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ABBREVIATIONS AND DIACRITICS (GENERAL USAGE)

Abbreviations

adv	adverb
ASSOC	associative
BKRF	backreference marker
CF	counterfactual
coord conj	coordinating conjunction
CTS	contingent temporal succession
DEIC	deictic
DEM	demonstrative pronoun
D.PST/PR	distant past/prior
DUR/HAB	durative/habitual
E	(see [pronoun].E)
emph	emphasis
EQU	equative
EX	existential
F	frases
FOC	focus marker
F&	focal coordinating conjunction
FUT	future
H	high tone
I	(see [verb].I)
ID/SUB	identification subordinator
IDEO	ideophone
L	low tone
M	mid tone
NC	noun class
NEG	negative
NP	Noun Phrase
NR.PST	near past
NW	Noun Word
P	(see [verb].P)
pl	plural
PN	pronoun
PoPhr	Postpositional Phrase
POS	possessive
PRIOR	prior, temporally or logically
PROB	probability
PROG	progressive
[pronoun].E	emphatic pronoun
REL	relative pronoun

S	(see [verb].S)
sg	singular
SJV	subjunctive
SS	same-subject chain marker
SUBS1	“near” subsequent
SUBS2	“far” subsequent
TAM	tense, aspect, modality
[verb].I	Imperfective verb
[verb].P	Perfective verb
[verb].S	Stative verb
[verb] (no grammatical gloss)	invariant verb
V.I	Imperfective verb
V.N	Neutral verb
V.P	Perfective verb
V.S	Stative verb
VP	Verb Phrase
VW	Verb Word
1-13	noun classes 1-13

Diacritics

acute accent (e.g., á)	high tone
overscore (e.g., ā)	mid tone
grave accent (e.g., à)	low tone

ABBREVIATIONS AND NOTATIONS SPECIFIC TO FLEMING'S MODEL

Abbreviations

ACT	ACTIVITY
Arr	Arrangement
ATTBTN	ATTRIBUTION
C	central sequential position
EXPR	EXPRESSION
F	following sequential position
Log	Logical
LOG	LOGICAL
P	preceding sequential position
SIMUL	SIMULTANEOUS
SUBS	SUBSEQUENT
Tmp	Temporal
TMP	TEMPORAL

Notations

Superscripted letters	stratal levels
M	Morphosyntactic stratum
S	Semantic stratum
CS	Communication Situation stratum
Initial capital letter	Construction
ALL CAPITAL LETTERS	CONSTITUENT of a Construction

Symbols

/ (e.g., S/M)	upper-to-lower level realization
\ (e.g., M/S)	lower-to-upper level realization
	conditioning environment; "in the environment of"
: (e.g., Clause.F1: NP)	indicates a filler following a function or constituent position
. (e.g., Clause.F1)	indicates that what follows is a constituent of what precedes
ϕϕ	double zero realization (element is present on upper stratum but not realized on lower stratum)
()	indicates a sub-type (e.g., ^S Event(ACT) = Semantic ACTIVITY Event)

AN OVERVIEW OF GANGAM GRAMMAR

1. GOALS OF THIS PAPER

In this paper I give the reader a typological overview of Gangam and familiarize him with its basic morphosyntactic constructions. It is not meant to be a definitive work on Gangam grammar, but is rather meant as an introductory study. As my point of departure, I use the communication model developed by Ilah Fleming as presented in *Communication analysis: A stratificational approach, volume II* (1988). This model affords the opportunity to present the semantic content which the various constructions encode, via constituent structure charting of the different morphosyntactic constructions. I also give consideration to the structural level higher than the Clause and consider the status of the Gangam Clause Chain.

2. THE GANGAM LANGUAGE

Gangam¹ is a Gur language spoken by perhaps 65,000 adults,² predominantly in the Oti *Préfecture* of Northern Togo and in the *Sous-Préfecture* of Coby in the Atacora region of Northern Benin. Dialectal differences manifest themselves between the inhabitants of Gando, Mogou, and Tontondi, respectively, as one moves from south to north. Due to the influence of the Tchokossi people, whose term *gangan* 'bush people' is used to refer to non-Muslims or 'pagans', what I refer to as Gangam is often grouped together with a closely related language to the south, spoken in and around Koumongou (Kelly 1993:1).³ These dialectal differences are part of the Gur continuum, and distinctions between what should be considered related languages on the one hand and dialects within languages on the other are not always clear. This study is based on the dialect spoken in and around Gando.

The Gur language family is positioned within Niger-Congo as follows in Figure 1, taken from Williamson (1989:21).

¹Gangam is also known as Migangam, Ngamgam, and Dye (Naden 1988:43).

²A 1997 census of the cantons of Gando and Mogou (in Togo) revealed approximately 42,000 people 18 years old or older residing in these two cantons. Perhaps 80% of these people are Gangam, giving an estimated adult Gangam population of 32,000. It is further believed that an equal number of Gangam people live in the contiguous areas of Benin.

³Kelly cites Karan (1981:14-15, 21), saying that 'these Gangam dialects are "links in a chain" tying together Konkomba, in the south, to Moba and Gurma (sometimes referred to as Gurmantche) in the north.'

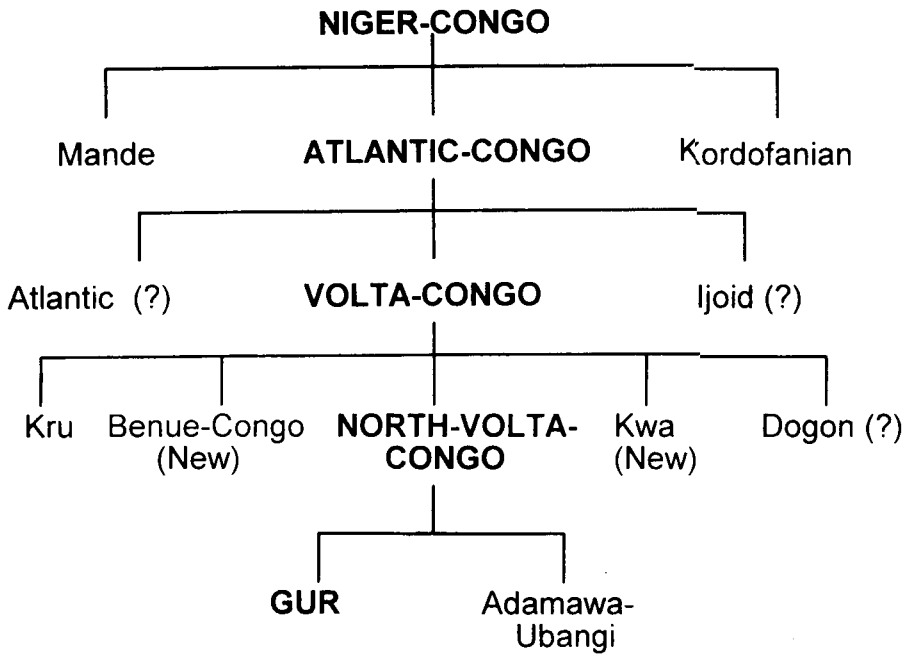


Figure 1. The Gur language family within Niger-Congo.

Naden (1989:144-146) classifies Gangam within the Gur family as follows in Figure 2.

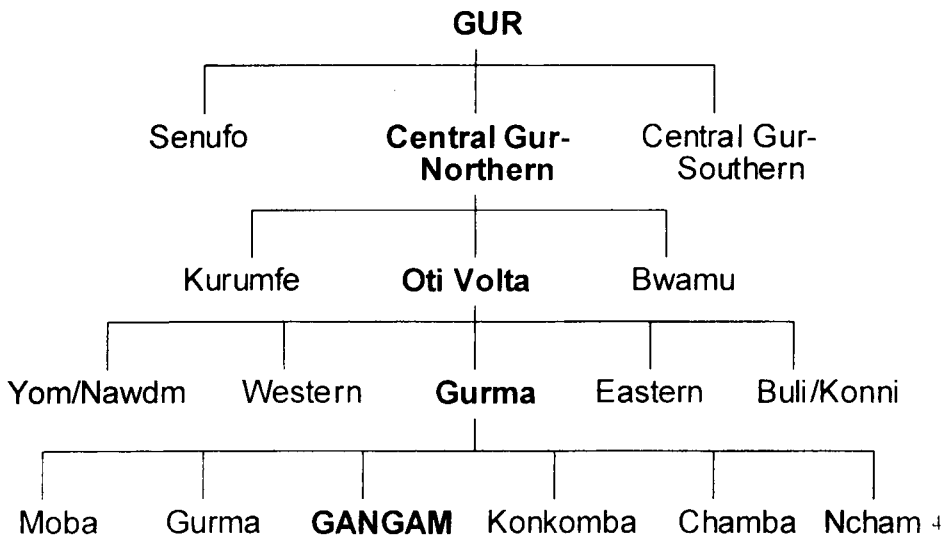


Figure 2. Gangam within the Gur language family.

⁴ I have substituted *Ncham* for Naden's term *Bassari*. *Ncham* is the name of the language, whereas *Bassari* is the name of the people who speak it.

3. TYPOLOGICAL OVERVIEW

The typological distinction that has received the most attention, beginning with Greenberg (1963), is the basic word order of the clause (SVO for Gangam⁵). This has been further refined (Lehman 1973 and Vennemann 1973) to VO versus OV as the most basic predictor of other word order features of a given language. This distinction can be restated as head-dependent versus dependent-head constituent order, respectively.

Dryer (1995) says that ‘VO languages tend to employ prepositions. In other words, objects of adpositions tend to precede the adpositions in OV languages, but to follow in VO languages.’ Given the VO (head-dependent) word order found in Gangam, one would expect to find prepositional phrases. However, Gangam has postpositional phrases rather than prepositional phrases.

As with other Gur languages, Gangam has both dependent-head and head-dependent structures. Although a dependent-head relationship is exhibited in the postpositional phrase, the noun phrase exhibits a predominantly head-dependent relationship. These less-than-clear typological observations lead one to question whether the VO versus OV distinction is the best predictor for Gangam.

An alternative to the VO-OV distinction is proposed by Hawkins (1979; 1980; 1983, cited in Dryer 1995) who argues that ‘adposition type — whether a language uses prepositions or postpositions — seems to be a better predictor of other word order characteristics.’ In Gangam, however, this is still not a clear predictor.

Following the **head-dependent, or VO, pattern**, are the following constructions and sequences:

- 1) *Coordinating conjunctions followed by the Clause they introduce*. This includes the focal particle *ne* when it functions as a coordinating conjunction (‘and’); the subordinating conjunction *ten* ‘as if’, which relates two Clauses within a sentence; other coordinating conjunctions which serve to introduce sentences, whether particles or grammaticalized phrases; and the same-subject chain marker *ki* (see section 5.9).
- 2) *The verb-object sequence and the verb-adverb sequence*.
- 3) *The Noun Phrase*, in which the head noun precedes its modifiers.
- 4) *The determiner-noun sequence*.
- 5) *The verb sequences of volitional or causal verbs followed by the verbs carrying the main semantic content*, in which ‘want’ or ‘cause’ precedes the main verb.

⁵I am not aware of any exceptions to this basic word order.

Following the **dependent-head or postpositional pattern**, on the other hand, are the following constructions and sequences:

- 1) *Clausal subordinators* such as the conditional particle *la* 'if', the adverbial phrase *ma nno* 'like that/since', and the particle *so* (identification/subordinator). These appear after the Clause which they subordinate.
- 2) The *focal particle ne*, which follows the focalized Clause constituent.
- 3) Both instances of *morphosyntactic possession*. In both pronominal possession and possession with the particle *ya*, the possessed nominal follows the possessor.
- 4) The *Postpositional Phrase*.
- 5) The *Verb Phrase*, in which the inflected Verb Word follows uninflected verbal particles.⁶

Table 1 summarizes these typological observations.

TABLE 1

**GANGAM MORPHOSYNTACTIC STRUCTURES
AS TYPOLOGICALLY PREDICTIVE**

Head-Dependent (VO Patterning)	Dependent-Head (Postpositional Patterning)
coordinating conjunctions	Clause-clausal subordinators
verb-object, verb-adverb	focalized constituent-focal particle
noun-modifier	possession constructions (genitive-noun)
determiner-noun	Postpositional Phrase
volitional verb-content verb causal verb-content verb	Verb Phrase (uninflected particles-inflected Verb Word)

⁶My usage of the term Verb Phrase here does not include series of verbs. Whenever more than one verb is used in an utterance, the utterance is either a Clause Chain or a Sentence construction. Cf. 5) *verb sequences* above under **head-dependent pattern**.

