hide'		vea 'to be hidden'
9.	fa tua 'to stick in'		dua 'to be stuck in'
10.	fa sia 'to stick in/ under		zia 'to be held in'

Group C: Zero causativization

Group C. I

	<u>Causative dynamic</u>		<u>Non-causative dynamic</u>
11.	te 'to strike down'		te 'to hit ground'
12.	tu 'to expel'		tu 'to leave'
13.	kponla 'to strike down'		kponla 'to hit ground'

Group C.II:

	<u>Causative dynamic</u>		<u>Non-causative stative</u>	
14.	bea	'to lay across'	bea	'to be lying across'
15.	butu	'to overturn'	butu	'to be lying face down'
16.	gua	'to place/ put on'	gua	'to be lying on'
17.	wone	'to turn downward'	wone	'to be turned/ pointing down- ward'

Group D: Lexical causativization

	<u>Causative dynamic</u>		<u>Non-causative stative</u>	
18.	sie	'to place on'	gyi	'to be (standing) on'
19.	to	'to put on'	la	'to be (lying) on'
20.	fa wula	'to place in'	wo	'to be in'

(B) Ditransitive and Transitive clauses

The causative/non-causative distinction is set up to handle such differences as those between the morphologically-related pairs of verbal forms occurring in the following syntactically- (and semantically-) related pairs of ditransitive and transitive clauses:

- | | | |
|------|---|---|
| (1a) | Akyé <u>nóa</u> Kofí nyéfónle
(Akye makes Kofi drink
breast milk) | (ditransitive,
causative, dynamic) |
| (1b) | Kofí <u>nó</u> nyefónle
(Kofi drinks breast milk) | (transitive,
non-causative, dynamic) |
| (2a) | Akyé <u>sóa</u> Kofí kyéle
(Akye makes Kofi put on a hat) | (ditransitive,
causative, dynamic) |
| (2b) | Kofí <u>zó</u> kyéle
(Kofi is wearing a hat) | (transitive,
non-causative, dynamic) |

It is to be noted that in (2a-b) the non-causative, stative verbal form zo 'to be wearing' (2b) is both morphologically related by suffixation and phonologically related by Type B mutation to the causative, dynamic verbal form soa 'to put on' (2a). The causative/non-causative relationship manifest in (1-2(a-b)) above exemplifies morphological causativization.

And also by analogy with the morphologically-and phonologically-related pairs of dynamic/stative verbal forms in (2a-b), the dynamic/stative pairs of phonologically-related verbal forms, between which the same syntactic (and semantic) relationship holds in the following corresponding ditransitive and transitive clauses, may be handled in terms of the causative/non-causative distinction.

- | | | |
|------|--|---|
| (3a) | Sanéba <u>kéda</u> Akyé édanlé
(Saneba makes Akye put on cloth) | (ditransitive,
causative, dynamic) |
| (3b) | Akyé <u>héda</u> édanlé
(Akye is wearing cloth) | (transitive,
non-causative, stative) |
| (4a) | Sanéba <u>kyé</u> Akyé fálé
(Saneba makes Akye put on a belt) | (ditransitive,
causative, dynamic) |
| (4b) | Akyé <u>kyé</u> fálé
(Akye is wearing a belt) | (transitive,
non-causative, stative) |

The above instances exemplify phonological causativization.

Pairs of causative/non-causative verbal forms occurring in corresponding ditransitive and transitive clauses, may, however, be identical in phonological shape and, therefore, exemplify zero causativization. The verbal forms may be simple verbs (e.g. wula 'to put on/to be wearing' and gua 'to inhale') as in (5-6(a-b)) below:

- | | | |
|------|--------------------------------------|---------------------|
| (5a) | Akyé <u>wula</u> Kofí tśladéś | (ditransitive, |
| | (Akyé makes Kofi put on a dress) | causative, dynamic) |
| (5b) | Kofí <u>wula</u> tśladéś | (transitive, non- |
| | (Kofi is wearing a dress) | causative, stative) |
| (6a) | Akyé <u>égua</u> Kofí áyilé | (ditransitive, |
| | (Akyé has made Kofi inhale medicine) | causative, dynamic) |
| (6b) | Kofí <u>égua</u> ayilé | (transitive, non- |
| | (Kofi has inhaled medicine) | causative, dynamic) |

