THE STRUCTURE OF THE DETERMINER PHRASE IN BULI

BY

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ABSTRACT

This thesis investigates the structure of the Determiner Phrase (DP) in Buli-a Gur language spoken in and around Sandema in the Upper East Region of Ghana. It aims at examining the class of determiners in the language; systematically describing the internal components of the DP, particularly the sequential order of elements within it; and testing some theoretical assumptions within the realm of the Determiner phrase.

This first chapter is preoccupied with the introduction of the dissertation, with special emphasis on the language and its speakers, research problem, aims and relevance of the study. Some grammatical properties of the language are highlighted in addition to clarifying some issues in the structure of the noun phrase in Gur. The sources of data are also mentioned.

Chapter two reviews relevant and related literatures in addition to explaining the tenets of the framework used for explaining the data. The framework adopted in this work is the Minimalist Program (MP) developed by Chomsky (1995). This is a linguistic program that is designed to capture the true reflection of language as it exists in the Faculty of Language (FL).

The concern of chapter three is the discussion of determiners and personal pronouns, particularly, the semantics, morphology and syntax of determiners as well as the syntax of personal pronouns.

Chapter four looks at the nature of modifiers and their distribution in the language. Modifiers like adjectives, numerals, relative clauses, quantifiers and possessed nouns are considered.

The theoretical implications of the data presented are considered in chapter five. In this chapter proposals are made to capture the facts of the language. Chapter six concludes the work by summarising and making recommendations for future research.

DECLARATION

I do hereby declare that with the exception of references that have been duly cited, this dissertation is the result of my own research, and that it has not been presented either in whole or in part for another degree elsewhere.

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DEDICATION

To

My Grandparents.

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I would like to first of all acknowledge my inability to mention the names of everyone from whom I have learnt something about life and especially about linguistics. An attempt to mention every individual's name will constitute another thesis which I am not ready to start. But this is not an excuse to rely on not to make an attempt to express my sincere gratitude to the many who have contributed directly or indirectly to the convergence of the various chapters of this thesis. With this caveat, I shall proceed with my acknowledgments, hoping that whoever is not directly mentioned will still accept my gratitude all the same.

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to both the organizers and participants of the Rapid Word Collection Workshop in Buli for making me a part of the whole process. To my many language consultants, I say thank you very much for your patience and understanding.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ABBREVIATION

1	First person
2	Second person
3	Third person
ACC	Accusative
CD	Clausal determiner
CM	Class marker
DEF	Definiteness marker
DEM	Demonstrative
DET	Determiner
ERG	Ergative
FUT	Future
INDEF	Indefiniteness
NEG	Negative
NOM	Nominative
NUM	Number
OBJ	Object
OM	Object agreement marker
PART	Particle
PERF	Perfective
PLU	Plural
POSS	Possessive
POSSD	Possessed
PRE	Prefix
PRES	Present

PRO Pronoun

PST Past

RCM Relative clause marker

REL Relative

SG Singular

SM Subject agreement marker

SPF Specific

SUBJ Subject

CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction

In recent times, there has emerged the need to re-analyse noun phrases as complements of determiners following Abney's DP-Hypothesis. In his work, Abney (1987) argues for a parallel treatment of a noun phrase and a verb phrase or a clause. Just as a functional element inflection (infl) heads a clause (IP), a noun phrase is argued to be headed by a functional element D, identified with the determiner. This dissertation extends this hypothesis to Buli, a Gur language. Against this background, the dissertation seeks to investigate the class of D-elements and their distribution in Buli. Following the goal of 'charting' out the structure of the Determiner phrase in the language, the word order patterns, especially, sequences of modifiers within it are investigated.

With relatively little syntactic work on this language, the syntactic patterns discovered in the determiner phrase possess the potential of shedding light on recent theoretical developments in the Determiner phrase literature.

1.1 The Bùlì Language and its Speakers

Bùlì is the language or L1 of the Bùlsà people of the Upper East Region of Ghana.Buli is spoken in major towns like Sandema, Wiaga, Fumbisi, Chuchulga and villages including Siniensi, Gbedema, Kaadema and Weisi. It is also spoken outside its traditional areas due to migration and other economic activities. It has

three dialects namely, the Northern, Southern and Central dialects. The Central dialect is distinguished from the Northern and Southern dialects on phonological grounds, as noted by Akanlig-Pare (2005). For instance:

1)	Northern	Southern	Central	Gloss
a)	bā:gā	bā:k	biāk	'dog'
b)	dō:gī	dō:gī	dʊɛ̄gī	'lie down'
c)	ɟīnlá	ɟīnlá	dʒīnla	'today'
d)	cī:nī	cī:nī	tɕī:nī	'count'

In example (1), whereas the Northern and Southern dialects have long monophthongs in (1a) and (1b), the central dialect has diphthongs. The difference between the Central dialect on one hand and the Northern and Southern dialects on the other is also evident in the use of alveo-palatal affricate in the former as against the use of palatal stops in the latter. The data that is used for this analysis comes from the central dialect which I speak and because of the prevalence of literacy works found in it. Genetically, Buli is a member of the Gur language family which are classified under the larger Niger-Congo language family. Naden (1988) affiliates it to the Proto-Oti-Volta sub-grouping with question marks.

It is estimated to have over 90,000 speakers who, when in contact with outsiders, commonly refer to themselves as Bulsa, but some identify themselves with the towns and villages they are from by affixing noa 'a person from' and dem 'people

from' to their towns and villages. For instance, Kanjagdem 'people from Kanjaga', Wiadenoa 'a person from Wiak'. The people are mainly farmers. They cultivate crops like millet, sorghum, beans, rice among others. With regard to livestock, sheep, cattle, goat, fowl and guinea fowls are reared by the people. The introduction of formal education has increased the range of professions available to the people some of whom are now teachers, doctors, lawyers, linguists among others. Their major festival is called "Feok" and it is celebrated in December each year to mark historical events of the community.

1.2 Research Problem

The importance of language description and documentation has, in recent times, been stressed by both linguists and other stakeholders interested in language and its related functions. As a result, many languages have benefited from this advocacy by registering a substantive form of documentation and description. Other languages are waiting to be discovered while some can only boast of scant literature. Buli is among the under-described languages of the northern half of the country (Ghana).

A number of literary works including the *English-Buli dictionary* by KrÖger (1992), a translated version of the New Testament Bible, an abridged version of the constitution of the Republic of Ghana, and other educational materials have been written in Buli.

Linguistically, the phonology of Buli has recorded a substantive description and documentation in (Akanlig-Pare 1994; 2002; and 2005). In other works, attempts have been made to sketch the grammar of the language (Kenstowicz and Akanlig-Pare 2003). Considering all the efforts geared towards documenting this language, several aspects of its grammar, especially in the area of Syntax, remain to be studied. Thus this thesis is aimed at filling this gap by concentrating on an aspect of the syntax: the Determiner Phrase.

1.3 Aims of Research

The lack of comprehensive work in the syntax of the language requires a project that will consider each aspect of the syntax thereby ultimately giving a systematic structural account of Buli syntax. In the absence of such a project, individual efforts, no matter how meagre, can lead the way towards arriving at the ultimate aim of unravelling the intricacies in the structure of the language. In this regard this research aims to:

- Investigate the class of determiners in the language
- Systematically describe the internal components of the Determiner Phrase, particularly the sequential order of elements within it; and
- Test some theoretical assumptions within the realm of the Determiner phrase.

1.4 Relevance of Study

Buli is one of the less studied languages both among the Gur languages and Ghanaian languages as a whole. Little linguistic research especially on the syntax has been carried out in the language; as a result the benefits of this work are numerous.

- This study constitutes the first major work on this aspect of the grammar of the language.
- Major syntactic characteristics of the Determiner Phrase are highlighted thus contributing to the understanding of the syntax of Buli.
- It serves as a reference point for future research in the language and other related languages in the area of syntax.
- The study will complement efforts aimed at documenting the Buli language in particular and the Gur languages in general.

1.5 Some Grammatical Properties of Buli

This section is aimed at briefly presenting some grammatical properties of the language. In terms of word order, Buli is basically a subject-verb-object language, implying that in an unmarked sentence, the subject precedes the verb while the object follows the verb. The case of arguments is determined strictly by word order since there are no overt case markers in the language. The sentences in (2) below illustrate the word order patterns of the language.

2) a. Ati:m dà jèrí

Ati:m buy.PST house

Ati:m bought a house

b. * dà jèrí Ati:m

buy.PST house Ati:m

c) * Ati:m jèrí dà

Ati:m house buy.PST

Observing from the data in (2), (2a) is grammatical following its adherence to the SVO order dictated by the language; (2b) and (2c) are however ungrammatical as a result of their violations of the SVO word order of the language. In (2b), the verb appears sentence initial while (2c) has the verb terminating the sentence.

Nouns in Buli are grouped into five singular classes and four plural classes. Below is an illustration of the various noun classes in the language. The numbering below follows that of Kröger (1992).

3) a. Table 1: Singular Noun Class System

Class	Class marker	example
I	wà	Bi:k ‘child’
II	dì	Yérí ‘house’
III	kà	Bìak ‘dog’
IV	kù	Ná:b
V	bù	Ti:b ‘tree’

b. Table 2: Plural Noun Class System

Class	Class marker	Example
I	bà	N̂ipō:bā ‘women’
II	ŋà	Yî̂e ‘houses’
III	Sì	bàŋsà ‘lizards’
IV	Tì	Súità ‘roads’

There appears to be a correspondence between the singular and the plural classes. A class (I) noun in the singular form enters the same class (I) in the plural form. Consider the table of correspondence for instance:

4) Table 3: Class Correspondence

Class	Singular	Plural	Examples
I	Wà	Bà	Núr ‘man’
II	Dì	ŋà	Yérî ‘house’
III	Kà	Sì	bàŋ ‘lizard’
IV	Kù	Tì	Sîuk ‘path’
V	Bù	-	

As shown in (4), <u>núr</u> ‘man’ which belongs to class (I) in the singular also belongs to class (I) in the plural form. The other nouns in the table exhibit the same pattern

with the exception of the class (V) singular which has no particular corresponding plural form but may choose to be in any plural class. Although, this singular/plural correspondence is prevalent among nouns, certain exceptions are registered which makes it difficult to predict and to make a generalization that will capture the entire noun class system. For example, a noun like dòk ‘room’ which belongs to class (IV) in the singular finds itself occurring as a member of class (II) in the plural form. These mismatches in the class system make prediction in the Buli noun class system challenging.

Tone plays a crucial role at different stages in the grammar of Buli ranging from lexical to grammatical. Lexically tone is phonemic, that is the level of a tone has a potential of creating meaning difference between words. Example:

	High Tone	Mid-Tone	Low Tone
5)	siúk ‘path’	siūk ‘navel’	siù̀k ‘fish’
	kɔ́K ‘mahogany’	kɔ̄k ‘feather’	kɔ̀k ‘ghost’

The differences in the meaning of the above words are occasioned by the differences in their tonal patterns.

In addition to the lexical functions, tone in Buli also has grammatical functions. Tones combine with aspect markers to inflect aspects e.g the present and future. The present tense is marked by the particle à with a low tone preceding the verb.

6) Aná:léy à chēŋ bèl̃ì

Aná:lèy PRES.PART go river

Aná:lèy goes/ is going to the river.

The verb has a past tense reading without the present tense morpheme à placed before it as in (7).

7) Aná:léy chēŋbèl̃ì

Aná:léy go.PST river

Aná:léy went to the river

The future tense is marked with the particle l̃ì put before the verb.

8) Aná:léy lî chēŋbèl̃ì (chúm)

Aná:lèy FUT.PART go river (tomorrow)

Aná:lèy will go to the river

In addition to the future particle l̃ì, the adverbial chúm 'tomorrow' can optionally be added to the sentence as in example (8).