4. AN INTRODUCTION TO FLEMING'S STRATIFICATIONAL COMMUNICATION MODEL

Fleming's model fits within the basic paradigm of Lamb (1966) and Lockwood (1972). Among the assumptions of this paradigm are those concerning the nature of language. According to Lockwood, 'language is a code known by its speakers, enabling them to serve as encoders and decoders in the communication process. ... [L]anguage is a system of relationships. ... [which] form the most appropriate characterization of a language' (1972:3).

The most distinctive feature about Stratificational Grammar is the presence of strata, or levels, which are posited. By convention, meaning is represented at higher levels and expression at lower levels. Stratificational Grammar is a performance model, and encoding and decoding are key notions.

Fleming makes several theoretical innovations within the stratificational framework. First, she posits five stratal levels. They are, in descending order, Communication Situation, Semantic, Morphemic (hereafter referred to as Morphosyntactic), Expression level, and Physical Phenomena. (See Figure 3.) Each of these levels consists of a single stratum except the expression level. Here multiple strata operate simultaneously. The expression level includes the phonemic stratum, in which phonological processes take place, as well as the Graphemic Stratum (written language), and so forth. Note that the stratal levels at each end of the spectrum, the physical phenomena level and the Communication Situation Stratum, contain extra-linguistic features. (This is indicated by the double lines bordering these levels.) The Communication Situation Stratum includes such things as the real or perceived referential realm, culture, and social setting. Realization relationships exist between both contiguous and non-contiguous strata.

Second, Fleming moves away from Lamb and Lockwood's theoretical postulate that only relationships (not units) exist in language. She incorporates something similar to Pike's (1967) earlier two-cell tagmeme into her model, and thus has distinct units on each stratum, such as the functions C^{S} PERFORMER, S AGENT, and the central position of the M^C clause, together with their appropriate distribution class fillers. In addition to units on each stratum, there are also constructions, such as semantic propositions.

Fleming's model provides an explicit means of looking at multiple phenomena, both linguistic and extra-linguistic,⁷ and the relationships between them. For example, the Semantic Proposition Event(ACTIVITY) typically has the following constituent structure: $S_{Event}(ACTIVITY) = AGENT + ACTIVITY + PATIENT$. When both AGENT and PATIENT are present, it encodes two separate $CS_{Incident}$ s, those of PERFORMER and AFFECTED, whose constituent structures are: $CS_{Incident}(PERFORMER) = PERFORMER + PERFORMANCE$, and $CS_{Incident}(AFFECTED) = AFFECTED + PERFORMANCE$. $S_{Event}(ACTIVITY)$ in turn can be encoded by several different morphosyntactic constructions, the most common of which is M_{Clause} , whose emic constituent structure of relative positions is defined uniquely for each language. At the level of discourse analysis, text structures on the Communication Situation stratum have realization relationships with lower strata, and the model calls for propositional and interpropositional semantic content to be analyzed in relation to these text structures.

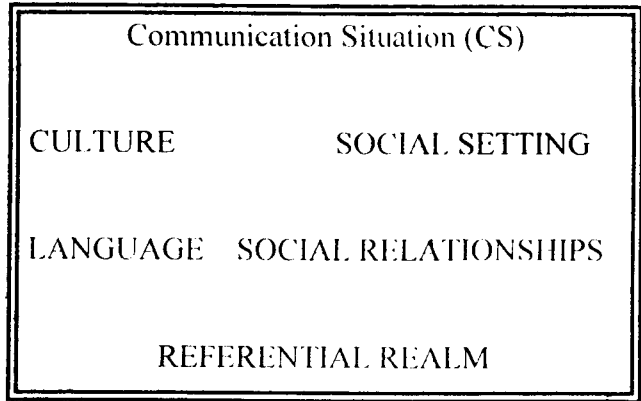
I will use certain notational devices unique to Fleming's model in the body of this study. These include Initial Capital Letters, ALL CAPITAL LETTERS, SUPERSCRIPTED letters, and the symbols \cdot / \cdot , $\cdot \setminus \cdot$, $\cdot \parallel \cdot$, $\cdot : \cdot$, and $\cdot \cdot \cdot$. Initial capital letters indicate a construction, e.g., a Semantic Proposition. All capital letters indicate a function within a construction, e.g., AGENT within $S_{Event}(ACTIVITY)$. Superscripted letters indicate the stratum to which a construction or function belongs, e.g., $S_{Event}(ACTIVITY)$ belongs to the Semantic stratum. The symbols \cdot / \cdot and $\cdot \setminus \cdot$ indicate realization relationships between strata: the former from an upper stratum to a lower stratum, and the latter from a lower stratum to an upper stratum. The symbol $\cdot \parallel \cdot$ indicates environmental conditioning and is read, 'in the environment of.' The colon ($\cdot : \cdot$) indicates the filler of a constituent position or function, e.g., S_{AGENT} : thing, i.e., Semantic AGENT filled by a member of the Semantic 'thing' class. Finally, the period ($\cdot \cdot \cdot$) indicates that what follows is a constituent of what precedes, e.g., NP.C for the central position of a Noun Phrase.

⁷Sociolinguistic and cultural phenomena are two of these.

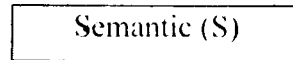
**STRATAL
LEVELS**

STRATA

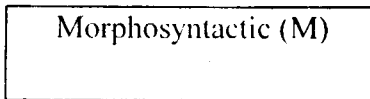
**Communication
Situation:**



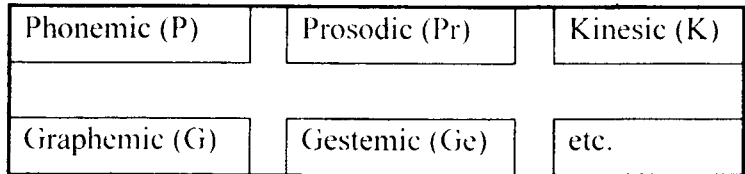
Semantic:



**Morpho-
syntactic:⁸**



Expression:



**Physical
Phenomena:**

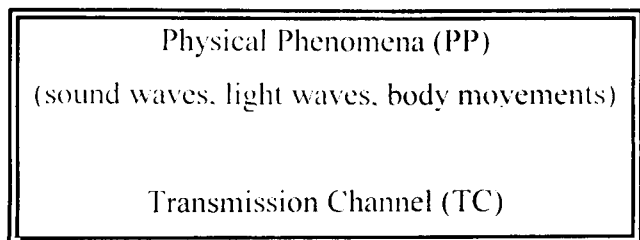


Figure 3. Fleming's stratal levels and strata.

⁸Fleming's original figure (1988:5) calls this stratal level *morphological*, and the corresponding stratum *morphemic*. According to Wang (1992:28), Fleming 'uses the terms "Morphemic", "Morphological", and "Morphosyntactic" interchangeably and will be standardizing on the latter (personal communication).'

5. BASIC MORPHOSYNTACTIC CONSTRUCTIONS

In this section, I examine the basic building blocks of Gangam morphology and syntax, starting with Noun Word and moving through the Sentence level.

As a basic tool in presenting the constituent analyses of these constructions, I will use charts patterned after those used by Fleming (1988). (See, for example, Table 11.) The second row from the top in each chart, when read from left to right, provides a tactic formula of the construction, e.g.,

$$M_{\text{Clause}} = P^n: NP + C: VP + F1^n: NP + F2: \text{PoPhr} + F3: \text{adv.}$$

This formula reads as follows: 'The morphosyntactic Clause is composed of an iterative preceding position filled by Noun Phrase, plus a central position filled by Verb Phrase, plus an iterative first following position filled by Noun Phrase, plus a second following position filled by Postpositional Phrase, plus a third following position filled by adverb.' Not every constituent position is required in every specific instance of the construction, and iterative positions are not always realized iteratively. The name of the construction appears at the far left, preceded by a superscripted M, placing the construction on the morphosyntactic stratum. By convention, initial letters of constructions begin with a capital letter. Constituents of the construction are identified by relative position (or sometimes by absolute position), and are labeled as central (C), preceding (P), and following (F). Where more than one position precedes or follows the central position, these are numbered consecutively moving away from the central position.

The top row in each chart shows the upper level *realizes*, that is, the Semantic, or sometimes Communication Situation, content of the construction's respective constituent positions. The left-most column identifies the upper-level realizes corresponding to each example line in the chart. Usually, realizes of constituent positions (the top row) are *functions* of semantic propositions, and realizes of constructions are the *propositions* themselves. This relationship can, however, be skewed. Semantic and Communication Situation realizes given in each chart are illustrative only; they do not constitute an exhaustive listing of possible realizes. Each data line in the chart is an instance of the morphosyntactic construction under consideration. For the reader's convenience, a free translation is provided in the column at the far right.

5.1 M_{Noun} Word

Gangam is a noun class language; that is, each noun is inflected to indicate the class to which it belongs. Thirteen noun classes have been identified.⁹ Classes 1, 2, and 10 are each subdivided (1, 1a, etc.) by differences in affixation. They are not analyzed as separate classes, however, because of pronoun agreement. These thirteen classes manifest twelve different

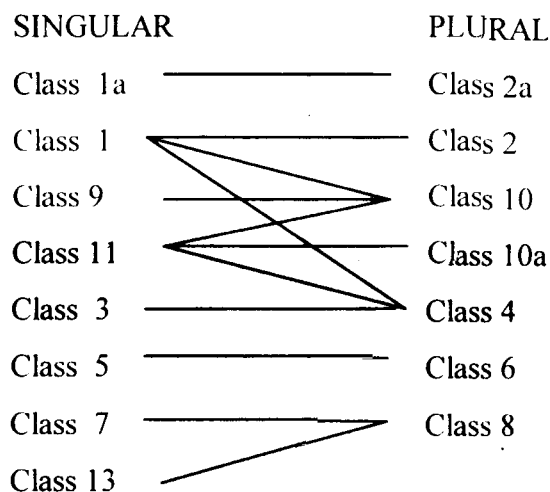
TABLE 2
GANGAM NOUN CLASS MARKERS,
WITH EXAMPLES OF EACH CLASS

class	proclitic	suffix	sg/pl	example
1	ū-	-M	sg	unil 'person'
1a	(Pos)-	-M	sg	baa 'father'
2	bī-	-b(ī)	pl	binib 'people'
2a	(Pos)-	-m̀bè	pl	baambe 'fathers'
3	lī-	-l(ī)	sg	lilol 'truck'
4	ī-	-(n)M	pl	Ibopien 'Whites'
5	kī-	-k(ī)	sg	kidaak 'market'
6	mú-	-mú	pl	mubumu 'children'
7	kú-	-kū	sg	kunɔnk '(piece of) meat'
8	tí-	-d(ī)	pl	tinɔnt 'meat'
9	ú-	-H	sg	usen 'road'
10	í-	-(n)H	pl	ijen 'fish'
10a	í-	-dé	pl	itɔnde 'bows'
11	bú-	-b(ū)	sg	buciib 'soap'
12	mī-	-m(ī)	mass	miñunm 'water'
13	nī-	-n(ī)	sg	nibonn 'thing'

⁹Kelly (1993) expands on work done by Reimer (1983) to arrive at his analysis of the Gangam nominal class system.

singular-plural groupings (Kelly, 1993).¹⁰ Class 12 is composed of mass nouns and nominalized verbs, such as *miñunm* ‘water’ and *miguɔnm* ‘sleep’, and stands alone as an ‘unpaired class’ (De Wolf 1971:32). Table 2 shows the classes, along with examples of each class. (In this table, H and M refer to high tone and mid tone, respectively. Note also that ú, ū, and ù represent high, mid, and low tones respectively. Although tone is marked in Tables 2 and 4, elsewhere in this work Gangam examples are written in current Gangam orthography, which leaves most tones unmarked.) Table 3 shows the singular/plural groupings of these classes. Certain Class 1 roots, for example, form their plural by affixation from the plural Class 2, while others do so by affixation from plural Class 10.

TABLE 3
SINGULAR/PLURAL PAIRINGS (GENRES)
OF GANGAM NOUN CLASSES



In addition, there exists in Gangam an extensive system of agreement of pronouns and NP elements with the head noun. This system is presented in summary form in Table 4.¹¹ Note that separate sets of personal pronouns are limited to first and second person; for third person, the pronoun sets for Noun Classes 1 and 2 are employed.