The verbal forms may also be complex verbs (e.g. kye shone 'to starve/fast') as in (7a-b) below:

- | | | |
|------|------------------------------|---------------------|
| (7a) | Akyé <u>hyéle</u> Kofí śhóné | (ditransitive, |
| | (Akyé starved Kofi) | causative, dynamic) |
| (7b) | Kofí <u>hyéle</u> shóné | (transitive, non- |
| | (Kofi fasted) | causative, dynamic) |

It is to be noted that with the simple verbs, the verbal form in the non-causative transitive clause may be dynamic or stative. With verbs of adornment (e.g. wula) it is characteristically stative as in (5b); with verbs of medication (e.g. gua) it is dynamic as in (6b). In the case of complex verbs, the verbal form in the non-causative clause is usually dynamic as in (7b).

On the basis of the above description, three main groups (A-C) are distinguished among verbs which may be related in terms of the causative/non-causative opposition in corresponding ditransitive and transitive clauses. Group A consists of

morphologically-related causative/non-causative verbal forms - i.e. morphological causativization; two sub-sets (I-II) are further set up within Group A on the basis of whether the non-causative verbal form may be specified as dynamic or stative. Group B consists of phonologically related causative/non-causative verbal forms - i.e. phonological causativization. Group C consists of zero causativization which are sub-divided according to whether the non-causative verb is stative or dynamic, the latter being further grouped into simple and complex verbs.

Group A: Morphological causativization

Group A.I:

	<u>Causative dynamic</u>	<u>Non-causative dynamic</u>	<u>Causative suffix</u>
1.	<u>noa</u> /nŭwã / 'to make drink'	<u>no</u> /nũ / 'to drink'	/-wã /

Group A.II

	<u>Causative dynamic</u>	<u>Non-causative stative</u>	<u>Causative suffix</u>
2.	<u>soa</u> /sŭwa / 'to put on'	<u>zo</u> /zũ / 'to be wearing'	/-wã /

Group B: Phonological causativization (verbs of adornment)

	<u>Causative dynamic</u>	<u>Non-causative stative</u>
3.	kye 'to put on (belt)'	hye 'to be wearing'
4.	keda 'to put on (cloth)'	heda 'to be wearing'

Group C: Zero causativization

Group C.I (Verbs of adornment)

	<u>Causative</u> <u>dynamic</u>		<u>Non-causative</u> <u>stative</u>
5.	bo	'to tie, put on (turban)'	bo 'to be wearing'
6.	mo	'to tie, put on (loin cloth)'	mo ' " " '
7.	wula	'to put on (dress)'	wula ' " " '

Group C.II: (a) Simple verbs (of medication)

Causative, dynamic/non-causative, dynamic

8.	bia	'to wash'
9.	tua	'to insert (in arms)'
10.	gua	'to inhale'
11.	sela	'to give enema'
12.	twi	'to daub'

Group C.II: (b) Complex verbs

13.	kye shone	'to starve; to fast'
14.	kye nvoninli	'to take photograph of'; 'to have photograph taken'
15.	bo anyiemgba	'to disgrace; to be disgraced'
16.	bo bosea	'to give loan, lend; to take loan, borrow'
17.	bo kake	'to impose fine; to pay costs'

Group C.II: (c) Verbs of cognition

18.	kakye	'to remind; to remember'
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(C) Transitive and Intransitive Clauses

We shall also find pairs of morphologically-related verbal forms between which the causative/non-causative relationship holds in corresponding transitive and intransitive clauses. The following illustrative pairs of clauses are in the positive perfect tense and involve the verbal forms (1) nua/nu 'to put/to go out' and (2) sea/se 'to make pass/to pass':

- | | | |
|------|---|---|
| (1a) | Akyé <u>énlua</u> senlé ne
(Akye has put out the fire) | (transitive,
causative, dynamic) |
| (1b) | senlé ne <u>énlu</u>
(the fire has gone out) | (intransitive,
non-causative, dynamic) |
| (2a) | Akyé <u>ézea</u> eyevóls ne
(Akye has made the guest pass) | (transitive,
causative, dynamic) |
| (2b) | eyevóls ne <u>éze</u>
(the stranger has passed). | (intransitive,
non-causative, dynamic) |

In the above examples, the causative verbal forms occurring in the (a) transitive clauses are morphologically related by suffixation to the non-causative verbal forms occurring in the corresponding (b) intransitive clauses, and the causative/non-causative relationship here exemplifies morphological causativization.