The tones of Buli display different tone processes. Two main tonal processes are identified in the language: Low Tone Spread (LTS) and Rising Tone Simplification (RTS). (see Akanlig-Pare 2005 for detailed discussion). LTS is conditioned by the presence of a high tone after a low tone resulting into a rising

tone on the Tone Bearing Unit (TBU) with the High tone. The low tone spreads onto the adjacent high tone to its right to give a rising tone as shown in (9)

9) a. m̀ + bí̌:k ⟶ m̀bǐ:k

my + child my child

b. bì:k + ká ⟶ bì:k kǎ

language + DEF the language

Rising Tone Simplification as the name implies, on the other hand, occurs when the result of a LTS is followed by a TBU with a high tone, in this case, the high component is delinked leaving only the low tone. Example (10) below shows this process

10)

bà	sárí	ní	input
bà	sǎŕí	ní	LTS
bà	sàŕí	ní	RTS
bà	sà	ní	output
dog	female	DEF	

the female dog

Going through a step by step derivation, the low of bà ‘dog’ spreads to the first syllable of sárí ‘female’ to create a rising tone. The high component of the rising is simplified to low. These two processes combine in a way to change the underlying tone of a syllable from high to low as shown above.

1.6 Issues in the Noun Phrase in Gur

Bendor-Samuel (1971:171) states that " in Gur languages nominal phrases are usually quite simple. Constructions consisting of a noun followed by a numeral or a noun followed by a demonstrative are common, but a noun followed by an adjective is not frequent and a noun with a string of adjectives never occurs." Studies in some of the languages in this language family (Angkaaraba 1980;Bodomo 1993; Olwasky 1999) have shown that his statement is not a true reflection of the structure of nominals in these languages. Data from Buli will further show that the nominal structure is not as simple as Bendor-Samuel puts it.

For Dagaare, Angkaaraba (1980) shows that it is possible to have a string of adjectives modifying a noun contra Bendor-Samuel. He, however, limited the number of adjectives to four. The following construction (11) from Angkaaraba (ibid) illustrates this point:

11) d**ɔɔ** kpong s**ɔ**gli wog faa nga

man big black tall bad this

this big black tall bad man. (Angkaaraba 1980:26)

In (11), a string of four adjectives follow the head noun d**ɔɔ** 'man'. Following this Bodomo (1993) observes that the sequencing of adjectives could exceed four. Drawing from Mampruli, another language from the Gur family Bodomo (ibid) proves the existence of strings of adjectives in the noun structure of these languages. Construction (12) from Bodomo (1993) exemplifies this:

12) gbaŋbiligyia

book small red

small red book (Bodomo 1993: 9-10)

It is obvious from (12) that the nominal structure can accommodate more than an adjective.

Olawsky (1999), in a study on Dagbani, noted that it is possible to have series of adjectives though this might be unusual. The following construction (13) from him is used to buttress his point.

13) paɤ' viɛl' bundaan' titali maa

woman nice wealthy big DEF

the big nice rich woman. (Olawsky 1999:43)

The structure in (13) once again shows that adjective sequences exist in the Gur languages. The example from the focused language adds to the already numerous examples across the Gur family.

Just like its sister languages, sequences of adjectives follow the head noun they modify in Buli as shown in (14).

14) ná: sɔ̀blǐk wɔŋ kŭ

cow black tall DEF

the tall black cow.

The data from Dagaare, Mampruli Dagbani and Buli prove that the nominal structure in the Gur languages is more complex than the simple one ascribed to it by Bendor-Samuel (1971). However, the closely knit relation that exists between nouns and adjectives in Gur exemplified by Mampruli according to Bodomo (1993) creates the impression that they are compound words motivating the conclusion reached by Bendor-Samuel.

1.7 Methodology

1.7.1 Data Collection.

The primary source of data for this work is from a period of linguistic research in the language speaking area. During this period direct elicitation of syntactic structures were made guided by questionnaires designed for linguistic field work such as Bouquiaux and Thomas (1992) and Payne (1997). As a native speaker too, I relied on my intuition as well.

The secondary data used is textual. Written Buli texts including *Bulsa Sunsuelima: folktales of the Bulsa in Northern Ghana*, (Schott 1993), *Buli Karuŋ Gbaŋ* (GILLBT 1985), *Biamagsika Nyuenta* (Akanlig-Pare and Wangara 2007), and *Buli-English Dictionary*, (Kröger 1992) were also consulted.

1.7.2 Theoretical Framework

This work is chiefly guided by the tenets of the Minimalist Program put forward by Chomsky (1995) and supplemented by Kayne's (1994) Antisymmetry theory. Though adhering to minimalist guidelines, other frameworks within the broader domain of Generative Grammar will be employed where necessary to account for a particular phenomenon. Detailed discussion of these frameworks is delayed until chapter two.

1.8 Organization of Work

This thesis consists of six chapters. Chapter one gives a general introduction to the research touching on important themes like language information, methodology, aims and relevance of the entire dissertation. Chapter two reviews the literature and discusses the theoretical frameworks. Determiners in Buli are discussed in chapter three. Constituent order of modifiers is discussed in chapter four. Chapter five gives a theoretical account of the surface order of elements in the Determiner phrase. The final chapter summarises and suggests areas for future research and then concludes.

1.9 Summary of Chapter

This chapter has been preoccupied with the introduction of the dissertation, with special emphasis on the language and its speakers, research problem, aims and relevance of the study. Some grammatical properties of the language are

highlighted in addition to clarifying some issues in the structure of the noun phrase in Gur. The sources of data used for the study and theoretical framework are also mentioned. The chapter concludes with an explanation on how the thesis is organized.

CHAPTER TWO

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.0 Introduction

This chapter is devoted to explaining the frameworks within which the issues raised are to be discussed. It also presents a review of various works that laid the foundation for the development and sustenance of the whole idea of the Determiner phrase (DP). In this regard, the rudiments of the Minimalist programme (Chomsky 1995) as well as that of the Antisymmetry theory (Kayne 1994) are explained. The review will look at works done within the context of the DP-hypothesis.

2.1 Theoretical Background

This section briefly gives a theoretical background to the Minimalist Program—a framework that will subsequently be adopted in the discussion of the Determiner Phrase in Buli. At the centre of this framework is the notion of Universal Grammar (UG), which views language as an innate property of humans. "Many parts of Language are built in, or innate. Much of Language is ability hard-wired into our brains by our genes" (Carnie 2007: 15).In this view language learning is regarded as the acquisition of rules and principles. "A person who has learned a language has acquired a system of rules that relate sound and meaning in a certain specific way. He has…acquired a certain competence that he puts to use in producing and understanding speech" Chomsky 1970:184). Over the years, there have been many

different approaches to language study. Some of which consider language as an innate biological faculty. These approaches have been modeled into a syntactic theory which has come to be referred to as Generative Grammar. The aim of this theory is to describe or explain the nature of language. In doing so, it regards the knowledge of language as the knowledge of rules and principles. Generative linguistics as an approach to language analysis is concerned, with system of rules that generate well-formed constructions in a language. Chomsky (1965), explaining generative grammar writes

> …by generative grammar I mean simply a system of rules that in some explicit and well-defined way assigns structural descriptions to sentences. Obviously, every speaker of a language has mastered and internalized a generative grammar that expresses his knowledge of his language. (1965:8)

The following sections explain the frameworks that are adopted in this work.

2.1.1 The Minimalist Program (MP)

The Minimalist Program, developed by Noam Chomsky (1995), is a linguistic program that is designed to capture the true reflection of language as it exists in the Faculty of Language (FL)—a component of the human mind/brain dedicated to language. FL according to MP, comprises two systems viz. Cognitive system and Performance system. The cognitive system is responsible for storing information while the performance system is responsible for accessing and using information stored in the cognitive system. The interaction of these two systems are reflected

in the articulatory-perceptual system (A-P) and conceptual-intentional system (C-I) yielding the most important interface levels of grammar which include Phonetic Form (PF) and Logical Form (LF) respectively. With this architecture of FL, the link between sound and semantics are readily achieved.

MP considers language as part of the natural world. Linguistic expressions under the current framework are assumed to be outcomes of an I-language contained in FL which generates them. The meanings of these expressions are supplied by certain linguistic levels specified by UG. The only relevant linguistic levels recognized by MP are the PF and LF levels. This makes it different from the GBframework which recognizes four linguistic levels namely: D-structure, S-structure, PF and LF. On this basis, linguistic expressions are viewed as sequences of representations derived from a combination of operations from the lexicon to LF. Thus the grammar of a language is assumed under MP to be a product of the combinational process of components such as the lexicon, numeration, computational system, Phonetic Form (PF) and Logical Form (LF).

2.1.1.1 The lexicon

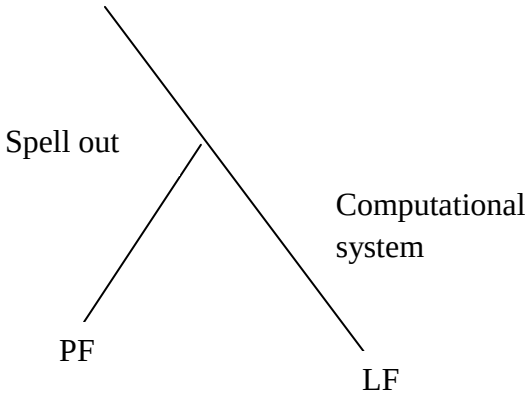
The lexicon is an important component of UG. Linguistic expressions are outcomes of combinations of lexical items. It is necessary to include in the description of an individual's linguistic capacities the amount of lexical items he possesses. Considering this, lexical categories form an important component of an individual's linguistic competence. The lexicon thus serves as a repository for

these lexical items. Detailed information about lexical items, in the areas of semantic properties, phonetic forms and syntactic features are all stored in the lexicon. Information about the argument structure of words, the number of arguments a head allows, theta roles to be assigned by the head, and class of categories to receive such roles are all stored in the lexicon. For example the syntactic category of the word '*cook'* as a verb, its meaning, its assignment of agent, theme and beneficiary theta roles as well as its pronunciation is specified in the lexicon. The lexicon provides the necessary lexical items needed by the computational system to generate sentences.

2.1.1.2 Computational system

Lexical items from the lexicon are fed into the computational system which is used to build linguistic structures. Lexical items are not combined in just any manner but must obey certain structural building rules and principles. Information on structural relations, domination and linearity, c-command, government and binding, case assignment which are needed to build acceptable linguistic structures are all features of the computational system. Well formed structures are as a result of the successive applications of operations of the computational system. "The computational component contains all the rules and constraints. This part of the mind does the work of building sentences and filtering out any ill-formed one." Carnie (2007:227). In view of all these, the architecture of grammar proposed by Chomsky under MP is:

1) Lexicon Numeration



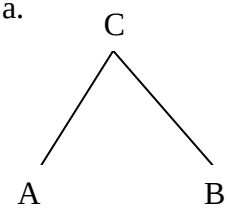
(Jang 2000:5)

Through the operation select, the lexicon supplies lexical items into the numeration. The computational system relies on the items in the numeration to generate linguistic expressions. At each stage of the computation, relevant features are separated and sent to the different interface levels. The computation splits at Spell-Out where phonological features are taken to the PF interface with the computation continuing till LF. The combinations of the different elements in the numeration are made possible by certain theory internal notions like Merge, Attract/Move, Feature checking and are constrained by certain economy conditions.

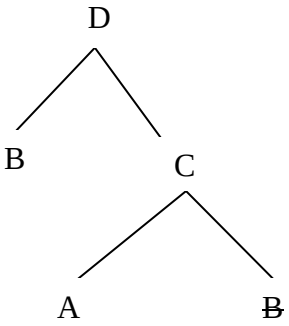
Merge is a structural building operation that combines two syntactic objects to form a new one. According to Chomsky, merge is "…an operation that takes *n* syntactic objects (SOs) already formed, and constructs from them a new SO" (2005:5). The operation Attract/Move dislodges items from their merged positions to new structural positions forming a chain between the moved elements and its

copy. In Chomsky's view, "the operation Move is driven by morphological considerations: the requirement that some feature F must be checked" (Chomsky 1995:262). He defines Attract/Move as "K attracts F if F is the closest feature that can enter into a checking relation with a sublabel of K" (Chomsky 1995:297). The following structures illustrate Merge and Attract/Move:

2) a.



b.



The tree in (2a) represents the operation Merge where A and B are combined to form the new syntactic object C. The tree in (2b) on the other hand exemplifies Attract/Move, in which B is attracted by C and merges with it to form D leaving behind a copy. In this work, copies of moved elements are represented by strikethrough following Haegeman (2006) as exemplified in (2b).