¹⁰Although the term ‘class’ is sometimes also used to refer to the singular/plural pairings (see, for example, Naden 1988:34-36), I use the term ‘class’ here to refer to a set of affixal markings with its concordant pronouns and other NP elements. This usage follows Welmers (1973:163), De Wolf (1971:36ff), and Kelly (1993).

¹¹Table 4 is taken from Kelly (1993:27), but I have reversed Kelly’s numbering of classes 9 and 10.

TABLE 4
SYSTEM OF GANGAM NOUN CLASS AND
PERSONAL PRONOUN CONCORD

class	proclitic	suffix	subject	object	posses- sive	emphatic	negative	relative	demon- strative
1	ū-	-M	ù	wò	ū	wōn	wǎ	wà'	wúò
1a	(Pos)-	-M	ù	wò	ū	wōn	wǎ	wà'	wúò
2	bī-	-b(ī)	bì	bè	bī	bēn	bǎ	bà'	bíè
2a	(Pos)-	-mbè	bì	bè	bī	bēn	bǎ	bà'	bíè
3	lī-	-l(ī)	lì	lè	lī	lēn	lǎ	là'	líè
4	ī-	-(n)M	ì	yè	ī	yēn	yǎ	yà'	yíè
5	kī-	-k(ī)	kì	kè	kī	kēn	kǎ	kà'	kíè
6	mú-	-mú	mù	mù	mú	mūn	mùá	mùà'	múù
7	kú-	-kū	kù	kù	kú	kūn	kùá	kùà'	kúù
8	tí-	-d(ī)	tù	tù	tú	tūn	tǎ	tà'	túù
9	ú-	-H	wù	wù	ú	wūn	wǎ	wà'	wúù
10	í-	-(n)H	ì	yì	í	yīn	yǎ	yà'	yî
10a	í-	-dé	ì	yì	í	yīn	yǎ	yà'	yî
11	bú-	-b(ū)	bù	bù	bú	būn	bùá	bùà'	búù
12	mī-	-m(ī)	mì	mè	mī	mēn	mǎ	mà'	míè
13	nī-	-n(ī)	nì	nè	nī	nēn	nǎ	nà'	níè

person	Subject	Object	Posses- sive	Emphatic	Nega- tive
1sg	n̄	nn̄	n̄	m̄n	má
2sg	ā	ṅē	ā	s̄n	ṅá
3sg	(see Class 1 above)				
1pl	tī	tē	tī	tūnbì	tá
2pl	nī	ne	nī	nūnbì	ná
3pl	(see Class 2 above)				

Noun Words are composed of one or more roots and a suffix. Although the proclitic determiner makes up part of the phonological word in Gangam (and is written as part of the graphemic word in Gangam orthography), it is analyzed as a constituent of the Noun Phrase. The determiner and the suffix mark the class to which a noun belongs. The determiner is present in all cases except negation and possession.¹² Certain relational terms such as ‘mother’ and ‘Lord’ never take a determiner, but always occur in a possessive construction. These are classed as 1a and 2a.

(1) a’ naa (a’naa)
your mother

‘your mother’

(2) ti’ yonbdaan (Ti’yonbdaan)
our Lord

‘Lord (God)’

Certain borrowed words, such as *fanga* ‘pig’ have no proclitic. They have no singular suffix, but use the plural suffix *mbè* (Class 2a) and take pronouns from Class 1 for both singular and plural.

(3) fanga
‘pig’

(4) fangambe
‘pigs’

When a compound is composed of roots which are from two or more different classes, it is the semantically dominant root which determines the class of the compound. Thus in example (5), the compound formed by *u-kpen-H* ‘stream’ and *li-gben-l* ‘bank’ (‘stream bank’) takes its class from the primary root, *ligbenl* ‘bank’.

(5) li- kpen gben -l(i)
DET-3 stream bank NC3

‘the stream bank’

¹²Naden (1989:158) states of Gur languages: ‘Nouns characteristically have singular and plural class suffixes (sometimes, especially in the east, prefixes also or, rarely, instead).’

This semantically dominant root would be parallel in English to the noun, whereas the non-dominant root would be parallel in English to the adjective or nominal adjunct. The root with primary meaning occurs stem-finally; the root or roots with non-primary meanings (modifiers) precede.

In the case of a compound composed of a nominal root and a verbal root, Class 9 is chosen for singular compounds and Class 10 for plural. Thus in example (6), the compound formed by *bu-ñɔ-bu* ‘mouth’ and *kpaan* ‘agree’ takes the Noun Class 9 determiner and suffix, while in example (7), the compound formed by *miyɛnm* ‘conscience’ and *maale* ‘think’ takes the Noun Class 10 determiner and suffix. The verbal root occurs stem-finally; the nominal root precedes it.

- (6) ú- ñɔ kpaan -H
 DET-9 mouth agree NC9

‘an agreeing mouth’

- (7) í- yɛn maale -H
 DET-10 conscience think NC10

‘presence of mind’

Classes 1, 4, 9, and 10 have tonal rather than segmental suffixes. Table 5 summarizes ^MNoun Word.

TABLE 5

CONSTITUENT ANALYSIS OF THE GANGAM NOUN WORD

	^S MEMBER, ITEM, ATTRIBUTION	^S CLASS	
^M Noun Phrase =	C ⁿ : noun root, verb root	F: NC suffix	(graphemic word) + translation
^S Classification	ñun ‘water’	-m(i) NC12	miñunm ‘water’
^S Classification	soja ‘soldier’	-φ NC1a	soja ‘soldier’
^S Classification	na + fin + fin cow wake.up? wake.up?	-ku NC7	kunafinfiinku ‘butterfly’
^S Classification + Attribution	ñɔ + kpaan mouth agree	-H NC9	uñɔkpaan ‘agreement/an agreeing mouth’

TABLE 6

CONSTITUENT ANALYSIS OF THE GANGAM NOUN PHRASE

	SOWNER. REF-ego. AGENT. SPECIFI- CATION	SCOUNTED. SPECIFIED. IDENTIFIED. TOTAL. ACTIVITY	SIDENTI- FIER	SNUMBER. PROPOR- TION	SSPE- CI- FICA- TION	S ₂	
M _{Noun Phrase} =	P: PssrPhr, pn-pssv, determiner, det+le	C: NW, pn- pers, φφ	F1: RelCl, RelChain, RelPhrase	F2: NUM, ke, det+ba,	F3 ⁿ : nɔ, dem, nnɔ,	F4: nɔ, nɛ, mɔnɔn	
S ₂	mi- DET-12	n̄unm <i>water</i>				nɔ <i>also</i>	'water also'
S _{Specification}		dinnɔ <i>today</i>			ɔnɔ nɔ <i>dem DEIC</i>		'this very day'
S _{Specification}	ti' <i>our</i>	du <i>village</i>			ɔnɔ <i>dem</i>		'this our village'
S _{Event (ACT)}	uɔnɔ nɔ <i>rabbit too</i> ya POS	baam <i>arrival</i>					'The rabbit also arrived'
S _{proportion}	u- DET-1	nil <i>person</i>		ke <i>all</i>			'every- one'
S _{Event (EXPR)}	min ya <i>1sg-E POS</i>	gber <i>word</i>	tà n ye <i>REL I say</i> ń tɔke <i>I-SJ' speak</i>				'my word which I say I should speak'
S _{Count.} S _{Specification}	a' <i>your</i>	pomu <i>bowl</i>		uba <i>one</i>	nɔnɔ <i>BKRF</i>		'that one bowl of yours'
S _{proportion}	ti' <i>our</i>	φφ		ke <i>all</i>			'we all / all of us'
S _{Specification.} S _{Focus?}		φφ			ɔnɔ <i>dem</i>	nɛ <i>FOC</i>	'that (one) there'
S _{Specification +} CS _{INTENT: query}	li le	kuɔl					'which law?'
S _{Specification}	bi- DET-2	gengenb <i>Gangams</i>		biba <i>certain</i>			'certain Gangams'
S _{Focus?}	bu- DET-11	ciib <i>soap</i>				mɔnɔn <i>even</i>	'(not) even soap'

5.2 MNoun Phrase

The Gangam noun phrase follows a predominantly head/dependent word order, with modifiers following the noun. This is true with the exception of the preceding constituent position, which is filled by either the determiner, the possessive pronoun, the Possessor Phrase, or the determiner + *le*. For the sake of consistency, I have included the possessive pronoun and the possessor phrase as constituents of the Noun Phrase construction rather than considering them separately. In most typological studies, however, the word order of genitive/noun (or noun/genitive) is considered separately from Noun Phrase word order. This argues for calling the Noun Phrase predominantly head/dependent despite the presence of these preceding constituents.

Semantic content of the noun phrase construction includes identification, specification, proportion, and count. See Table 6 for a constituent analysis of MNoun Phrase.

The possible fillers of the preceding position are in complementary distribution; that is, only one possibility is allowed. The proclitic determiner is discussed in section 5.1 on the Noun Word. Use of the possessor phrase to encode specification is discussed in section 5.6. A parallel structure to this use is found in example (8), this time employing the question particle *le* instead of the possession particle *ya*. The meaning of this construction is ‘which one of?’ or ‘what?’.

- (8) Li le kuol yé likpiekl-i?
DET-3 what law be first.law

‘What is the most important law?’

Identification is encoded by means of an embedded relative Clause, relative chain, or relative phrase, which I have analyzed as the first following (F1) position. These embedded relative constructions serve to further identify the referent which stands as the head of the noun phrase, as in example (9). Note that specification can co-occur with identification (*nnɔ*, back-reference/ ‘[the thing] in question’).

- (9) binib bà tukeh tiwent ki lá kuoreh ti’ bo nnɔ
people REL bring-1 things SS SUBS2 sell-1 our on BKRF

‘those people who bring things and then sell them to us’

The second following position (F2) is filled by the particle *ke* ‘all’, the numeral, or determiner + *ba*, which function as proportion, count, and indefinite specification, respectively. The F3 position is filled by the demonstrative pronoun, the deictic marker *nɔ*, or the back-reference marker *nnɔ*. It is recursive, meaning that more than one of these

possibilities can be chosen in a given noun phrase, as in example (10). (In Table 6, the notation $F3^n$, denotes that the position F3 is recursive.)

(10) *dinnɔ wuɔ nɔ*
today PN13Dem DEIC

‘this very day’

Demonstrative pronouns vary in form according to the class of the nominal which they modify; they ‘concord with the class of the head noun’ (Naden 1989:158), as do all pronouns. Demonstratives can be either near or far in meaning, according to context, and are thus translated as either ‘this’ or ‘that’. The deictic *nɔ*, also translated ‘this’ or ‘that’ according to context, is a ‘pointing’ word, referring most often to a referent in the physical context.

(11) *Nɛ ti liebe’... ki lá baa’ iden nɔ.*
F& we return-P SS SUBS2 arrive-P house this

‘And we returned and then arrived at this house.’

By contrast, the back-reference particle *nnɔ* [ɲɲɔ] modifies a referent (or sometimes an action) already mentioned or already implicit in the discourse, as in example (12).

(12) *A take’ pomu uba ki baa’ la,*
you bring-P bowl one SS arrive-P if

a li kuɔre pomu uba nnɔ iŋɛ ne?
you FUT sell bowl one BKRF how.much FOC

‘If you bring one bowl [of millet], for how much then will you sell that one bowl?’

Indefinite specification (e.g. *kibuk kiba* ‘a child’), signaled by the F2 position, is at times ambiguous with the notion of count for singular nouns. Note that in example (12), co-occurring propositions of ownership and back-reference specification necessitate an interpretation of count (‘one bowl’) rather than indefinite specification (‘a bowl’). As is the case with all numerals in the F2 position, the word *uba* ‘one’ in example (12) above shows noun class agreement with its head noun. However, unlike other numerals, it is not the numeral used in counting (*nlen* ‘one’) which is at its base, but the particle *ba* ‘what’. When used in concordance with plural nouns, it very clearly means ‘some’ or ‘certain’, as in *binib biba* ‘some people’.

The fourth following (F4) position, while a constituent of the noun phrase, functions to relate the noun phrase to the other constituents of the Clause. This includes the focus particle and the particles translated ‘also’ and ‘even’.

The preceding (P) constituent position will be further discussed in sections 5.6 and 5.7, due to its close association with morphosyntactic possession.