Other morphologically-related pairs of causative/non-causative verbal forms in corresponding transitive/intransitive clauses are: (3) siane 'to make return'/sia 'to return' and (4) benle 'to make invulnerable'/'be 'to become invulnerable'. The variant causative suffixes which mark the causative verbal forms in the various examples may well represent remnants of morphological processes of the formation of causative verbal forms that were historically more or less productive.

The occurrence of each suffix with a particular verb stem is, in general, determined by the sub-class of the verb stem. For example, with directional verbs such as (1) fola/fo 'to make climb/to climb' it is realized as /-la/, as /-nlã/ with locational verbs such as (2) gyinla/gyi 'to stand, stop/ to be standing' and as /-wã/ with verbs of adornment as in (3) soa/zo 'to put on/to be wearing' or verbs of medication as in noa/no 'to make drink/to drink'.

By analogy with the previous examples (1-2(a-b)), we may also handle, in terms of the causative/non-causative opposition, pairs of verbal forms which can occur, albeit in identical shape, in corresponding transitive/intransitive clauses. Such verbal forms may be either simple verbs (e.g. tunwue 'to wake up') as in:

- (3a) Akyé édunwue eysvóle ne (transitive,
(Akye has woken up the stranger) causative, dynamic)
- (3b) eysvóle ne édunwue (intransitive,
(the stranger has woken up) non-causative, dynamic)

or complex verbs (e.g. tu ahonlé 'to frighten) as in:

- (4a) Akyé dúle Kofí áhonle (transitive,
(Akye frightened Kofi) causative, dynamic)
- (4b) Kofí áhonle dúle (intransitive,
(Kofi became frightened) non-causative, dynamic)

By contrast with the cases of morphological causativization exemplified in (1-2(a-b)) above, the causative/non-causative relationship in such instances as (3-4(a-b)) may be regarded as exemplifying what we have distinguished as zero causativization. The term 'ergative' is now generally used to distinguish such verbs.

It is to be noted, as a characteristic feature of causative/non-causative verbal forms occurring in corresponding transitive/intransitive clauses, that such verbal forms are dynamic in either transitivity clause-type.

The above examples (1-4(a-b)) illustrate the possible ways in which pairs of verbal forms which can occur in corresponding transitive/intransitive clauses may be handled in terms of the causative/non-causative aspectual distinction. On the basis of the above analysis, two main groups (A-B) may be distinguished among such verbal forms. Group A consists of morphologically-related causative/non-causative verbal forms exemplifying morphological causativization and Group B consists of ergative verbs exemplifying zero causativization.

Group A: Morphologically-related verbal forms
(Morphological causativization)

	<u>Causative</u> <u>dynamic</u>	<u>Non-causative</u> <u>dynamic</u>	<u>Causative</u> <u>suffix</u>
1.	sea /s(ĩ)jã / 'to allow to pass'	se /sĩ / 'to pass'	/-jã/
2.	siane/syan(ĩ)/ 'to make to turn back'	sia/sya/ 'to turn back'	/-n(ĩ)/
3.	benle/bẽnlĩ / 'to make invulnerable'	be /bĩ / 'to become invulnerable'	/-nlĩ/
4.	nua /nũwã / 'to put out (fire)'	nu /nũ / 'to go off'	/-wã /

It should be noted that, in a transitive clause, items (1-3) may take a definite animate object noun phrase which, by definition, is pronominalizable. Item (4) is different in

requiring an inanimate object noun phrase and belongs to the sub-class of transitive verbs which favour pronominalization of their definite inanimate object noun phrase.

Among ergative verbs of Group B two main sub-divisions (I-II) may be set up on the basis of whether they take an animate (B.I) or inanimate (B.II) object noun phrase and within each sub-division simple verbs are separated from complex verbs. In the case of verbs of Group B.II, two sub-sets are distinguished on the basis of whether or not the verbs favour the pronominalization of their definite inanimate object noun phrase.