The copy theory of movement forms an important part of MP. Under the copy theory moved elements leave behind copies instead of traces. "The trace left behind is a copy of the moved element, deleted by a principle of PF component in the case of overt movement" (Chomsky 1995:202). Conceptually this is explained by the inclusiveness condition which prevents the computational system from introducing new elements in the course of the derivation. Traces are considered new elements since they are not part of the items introduced into the computation system thereby violating the inclusiveness condition.

Central to MP is feature checking. Cross linguistic variations in word order are attributed, under the program, to the strength of features and how they are checked/deleted. Strong features trigger overt movement of the targeted item that it enters into a checking relation with, while weak features attract covert movement at LF. The following examples from French and English illustrate how variation is accounted for under MP:

3) a. Je vais souvent à l'école.

1SG go often to school

(I often go to school.)

b. I often go to school.

In (3a), the adverb souvent 'often' follows the verb vais 'go' in French while in (3b) the verb is preceded by the adverb in English. This variation is accounted for, by assuming that the features in (T^1) in the two languages possess different strengths. The (T) feature in French is strong, thereby, forcing an overt movement or raising of the verb across the adverb to check its feature at (T). The verb in English, on the other hand, has no motivation to raise overtly across the adverb because of the weak feature at (T), thereby checking its feature covertly at LF.

In later examples (15&16), it will be realised that the variation in word order between the determiner and noun in Romanian and French are accounted for by assuming the presence of strong features at D in Romanian and weak features at D in French.

During the computation of linguistic expressions, simple operations are preferred over complex ones, short movements over long ones, Covert movement over overt

movement due to general economy conditions expressed in notions like: Minimal Link condition (MLC) and Last Resort which are defined as follows:

Minimal Link Condition (MLC): "at a given stage of a derivation, a longer link from α to K cannot be formed if there is a shorter legitimate link from β to K."(Chomsky 1995:295). This condition discourages long movements where short movements are possible.

Last Resort: "Move F raises F to target K only if F enters into a checking relation with a sublabel of K" (Chomsky 1995:280). This operation is permitted upon satisfying the conditions that: a feature contained in F is checked by the operation; a feature of either F or K is checked and finally the operation serves as a foundation for future feature checking of F. The advantage of the operation Move F is that it prevents double movement of an element in order to check the same feature.

These economy notions are meant to curtail unwanted movement operations during computations of linguistic expressions.

2.1.2 Antisymmetry Theory

This theory, through the Linear Correspondence Axiom (LCA), seeks to restrict or limit the range of syntactic representations available to human language. This theoretical concept prohibits flexible word order between Specifiers (S) Heads (H) and Complements (C) made available by earlier frameworks. Kayne (1994) argues against this flexibility and postulates that the only linear order option available for

languages is Specifier-Head-Complement. However, languages like Japanese that exhibit an order of Specifier-Complement-Head should be considered as an instance of complement raising to a higher structural position above the Head. The following paragraphs consider the notions that underlie the Linear Correspondence Axiom (LCA) and how it explains the relation that exists among elements of a phrase structure beginning with a definition of LCA.

2.1.2.1 Linear Correspondence Axiom (LCA)

4) LCA is defined as "d (A) is a linear ordering of T" (Kayne 1994:6). Where:

d: the non-terminal to terminal dominance relation;

A: a set of all pairs of non-terminals such that the first asymmetrically c-commands the second;

d(A): a set of terminals that A dominates and

T: a set of terminals.

This view of phrase structure imposes a linear ordering on terminal[2] nodes. The terminal nodes of a given phrase structure are linearly ordered if it possesses the three properties of linear ordering.

2.1.2.2 Properties of Linear Ordering

5) a. It is transitive; that is, xLy & yLz + xLz.

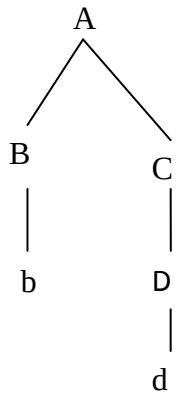
b. It is total; that is, it must cover all the members of the set: for all distinct x, y, either xLy or yLx.

c. It is antisymmetric, that is, not (xLy & yLx). (Kayne1994:4).

2.1.2.3 Asymmetric C-Command

"X asymmetrically c-commands Y iff X c-commands Y and Y does not c-command X" (Kayne 1994:4). This requires that the relation between two terminal nodes (x, y) should be the case that the non-terminal node X, dominating x c-commands Y, the non-terminal node dominating y. The relevant consequence of this notion to the LCA is that it gives linear ordering to terminal nodes in a phrase structure. Consider the phrase structure below:

6)

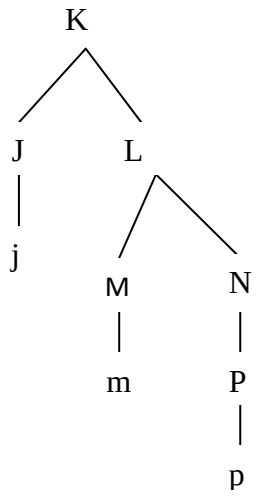


In (6), the non-terminal node B, dominating the terminal b asymmetrically c-commands D, the second non-terminal node dominating d.Consequently, for the set of terminals (b, d) the non-terminal of (b) asymmetrically c-commands that of (d).

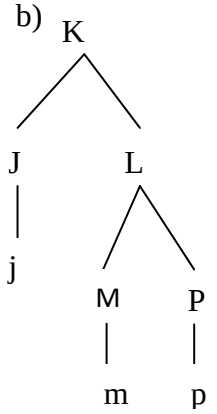
2.1.2.4 LCA and Phrase Structure

The structures below taken from Kayne (1994) illustrate how the LCA and its accompanying notions explain the relation that exists among non-terminal nodes and their corresponding terminal nodes:

7) a).



b)



The set A (a set of allpairs of nonterminals such that the first asymmetrically c-commands the second) of (7a) include: (J,M), (J,N), (J,P), (M,P) and their corresponding d(A) include (j,m), (j,p) and (m,p). The set d(A) is considered a linear ordering of the terminals (j, m, p) because it satisfies the three properties of linear ordering as stated in (5a-c) Kayne (1994).

The set A of pairs in (7b), such that the first nonterminal asymmetrically c-commands the second include (J, M), (J, P). The resulting d(A) for these pair is (j, m), and (j, p). The set (j, m) (j, p) does not constitute a linear ordering of the terminals (j, m, p) because the order of the two terminals (m, p) are left out, hence is not total as required by the second property of linear ordering.

The structure (7b), according to Kayne, answers two major questions in X-bar theory: 1) why the complement of a head cannot be a head? And 2) why a phrase structure cannot have two heads?

Kayne argues that a complement of a head functioning as a head will yield a non-admissible structure like (7b) thereby accounting for why complements cannot be heads. Similarly, a two head phrase is excluded by the LCA because it cannot linearly order terminal nodes as in (7b).

Having discussed LCA with its attendant concepts, relevant to the current work is the conclusion reached by Kayne that "specifier-head-complement, and not the reverse, is the only order available to the subcomponents of a phrase."(Kayne 1994:36).

2.1.3 The Minimalist Program and the Linear Correspondence Axiom

Chomsky (1995) acknowledges that on conceptual grounds, the LCA differs from the bare theory in that the architecture of X-bar theory which features prominently in Kayne's LCA is abandoned in the bare theory. This notwithstanding, Chomsky notes that "the general idea is very much in the spirit of the Minimalist Program and consistent with speculation that the essential character of C_{HL} is independent

of the sensorimotor interface" (Chomsky 1995:335). On empirical grounds, the LCA is considered a principle of the phonological component of grammar that occupies itself with ordering.

In conclusion, the Minimalist Program and the Linear Correspondence Axiom accord that the Specifier-Head-Complement order is the universal word order. This follows from Chomsky's statement that "it seems that Kayne's basic intuition can be accommodated in a straightforward way in the bare theory, including the major empirical conclusions, specifically, the universal order SVO and adjunction-target" (Chomsky 1995:340).

2.1.4 Relevance of the Framework.

For any theory to be considered a model for the study of language, it must have satisfied the three main criteria of evaluation. Thus the theory should be observationally, descriptively, and explanatorily adequate. I adopt this approach in my study because I think the theory has satisfied these three conditions. Secondly, as an approach to language analysis, the framework aims at describing language as it is in the human mind by concentrating on the cognitive system responsible for storing information.

2.2 Literature Review.

This section serves as a guide to extensively increase our knowledge and awareness of pertinent issues raised and discussed in the various Determiner phrase structures across the world's languages. This starts with the pioneering

work of Abney (1987) and then navigates through other authors who have adopted it and modified it based on language particular idiosyncrasies thereby contributing to the progress of the hypothesis: Longobardi (1994); Bernstein (1993); Fassi Fehri (1999); and Aboh (2004). Other related works essential to this study are subsequently reviewed in relevant chapters of the thesis.

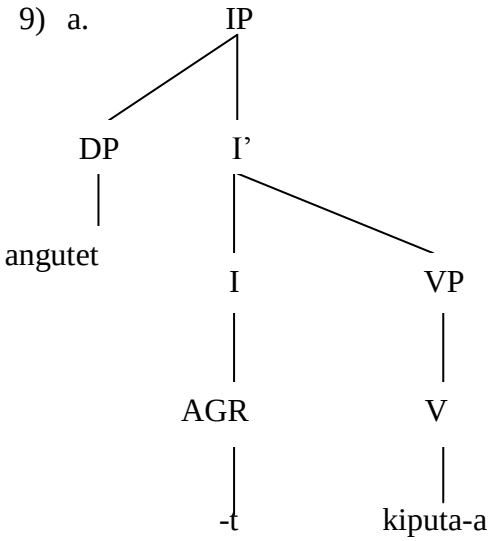
Abney (1987), following proposals of extending X-bar theory to functional categories, extensively argues for the parallel treatment of a noun phrase and a clause. It follows that just as a clause is headed by a functional element Inflection (infl) as in (IP), the determiner, considered as a functional category, projects its own phrase, Determiner Phrase (DP) and takes a noun phrase (NP) as a complement. The similarity between the IP and the DP is exemplified by Yup'ik, a Central Alaskan Eskimo language. In this language, nouns agree with their possessors indicating the existence of an agreement morpheme in the DP as we have in the IP. Consider the following examples:

8) a. angute-t kiputa-a-t
men-ERG buy-OM-SM
the men(PLU) bought it

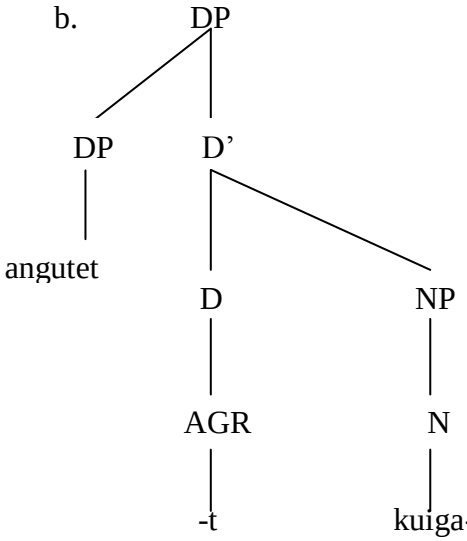
b. angute-t kuiga-t
men-ERG river-SM
the men's river. (Abney 1987:39)

The examples in (8) show the similarities between the IP[3] and the DP. In (8a), the subject agreement marker (–t) found on the verb is the same as the agreement morpheme found on the possessed noun kuiga ‘river’ in (8b). Similarly, the subject of the transitive verb angute ‘men’ in (8a) receives an ergative case just as the possessor in (8b). The resemblance of the clause (8a) and the DP (8b) is shown in (9a) and (9b) below respectively:

9) a.



b.



(Abney 1987:40)

The heads of the complements kiputaa- ‘buy’ in (9a) and kuiga- ‘river’ in (9b) are raised at PF to join to the AGR morpheme (–t).

Clauses and phrases in other languages like Hungarian, Mayan, and Turkish behave similarly as Yup’ik where nouns show agreement with their possessors similar to the agreement relation that exists between inflections and their specifier positions. In Hungarian for instance, the possessor is marked with a nominative case similar to that of the subject in a clause, likewise the possessed noun like the verb agrees in person with the possessor. These patterns are illustrated in (10) below:

10) a. az en vendeg-e-m
DET I.NOM guest-POSSD-1SG
My guest.