5.3 MVerb Word

The Verb Word is inflected for aspect. Most verbs show a three-way contrast between the Neutral, Perfective, and Imperfective forms, but certain verbs, such as *ye* ‘say’, are invariant in form. With some verbs, neutralization of form exists between two of the aspects, and the aspect must be determined from the context. In addition, certain verbs have a fourth form, the stative, as in example (16).

The most common indicator of aspect in Gangam is tonal change on the verb.¹³ However, nasalization, vowel length, and affixation can also indicate aspect on certain verbs. In current Gangam orthography (used in this paper), tone is not marked except where needed to distinguish minimal pairs, but the Perfective and Imperfective verb forms are marked with an apostrophe and an ‘h’ following the verb, respectively, as in examples (14) and (15).

(13) *Neutral*: duɔn [dùón]

Duɔn!

lie.down

‘Lie down!’

(14) *Perfective*: duɔn' [dūòh]

Uwɔb tì baa' likpengbenl ki kpende' lisuɔnkel
goat SUBS1 arrive.P Stream.bank SS transform.P head.cushion

ki duɔn' usen ni.
SS lie.down.P path in

‘Goat then arrived at the stream bank and changed himself into a head cushion and lay down in the path.’

¹³Kelly (1993) gives a comprehensive treatment of tonal phenomena in relation to verbal morphology. He analyzes the Neutral form of the verb as basic, and the others as being derived from it.

(15) *Imperfective*: duɔndeh [dùòndé]

U duɔndeh daal ke daal tikur tita.
he lie.down.I day all day hour three

‘He lies down each day at three o’clock.’

(16) *Stative*: dɔ [dɔ]

N kebeh iba, itɔ dɔ licɛnkpekl.
I fish.I certain.ones others lie.down.S at.side

‘I am fishing for certain ones; others are there (on the ground) beside me.’

Reduplication also adds complexity to the Verb Word construction. Thus *kuɔre* ‘sell’ becomes *kɔkuɔre* ‘sell off (Distributive aspect)’ (17), and *kere* ‘bite’ becomes *kekere* ‘chew up (Intensive aspect)’ (18).

(17) Binib bɔle’ ki kuɔkuɔre’ iji nɔɔ
people hide.P SS sell.sell millet BKRF

‘People hid and sold off the millet’ (bowl by bowl to different people)

(18) kí taa lisuɔnkɛl kí kekere kekere
SS.SJV take head.cushion SS.SJV bite.bite bite.bite

kí le na yé nɔnku
SS.SJV see it.not be meat

‘... and let him take the head cushion and chew it to pieces and look to see that it’s not meat’

Example (18) above shows reduplication not only at the Verb Word level, but also at the Verb Phrase level, resulting in a double marking of Intensity. See Table 7 for a constituent analysis of the *M*Verb Word. The Verb Word is treated in more detail in Higdon (1996), chapter 3, ‘The Verbal System in Gangam.’

5.4 *M*Verb Phrase

The Gangam Verb Phrase consists of a Verb Word as the central constituent, a following position filled by *mɔ* ‘also’ or *ne* (focus), and three preceding constituent positions.

The Verb Word encodes the basic three-way aspectual distinction in Gangam in the central or head position of the Verb Phrase (VP.C). The first preceding constituent position (P1) is filled by a reduplicated Verb Word, giving the aspectual meaning of intensity. The reduplication of the Verb Word can co-occur with reduplication of the verbal root within the Verb Word, as in example (17) above. Other semantic and discourse-level TAM notions are encoded by verbal particles in the second preceding position (P2). These include relative sequencing and temporal notions such as *tì* (subsequent1), *lá* (subsequent2), *là* (prior/distant past), *wun* (immediate past or future), and *ji* 'now';¹⁴ future tense (*li*); counterfactuality (*bi*); insistence *li* 'surely'; and *laan* 'yet/still'.

TABLE 7

CONSTITUENT ANALYSIS OF THE GANGAM VERB WORD

		SINTENSITY, DISTRIBUTIVE	SASPECT	SASPECT	
MVerb Word =	P: reduplication	C ⁿ : verb root, infixation	F: -de/re, -ke, -le, -n, L, H		
Neutral		faá			'become day'
Perfective		fâà			'become day'
Imperfective		faa	-re		'become day'
Neutral		kó			'enter'
Perfective		kó	-n		'enter'
Imperfective		kô			'enter'
Neutral		púle			'roast'
Perfective		pulé			'roast'
Imperfective		púù			'roast'
Neutral		sókré			'wash'
Neutral	só-	sókré			'wash [each piece]'
Stative		ee			'stand'

¹⁴ The particle *ji* can be glossed 'now' in a positive clause or 'no longer' in a negative phrase. It signals a change in action or state.

(19) *Donc, a ji li liebe kí tì nuun*
 so.then you now FUT return SS.SJV SUBS1 search

ilike nɛ, kí lá pukn
 money FOC SS.SJV SUBS2 add

‘So then, now you’ll return to look for money to add to it...’

(20) *N là tì kuore’ wɔ ki teke’ awa unan nɛ.*
 I D.PST/PR SUBS1 sell.P it SS take 500F four FOC

‘I would then sell it and take 2,000 francs.’

(21) *Ti’ mɔ bi ŋmɔbeh iyɛnmaale la, ti bi li liike*
 our also CF have.I thoughts if we CF FUT look

nɛn saan nɛ ki ye
 itE beside FOC SS say

‘If we, too, were thinking, we would look around and say,...’

The subjunctive marker is realized as a clitic on the preceding subject position (or, in the absence of the subject, on the same-subject chain marker, which functions as a coordinating conjunction), and the negative marker coalesces with pronominal subjects and the same-subject chain marker. However, it seems best to consider the subjunctive and the negative markers also to be part of the verb phrase. In doing so, their relative sequential order is maintained, and they can be analyzed together with other TAM particles. The subjunctive and the negative particles are always followed directly by (other) VP constituents.

When the subject of a Clause is a noun or noun phrase, the negative appears as *ŋa* ‘not’. However, when the subject is pronominal, the negative coalesces with the pronoun. When negation co-occurs with the future particle *li*, the result is *la*, as in example (24).

(22) *Gobina ŋa laan de’ usɛn*
 government not yet give road

‘The government hasn’t yet shown the way.’

(23) Ba jin' nni
they.not eat me

'They didn't take advantage of me.'

(24) Ni la cèrè wenli wà we ní nnɔ ya
you.pl NEG.FUT allow tomorrow REL come here BKRF POS

gber í li wɛ̀bndeh nɛ.
affairs SJV FUT bother-I you

'Don't let the affairs of tomorrow bother you.'

In a similar fashion, the subjunctive appears as *í* when following a noun, noun phrase, or noun class pronoun as subject (25), but first- and second-person subject pronouns take the subjunctive high tone directly without the following epenthesis nasal segment (26). When the subjunctive occurs in a Verb Phrase which is preceded by the same-subject chain marker *ki*, it is realized as a high tone on the *ki* as in example (27).

(25) Ne usengbenl í tɔ̀kɛ uwɔ̀b
F& dog SJV speak goat

'And [he said] that Dog should tell Goat...'

(26) Tí nuunh tí li kuɔ̀rɛh ubiɛn wà.
we.SJV search.I we FUT sell.I price REL

'May we seek out the price at which we'll sell.'

(27) kí taa lisuɔ̀nkɛl kí kɛ̀kɛ̀rɛ kɛ̀kɛ̀rɛ
SS.SJV take head.cushion SS.SJV bite.bite bite.bite

kí lɛ na yé nɔ̀nku
SS.SJV see it.not be meat

'...and let him take the head cushion and chew it to pieces and look to see that it's not meat'

When they co-occur, the negative precedes the subjunctive. The negative is therefore analyzed as filling the third preceding constituent position (P3), while the subjunctive is combined with other TAM particles in the second preceding position (P2). See Table 8 for a constituent analysis of *M*Verb Phrase.

TABLE 8

CONSTITUENT ANALYSIS OF THE GANGAM VERB PHRASE

	SNEG- ATION	STENSE, MODE	SINTENSITY, DISTRIBU- TIVE	SASPECT + ACTIVITY, ATTRIBUTION, EXPERIENCE, ABILITY, etc.	CSINTEREST, SEMANTIC ADDITION, SINTENSITY	
MVerb Phrase =	P3: N (negative)	P2 ⁿ : H (SVJ clitic), particle	P1: redupli- cation	C ⁿ :VW, verb root	F ⁿ : mɔ, nɛ	
	N (ŋa) NEG	laan yet		de' give		'hasn't yet given'
		li FUT		fre be.able		'will be able'
	N (ŋa) you.NEG	ji li now FUT		le see		'now [you] won't see'
		H (tí) SVJ		nuunh search		'may [we] seek out'
		là tì D.PST/PR SUBS1		kuɔre' sell		'would then sell'
	N (ba) they.NEG			jin' eat		'they didn't eat (take advantage of) [me]'
	N (na) it.NEG	H (ń) SVJ		baa arrive		'[it] would not suffice'
		ji lá now SUBS2		kuɔre' sell		'now, [you] then sold'
		bi li CF FUT		liike look		'would look'
		ji now		φφ		'now [rainy season is here]'
		bi li CF FUT		gbo be.full		'would be full'
				jɔreh stupid.I	mɔ nɛ-aa also FOC. emph	'[you] are incredibly stupid!'
			kekere chew.up	kekere chew.up		'chew to pieces'

5.5 M^{Postpositional} Phrase

The Postpositional Phrase is composed of a nominal followed by a postposition and, optionally, the focal particle *ne*. See Table 9 for a constituent analysis of M^{Postposition} Phrase.

TABLE 9
CONSTITUENT ANALYSIS OF THE GANGAM
POSTPOSITIONAL PHRASE

	S _{SP-LOCATED} , T-LOCATED, PATIENT, RECIPIENT	S _{SP-LOCATION} , SP-POSITION, SP-DIRECTION T-LOCATION, T-POSITION	S _{FOC}	
M ^{Postpositional} Phrase =	P: NW, NP	C: postposition	F: ne	
S _{SP-LOCATION} + SP-POSITION	likpembengbenl <i>river.bank</i>	bo <i>on</i>		'on the river bank'
S _{SP-LOCATION} + SP-POSITION	ti'du wuu <i>our.village this</i>	ni <i>in</i>		'in this our village'
S _{PATIENT}	ti' like nno <i>our.money BKRF</i>	bo <i>on</i>		'[The White man has devalued] our money.'
S _{RECIPIENT}	ti' jaar <i>our.those.of</i>	bo <i>on</i>	ne <i>FOC</i>	'[we also should add] to ours.'
S _{T-LOCATION} + T-POSITION	ɲmaalniin <i>month.eight</i>	ni <i>in</i>		'in the eighth month'
S _{SP-LOCATION} + SP-DIRECTION	Lilenl <i>(PLACENAME)</i>	bó <i>toward</i>		'[if you have a bicycle and go] toward Lilenl'
S _{SP-LOCATION} + SP-POSITION	bɔfre <i>papaya</i>	saan <i>beside</i>		'beside the papaya'

Gangam has four postpositions: *ni* 'in', *saan* 'beside', *bo* 'on', and *bó* 'toward'. The first three indicate spatial position. The fourth, *bó*, indicates spatial direction, 'toward'.

(28) Bon, min ya gber si... iji ya kuorn
OK 1sgE POS word own millet POS selling

ti' du wuu ni.
our.village this in

'OK, my word concerns ... the selling of millet in this our village.'

(29) U la baa' ukpen saan so,
he SUBS2 arrive-P marsh beside SUB

'Then he arrived beside the marsh.'

(30) Lisuonkel ti lu' likpengbengbenl bo,
head.cushion SUBS1 fall-P river.bank on

'The head cushion fell on the riverbank.'

(31) A taa' kumuoku ki ti nen' Lilenl bó la,
you take-P Mogou SS SUBS1 leave Lilenl toward if

'If you go via Mogou and head toward Lilenl, ...'

In addition to these primary meanings, three of the four postpositions have secondary meanings. *Ni* 'in' can also be used in the sense of temporal location combined with temporal position,¹⁵ as in example (32).

(32) Kusiaku ji ní nmaalniin ni,
wet.season now here month.eight in

a li se ki ɲoh pepepeb!
you FUT stand SS tremble brrr!

'When rainy season comes in the eighth month, you'll stand and tremble – brrr!'

Saan 'beside' is also used in the grammaticalized phrase *nen saan ne* which functions as a coordinating conjunction and means 'so then' or 'therefore'.