Group B: Ergative verbs (Zero causativization)

Group B.I: (a) Simple verbs which take an animate object noun phrase

1. boda 'to injure, hurt'
2. tunwue 'to wake up'
3. bia 'to wash'
4. sske 'to spoil, pamper'
5. sokoe 'to help set down load'

(b) Simple verbs which take an object noun phrase which is a genitive construction consisting of an animate nominal as the possessor and a body-part name as the possessed

6. ps 'to cut (somebody's hand)'
7. tu 'to extract (somebody else's tooth)'

(c) Complex verbs consisting of a verb stem plus body-part name (which may be an inalienable noun as in (8-9) or an alienable noun as in (10-11)) such that in a transitive clause the object noun phrase is a genitive construction

8. die enyels 'to entertain'
9. tu bo 'to exhaust'
10. tu ahonle 'to frighten'
11. te ebole 'to harass, bother'

Group B. II: (a) Simple verbs which favour the pronominalization of their definite inanimate object noun phrase

1. bo 'to break'
2. bu 'to break down, demolish'
3. bondo 'to dent'
4. tulu 'to loosen, untie (parcel)'
5. kolo 'to melt'
6. seke 'to spoil, destroy'
7. te 'to tear'
8. sua 'to tear'
9. yela 'to burn'
10. doa 'to soak'
11. kpuke 'to burst'
12. fiti 'to hole, make a hole in'
13. tenda 'to make tangled (thread)'
14. solo 'to fade(cloth)'
15. minli 'to lose'
16. gyinla 'to stop'

Group B.II: (b) Simple verbs which do not favour the
pronominalization of their definite
inanimate object noun phrase

- 17. so 'to light'
- 18. tu 'to untie (loin cloth)'
- 19. buke 'to open (door)'
- 20. tukue 'to open (box, door)'
- 21. sianyi 'to untie (belt, load)'

Group B.II: (c) Complex verbs consisting of a verb stem
plus an inalienable noun, such that in a
transitive clause the nominal object is
realized as a genitive construction

- 22. to nuhua 'to close, shut'
- 23. tu o bo 'to exhaust'

Group C: Additional cases (Verbal Adjectives with
dynamic use)

- 24. tenre 'to straighten; to become straight'
- 25. kyea 'to bend, incline; to become bent'
- 26. kpo 'to bend; to become bent'

C o n c l u s i o n

This study of the verbal piece in Nzema has been an attempt to present, in formal terms, the main grammatical categories, an account of the terms in each category and their relationships to each other. And so far as the present writer is aware, this study is the first detailed and coherent description of this part of the syntax of the language. It has not been possible, however, to deal with all the categories set up to the same extent, and other equally interesting aspects of the verbal piece, for example reduplication, serial verbal construction and finite and non-finite clause objects, have either received scant mention or been necessarily omitted.

The area of the grammar investigated is complex and the number of categories set up is greater than one would have to contend with in a comparable study of nominal pieces. The verb word as a linguistic unit has a variety of structural patterns, and the same verb word may be used in various senses and, therefore, enter into a number of transitivity clause-types or occur with different aspects. The language exploits combinations of intonation, consonant mutation and other phonological features in addition to such morphological features as affixation and choice from possible pronominal sets in effecting subtle differences of meaning.

All these complexities confirm Palmer's observation that "the most difficult part of any language is usually that part that deals with the verb. Learning a language is to a very

large degree learning how to operate the verbal forms of that language " (1965: 1).

It is hoped, however, that this study has contributed significantly to an understanding of this area of the grammar of the language and, in particular, shown the relationship of the terms in each category to each other; and, by adopting a hierarchical approach, has given a clear picture of the way the language works in so far as the verbal piece is concerned. It is very unlikely that the findings of this study are restricted to the language under examination.

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- FL - Foundations of Language. International journal of language and philosophy. Dordrecht, Holland.
- IJAL - International Journal of American Linguistics. Baltimore.
- JAL - Journal of African Languages. Published under the joint auspices of Michigan State University and The School of Oriental and African Studies, University of London, London.
- JL - Journal of Linguistics. The Journal of the Linguistics Association of Great Britain. London and New York.
- JWAL - The Journal of West African Languages. Published by Cambridge University Press in Association with The West African Languages Survey and the Institute of African Studies, University of Ibadan. London.
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