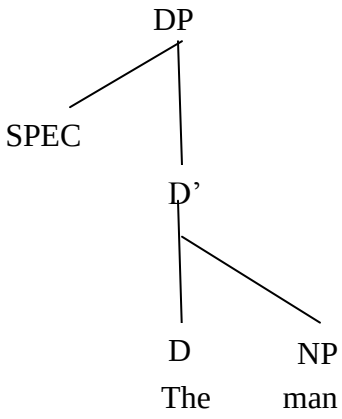
b. a te vendeg-e-d
DET you.NOM guest-POSSD-2SG
Your guest.

c. (a) Mari vendeg-e-**ø**
(DET) Mary.NOM guest-POSSD-3SG
Mary’s guest. (Abney 1987:44)

The possessors in example (10) en ‘I’ in (10a), te ‘you’ in (10b) and Mari ‘Mary’ in (10c) take nominative cases respectively similar to the case of the subject in a sentence. The head noun vendeg ‘guest’ agrees in person with the possessor, 1SG in (10a), 2SG in (10b) and 3SG in (10c). In line with case assignment in the

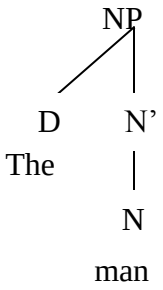
sentence, if inflection in the sentence is responsible for assigning nominative case to the subject, it follows naturally that the nominative cases in example (10) above are assigned by a similar inflection in the noun phrase. Following Szabolcsi (1987), Abney concludes that the determiner (D) is a lexical instantiation of inflection in the noun phrase. Structurally, Abney's hypothesis is charted as in (11).

11)



In the DP-hypothesis, the noun is a complement of the head D as shown in (11). This sharply contrasts earlier analysis whereby the determiner is put in the specifier of an NP as in (12) below:

12)



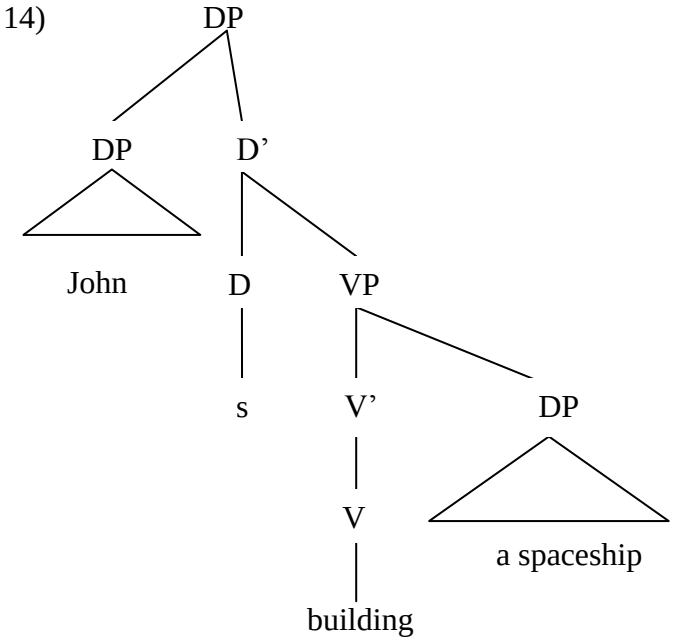
Apart from evidence from languages like Yup'ik, Mayan, and Hungarian that support the DP-hypothesis in (12) over the standard analysis represented by (12); English also give evidence in support of the DP-hypothesis.

Abney (1987) argues that the DP-hypothesis provides a solution for the "poss-ing" gerundive in English which no other analysis has been able to adequately provide a solution to. For example the "poss-ing" gerundive construction in (13) fits perfectly well within the structure provided by the DP-hypothesis.

13) John's building a spaceship.

The remarkable feature of constructions such as (13) as noted by Abney is its dual nature. On the one hand it is a noun phrase and on the other hand, a sentence. This not withstanding, the DP-hypothesis is able to accommodate it without violating any principle in phrase structure as in the tree in (14) below:

14)



The DP-hypothesis with its potential of accounting for the various word orders of the languages of the world has proven to be more complex than (11) above. Several functional phrases are argued to occur in the structure of the DP including Quantifier phrase (QP) and Adjective phrase (AP), (Abney 1987); Number Phrase (NumP) in Hebrew, (Ritter 1991); and in Walloon, (Bernstein 1993); Article phrase (ArtP) in Scandinavian languages, (Roehrs 2006). Application of this hypothesis to languages has witnessed modifications over the years without affecting its central claim. Thus, this thesis should be considered as an extension of this idea in the investigation of the Buli structure; however, caution is taken to adequately bring out the language specific operations that are likely to emerge in the course of the analysis of this language.

Longobardi (1994) argues for the existence of DP in Italian and Western Romance. According to him, "a nominal expression is an argument only if it is introduced by a category D" (1994:620). Nominal expressions are licensed as arguments in Italian only when introduced by a D which semantically contains the feature number. Pronouns, he argues, are generated in D while nouns are base generated at N. Common nouns are introduced by overt determiners in the syntax to qualify as arguments. Proper names are proposed to occupy two structural positions in the language. They remain in-situ when accompanied by determiners as the case in last names of female human beings and are raised to D in the absence of an overt determiner in order to be interpreted as arguments. The latter structural position occupied by proper names viz. D is accounted for by N raising

to D. This naturally supports the idea of the existence of DP and movement within it. Contrasting N-movement in Western Romance, English and German, he concludes that N raises to D in the syntax of the former but takes place only at LF in the latter languages.

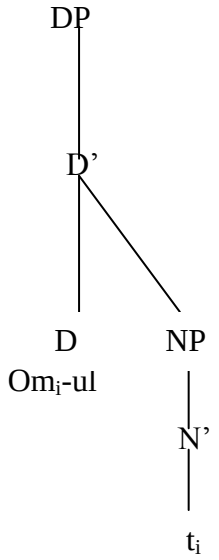
Bernstein (1993), accounting for the relatively flexible word order between nouns and adjectives across the Romance languages, adopts the idea of Noun movement. She argues that adjectives are prenominally generated and nouns move across adjectives resulting in the different surface orders observed in Romance. She, however, notes that noun movement alone is not adequate to account for the cross linguistic variations in the DP; thereby, proposing a functional phrase corresponding to number phrase (NumP) in Romance motivated by earlier proposals (Ritter 1991; Picallo 1991; and Valois 1991a,b). From a minimalist perspective where movements are motivated by the need for feature checking, Bernstein argues that N-stem raising to functional heads in the DP is motivated by the need for it to check its morphological features viz. gender and number. She further claims that definite article features attract N-stem to D for convergence. The level at which N to D movement takes place however varies. Generally, most Romance languages exhibit N to D movement at LF while some like Romanian have N to D movement at overt syntax. This is exemplified by the following examples from Romanian and French taken from Bernstein (1993). The position of the noun in the Romanian example in (15a) shows that the noun <u>om</u> 'man' has moved from its base position N to D for feature checking. This movement is shown in the tree in (15b) (X-bar levels mine) below:

15) a. Om-ul (Romanian)

Man-DET

The man

b.



(Bernstein 1993:254)

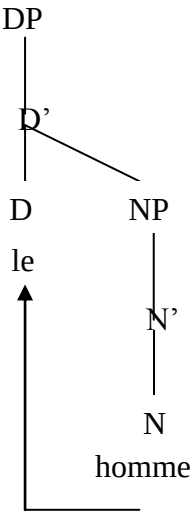
In (15b) the morphological features of the definite article are checked by N raising to D in overt syntax. The noun om ‘man’ merges with the article ul ‘the’ at D leaving a trace at its base position. The situation in French is however different, in French as shown below (16a) N to D raising is done at LF indicated by the arrow in the tree in (16b). (X-bar levels mine)

16) a. L’ homme (French)

DET man

The man

b.



(Bernstein 1993:255)

According to her, the presence of overt morphological case in Romanian as against its absence in other Romance languages is responsible for the overt N raising in Romanian and LF raising in other languages exemplified by French.

Fassi Fehri (1999) investigates the structure of the DP in Arabic in relation to adjectival modifiers. Among other things, he distinguishes between attributive and predicative adjectives structurally though both appear postnominally. In this regard, he noted that attributive adjectives are placed before the complement of the noun they modify while predicative ones occur after the complement. He added that attributive adjectives must precede while predicative adjectives follow the possessor and complement in an analytic possessor construction. Fassi Fehri argues that though adjectives increasingly occur after nouns in Arabic, they are generated prenominally. Postnominal order of adjectives, however, is derived by assuming Kayne's (1994) antisymmetrical left movement. AP (or A) raising as

well as N and possessor raising are the movement types identified by him in the Arabic DP.

Contrary to the views about the lack of movement of APs in the DP, Fassi Fehri (1999) reveals that the mirror image of prenominal adjectives exhibited postnominally is attributed to AP or A raising in Arabic. He illustrates AP (or A) raising with the following examples:

17) l-xabar-u l-mudaa'u mu?axxar-an
DEF-news DEF-broadcast late-ACC
the lately broadcast news (Fassi Fehri 1999:121)

Considering example (17), assuming the adverbial modifier of the adjective mu?axxar-an 'late' is generated at the Spec of the adjective l-mudaa'u 'the broadcast', then the surface order shown above where the adjective precedes its modifier can only be accounted for if AP raises above its Spec position, corroborating the idea of AP-movement.

Another evidence showing AP raising is presented in (18) below:

18) l-hujuum-u š-šadiid-u l-muhtamal-u
DEF-attack-NOM DEF-violent-NOM DEF-probable-NOM
li-?amiriikaa 'alaa l-muqaawamat-i
of-America on DEF-resistance
the probable violent attack of the resistance

(Fassi Fehri 1999:122)

In the base structure of example (18), the modal AP l-muhtamal-u 'the probable' and possessor ?amiriikaa 'America' are placed high on the tree than the manner AP š-šadiid-u 'the violent'. However, at surface structure the manner AP appears above both modal AP and possessor indicating once again that the AP has moved.

These movements, he argues are motivated by the presence of strong features at D viz. case, definiteness, gender and number which need to be checked. Though motivated by similar reasons, structurally the moved elements occupy different positions. Thus the features of A or N are checked at D while that of AP or Possessor are checked at Spec D.

In sum, Fassi Fehri argues for an underlying prenominal adjective order for Arabic and concludes that surface order is accounted for by independent AP (or A) as well as N or Possessor movement.

Aboh (2004) comprehensively discusses the structure of Determiner phrase in Gungbe, a Gbe language. Of particular interest are his description and derivation of the surface order of elements in the DP. He proposes and argues that the Gungbe DP is best accounted for by assuming a split-D hypothesis. Under this hypothesis, the D-system is composed of two functional heads D^o and Num^o corresponding to [±specific] and [plural] markers respectively. The co-occurrence of the components of D viz. determiner and plural marker led to the natural conclusion that they occupy different structural positions in the DP. D^o the head of the highest projection serves as a link between the noun phrase and discourse and

Num^{o} the locus of number features heads the lowest projection situated between the D-system and the nominal inflectional system.

The constructions below are used as evidence for the existence of split-D hypothesis in Gungbe. The marking of specificity and number on the Gungbe noun phrase is exemplified in (19).

19) a) Kɔ́kú xɔ̀ távò xóxó lɔ́ lɛ́

Koku buy.PERF table old $SPF_{[+DEF]}$ NUM

Koku bought the specific old tables.

b) Kɔ́kú xɔ̀ távò xóxó ɖɛ̌ mí mɔ̀n lɔ́ lɛ́

Koku buy.PERF table old that 1PLU see.PERF $SPF_{[+DEF]}$ NUM

Koku bought the specific old tables that we saw.

c) *Kɔ́kú xɔ̀ távò lɔ́ xóxó ɖɛ̌ mí mɔ̀n lɛ́

Koku buy.PERF table $SPF_{[+DEF]}$ old that 1PLU see.PERF NUM

(Aboh 2004:80)

In example (19a), the specificity marker lɔ́ and the number marker lɛ́ follow the head noun and its adjectival modifier. Similarly in (19b), the relative clause ɖɛ̌ mí mɔ̀n 'that we saw' intervenes between the noun phrase and the specificity and number markers. The ungrammaticality of (19c) is as a result of the elements occurring between the specificity marker and number marker. Aboh concludes that the fact that nothing is allowed to intervene between these two elements suggests that they belong to the

same system. Thus D^{o}occupied by the specificity marker and Num^{o} occupied by the number marker encode two aspects of the same D-system.