¹⁵The terms 'temporal location' and 'temporal position' follow Fleming (1988:151-153), in which her semantic terminology draws a parallel between temporal and spatial notions.

(33) Nen saan ne, ti ke ń cuo ti' ba
PN13E beside FOC we all SJV catch our one

‘So then, we all should catch ourselves, ...’

Bo ‘on’ may mark the patient of certain verbs, as in example (34). This analysis is tentative; an alternate analysis would be that it marks the semantic notion of RECIPIENT, encoding the notion of doing X *to* Y. In example (35), *bo* ‘on’ is more clearly the marker of RECIPIENT. The context makes it clear that ‘our things’ is not what will be added, but what will be added onto.

(34) Ibonpien kuore' ti' like no bo.
Whites diminish our money BKRF on

‘The Whites have devalued our money.’

(35) Tibont pukndeh la, nì møn,
things add-I' if it good

ti' mø ń li pukndeh ti' jaar bo ne.
we also SJV FUT add our those.of on FOC

‘If the price of things is going up, fine, we also should raise the price on our things.’

In addition, *bo* ‘on’ is used in the grammaticalized phrase *ma bo*, which follows a Clause or Clause Chain and subordinates it, as in example (36).

(36) Nen saan ne, ti ke ń cuo ti' ba
PN13E beside FOC we all SJV catch our one

kí liike udu wuu cuonh ma bo.
SS-SJV look village this work how on

‘So then, we all should catch ourselves, and look at how this village works.’

5.6 M_{Possessor} Phrase

The Possessor Phrase in Gangam is composed of a nominal (Noun Word, Noun Phrase, etc.) followed by a semantically empty functor word, *ya*.¹⁶ See Table 10 for a constituent analysis of M_{Possessor} Phrase.

TABLE 10

CONSTITUENT ANALYSIS OF THE GANGAM POSSESSOR PHRASE

		ϕ	
M _{Possessor} Phrase =	P: NW, NP, pn-Emph, prefix-NC	C: ya	
S _{SPEAKER}	min <i>1sgEmph</i>	ya <i>POS</i>	'my [word]'
S _{TEMPORAL} LOCATION	Kidaak kà <i>market REL</i> gebre' nɔ <i>pass-P DEIC</i>	ya <i>POS</i>	'[the day] of the last market'
S _{Composition.} ITEM	ubatuuleŋmaal <i>White.man.month</i>	ya <i>POS</i>	'White Man month's'
S _{SPECIFICA-} TION	I <i>NC9</i>	ya <i>POS</i>	that [millet]
S _{REF-ego}	ipɔnd <i>frogs</i>	ya <i>POS</i>	'the frogs' [elder]'
S _{REF-ego}	upɔnd4 <i>frog</i>	ya <i>POS</i>	'the frog's [eldest child]'
S _{AGENT}	uwɔn mɔ <i>rabbit also</i>	ya <i>POS</i>	'the rabbit also [arrived]/ the rabbit's [arrival]'

I label this construction *Possessor Phrase* by convention; however, it encodes a fairly broad range of semantic propositions in a fashion generally parallel to English — not just ownership. Among the more common are kinship, activity, and expression events. The possessor precedes the possessed constituent. Rather than including the possessed noun in a M_{Possession} Phrase, I analyze the possessed noun as the central constituent of a noun phrase,

¹⁶In Fleming's model, this is called a 'determined morpheme' in that it is the only possible morpheme to fill its constituent position.

and the Possessor Phrase as being a filler of the Noun Phrase P1 position. For the sake of clarity, both possessor and possessed are included in examples (37) through (40).

(37) *min ya gber tà n ye ní toke*
me-E POS word REL I say I-SJV speak

‘my word which I say I should speak’

(38) *upɔnd ya bucienk*
frog POS eldest.child

‘the frog’s eldest child’

(39) *uwɔn mɔ ya baam*
rabbit also POS arrival

‘Rabbit’s arrival, too’ (or, ‘along came Rabbit’)

The Possessor Phrase is also used in specification. In this case, the preceding position is filled by the nominal class determiner which agrees with the central Noun Phrase constituent (the possessed nominal). In effect, the proclitic determiner is separated from its corresponding noun by the insertion of the possessive particle *ya*. In example (40), the narrator decries the fact that an outside merchant will buy millet in Gando (a millet-producing region) for 100 francs per bowl, then return to Gando later and sell it at 300 francs per bowl.

(40) *kí liebe kí lá tuke i ya ji*
SS-SJV return SS-SJV SUBS2 bring DET-10 POS millet

ní mɔ ti’ ni woo
here also our here oh!

‘to return and then bring that (same) millet here, among us!’

(41) Ikpɛtuon cinbe ki kɔh u ya yo nɛ ten :
fieldwork really SS enter DET-9 POS moment FOC lots

bi buuh iji nin tibont kɛ u ya ŋmaal ni, nɛ ki
they sow-I millet and things all DET-9 POS month in FOC& SS

guureh tiwenbr.
tie.up-I mean.animals

‘Fieldwork really gets started at this time (June): people sow millet and all [sorts of] things in this month, and they tie up mean animals.’

5.7 Pronominal Possession

Pronominal possession is encoded in the preceding and central constituent positions of the Noun Phrase (see Table 6). First- and second-person personal subject pronouns combine with the proclitic determiners of the 13 noun classes to form the set of possessive pronouns (see Table 4).

In this instance, the preceding position of the Noun Phrase is filled by a possessive pronoun, and the central position is filled by a Noun Word, as in examples (42) and (43), or by a substantive pronoun, as in example (44). Semantic content of this construction parallels that of the *ya* possession phrase and that of English. The apostrophe which appears between the pronoun and the nominal is orthographic convention. It has no phonetic reality, but cues the reader that the pronoun comes from the possessive pronoun set. The possessive pronoun is phonologically bound to the possessed nominal.

(42) a' kpɛlɔɛr
your clothes

‘your clothes’

(43) n' po
my wife

‘my wife’

In other instances the possessed word appears to be one of several non-central constituent fillers of the Noun Phrase. These include postpositions, *ba* ‘what/one’, *kɛ* ‘all’, and *mɔ* ‘also’, as in examples (44) through (46). In these cases, semantic content is posited

for the central constituent position of the Noun Phrase, even though it is not realized in the morphosyntax.

- (44) *Ti' mɔ́ ní lí pukndeh ti' jaar bo nɛ.*
our also SJV FUT add-I our those.of on FOC

'May we also augment (the price of) ours.'

- (45) *kí liebe kí lá take i ya ji*
SS-SJV return SS-SJV SUBS2 bring NC9 POS millet

ní mɔ́ ti' ní woo
here also our here oh!

'to return and then bring even millet here, among us!'

- (46) *Ti' kɛ́ ní cuo ti' ba kí liike udu*
we all SJV catch our one SS-SJV look village

wuu cuonh ma bo.
this walk as on

'We should all catch ourselves (stop) to look at how this village works.'

5.8 MClause

The basic word order of the Gangam Clause is SVO. The Clause formula presented in Table 11, $M_{\text{Clause}} = P^n: NP + C: VP + F1: NP - F2: \text{PoPhr} + F3: \text{adv}$, is a simplified version of that which is called for by Fleming's model. (Fillers of the constituent positions are discussed below according to Fleming's model.)

The central position (C) is filled by a Verb Word or a Verb Phrase. The preceding position (P) is filled by a Noun Phrase, Noun Word, pronoun, or proper noun. This preceding subject position is empty when the Clause is a subsequent Clause in a Clause Chain introduced by the same-subject chain marker *ki*. This particle is analyzed at the inter-clausal level to be functioning as a coordinating conjunction. There are three following positions in the Clause construction. The first (F1) is the object slot, filled by a Noun Word, Noun Phrase, pronoun, or embedded Clause. The second following position (F2) is filled by a Postpositional Phrase. Finally, the third following position (F3) is filled by an adverb. See Table 11 for a constituent analysis of M_{Clause} . In the following examples, each Clause is bracketed.

TABLE 11

CONSTITUENT ANALYSIS OF THE GANGAM CLAUSE

		SAGENT, IDENTIFIED	SACTIVITY	SPATIENT, IDENTIFIER	SSPATIAL LOCATION + SPATIAL POSITION	SMAN- NER	
	M Clause=	P ⁿ : NP	C : VP	F 1: NP	F 2: PoPhr	F 3: adv	
	coordinating conjunction, inter- clausal particle						
STEMPORAL DURATION		ni it	wəke' be.long.time.P				'it has been a long time'
SEvent (ACT)		bi they	likeh look.I		iden yii ni nē home this in FOC		'they look in this house'
SEvent (ACT)		Bi they	ti baa' SUBS1 arrive.P				'then they arrived'
SEvent (ACT)	nē ki F& SS	φφ	kebch fish.I	ijen fish			'and (they) were fishing for fish'
SEvent (EXPR)	Tɔ, OK	sin wà yé you.E REL be ucien, sin nē great you.E FOC	li gē FUT sing				'Fine, you who are great, you will sing'
SEvent (ACT)		Ti we	nin li taa like FUT take			mila how	'what will we do?'
		gbierm counsel	ŋa te not be		len in (it)		'there was no counsel in it'

Table 11--Continued

MClause=		p ⁿ : NP	C: VP	F1: NP	F2: PoPhr	F3: adv	
S _{Event} (ACT)			Liike look				'Look'
	kí SS.SJV	φφ	gbien fill.up			kpa well	'and fill (it) up well' (= 'really well')
S _{Identification}	Bon, OK then	min ya gber tà me.E POS word REL n ye ní tǎke I say I.SJV speak	si own	iji ya millet POS kuorm selling	ti' du wuu ni. our village this in		'OK, my word which I say I should speak concerns the selling of millet in this our village.'
S _{MANNER}	Ama but	binib bà tukeh people REL bring.I tiwent ki lá things SS SUBS2 kuoreh ti' bo nno sell.I our on BKRF	pok zip!				'But the people who bring things and then sell them to us zip! [have started raising the price of things]'
S _{Event} (ACT)		a you	li kuore FUT sell	pomu uba nno bowl one BKRF		ige ne? how.much FOC	'How much will you sell that one bowl for?'

- (47) [Bi tì baa'], nε ki [kebeh ijen].
 they SUBS1 arrive.P F& SS fish.I fish

'Then they arrived, and they were fishing for fish.'

- (48) [Bon, min ya gber [tā [n ye [ń toke]]] si
 OK me.E POS word REL I say I.SJV speak own

iji ya kuorm ti' du wuu ni.]
 millet POS selling our village this in

'OK, my word which I say I should speak concerns the selling of millet in this our village.'

- (49) [Liike] kí [gbien kpa] kí [wiε].
 look SS.SJV fill.up well SS.SJV throw

'Look really well and throw it.'

Imperative Clauses have no overt subject, as in (49) above. Subsequent Clauses following such a Clause and preceded by the same-subject chain marker *ki* are also imperative in force. In example (49), the second Clause functions adverbially.

Clauses can be subordinated by *ten* 'as if', *ma nnɔ* 'like that (back-reference)', *ma nɔ* 'like that (deictic)', *sɔ* (identification/subordinator), or *la* 'if'. The subordinating particles fill the central (C) position of the Subordinated Clause construction. The Clause (or Clause Chain or Sentence) is analyzed as filling either the preceding (P) or the following (F) position. Subordinated Clauses occur preposed to the independent Clause of a ^MSentence or, in the case of *ten* Clauses, postposed. (See Table 14.)

Subordinated Clauses are analyzed in Table 12¹⁷

¹⁷For the sake of simplicity, I call this construction ^MSubordinated Clause, even though its preceding constituent position can be filled by ^MClause Chain and ^MSentence in addition to ^MClause.

TABLE 12

**CONSTITUENT ANALYSIS OF THE GANGAM
SUBORDINATED CLAUSE**

	S _{Event} (ACTIVITY), Event (REACTION), etc.	STEMPORAL LOCATION, Tmp Arr (SIMUL), LOG PRIOR, MANNER	S _{Identifi-} cation (etc.)	
M Subordinated Clause =	P: Clause, Clause Chain, Sentence	C: ma nɔ, ma nɔɔ, sɔ, la, tɛn	F: Clause, Clause Chain, Sentence	
STMP LOCATION + CSNon-MAINLINE	Iden yii men' home this build	ma nɔ as DEIC		'Since this house was built, [it's been a long time]'
STmp Arr (SIMUL) + CSNon-MAINLINE	Bi kebeh they fish.I	ma nɔɔ as BKRF		'As they were fishing like that, / While they were fishing.'
STMP PRIOR + CSNon-MAINLINE	U duon' likpengbenl he lie.down.P stream.bank	sɔ SUB		'After he lay down by the bank.'
SLOG PRIOR + CSNon-MAINLINE	A kuore' kobile nɔ you sell.P 100F BKRF	la, if		'If you have sold at 100 francs.'
SLOG PRIOR + CSNon-MAINLINE	A bi yie you CF want á gmon te you.SJV eat us	la, if		'If you want to eat us.'
SLOG PRIOR + CSNon-MAINLINE	a tuke' pomu uba you bring.P bowl one ki baa' SS arrive.P	la, if		'If you bring one bowl and arrive.'
SMANNER + CSNon-MAINLINE		ten as.if	u ye he be usengbenl ne dog FOC	'[You look at him] as if he were a dog.'