Aboh further observes that Num^{o} serves as a boundary between the D-system and the nominal inflectional domain. The nominal inflectional domain involves the extended projection of the NP including its modifiers like adjectives, numerals and demonstratives. Structurally, he argues that the modifiers are licensed in the specifiers of functional projections that dominate the NP. Accordingly, the Gungbe DP appears bracketed as follows:

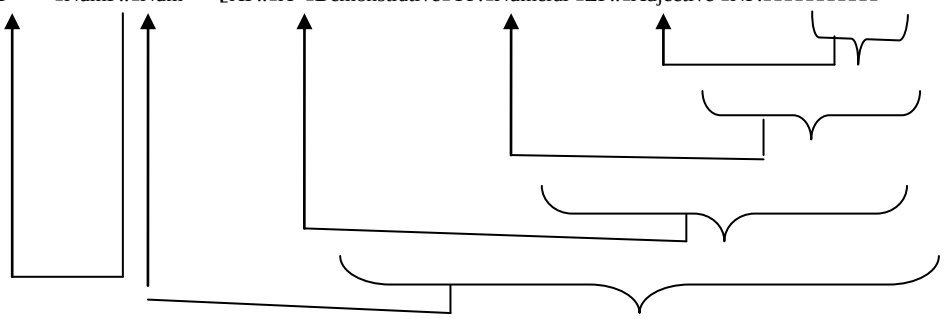
20) $[_{DP}\ [_{D^{o}[\pm spcific]}\ [_{NumP}\ [_{Num^{o}[\pm plural]}\ [_{XP}\ [_{NP}]]]]]]$ (Aboh 2004: 83)

In (20) the D-system comprises the DP and NumP. XP and NP constitute the nominal inflectional domain. XP stands for the functional categories hosting the modifiers.

Adopting the specifier-head-complement hypothesis (Kayne 1994), another hypothesis adopted in this thesis, Aboh proposes that the surface order of [Noun+Modifiers +Specificity marker + Number Marker] is arrived at by moving the whole of the inflectional nominal domain cyclically through the specifier of NumPand DP respectively. This movement is necessitated by the need for the noun to check its [±plural] [±specific] features at Num^{o} and D^{0} respectively. Among other things, he argues, following the universal sequence of Determiner>Number>Demonstrative>Numeral>Adjective>Noun (Hawkings 1983) that the surface order of Noun>Adjective>Numeral>Demonstrative>Number>Determiner order exhibited

by Gungbe is arrived at through two separate movements. First, cyclical movement of the nominal inflectional domain to spec DP through spec NumP mentioned earlier and second, snowballing movement which is limited to only the nominal inflectional domain. Snowballing movement involves moving the NP across the adjective to form noun-adjective. The noun-adjective sequence moves to the left of the numeral. The new sequence noun-adjective-numeral subsequently moves to the left of the demonstrative. The following structure (21) exemplifies the two types of movements discussed:

21). $[_{DP.}[_{D}{}^{o}$lɔ́ $[_{NumP..}[_{Num}{}^{o}$lɛ́$[_{XP..}[_{X}{}^{o}[_{Demonstrative}[_{YP.}[_{Numeral}\ [_{ZP..}[_{Adjective}\ [_{NP.}]]]]]]]]]]$



Cyclical movement Snowballing movement.

(Aboh 2004: 114)

There is no doubt that the in depth analyses and revelations of this work have impacted tremendously on my work. Appealing in Gungbe is its complex articulated DP and DP internal operations. Importantly, this study has broadened our knowledge in DP structure and cautions that languages have different structures. With this in mind, I proceed to discuss the DP in Buli.

2.3 Summary of chapter.

This chapter has been preoccupied with the goal of reviewing relevant and related literatures in addition to explaining the tenets of the frameworks that are used for explaining the data. The reviewed works include: Abney (1987) setting the stage for DP analysis; Logobardi (1994) on the Italian DP, arguing that only DPs in Italian can function as arguments of clauses further grounding the need for the existence of DPs; Bernstein (1993); Fassi Fehri (1999); and Aboh (2004) in which the DP of Gungbe is 'chartered' within a Split-D system. Under this system, the D is composed of two functional heads D^o and Num^o corresponding to [±specific] and [plural] markers respectively.

Endnotes

[1]T is the head of the phrase TP. It is basically the same as I in IP as you may find in other works.
[2]A node on a syntactic tree that dominates nothing (Carnie 2007).
[3]I used IP here instead of TP because Abney (1987) used an IP in his work.

CHAPTER THREE

DETERMINERS AND PERSONAL PRONOUNS

3.0 Introduction

Determiners play a crucial role in communication because they contribute their semantic values to phrases that they are a part of. Their presence or absence impacts significantly on conveyed information because they possess referential functions. The main aim of this chapter is to investigate the class of Determiners in Buli. Accordingly, the definite and indefinite articles as well as demonstratives are considered. In order to achieve this goal, three different aspects of Determiners are tackled. 1) Their semantics—the feature values they contain that they transfer to nouns, 2) Their morphology—the forms determiners assume depending on the nouns they occur with, and 3) Syntax—their distribution with relation to other categories. These different aspects of the determiners give an idea about the behaviour of elements that head the determiner phrase in Buli. The final section in this chapter will provide information on the pronominal system of the language due to their roles as heads in the DP (Abney 1987; Longobardi 1994,).

3.1 The Semantic Features of Determiners

This section examines the meanings determiners contribute to the constructions they are found in. The choice of determiner in a particular construction signifies

the level of information shared by both the speaker and the hearer. For instance, consider the following constructions in English:

1) a. The goat ate the grass

b. A goat ate the grass.

The difference in sentences (1a) and (1b) is attributed to the definite and indefinite distinction introduced by the two determiners in English. The speaker in (1a) chose the definite determiner because the addressee in that context is familiar with the referent of the noun goat. In (1b) however the referent of the noun goat is not known to the addressee. Apart from familiarity, other notions like specificity and non-specificity are expressed by the definite and indefinite determiners respectively.

3.1.1 Definiteness

Determiners express definiteness. The use of a definite determiner in a construction implies that the reference of the noun is known to both the speaker and the hearer. To exemplify this, consider the sentences below:

2) a. bĭa ká dòm bĭ:k

Dog DEF bite.PST child.INDEF

The dog bit a child.

b. bīak dòm bì: ká

Dog.INDEF bit Child DEF

A dog bit the child.

The noun phrase bīa ká ‘the dog’ in (2a) is known to both the speaker and the hearer; this knowledge is expressed by the presence of the definite determiner ka after the noun. Similarly in (2b) bî: ká ‘the child’ is the known entity. All nouns in Buli are marked as either definite or indefinite by the use of determiners as will be explained shortly.

Apart from the use of overt determiners to indicate definiteness, other constructions like relative clauses and possessive constructions are also employed to specify definiteness. This is illustrated in the examples (3-4) below:

3) a. Doctor wāi àlē dʒàm dɛ̀lá lá

Doctor REL.PRO SUBJ.PART came here REL.PART

The doctor who came here.

b. bî:k kái ātē bà nàg lă

Child REL.PRO OBJ.PART 3PLU beat REL.PART

The child whom they beat

As the English glosses show in example (3), both the doctor in (3a) and the child in (3b) are known. The shared knowledge is attributed to the use of the relative clauses.

The possessive construction in (4) implies that the addressee has knowledge about the speaker's child.

4) mî bî:k ká dʒàm dɛ̌

POSS.PRO child DEF come here

My child came here.

3.1.2 Indefiniteness

Indefinite constructions imply that the addressee has no knowledge about the reference of the noun. This is usually represented by a suffix or a null determiner. Nouns used in the indefinite sense are generic in that they do not refer to any particular member of that class but rather all the entities that can be identified by such reference.

The following sentences illustrate the use of the suffix and a null determiner to mark indefiniteness respectively:

5) a. núr-ú àlē dʒām dɛ́

man-INDEF SUBJ.PART came here

A man came here.

b. bū:k àŋɔ̄bī vá:tà

goat.INDEF PRES chew leaves

A goat chews leaves

c. bīa ká àŋɔ̄bī lām

dog DEF PRES chew meat.INDEF

The dog chews meat

In (5a), the subject <u>núr</u> ‘man’ is accompanied by the indefinite suffix -u, while indefiniteness of the subject <u>bū:k</u> ‘a goat’ in (5b) is marked by the final sound [k] of the word. In (5c), <u>lām</u> ‘meat’ is not marked by any overt determiner.

3.1.3 Deictic Features

“Deixis concerns the ways in which languages encode or grammaticalize features of the context of utterance or speech event, and thus also concerns ways in which the interpretation of utterance depends on the analysis of that context.” (Levinson, 1983:54). The class of determiners that encode these features are demonstratives. According to Diessel (1999), demonstratives comprise two different kinds of features: (1) deictic features—responsible for indicating the distance of an entity from the deictic centre and (2) qualitative features—which specify some unique properties like animacy, gender and human or non-human of a referent. Buli lacks the qualitative features in its demonstratives. As will be seen, the demonstrative marker does not alternate in form with the alternation in difference in the types of nouns. Human nouns, non-human, animate and inanimate nouns all make use of the same demonstrative particle. Two types of spatial demonstratives are identified: proximal and distal demonstratives.

3.1.3.1 Proximal Demonstratives

These types of demonstratives are used to refer to elements near the deictic centre or speaker (Yule 1996; Diessel 1999). Proximal demonstratives are recorded in Buli and are represented as shown below in example 6):

6) a. núr màŋ kà **dɛ́**

man good DEF DEM

This good man.

b. ná: mú **dɛ́**

cow DEF DEM

This cow.

The demonstrative dɛ́ indicates that the referents of the nouns in (6a&b) are near their respective deictic centres.

3.1.3.2 Distal Demonstratives

These are used to denote entities that are far away from the deictic centre. The demonstrative determiner lá 'that, those' is used for this purpose in Buli. This is shown in (7).

7) a. bū-kū-lá

goat-3SG-DEM

That goat.

b. yé-ŋá-lá

house-3PLU-DEM

Those houses

Just like its proximal counterpart, the distal determiner marks the end of the construction as indicated by (7a-b). It however has a syntactic distribution that distinguishes it from the proximal demonstrative. This occurrence is explained in (section 3.3).

3.1.4 Number

Another feature that determiners have in Buli is number. The selection of determiners is instantiated by the number expressed in the noun. Singular nouns co-occur with singular determiners and plural nouns are accompanied by plural determiners. Both definite and indefinite determiners exhibit this pattern. The number feature is exemplified by the following constructions:

8) a. kpóŋ kú

Guineafowl.SG DEF.SG

The guinea fowl

b. kpî:ná ŋá

Guineafowl.PLU DEF.PLU

The guinea fowls.

c. *kpóŋ ŋá

Guineafowl.SG DEF.PLU

d. *kpî:ná kú

Guineafowl.PLU DEF.SG

In (8), the definite singular determiner kú is used in (8a) to specify the singular noun kpóŋ 'guinea fowl', while the plural counterpart ŋá marks the plural noun as definite in (8b). Examples (8c) and (8d) are ungrammatical because the definite plural determiner ŋá and the definite singular determiner kú are made to occur with a singular noun in (8c) and a plural noun in (8d) respectively.

This concord phenomenon also exists between indefinite determiners and the nouns they specify over. Consider the expressions in (9) for instance, the indefinite singular determiner '-u' is suffixed to the root in (9a). In (9b) the indefinite plural determiner ba is selected to match with the noun.

9) a. núr-**ú** sùgrì wà nǎŋ

man-INDEF.SG wash 3SG leg

A man washed his leg.

b. núr **bá** sùgrì bà nǎŋ-sà

an INDEF.PLU wash 3PLU leg-PLU

Men washed their legs

Examples (8-9) illustrate that number is a crucial relational feature between nouns and determiners. Singular nouns must always occur with singular determiners and plural nouns with plural determiners. It can thus be concluded that number triggers the choice of determiners to be used in a particular context.

It is prudent to note, however that the number concord is limited to only the definite and indefinite determiners. The demonstrative determiners are number neutral, in the sense that the same form dɛ ‘this’ or la ‘that’ is used regardless of whether the noun is singular or plural. The following examples show that there is no agreement between the demonstrative and the noun in terms of number:

10) a. tūem mú **dɛ́**

Sickness DEF DEM

This sickness

b. tūe-tā ŋá **dɛ́**

Sickness-PLU DEF DEM

These sicknesses.

The same demonstrative marker dɛ is employed in both instances (10a&b) though; the noun is singular in (10a) and plural in (10b).

From the discussions in this section, one can say that definiteness, indefiniteness, deixes and number are the semantic features contained in the determiners. Unlike the definite and indefinite determiners which alternate between singular and plural forms depending on the number of the noun, demonstrative determiners are number neutral. The next two sections consider the forms determiners assume and their distributions respectively.

3.2 Morphology of Determiners

Determiners assume different shapes and forms depending on the nouns they occur with. This section investigates the various different forms of determiners in Buli.

3.2.1 Definite singular

The definite singular is represented by different forms triggered by the class of noun it occurs with. Earlier works (Kroger 1992; Kenstowicz and Akanlig-Pare 2003; Akanlig-Pare 2005) recognised five classes of nouns corresponding to five different singular definite determiners. These are shown in (11) below:

11). Class.	Stem	DEF.SG Form.	Gloss.
I.	núr	wá	the man
	kò	wă	the father
	nà:	wă	the chief

II.	bî	nî	the seed
	yé	nî	the house
	bē	nî	the river
III.	tēŋ	ká	the land
	bî:	ká	the child
	tĭa	kă	the mat
IV.	bū:	kú	the goat
	kpɔ́ŋ	kú	the guinea-fowl
	fɔ̀rù	kŭ	the bag
V.	ná:	mú	the cow
	tĭ:	mŭ	the medicine
	lām	mú	the meat

The different forms identified as representing the definite singular determiner include: {wa, ni, ka, ku, mu} (Kroger 1992; Kenstowicz and Akanlig-Pare 2003; Akanlig-Pare 2005). The selection of a form of determiner from this group is not random but rather class based. There exists a strong class division among these forms. A form of one class is barred from co-occurring with a noun from another class. This explains the inadmissibility of the following combinations in (12) as shown below:

12) * ná: kú the cow

*yé ká the house

*bé mú the river

*bú: nɨ̂ the goat

*tɨ̄ak wá the mat

3.2.2 Definite plural

Different forms are also used to mark the definite plural. Unlike the singular forms, these forms are limited to only two {ma, ŋa}. The examples in (13) are used to illustrate this note.

13). Class.	Stem	DEF.PLU Form	Gloss.
I.	núr	má	the men
	kò	mă	the fathers
	nàlmà	ŋă	the chiefs.
II.	bɨ̂e	ŋá	the seeds
	bēlā	ŋá	the rivers
III.	tēŋsā	ŋá	the land

	bîsà	ŋá	the children
IV.	kpî:ná	ŋá	the guinea-fowls
	fɔ̀tà	ŋǎ	the bags
V.	ti:tà	ŋǎ	the medicines
	lāntā	ŋá	the meat

The data above suggest that majority of the nouns in the language prefer the {ŋa} form to the {ma} form in marking definiteness in the plural noun. It can thus be concluded that while the {ma} determiner is limited to members of class one, the {ŋa} is unrestricted in terms of its occurrence.

3.2.3 Indefinite singular

The characteristics of the Buli noun are captured by the following statement "Buli nouns exhibit a morphological complexity, which consists of a nominal root that fuses obligatorily with singular suffixes to give the indefinite form of the noun" Akanlig-Pare (2005:63). The singular suffixes referred to in the statement above are however numerous and varied. Majority of the nouns terminate in identifiable forms which are extracted to represent the indefinite singular. Other nouns do not possess overt indefinite singular forms. This class of nouns are to be considered as

constituting a class with null indefinite singular forms. Below is an illustration of the indefinite singular forms. Examples taken from (Kroger 1992).

14)	Stem.	Indef.Sg form	Gloss.
a.	nóa	-i	mouth
	núr	-u	a man
	yér	-i	a house
b.	tɨ̀:-	-b	a tree
	tì:-	-m	medicine
c.	lām	-	meat
	kò	-	father
	dòk	-	a room

Three broad categories of indefinite singular determiner forms are identified: Vowels as in (14a), consonants as shown in (14b) and the null forms represented by the nouns in (14c).

3.2.4 Indefinite plural

Previous works (Kroger 1992; Akanlig-Pare 2005) have identified the following forms as the indefinite plural markers in the language :{ sa, ba, ta, ma}. The following examples illustrate their distribution.

15)

Stem	INDEF.PLU form	Output	Gloss.
gbáŋ	sà	gbáŋsà	books
kpĩak	sà	kpēsā	fowls
núr	bà	núrbà	people
kò	bà	kòbà	fathers
tūem	tā	tūetā	illnesses
tì:m	tà	tì:tà	medicines
nà:b	mà	nàlìma	chiefs
tōm	mà	tìmà	bows

In this work, I depart from the treatment of these forms {sa, ta, ma} as indefinite plural markers and propose that they should be viewed as plural markers instead. In the following paragraphs I present my argument in support of this proposal.

Generally, the definite and indefinite forms are found to exclude each other. This means that we can not have both the definite and indefinite forms coexisting in a noun in Buli at the same time. Consider the following examples in (16):

16) a. nóa-i

Mouth-INDEF.

A mouth.

b. nóa-nî

mouth-DEF

The mouth.

c. *nóa-i-nî

mouth-INDEF-DEF

the mouth

In (16a), indefiniteness is marked by the front high vowel (í). (16b) indicates definiteness with the determiner (nî) suffixed to the stem. The inadmissibility of (16c) clearly points to the fact that the indefinite marker (í) and the definite marker (nî) do not appear concurrently in the same noun. Similar examples are given in (17) below:

17) a. yér-í

house-INDEF

A house

b. yén-nî

house-DEF

The house

c. *yér-î-nî

house-INDEF-DEF

The house

Once again, the ungrammatical phrase in (17c) is attributed to the fact that the indefinite and definite determiners are barred from occurring within the same lexical item. Considering this explanation, the intuition is that each time both the definiteness and indefiniteness markers co-occur in a phrase, that phrase should not be admissible. However this fact is not supported when we treat {sa, ta, ma} as indefinite plural suffixes because these forms can freely occur with the definite determiner without them resulting into ungrammatical constructions. The following examples in (18) illustrate:

18) a. bāŋ-sā ŋá

Bangle-INDEF.PLU DEF.PLU

The bangles.

b. tūe-tā ŋá

sickness-INDEF.PLU DEF.PLU

The sicknesses.

c. nàlì-mà ŋǎ

chief-INDEF.PLU DEF.PLU

The chiefs

In line with the above analysis, it is expected that the phrases in (18) be considered ungrammatical because they violate the non co-occurrence rule that prohibits the definite and indefinite determiners from coexisting within the same phrase. The admissibility of (18) suggests that {sa, ta, and ma} are not true indefinite determiners for the reason that true indefinite determiners exclude the definite determiners in a phrase.

The behaviour of indefinite determiners with regard to definite determiners is further exemplified with the following constructions:

19) a. *kò-bà mǎ

Father-INDEF.PLU DEF.PLU

The fathers.

b. *núr-bà mǎ

man-INDEF.PLU DEF.PLU

The men.

Attaching the definite plural determiner ma to the indefinite plural determiner ba is responsible for the ungrammatical constructions in (19) above. Following from the discussions above we can conclude that {sa ta ma} be excluded from the list of

indefinite plural markers as listed by Kröger (1992) and Akanlig-Pare (2005). A question that requires an answer is what then is the role of these elements in the phrase?

The role I propose for {sa, ta, ma} is that they are suffixes attached to stems of nouns to indicate plurality as shown below:

20) Stem	Plural Form	Gloss
bīak	bā:sā	dogs
tî:b	tî:sá	trees
bàŋ	bàŋsà	lizards
tūem	tūetā	sicknesses
tî:m	tî:tá	medicines
kpá:m	kpá:tá	oil
nà:b	nàlìmà	chiefs

Analysing them as plural markers readily provide an answer to the following question: Why does {sa, ta, ma} co-occur freely with the definite plural marker in (18)? repeated here as (21) for convenience.

21) a. bāŋ-sā ŋá

bangle-PLU DEF.PLU

The bangles.

b. tùe-tà ŋǎ

sickness-PLU DEF.PLU

The sicknesses.

c. nálɨ̂-má ŋá

chief-PLU DEF.PLU

The chiefs

The solution is that only the definite and indefinite forms exclude each other in a phrase as in example (19), since {sa, ta, ma} are not indefinite markers, they cannot prevent the definite determiners from occurring with them, hence their coexistence with the definite determiners as exemplified in (21).

Another question that results from this proposal is that since {sa, ta, ma} are no longer recognized as the indefinite plural forms of nouns as analysed previously (Kroger 1992; Akanlig-Pare 2005), what forms will then occupy the vacant position of indefiniteness created by the present analysis? In other words what are the indefinite plural markers for nouns that take{sa, ta, ma} as their plural suffixes given that they {sa, ta, ma} are no longer considered indefinite plural markers?

Recall that in (section 3.2.3) among the forms identified as the indefinite singular determiners is the null determiner. In line with this, I propose that the class of indefinite plural determiners should include the null determiner. The null determiner proposal fits in the determiner structure of the language thereby providing a solution to nouns without any overt determiners. Thus the examples below should be analysed as consisting of null indefinite plural markers.

22) Stem	INDEF.PLU form	Gloss
lāntā	-	meat
tūetā	-	sicknesses
bàŋsà	-	lizards
bǐsà	-	children

The result of the preceding analysis is that the number of indefinite plural forms have been reduced from four {sa, ta, ba, ma} in (15) to two { ba, and **ø**}. The data below presents the new forms of indefinite plural determiners espoused in this thesis.

23). Stem	INDEF.PLU form	Gloss.
gbáŋsà	**ø**	books
kpēsā	**ø**	fowls
tùetà	**ø**	illnesses

tî:tà	**ø**	medicines
núr	ba	people
kò	ba	fathers

24) Table 4: Summary of Determiners

Definite Determiners		Indefinite Determiners		Demonstratives	
Singular	Plural	Singular	Plural	Proximal	Distal
wá	Má	-i	bá	dɛ̀	Lá
nî	ŋá	-u	ø		
ká		-b			
kú		-m			
mú		ø			

3.3 Syntax of Determiners

3.3.1 Definite/Indefinite.

Determiners, like other modifiers generally appear postnominally in Buli. The determiners usually occur to the right of the noun, adjective or numeral they specify over. This is illustrated by Example (25):

25) a. bî: **ká**

Child DEF

The child

b. bū: sɔ̄blī **kú**

goat black DEF

The black goat

c. nur bà-yɛ̀ **mǎ**

man CL-two DEF

The two men

The determiners in (25) follow the noun as in (25a), adjective in (25b) and the numeral in (25c). The distributional fact is that determiners are not restricted to co-occur only with nouns in Buli but also with adjectives as well as numerals.

3.3.2 Proximal/Distal Demonstratives

Proximal demonstrative constructions exhibit a distributional phenomenon that combines the definite determiner and the demonstrative particle. Consider the following examples in (26).

26) a. núr **má** **dɛ́**

man DEF.PLU DEM

these people

b. *nur **ba** **dɛ́**

man INDEF.PLU DEM

These people.

c. *nur **dɛ́** **má**

man DEM DEF.PLU

these people.

In a construction as (26a), the demonstrative determiner dɛ occurs phrase finally, licensed by the presence of the definite determiner má. Though the demonstrative determiner dɛ appears phrase finally in (26b) it is still not acceptable because the determiner accompanying it is indefinite. (26c) has the same elements as (26a) yet it is inadmissible, this results from the fact that the demonstrative determiner precedes the definite determiner contrary to the preferred ordering of demonstrative following the definite determiner. It is worth noting that determiners and demonstratives are not incompatible as is the case in English. This means that the definite determiner and the demonstrative can occur together without resulting in ungrammatical construction as is the case in English. When they co-occur the definite determiner precedes the demonstrative determiner.