5.9 MClause Chain¹⁸

The Gangam Clause Chain is a series of two or more Clauses or Sentences, with the non-initial Clauses or Sentences being preceded by the chain marker *ki*, and showing no overt subject.¹⁹ These Clauses (and Sentences) function together as a unit, the chain as a whole often filling constituent positions of the MSentence construction. In addition, the same grammatical subject holds for the entire length of the chain and is identified in the initial Clause. Clause Chains in my corpus of data vary in length from two to nine Clauses and/or Sentences. Examples (50) and (51) show sample Clause Chains. In example (51), the bracketed portion is an embedded relative Clause Chain. Clause Chain constituent positions (C1, C2) are identified in the examples.

(50) C1: Uwɔb tì baa' likpengbenl
 goat SUBS1 arrive.P stream.bank

C2a: ki kpende' lisuɔnkel
 SS transform.P head.cushion

C2b: ki duɔn' usen ni.
 SS lie.down.P path in

'Goat then arrived at the stream bank and changed himself into a head cushion and lay down in the path.'

¹⁸There are two main constructions in Gangam which are formed by the combination of Clauses. These are the Clause Chain and the Sentence. Following Fleming's model closely, there would technically be a third such morphosyntactic construction, namely the Conjunction Chain, where Clauses are joined together by coordinating conjunctions. For my purposes, however, I will not distinguish between the Conjunction Chain and the two other constructions. I have not included coordinating conjunctions in table 13 summarizing the Gangam MClause Chain, but they are presented in the linear order in which they occur in table 14 summarizing the MSentence.

¹⁹For the sake of simplicity, I call the chain a Clause Chain, even though its constituent positions may be filled by Sentences as well as by Clauses.

(51) C1: Ama binib [bà tukeh tiwent ki
but people REL bring.I things/animals SS

lá kuoreh ti' bo nnɔ] pɔk
SUBS2 sell.I our on BKRF zip!

C2a: ki cin'
SS start.P

C2b: ki duondeh tiwent ya daaku.
SS raise.I things POS price

'But the people who bring things and then sell them to us zip!
have started raising the price of things.'

Table 13 shows a constituent analysis of the M Clause Chain construction. Instead of using relative sequential order, I have analyzed the Clause Chain as having two central positions in absolute order, the second with internal absolute order. One could argue that because the initial Clause contains an overt subject and the non-initial Clauses do not, the initial Clause should be considered the central constituent. However, the construction signals no semantically dominant constituent, either from the perspective of semantic content or from the perspective of discourse prominence. In fact, it is possible for the initial Clause to be merely introductory, and the non-initial Clause to be overtly marked for discourse prominence, as in example (52), where *ne* is the focal coordinating conjunction.²⁰ The *ne* can appear prior to the initial Clause of the chain or prior to a non-initial Clause. It marks discourse-level *importance* on all Clauses following it, through the end of the Clause Chain.

²⁰Higdon (1996:114-122) presents the particle *ne* as a marker of important information in the understanding and development of a text.

TABLE 13

CONSTITUENT ANALYSIS OF THE GANGAM CLAUSE CHAIN

	SPRIOR, SIMUL-A, ELABORATED, ABILITY	SSUBSEQUENT, SIMUL-B, ELABORATION		
MClause Chain =	C1: Clause	C2 ⁿ : 1. ki 2. Clause, Sentence (no subject)		
STmp Arr (sequential)	Bi ti baa' they SUBS1 arrive.P	ki SS	kebeh ijen. fish.I fish	'Then they arrived, and they were fishing for fish.'
STmp Arr (SIMUL)	Bi kebeh iba they fish.I certain.ones	ki SS	gbeh its glance.at others	'They are fishing for certain ones, and look sideways at others.'
SElaboration	uwob ní li monda goat SJV FUT [know].truly	ki SS	ben know	'[Dog should tell Goat that . . .] Goat should truly know . . .'
SABILITY	usengbenl freh dog able.I	ki SS	tiinh. run.I	'dog could run.'
SMANNER	a pøk you zip!	ki SS	le [ti liebe . . .] see we return	'quick as a flash you'll see us return'
SPHASE	bi ti ken' they SUBS1 fish.P	ki SS	gben'. finish.P	'And then they fished till they were done.'
SLog Arr (sequential)	Ti nin li taa mila we like FUT take how	ki SS. SVJ	gmere? be.saved	'What are we going to do to be saved?'
STmp Arr (sequential)	U là kpie' he TPRIOR before.P	ki SS	tien' nno do.P BKRF	'Before, he did like that.'

(52) C1: Bi ti baa',
they SUBS1 arrive.P

C2: nε ki kεbeh ijɛn.
F& SS fish.I fish

'Then they arrived, and they were fishing for fish.'

I have identified the M Clause Chain as an important part of the Gangam morphosyntactic hierarchy. As such, it is an important building block in Gangam discourse in both referent identification and the combination of Clauses. However, it is important to recognize that in using the term 'chain', there is potential ambiguity with current usage by other linguists.

Longacre (1985 and 1990) distinguishes between *chaining languages* and *co-ranking languages*. There are two types of chaining, 'right chaining towards a special final verb (in SOV languages) [and] left chaining away from a special initial verb (VSO and SVO languages)' (1990:144). In each case, the 'special' verb is fully inflected, while the medial or consecutive verbs (right chaining and left chaining, respectively) are not fully inflected and are to some extent dependent on the head verb. Were Gangam a chaining language according to this scheme, it would follow the initial verb-consecutive verb format, since it is an SVO language. Although a certain degree of dependence is shown in that non-initial Clauses have no overt subject, this is not the verbal dependency upon which Longacre bases his distinction: 'In a chaining structure, ... it is simply not possible to combine two verbs of the same rank in the same sentence' (1985:238).

Gangam, therefore, is not a chaining language according to Longacre's terminology, but a co-ranking language. Any of the basic verb forms, and at least a subset of the verbal particles, can occur in the subsequent Clauses in a chain. In addition, the subjunctive and the negative can occur in either the initial Clause or the subsequent Clauses of the chain. In Longacre's terminology, the Gangam Clause Chain is a *serial construction* (1990:168).

TABLE 14

CONSTITUENT ANALYSIS OF THE GANGAM SENTENCE

		SSIMUL-A, TMP PRIOR, LOG PRIOR	SSIMUL-B, PHASE, QUOTATIVE, COGNITION, AUTHORIZER, TMP SUBSEQUENT, LOG SUBSEQUENT, CONTRAST, CONTRASTED	SQUOTATION, PHENOMENON, MANNER	
M Sentence =	[coord conj]	Pⁿ : Subordinated Clause	Cⁿ : Clause, Chain	Fⁿ : Subordinated Clause, Clause-SJV, Clause, Chain, Sentence	
STmp Arr (SIMUL) SPHASE		Bi kebeh ijen ma nno, they fish.I fish as BKRF	bi ti neke' they SUBS1 almost.P	be ni niire i' bo they SJV reach their on	'As they were fishing like that, they were then just about to get them.'
SEvent (ACT)		Wa ke na bii' REL all not wrong.P niba la, something if	a likeh wo you look.I him	ten u ye usengbeni ne. as.if he be dog FOC	'Whoever has done nothing wrong, you look at him as if he were a dog.'
SConversa- tion Block	ne F&		kpere ye <i>Hyena say</i>	be ni cere they SJV allow be ni ge iyuon. they SJV sing song	'and Hyena said that they should allow themselves to sing a song.'
S Log Arr (sequential), SEvent (COGNI- TION)		tiwent ya daaku cin' things POS price start.P ki doh ma no, SS increase.I as DEIC	ti' mo ni bende our also SJV know	ti' mo li kuoreh our also FUT sell.I ti' ji ubien wa our.millet how.much REL	'since the price of things has started climbing, we also should know the price at which we, too, will sell our millet.'
SAUTHOR- IZER			be ni cere they SJV allow	be ni ge iyuon. they SJV sing song	'[and Hyena said that] they should allow themselves to sing a song'

Table 14--Continued.

MSentence =	[coord conj]	P ⁿ : Subordinated Clause	C ⁿ : Clause, Chain	F ⁿ : Subordinated Clause, Clause-SJV, Clause, Chain, Sentence	
STmp Arr (sequential)	----- e!	U duon' likpengbenl he lie.down.P stream.bank so, ID/SUB -----	----- usengbenl baa' ki ye dog arrive.P SS say peb ki gebre'. zoom! SS pass.by.P		'After he lay down by the bank, oh! Dog arrived and said zoom! and passed on by.'
SLog Arr (sequential)		a tuke' pomu uba you bring.P bowl one ----- a lá kuore' la, you SUBS2 sell.P if	a li fre you FUT able kí de buciib SS.SJV buy soap kí tí sòkre a'kpelcer SS.SJV SUBS1 wash your.clothes		'if you bring one bowl (of millet) and then sell it. you will be able to buy soap to then wash your clothes.'
SLog Arr (CON- TRAST)	----- ne F&		Biba là yiè', certain SUBS2 refuse.P ----- bitòb tuo'. others refuse.P		'Certain ones refused, and others accepted.'

5.10 M_{Sentence}

The Gangam Sentence is composed of three constituent positions, each of which can be iterative. The central position (C) is filled by an independent Clause or Clause Chain. The preceding position (P) is filled by a dependent Clause, Clause Chain, or Sentence subordinated by either *ma nɔ* ‘like that (backreference)’, *ma nɔ* ‘like that (deictic),’ *so* (identification/subordinator), or *la* ‘if’. The following position (F) is filled by a quotation, whether direct or indirect; or by a Clause, Clause Chain, or Sentence whose main verb is functioning as a complement verb.

In examples (53) and (54), the Sentence constituent positions (P, C, and F) are identified.

(53) P: Tiwent ya daaku cin’ ki doh ma nɔ,
things POS price start.P SS go.up.I as DEIC

C: ti’ mɔ ń bende ti’ mɔ li kuɔreh
our also SJV know our also FUT sell.I

ti’ ji ubien wà.
our millet price REL

‘Since the price of things has started climbing, we also should know the price at which we too will sell our millet.’

(54) P: A, kuɔre’ kobile nɔ la, a ti baa’ la,
you sell.P 100F BKRF if you SUBS1 arrive.P if

a li de buciib buà kobk nin gbontuɲun la,
you FUT buy soap REL 50F and 5F.five if

C: be ń ye
they SJV say

F: ni te kobita ne.
it be 150F FOC

‘If you have sold at 100 francs, if you then arrive, to buy soap at 75 francs, let them say that it’s 150 francs.’

See Table 14 for a constituent analysis of the M_{Sentence}.

6. SEMANTIC CONTENT OF INTERCLAUSAL CONSTRUCTIONS

Because Clauses tend to encode semantic propositions, the Clause Chain and the Sentence tend to encode semantic content which is *interpropositional*. That is, they serve to relate the two conjoined propositions to each other. Examples (55) and (56) show sequential temporal arrangements, and examples (57) and (58) show sequential logical arrangements. In each case, the PRIOR proposition is encoded in the initial Clause and the SUBSEQUENT proposition in the non-initial.

(55) TEMP PRIOR: Sin uba ní lá tuke a' wɔb ní
 you.E one SJV SUBS2 bring your goat here

TEMP SUBS: ki lá ye,
 SS SUBS2 say

'May one of you then bring your goat here and then say,...'

(56) TEMP PRIOR: U duɔn' likpengbenl sɔ,
 he lie.down.P stream.bank ID/SUB

TEMP SUBS: e! usɛngbenl baa' ki ye peb ki gɛbre'.
 oh! dog arrive.P SS say zoom! SS pass

'After he lay down by the stream bank, oh! Dog arrived and said zoom!
 and passed on by.'

(57) LOG PRIOR (+ means): Ti nin li taa mila
 we like FUT take how

LOG SUBS (+ purpose): ne kí ŋmere?
 F& SS.SJV be.saved

'What are we going to do to be saved?'

(58) LOG PRIOR (+ means): Uker ne'
 hyena follow.P

LOG SUBS (+ purpose): wɔ ní cuo.
 he SJV catch

'Hyena followed in order to catch (him).'

Both the Clause Chain and the Sentence encode the following semantic interpositions: elaboration, sequential and simultaneous temporal arrangement, and sequential logical arrangement. However, the contrastive logical arrangement is found only in the Sentence, as in example (59) and the last example line of Table 14. This is done by means of an iterative Sentence.C position, i.e., by the juxtaposition of two central positions in the Sentence.

(59) LOG PRIOR: Tiwent ya daaku mə pək ki cin' ki doh;
 things POS price also zip! SS start.P SS go.up

LOG SUBS: Logical Arrangement (CONTRAST)

CONTRAST: φφ [the government should do something]

CONTRASTED (+ contra-expectation):

gobina ɲa laan de usen
 government NEG yet give.P path

ki ye bε ń duon tiwent ya daaku.
 SS say they SJV raise things POS price

'The price of things also zip! has begun climbing; [and yet] the government hasn't yet led the way and said that people should raise the price of things.'

The Clause Chain and the Sentence also have in common the realization of the additional semantic constituent PHASE, as in 'begin to' or 'be just about to'.

(60) Tiwent ya daaku cin' ki doh ma nə,
 things POS price start.P SS go.up.I as DEIC

'Since the price of things has started climbing....'

(61) Bi tì neke' bε ń ñiire i' bo,
 they SUBS1 almost.P they SJV reach their on

'They were then just about to get them...'

In my corpus of data, no other additional semantic constituent occurs in both constructions. ABILITY 'be able to', MANNER, and INTENSITY occur in the Clause Chain, but not in the Sentence. REQUISITE RESOURCES (to have the resources necessary to perform an event) and AUTHORIZER 'allow' occur in the Sentence, but not in the Clause Chain.

The Conversation Block, an extra-propositional semantic structure, is limited to the Sentence, as in example (62).

- (62) Bigengenb biba là yiè' ki ye,
Gangams certain D.PST/PR refuse.P SS say

“Iji nnɔ, bi li kuɔre yi kobitata ne.”
millet BKRF they FUT sell it 50F.three.three FOC

‘Certain Gangams refused and said, “The millet, it will (should) be sold for 150 francs (a bowl).’

In addition, the realization of some single propositions is limited to the Sentence. These include Attribution,²¹ in example (63), and Events of the sub-types COGNITION (64), REACTION (65), and EXPERIENCE (66).

- (63) Nì bi mɔn tinbi Bigengenb mɔ, tí taa
it CF good we.E Gangams also we.SJV take

uñɔkpaan ne.
mouth.agree FOC

‘It would be good that we the Gangams also, that we all agree...’

- (64) Ni likeh kutaaku bo, ne ki bendch utaa li nii bii
you look-I sky on, FOC& SS know-I rain FUT fall or

wa ñ nii.
it.NEG SJV fall

‘You look at the sky and you know if it will rain or not.’

- (65) A bi yie á ñmɔn te la,
you CF want you.SJV eat us if

‘If you want to eat us...’

²¹The semantic proposition Attribution (e.g., ‘The dirt is black’ and ‘the black dirt’) is also encoded by the Noun Word construction in Gangam, but it is not encoded by the Clause Chain.

(66) A pɔk kɪ le ti liebe ki lá se a' buol nɛ.
 you zip! SS.SJV see we return SS SUBS2 stand your side FOC

'Quick as a flash, you'll see us return and stand beside you.'

Table 15 summarizes the possible semantic content realized by the Clause Chain and the Sentence.

TABLE 15

COMPARISON OF THE SEMANTIC CONTENT OF THE GANGAM CLAUSE CHAIN AND SENTENCE

	<u>M</u> Clause Chain semantic content	<u>M</u> Sentence semantic content									
Interpropositions	<table border="1"> <tr><td>Elaboration</td></tr> <tr><td>Tmp Arr (sequential)</td></tr> <tr><td>Tmp Arr (SIMULTANEOUS)</td></tr> <tr><td>Log Arr (sequential)</td></tr> </table>	Elaboration	Tmp Arr (sequential)	Tmp Arr (SIMULTANEOUS)	Log Arr (sequential)	<table border="1"> <tr><td>Elaboration</td></tr> <tr><td>Tmp Arr (sequential)</td></tr> <tr><td>Tmp Arr (SIMULTANEOUS)</td></tr> <tr><td>Log Arr (sequential)</td></tr> <tr><td>Log Arr (CONTRAST)</td></tr> </table>	Elaboration	Tmp Arr (sequential)	Tmp Arr (SIMULTANEOUS)	Log Arr (sequential)	Log Arr (CONTRAST)
Elaboration											
Tmp Arr (sequential)											
Tmp Arr (SIMULTANEOUS)											
Log Arr (sequential)											
Elaboration											
Tmp Arr (sequential)											
Tmp Arr (SIMULTANEOUS)											
Log Arr (sequential)											
Log Arr (CONTRAST)											
Extra-Propositional Semantic Structures		<table border="1"> <tr><td>Conversation Block</td></tr> </table>	Conversation Block								
Conversation Block											
Propositions		<table border="1"> <tr><td>Event(COGNITION)</td></tr> <tr><td>Event(REACTION)</td></tr> <tr><td>Event(EXPERIENCE)</td></tr> <tr><td>Attribution</td></tr> </table>	Event(COGNITION)	Event(REACTION)	Event(EXPERIENCE)	Attribution					
Event(COGNITION)											
Event(REACTION)											
Event(EXPERIENCE)											
Attribution											
Additional Semantic Constituents	<table border="1"> <tr><td>PHASE</td></tr> <tr><td>ABILITY</td></tr> <tr><td>MANNER</td></tr> <tr><td>INTENSITY</td></tr> </table>	PHASE	ABILITY	MANNER	INTENSITY	<table border="1"> <tr><td>REQUISITE RESOURCES</td></tr> <tr><td>AUTHORIZER</td></tr> <tr><td>PHASE</td></tr> </table>	REQUISITE RESOURCES	AUTHORIZER	PHASE		
PHASE											
ABILITY											
MANNER											
INTENSITY											
REQUISITE RESOURCES											
AUTHORIZER											
PHASE											

In order to enlarge the context in which I present the semantic content of the Gangam Clause Chain and Sentence, I now proceed to compare the material I have presented in this section with sentence structure notions as presented by Longacre (1985). Because Longacre's approach is not tied to a formal system of semantics, it is at times more intuitive than is Fleming's.

Longacre (1985) notes that:

...apparently the sentence level exists for the purpose of encoding combinations of predications, i.e., relations within the domain of the propositional instead of the predicate calculus. Nevertheless, surface structure sentences are not necessarily confined to such elements.

This observation coincides well with the multiple-level semantic content of the Gangam Sentence as presented in Table 15 above.

While the level of 'combinations of predications' is dominant (semantic interpropositions and conversation block), the Sentence also encodes certain simple semantic propositions and additional semantic constituents. These apparently fall into the category of 'merged sentences', or 'sentences in which the component clauses overlap each other and are mutually dependent' (1985:239-240). Longacre notes that 'the verbs which occur in the first clause are found to constitute a closed list' (1985:240). While this latter criterion is met without exception in the Gangam Sentences in question, the former criterion, that of overlap and mutual dependence, is met in only a subset of them.

The former criterion is met in the case of $S_{Event}(REACTION)$ (notions such as 'want'), in which the non-initial Clause is in the subjunctive, as in example (65).²² The criterion is not met, however, in the case of $S_{Event}(COGNITION)$ (notions such as 'know') and $S_{Event}(EXPERIENCE)$ (notions such as 'see'). The additional semantic constituents of PHASE, example (61), and REQUISITE RESOURCES (the notion of X having the resources necessary to perform an Event) when realized by the Sentence also take the subjunctive in the complement Clause, and AUTHORIZER (the notion of X allowing an action) does so optionally.

Several of Fleming's semantic constructions find their counterparts in Longacre's terminology. Where Fleming speaks of simultaneous and sequential temporal arrangement, Longacre speaks of temporal *overlap* and *succession*. Fleming's sequential logical arrangement is called *implication* by Longacre, and is divided into *conditionality*, example (67), and *causation*, example (68). These sub-categories of *implication* find their counterpart in Fleming's model as well (1988:192-193), as seen in the notation '(+ means)' and '(+ purpose)' in examples (57) and (58).

²²While the subjunctive can occur in the independent Clause, in this instance it signals a dependent relationship with the initial Clause for which it is a complement. When it occurs in the independent Clause, the subjunctive carries the force of a manipulative (Givón 1984:317).

(67) conditionality: A kuɔre' kobile nno la,
you sell.P 100F BKRF if

a ti baa' la,
you SUBS1 arrive.P if

a li de buciib buà kobk nin gbontuɲun la,
you FUT buy soap REL 50F and 5F.five if

be ni ye ni te kobita ne.
they SJV say it be 50F.three FOC

'If you have sold at 100 francs, if you then arrive, to buy soap at 75 francs, let them say that it's 150 francs.'

(68) causation: Bi kuɔre' ma nno ba fre' ki de'
they sell.P as BKRF they.not able.P SS buy.P

ciib monon.
soap even

'Since they sold like that, they couldn't even buy soap.'

Where Fleming speaks of the semantic interposition ^SElaboration, Longacre speaks of *paraphrase* and lists helpful distinctions, such as *specific-generic paraphrase*, example (69), where 'there is a loss of information in the second base ... accomplished ... by using more generic lexical terms in the second base' (1985:247), that is, in the second Clause.

(69) specific: Bigengenb biba là yiè'
Gangams certain D.PST/PR refuse.P

generic: ki ye,
SS say

'Certain Gangams refused and said,...'

Finally, Longacre refers to *attribution*. First, there is *speech attribution*, analogous to Fleming's ^SConversation Block, as in example (62). Secondly, there is *awareness attribution*, for which the primary verb is 'know'. This is analogous to Fleming's ^SEvent(COGNITION), as in example (64).

7. CONCLUSION

In this paper I have presented a typological overview of Gangam (section 3) followed by constituent analyses of its basic morphosyntactic constructions (section 5). Although Gangam is a VO language, it exhibits Postpositional Phrases and other dependent-head constructions, and does not follow typological predictions for either VO or Postpositional Phrase closely. What I call the Clause Chain is an important element in Gangam discourse; however, Gangam is classified not as a ‘chaining language’ according to Longacre’s terminology but as a ‘co-ranking language’. Finally, in section 6 I presented the various types of semantic content that can be encoded by Gangam inter-clausal constructions.

I wish to stress the tentative nature of this analysis. Certain areas of study need to be expanded, and certain of my conclusions will no doubt prove incorrect. For a more in-depth look at the Gangam verbal system, see Higdon (1996:46-93).

APPENDIX

In January 1994, DOURE Nbaame (about 70 years of age), counselor to the Gando canton chief (Oti prefecture, Togo), was asked to tell a story. The following story was recorded and transcribed by N'SARMA Wénatho and LAMBONI Gnanlé, and edited by LAMBONI Gnanlé and SAMBOGOU Matéyédou. It is printed here with the permission of the storyteller.

UJENKEBE 'FISHING'

1. Henhen, uker²³ nin usengbenl ne joh ujenkebe nin uwɔb.
 ahem hyena and dog FOC go.I fishing and goat
 Ahem, Hyena and Dog went fishing with Goat.

2. Bi tì baa', ne ki kebeh ijen.
 they SUBS arrived F& SS fish.I fish
 They then arrived, and they were fishing for fish.

3. Bi kebeh ijen ma nnɔ, bi tì neke' be ní ñiire i' bo,
 they fish.I fish as BKRF they SUBS almost.P they SJV get their on
 ne kperé²⁴ ye be ní cèrè be ní ge iyuon.
 F& observe.a.taboo say they SJV allow they SJV sing song
 As they were fishing like that, they were then just about to get to them (the fish), and
 Eats Anything said that they should allow themselves to sing a song.

4. Ne bi ye, "Tɔ, sin wà yé uciɛn, sin ne li ge;
 F& they say OK you.E REL EQU great you.E FOC FUT sing
 tí teke ŋɛ-a!"
 we.SJV take you.emph
 And they said, "Fine, *you* who are great, *you* will sing; we'll take up (the chorus)."