The Distal demonstrative as hinted earlier on exhibits a syntactic pattern that distinguishes it from the proximal demonstrative. The distal particle is attached to

a pronoun which corresponds with the class of the referent noun. As shown below, the nouns in (27) belong to different noun classes. The pronoun for the noun Biak 'dog' is ka in (27a) while that of Nur'man' is wa in (27b). It is these pronouns that allow the distal demonstrative determiner to be attached to them. The distal determiner, unlike the proximal one, cannot co-occur with the definite determiner to express the distal function hence the ungrammatical construction in (27c).

27) a. bā kā-lá

Dog 3SG-DEM

That dog.

b. Núr wá-lá

man 3SG-DEM

that man

c. *Núr má lá

man DEF DEM

those men.

3.4 Personal Pronouns.

This section presents the personal pronouns and their distribution. Buli like many languages possesses personal pronouns and make a distinction between these pronouns in terms of the function they play in a sentence; whether as subjective or objective. The following table shows the personal pronouns in the language. I follow the grouping of Akanlig-Pare (2005).

28) Table 5: Personal Pronouns in Buli

Person	Singular		Plural	
	Subject	Object	Subject	Object
1	mɪ́, mɪ̀	mɪ́, mə	tàmá, tɪ̀	tàmá, tə
2	fɪ́, fɪ	fɪ́, fə	nàmá, nɪ̀,	nàmá, nə,
3	wà	wà	bà	bà
	dɪ̀	də	ŋà	ŋà
	kà	kà	sɪ̀	sə
	kù	kù	tɪ̀	tə
	bù	bù	-	-

(Akanlig-Pare 2005:67)

Some generalizations can be made about the forms of the pronouns. The first and second person pronouns are observed to have two forms each. The forms to the left are the emphatic/strong pronouns whiles those to the right are the weak pronouns. The strong forms of the first and second person singular pronouns carry high tones while their weak counterparts bear low tones. The weak form of the first person subject pronoun is a nasal consonant. The third person singular subject (bu) has no counterpart in the plural form.

3.4.1 Syntax of Pronouns.

The pronouns that occur in pairs (in table 2) above, though sometimes occur in similar contexts, they are found to possess different distributional as well as semantic abilities. The following pronouns: first person singular subject {mí, mì}; second person singular subject {fì, fí}; first person plural subject {tì, tàmá} and second person plural subject {nì, nàmá} are considered in turn below:

3.4.1.1 First Person Singular Subject {mí, mì}

As indicated, these forms do not have similar occurrence in all instances. Some contexts dictate the form of pronoun to be used. The following sentences below illustrate the contexts in which the selection of a particular pronoun is preferred over the other, though both possess the same case and number. Consider (29) below for instance:

29) a. Mí dʒám yérí

1SG(EMPH) come.PST home

I came home.

b. mì-dʒàm yérí

1SG-come.PST home

I came home.

Both pronouns occur as subjects in the sentences above, mí in (29a) while m̀ in (29b). The difference, however, is that mí occurs independently as a word while m̀ fuses to the verb. Also, an emphatic sense is introduced when mí is used while the nasal possesses a non-emphatic meaning.

With the singular first and second person pronouns in object position, Akanlig-Pare (2005) makes a distinction between internal and external objects. The weak form of the pronoun is an internal object because it forms a phonological word with the verb and is syntactically different from nouns. The external object on the other hand is the emphatic form of the pronoun and in this position it behaves like full noun phrases. Consider the following examples (taken from Akanlig-Pare 2005:68-9):

30) a. fìnàgí mə̀

2SG. hit 1SG (Internal OBJ)

You hit me

b. fì nàgí mî

2SG. hit 1SG (External OBJ)

You hit me

3.4.1.2 Second Person Singular Subject {fì, fí}

In addition to the observation already made about these pronouns, they can also be modified by a quantifier. Consider the following instance:

31) fí ɲī:nî dʒám yérî

2SG only come house

Only you came home

The quantifier in (31) ɲī:nî ‘only’ modifies the pronoun fí ‘you’.

3.4.1.3 First Person Plural Subject {ti, tama}

Just like their singular counterparts, these pronouns also exhibit some distributional and semantic distinctions. The major semantic difference is the idea of clusivity (inclusive or exclusive) expressed by the pronouns. Let us consider the meaning difference showed by using either of the pronouns in the following examples:

32) a. Tì lè kālī dɛ́ vù:sì

2PLU FUT sit here rest

We will rest here

b. Tàmá lè kālī dɛ́ vù:sì

2PLU FUT sit here rest

We will rest here.

The choice of the pronoun ti ‘we’ in (32a) has an inclusive meaning. This implies that the addressee is included in the pronoun while tama ‘we’ in (32b) has an exclusive sense implying that the addressee is not part of the pronoun.

In addition to its exclusive nature, the pronoun tàmá ‘we’ syntactically can licence modification as shown in (33a); ti ‘we’ on the other hand, when used expresses possession exemplified in (33b).

33) a. Tàmá núrbîsà

2PLU human beings

We human beings

b. Tì nùrbîsà

2PLU human beigns

Our human beings

3.4.1.4 Second Person Plural Subject {nì, nàmá}

These pronouns occur freely as subjects in sentences without being affixed to any other word. The observable difference between these pronouns is in their syntax-

their ability to be modified and their semantics. As a way of illustration, let's consider examples (34a-b)

34) a. Nì yétî kùlì

2PLU getup go.home

You go home.

b. Nàmá yétî kùlì

2PLU getup go.home

You go home

In (34) above, the pronouns nì and nàmá both occur as independent words in functioning as subjects in (34a) and (34b) respectively. However, (34a) and (34b) have different interpretations. Consider the following scenario. A teacher enters a class room to dismiss his students. In so doing he uttered sentence (34a), all the students present in the classroom are affected by that utterance and therefore leave the classroom. However in uttering (34b), part or some of the students are being referred to. In this regard, the pronoun nàmá when used picks out a part from a group whereas nî points to everyone in the group without exceptions. On this Akanlig-Pare (pc) noted that example (34b) be read as (35) which is then truncated by omitting the second pronoun ni to arrive at (34b) with a long pause between the pronoun nama and the verb yiti 'getup'.

35) Nàmá, nî yîtî kúlî

2PLU, 2PLU getup go.home

You go home

With regard to syntax, the pronouns nàmá and nî can be modified with different elements. Nàmá 'you' is able to be modified by a numeral, noun and a quantifier as shown in (36a-c):

36) a. Nàmá nî-yɛ̀wà dʒàm

2PLU CM-two DET come

The two of you come

b. Námá Bùlsà

2PLU Bulsas

You Bulsas

c. Nàmá mîená dʒàm

2PLU all come

All of you come

In the examples above, the pronoun nàmá is modified by a numeral in (36a), a noun in (36b) and a quantifier in (36c).

The pronoun nî ‘you’ on the other hand can be modified by the quantifier mìená ‘all’ but not a numeral as shown in (37a-b) below:

37)a. Nì mèiná dʒám

2PLU all come

You all/all of you come

b. *Nì nì-yɛ̀ wǎ dʒám

2PLU CM-two DET come

While the pronoun ni can be modified by the quantifier in (37a), modifying it with a numeral as we have in (37b) renders the construction ungrammatical.

3.4.1.5 Third Person Pronouns.

The variation in the third person pronouns are attributed to the variation in class and number (singular or plural) of the nouns that serve as antecedents to the pronouns. A third person pronoun is selected based on the class the noun belongs to. The following two tables give instances of the classes of nouns and their corresponding pronouns.

38) Table 6: Third Person Singular Pronouns

Class	Example of Nouns	Pronoun	Case
I	Nǐpók 'woman'	wà	Subject/Object
II	Lògrí 'lorry'	dì	Subject/Object
III	Bāŋ 'bangle'	kà	Subject/Object
IV	Sǐuk 'path'	kù	Subject/Object
V	Tūem 'sickness'	bù	Subject/Object

49) Table 7: Third Person Plural Pronouns

Class	Example of Nouns	Pronouns	Case
I	Núrbà 'people'	bà	Subject/Object
II	Nǐ:gà 'cattle'	ŋà	Subject/Object
III.	Sá:sà 'walls'	sì	Subject/Object
IV	Mí lè John 'I and John'	tì	Subject/Object

As already noted the disparity in form of the third person pronouns is as a result of the class system shown in the language. Class (I) Pronouns both singular and plural are reserved for human noun antecedents while the other classes (II-V) can be used for both human and non-human nouns.

3.5 Chapter Summary

This chapter has been concerned with determiners and personal pronouns. I particularly discussed the semantics of determiners and identified definiteness, indefiniteness, deixis and number as the feature values contained in them. It was noted that determiners assumed different shapes depending on the nouns they specify over. I also mentioned that determiners terminate phrases they are a part of. I argued for an inclusion of a null determiner into the plural indefinite markers. In the final section, the syntax of personal pronouns is considered highlighting the various distributional and semantic differences expressed by each pronoun.

CHAPTER FOUR

CONSTITUENT ORDER OF MODIFIERS

4.0 Introductions

In this chapter, I will discuss modifiers (e.g., adjectives, numerals, quantifiers, relative clauses, possessives) and their syntax within the Determiner phrase (DP), particularly their order in relation to one another thereby highlighting some of the major syntactic features present in the DP. This is important in understanding how articulated the DP is in Buli.

4.1 Adjectives

A major argument in Buli grammar is whether it has a separate morphological category called adjectives. Works like (Matushansky 2003 and Akanlig-Pare 2005) argue against the existence of separate morphological categories called adjectives in Buli. They concluded that the semantic functions of adjectives are encoded morphologically by nouns and stative verbs. Nouns are used to express attributive modification while stative verbs are used to express predicative meaning. Semantically, some adjectives in Buli could readily be classed into: height, shape, colour, and size as indicated by the examples in (1) below:

1)

Adjective	Category	Gloss
wɔ̀ŋ	height	'tall'
gɔ̄lūŋ	shape	'crooked, curved'
pé:lùk	colour	'white'

kpîoŋ size ‘big’

The focus of this section is on the distribution of the categories that perform attributive functions in relation to other modifiers in the DP. I will use the term adjective to refer to the class of words that describe the property of the noun in the DP.

Adjectives in the language generally appear postnominally. The adjective must follow the noun and in a construction where determiners are present, the adjective precedes the determiners as illustrated in example (2a-b) below:

2) a. núr wɔ̀ŋ kŭ

man tall DEF

the tall man

b. gbáŋ pá:lík ká dɛ́

book new DEF DEM

this new book.

c. *pá:lík gbáŋ ká dɛ́

new book DEF DEM

The example in (2c) is ungrammatical because the adjective precedes the noun.

As hinted in the introductory chapter, adjective concatenating is possible. At least two adjectives could be found modifying the same noun in the language. In (3a) the adjectives sɔ́blík ‘black’ and wɔ̀ŋ‘tall’ are modifying the noun ná:b ‘cow’.

3) a. ná: sɔ́blík wɔ̀ŋ kŭ

cow black tall DEF

the tall black cow.

b. ná: wɔ̀ŋ sɔ́blík kú

cow tall black DEF

the tall black cow.

A cursory observation of the distribution of adjectives might suggest that there exists a relatively free ordering of adjectives in the language because (3b) is still acceptable with the exchange of position between wɔ̀ŋ 'tall' and sɔ́blík 'black'. However further investigation is needed to reach a firm conclusion on the ordering of adjectives in the language.

The semantic class of a noun may influence adjective serialization. While both human and non-human nouns can take three adjectives in a row, the third adjective in the human construction may be preceded by the particle (ja). For the purpose of this discussion I will refer to it as an adjectival linking particle. This particle creates space for more adjectives to be added to nouns with plus human features. Let's consider the examples in (4) below:

4) a. nípò: sɔ̀blík bì:tùk (já) wɔ̀ŋ

woman black fat PART tall

A tall black fat woman.

b. ná: sɔ̀blík bì:tùk wɔ̀ŋ

cow black fat tall

A tall black fat cow

c. ná: sɔ́blík bí:tùk *ja wɔ̀ŋ

cow black fat PART tall

A tall black fat cow

The third adjective in the series wɔ̀ŋ ‘tall’ in (4a) with a human noun may either be introduced by the linking particle ‘ja-’ or not. This particle is obligatorily missing in (4b) as a result of the non-human class of the noun. Introducing the particle in (4c) renders the construction ungrammatical.