5. Ne u yuure' lijenkeyebɔnl ki ñi' "boin boin" ki ye, "Bi kebeh
 F& he pick.up.P fishing.gourd SS hit.P IDEO IDEO SS say they fish.I
 iba ki gbɛh itɔ.
 certain SS glance.I others
 And he took the fishing gourd and hit out, "Boing, boing!" and said, "They (generic) are
 fishing for certain ones, and look sideways at others.

²³*Uker*, the common name of the hyena, means literally 'the biter'. It is derived from the verb *kere* 'bite'.

²⁴*Kpere*, derived from the verb *kperɛ* 'observe a taboo', is used ironically here to signify one who is without taboo, or who eats anything at all.

6. N kebeh iba, ito do licenkpekl.
I fish.I certain others lie.down.S at.side

I am fishing for certain ones; others are lying at my side.

7. N kebeh iba, ito do licenkpekl.
I fish.I certain others lie.down.S at.side

I am fishing for certain ones; others are lying at my side.

8. N kebeh iba, ito do licenkpekl.
I fish.I certain others lie.down.S at.side

I am fishing for certain ones; others are lying at my side.”

9. Uwob nin usengbenl ye, “Hin u nin niireh bi le ba ne
Goat and dog say huh he like speak.I they see what FOC

bi do licenkpekl no?
they lie.down.S beside that

Goat and Dog said, “What? Who’s he talking about, that they’re lying down beside him?”

10. U niireh tinbi so-a!
he speak.I us.E ID/SUB.emph

It’s *us* he’s talking about!

11. Ti nin li taa mila ne ki nmere?”
we like FUT take how F& SS.SJV be.saved

What are we going to do to be saved?”

12. Ne bi ti ken’ ki gben’.
F& they SUBS fish.P SS finish.P

And then they fished till they were done.

13. Ne bi ye boo, be ni ne ki gbiire ijen.
F& they say whew they SJV leave SS.SJV divide fish

And they said, whew! that they should go out in order to divide up the fish.

14. Ne bi nen’, ne u ye won si ijen keke, ka ni daan bi’ mo.
F& they leave.P F& he say he.E own fish all SS.NEG SJV leave their also

And they went out and he said *he* owned all the fish he wouldn’t spare them either.

15. Ne bi ye be ni cere be ni gbiere.
F& they say they SJV allow they SJV counsel

And they said that they should allow themselves to take counsel.

16. Ne u ye gbiern ɲa té len.
F& he say counsel not EX in.it

And he said there was no counsel in it.

17. Ne usɛngbenl ní tɔke uwɔb ki ye, uwɔb ɲa freh ki tiinh,
F& dog SJV tell goat SS say goat not able.I SS run.I

uwɔb ní li mɔnda ki ben usɛngbenl freh ki tiinh.
goat SJV FUT true SS know.S dog able.I SS run.I

And [he said] that Dog should tell Goat and say that Goat couldn't run, that Goat should truly know that Dog could run.

18. Ne uwɔb taa'.
F& goat take.P

And Goat took off.

19. Tɔ, miñunm mɔ dɔ usɛn ni, ukpen.
OK water also lie.down.S path in stream

So then, water was also there in the path, a stream.

20. Uwɔb tì baa' likpengbenl ki kpɛnde' lisuɔnkel
goat SUBS1 arrive.P stream.bank SS transform.P head.cushion

ki duɔn' usɛn ni.
SS lie.down.P path in

Goat then arrived at the stream bank and changed himself into a head cushion and lay down in the path.

21. U duɔn' likpengbenl sɔ, eh, usɛngbenl baa' ki ye
he lie.down.P stream.bank ID/SUB o! dog arrive.P SS say

peb ki gɛbre'.
zoom SS pass.by.P

After he lay down by the bank, oh! Dog arrived and said Zoom! and passed on by.

22. Uker ne' wɔ ní cuo.
hyena follow.P he SJV catch

Hyena followed behind in order to catch (him).

23. Usɛngbenl tì puore' ki sere' ki ye, "N' jɔ, a jɔreh
dog SUBS1 cross.P SS stop.P SS say my friend you be.stupid.I

mɔ nɛ-aa!
also FOC.emph

Dog then crossed over and stopped and said, "My friend, you're really stupid!

24. A bi yie á ηmɔn tɛ la, taa lisuɔnkɛl liɛ kɪ
you CF want you.SJV eat us if take head.cushion that SS.SJV

wiɛ lɛ nɪ puore ukpen wuu nɪ.
throw it SJV cross stream this here

If you want to eat us, take that head cushion to throw it so that it crosses this stream [and lands] over here.

25. Li puore' la, a pɔk kɪ lɛ ti liɛbe ki lá se
it cross.P if you zip! SS.SJV see we return SS then stand

a' buol nɛ."
your beside FOC

If it crosses over, quick as a flash you'll see us return and stand beside you."

26. Nɛ uker yuure' lisuɔnkɛl, nɛ u ye, "Liike kɪ gbien
F& hyena pick.up.P head.cushion F& he say look SS.SJV fill.up

kpa kɪ wiɛ."
well SS.SJV throw

And Hyena picked up the head cushion, and he said (to himself), "Look really well and throw it!"

27. Nɛ u taa' ki wiɛ'.
F& he take.P SS throw.P

And he took it and threw it.

28. Lisuɔnkɛl ŋi lu' likpengbɛngbɛnl bo, nɛ u laa'
head.cushion SUBS1 fall.P stream.bank on F& he see.P

uwɔb buore' ki fii' ki tien' ki ye, "Li bɛn, a la cere'
goat uncurl.P SS get.up.P SS cry.P SS say FUT know.S you not cut.P

n' konb a' n̄insenti."
my testicles your spit

The head cushion then fell on the stream bank, and he saw the goat uncurl and get up and cry out saying, "Know this: you won't cut my testicles! –your spit!"

29. Nɛ u ye, "Bo!
F& he say bo

And he said, "Bo!

30. N bi ben nno la, n bi ben ni yé tinont la,
I CF know.S BKRF if I CF know.S it EQU meat if

fenfen, dinno wuɔ nɔ, n bi li gbo.
now today this this I CF FUT satiate.S

If I had known that, if I had known it was meat, now, this very day, I would be full.

31. Lisuɔ̀̀kel!
head.cushion

A head cushion!

32. N yuure' tinont sɔ ki wiε'-εε – nì tì sere' ni' bo-oo?"
I pick.up.P meat ID/SUB SS throw.P.emph it SUBS1 stop its on.emph

So it was meat that I picked up and threw away – did it then stop over there?"

33. Nɛn si, ukɛr ji cuonh ki tì laa' lisuɔ̀̀kel la, wɔ́ ní
it own hyena now walk.I SS SUBS1 see.P head.cushion if he SJV

ye, "Uwɔb nno nɛ!" –
say goat BKRF FOC

That's why now when Hyena walks around and then sees a head cushion, let him say, "It's that goat!" –

34. (U là kpie' ki tien' nno, nɛ tinont tuba ŋmere')–
he D.PST/PR before.P SS do.P BKRF F& meat one escape.P

kí taa lisuɔ̀̀kel kí kɛkɛre kɛkɛre kí lɛ,
SS.SJV take head.cushion SS.SJV bite.bite bite.bite SS.SJV see

na yé nonku.
it.not EQU meat

(Before, he did like that, and a piece of meat escaped) and let him take the head cushion and chew it to pieces and look, to see that it's not meat.

35. Nɛ wɔ́ ní taa kí wiε.
F& he SJV take SS.SJV throw

And let him take it and throw it.

36. Usɛngbenl nɛ jin' miyenfuom ki cèrè' bi ŋmere'.
dog FOC eat.P wisdom SS allow.P they escape.P

Dog ate wisdom and allowed them to escape.

A SELECTED BIBLIOGRAPHY

- Bendor-Samuel, John. 1989. *The Niger-Congo languages: A classification and description of Africa's largest language family*. New York: University Press of America.
- De Wolf, Paul Polydoor. 1971. *The noun class system of Proto-Benue-Congo*. The Hague: Mouton.
- Dryer, William S. 1995. 'Word order typology'. *Syntax : ein internationales Handbuch zeitgenössischer Forschung*, ed. by Joachim Jacobs et al., vol. 2, 1050-1065. Berlin: de Gruyter.
- Fleming, Ilah. 1990. *Communication analysis: A stratificational approach*, vol. I. Dallas: Summer Institute of Linguistics. Ms.
- . 1988. *Communication analysis: A stratificational approach*, vol. II. Dallas: Summer Institute of Linguistics. Ms.
- . 1990. *Communication analysis: A stratificational approach*, vol. III. Dallas: Summer Institute of Linguistics. Ms.
- Greenberg, Joseph H. 1966. 'Some universals of grammar with particular reference to the order of meaningful elements'. *Universals of language*, second edition, ed. by Joseph Greenberg, 73-113. Cambridge: MIT Press.
- Hawkins, John A. 1979. 'Implicational universals as predictors of word order change'. *Language* 55.618-648.
- . 1980. 'On implicational and distributional universals of word order'. *Journal of Linguistics* 16.193-235.
- . 1983. *Word order universals*. New York: Academic Press.
- Higdon, Lee M. 1996. *Tense, Aspect, and Modality in Gangam Narrative and Hortatory Discourse*. Arlington: University of Texas at Arlington. M.A. thesis.
- . 1998. 'The Line of Importance in Gangam Narrative Discourse'. *Gur Papers / Cahiers Voltaïques* 3.45-53.
- Kelly, Paul. 1993. *Tonal processes in Gangam*. Summer Institute of Linguistics. Ms.
- Lamb, Sydney M. 1966. *Outline of stratificational grammar*. Washington, D.C.: Georgetown University Press.
- Leaders, Marlin. 1995. *Lecture notes, Grammar theory I: stratificational grammar*. The University of Texas at Arlington.

- Lockwood, David G. 1972. *Introduction to stratificational linguistics*. New York: Harcourt, Brace, and Jovanovich.
- Longacre, Robert E. 1985. 'Sentences as combinations of clauses'. *Language typology and syntactic description*, ed. by Timothy Shopen, vol. II: Complex constructions, 235-286. Cambridge: Cambridge University Press.
- . 1990. 'Storyline concerns and word order typology in East and West Africa'. *Studies in African linguistics*, supplement 10. Los Angeles: The James S. Coleman African Studies Center and The Department of Linguistics, UCLA.
- . 1996. *The grammar of discourse*. Second edition. New York: Plenum Press.
- Manessy, Gabriel. 1965. 'Les substantifs à préfixe et suffixe dans les langues voltaïques'. *Journal of African Languages*, 4/3.170-181.
- . 1966. 'Les substantifs à préfixe et suffixe dans les langues voltaïques'. *Journal of African Languages*, 5/1.54-61.
- . 1971. 'Les langues gurma'. *BIFAN* 33, B.1:118-246.
- . 1975. 'Les langues oti-volta'. *LACITO* 15. Paris: SELAF.
- Naden, Tony. 1988. 'The Gur languages'. *The languages of Ghana*, ed. by M. E. Kropp Dakubu, 12-49. London: Keagan Paul.
- . 1989. 'Gur'. In Bendor-Samuel, 140-168.
- Reimer, Jean. 1984. *Field notes summarizing a text analysis workshop*. Kara, Togo: Summer Institute of Linguistics. Ms.
- Walker, Bonnie. 1984a. *Compte rendu des travaux de recherche effectués à l'occasion du séminaire sur l'analyse de texte*. Kara, Togo: Summer Institute of Linguistics. Ms.
- . 1984b. *La fonction sémantique de l'aspect et du mode des verbes en Gangam*. Kara, Togo: Summer Institute of Linguistics. Ms.
- . 1984c. *Gangam narrative salience scheme* (abstract). Kara, Togo: Summer Institute of Linguistics. Ms.
- Wang, Peter. 1992. *Towards a methodology for defining the choice of focus in Philippine languages*. Arlington: University of Texas at Arlington. Thesis.
- Welmers, William E. 1973. *African language structures*. Berkeley: University of California Press.

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SIL Togo
Lomé
2001

Portions of this work are drawn, wholly or in part, from:

Higdon, Lee. 1996. Tense, Aspect, and Modality in Gangam Narrative and Hortatory Discourse. Arlington: University of Texas at Arlington. MA thesis.

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ISBN: 2-9513616-2-9