An important distributional fact about attributive adjectives worth mentioning in Buli is their ability to inflect for number. There is a change in the singular form of the noun when the plural morpheme is added to it. Consider the sets of nouns in (5) below:

5)

Singular Noun	Noun+PLU	Gloss
kpóŋ	kpí:nà	Guinea fowl
pósúk	pí:sà	Sheep
bírí	bíe	Seed

kp̄iak	kpēsā	Fowl
núm	nı̂nà	Eye

As it is seen in example (5), the forms of the nouns change when the plural morpheme is attached to them. This noun-plural morpheme relation changes with an introduction of an attributive adjective. When an attributive adjective is introduced into the DP the plural morpheme shifts from the noun unto the adjective. The following examples in (6) are used to illustrate this point.

6) a. nı̂:gà

cow.PLU

Cows

b. ná: mɔ̀n-tà

cow red-PLU

red cows

c. ná: mɔ̀nùŋ wɔ̀ŋ-tà

cow red tall-PLU

red tall cows

d.*ní:gá mɔ́n-tá

cow.PLU red-PLU

The examples in (6) illustrate the morphosyntactic behavior of the plural morpheme in the language. Example (6a) without any form of modification bears

the plural morpheme. The introduction of the modifier mɔ̀nùŋ ‘red’ in (6b) triggers a shift of the plural morpheme from the noun nɪ̀:gá ‘cows’ unto the modifier to arrive at mɔ́ntá ‘reds’. The addition of a second modifier, wɔ̀ŋ ’tall’ in (6c) attracts the plural morpheme unto it. The infelicity of (6d) is as a result of the presence of the plural morpheme on both the noun and the adjective. Inferring from the above examples, it can be said that the plural morpheme shifts systematically from the noun to the final adjective in the series of modification. Both the noun and adjective cannot simultaneously inflect for number in the Buli DP. This suggests that we can only have a single plural morpheme in a DP. Following this, the conclusion is that the plural morpheme is not a feature of a single lexical item in the DP but rather a feature of the entire DP. The theoretical implication of this phenomenon is discussed in (section 5.3) of chapter 5.

4.2 Numerals.

The second modifying element considered is numerals. Numerals occur postnominally akin to adjectives, but have a relatively free order in relation to determiners. Numerals may either follow or precede a determiner with each order requiring different interpretation. Before delving into numerals and their distribution in relation to determiners, I will discuss cardinal numbers. Buli hardly has a distinct morphological class of ordinals and therefore often resorts to descriptive phrases or sentences to express this notion; as a result attention will solely be given to Cardinal numbers.

4.2.1 Cardinal Numbers.

Cardinal numbers when used in counting are different from those used as modifiers. The following example (7) presents the counting cardinal numbers from one to ten.

7) yenni ‘one’
n-ya ‘two’
n-tɔ ‘three’
n-na:nsi ‘four’
n-nuisi ‘five’
n-yuebi ‘six’
n-pɔi ‘seven’
n-na:niŋ ‘eight’
n-nok ‘nine’
n-pi ‘ten’

The cardinal numbers from two to ten are counted with the prefix ‘n-’. This prefix is however missing in ‘one’. In modificational sense, the numerals behave differently. In this regard, I will classify them into three categories: (a) yenni ‘one’ (b) n-ya to n-pɔi ‘two’ to ‘seven’ and (c) n-na:niŋto n-pi ‘eight’ to ‘ten’. This division is motivated by their behaviour that sets them apart when used as modifiers.

The first class (a) yenni ‘one’ has two forms when modifying a noun. Consider (8) below:

8) a. gbáŋ yéŋ

book one

one book

b. gbáŋ **kà**-ɲĩ

book CL-one

one book

The difference between the forms of numeral in (8) is that while the numeral in (8b) is preceded by a class marker kà- that of (8a) is not. The form of the numeral in (8b) kà-ɲĩ ‘one’ is prefixed with a class marker making it analogous to the class (b) categories as will be explained shortly.

In the second class (b)n-ya to n-pɔi ‘two’ to ‘seven’, the numeral must always agree in class with the noun it is modifying. In this case, the prefix is replaced by the class marker of the noun it is modifying in order to satisfy the agreement relation. The implication is that the same number will have different prefixes depending on the class of noun it modifies. Consider the following instances in (9):

9) a. núrbá **bà**-yɛ̀

people CL-two

two people

b. kpēsā **sì**-yɛ̀

fowls CL-two

two fowls

c. tì:sà **tì**-yɛ̀

trees CL-two

two trees

d. pí:sá **sì**-yɛ̀

sheep CL-two

two sheep

In (9), different prefix forms are selected to correspond to the different classes the nouns belong to. The class prefix of (9a) differs from the rest owing to the fact that the noun in (9a) has a class different from the other nouns. A similar observation can be made about the other examples in (9b-d).

The third class (c) n-na:niŋ to n-pi 'eight' to 'ten' also exhibits a different modificational behaviour. These numbers, though are prefixed with (n-) when used in counting as their counterparts in class, (b), are not preceded by any class markers in the modifier position. The n- prefix in these numerals is completely deleted making them contrast with the class (b) numerals above. The examples in (10) illustrate this point.

10) a. kpésà ná:nɪ̂ŋ

fowls eight

eight fowls

b. tǐ:sà ná:nɪ̂ŋ

trees eight

eight trees

c. *kpésà sɪ̂-ná:nɪ̂ŋ

fowls CL-eight

d.*tǐ:sà ǹ-ná:nɪ̂ŋ

tree PRE-eight.

In (9) though the nouns belong to different classes, their class markers do not accompany the numerals as in (9a) and (9b). An attempt to introduce the class marker or (n-) prefix renders the construction ungrammatical as shown in (9c) and (9d) respectively.

As stated earlier in this section, numerals have a relatively free order in relation to determiners. They can either precede or be preceded by determiners. Each order however carries different semantic import. Take example (11) for instance:

11) a. kpɪ̂ŋ-sá bà-yɛ̀ mă

Orphan-PLU CL-two DEF

The two orphans

b. kpîŋ-sá ŋá bà-yɛ̀

Orphan-PLU DEF CL-two

Two of the orphans.

The differences in meaning between (11a) and (11b) are as a result of the difference in order between the determiner and numeral. When the determiner is preceded by the numeral as we have in (11a), the DP has a definite interpretation. The scope of definiteness in this order extends to include all the constituents in the phrase. In (11b) the determiner precedes the numeral, when this happens, it results into a partitive construction. The order between the numeral and determiner plays a very crucial role in differentiating between what constitutes a definite DP from a partitive construction.

4.3 Adjectives and Numerals

The modifiers: adjectives and numerals generally appear postnominally. There exists a strict order relation between them. The adjectives in the structure of modification precede the numerals. Consider (12) below:

12) a. nàŋgbǎŋ mɔ̀n-sà sì-tá

bird red-PLU CL-three

three red birds

b. * náŋgbáŋ sí-tá mɔ̀n-sà

bird CL-three red-PLU

c. nàŋgbǎŋ mɔ̀n-sà ŋá sì-tá

bird red-PLU DEF CL-three

three of red birds

The right order of (12a) has the adjective immediately following the noun before the numeral. The strictness of this order is exhibited in the unacceptable construction of (12b) which has the numeral preceding the adjective. In (12c) inserting the determiner between the adjective and the numeral result into a partitive construction.

4.4 Relative Clauses

Among the modifiers present within a DP are relative clauses. In this section, I present some features of relative clauses in Buli before proceeding to establish its position among other modifiers in the series of modification within the DP.

4.4.1 Some Features of Relative Clauses.

There exist some defining characteristics of relative clauses in Buli that differentiate or make them similar to relative clauses in other languages. Consider the examples in (13a-c) below:

13) a. núr wāi àlī dɛ̀ sā: mú lá kúlī

man REL.PRO SUBJ.CASE eat TZ DEF RCM go.home

The man who ate the TZ has gone home

b. Kpóŋ kūi àtì bì: ká dà lă kpì

Guinea fowl REL.PRO OBJ.CASE child DEF buy RCM die

The Guinea fowl which the child bought died.

c. Nànjŭŋ kāi àlī kàn à wōm sìnsàgà

Housefly REL.PRO SUBJ.CASE NEG PRES.PART listen advice

lă và kpìo à sìŋ vɔ́rú pō.

RCM follow corpse PRES.PART descend hole inside

The housefly which does not heed advice follows a corpse into the grave.

The examples in (13a-c) above present the basic properties of relative clauses in Buli. It is observed that all the relative clauses in (13) are preceded by their head nouns, <u>núr</u> 'man' in (13a), <u>kpóŋ</u> 'guineafowl' in (13b) and <u>nànjŭŋ</u> 'housefly' in (13c). Immediately following the head noun is a relative pronoun. The makeup of this pronoun varies depending on the class of the head noun. The relative pronouns, <u>wai</u> in (13a), <u>kui</u> in (13b) and <u>kai</u> in (13c) differ from one another owing to the fact that the nouns belong to different classes. The relative pronoun precedes a case marker indicating the case of the relativised head noun. In (13a) and (13c), the subject case marker <u>ali</u> is used contrasting with the object case <u>ati</u> used in (13b). The case marker is then followed by an embedded clause which terminates in la which I glossed as a relative clause marker (RCM).

Another feature of relative clauses worth mentioning is the issue of resumptive pronouns. Languages can be divided into those that employ the use of resumptive pronouns in relativization and those that do not. Buli belongs to the latter group. "When a pronoun occupies a position in which we would have expected an unpronounced copy of a wh-constituent we refer to it as a resumptive pronoun" (Haegeman 2006:364). The resumptive pronoun takes the relativised noun as its antecedent and it appears where the head noun is assumed to have originated from. Buli lacks resumptive pronouns as a feature of relative clauses. Inserting the resumptive pronoun renders the construction ungrammatical. Consider example (14) below:

14) a. sá: būi àtì núr wá dɛ́ lá

TZ REL.PRO OBJ.CASE man DEF eat RCM

The TZ which the man ate.

b. sá:$_i$ bū̃i átí núr wá dɛ̀ *bu$_i$ lá

T.z REL.PRO OBJ.CASE man DEF eat 3SG RCM

The T.Z which the man ate.

The resumptive pronoun is not required in relative clause constructions in Buli. When it is introduced, it renders the construction ungrammatical as shown in example (14b).

A contrast is drawn between Buli and Akan in the case of resumptive pronouns. Saah (2010:98) states that " the resumptive pronoun in Akan relative clause is

obligatory." The examples in (15) below show the obligatoriness of the resumptive pronoun in Akan.

15) a. [$_{NP}$ɔbaa$_i$ [$_{CP}$ aa [$_{IP}$ me-nim no$_i$] no]]] fi Takoradi

Woman REL 1SG-know 3SG CD come.from T.

The woman whom I know comes from Takoradi.

b. *[$_{NP}$ɔbaa$_i$ [$_{CP}$ aa [$_{IP}$ me-nim **] no]]] fi Takoradi

Woman REL 1SG-know CD come.from T.

The woman whom I know comes from Takoradi.

(Saah 2010:98, example 12b&d)

The construction in (15b) is ungrammatical as a result of the absence of the resumptive pronoun in the embedded clause represented by the double asterisk. Granting this, the difference is that while resumptive pronouns are obligatory in Akan relative clauses, they are not required in Buli relative clauses. Introducing resumptive pronouns in Buli renders a construction ungrammatical. This difference could be explained as follows: Granting that the presence of resumptive pronouns is to indicate the base position of a relativised noun, the absence of resumptive pronouns in Buli can be explained by assuming that the presence of a case marker in the relative clause in the language gives an idea which noun in the clause is relativised, therefore no need for an overt pronoun to perform this function. This implies that the use of a subject case indicates that it is the subject of the clause that has been relativised, similarly the presence of an object case

gives the impression that an object in the clause has been relativised. Akan unlike Buli which has no overt case marker in the relative clause must find ways of showing the position of the relativised noun hence the obligatory need for the resumptive pronoun to perform this function.

4.4.2 Adjectives and Relative clauses.

When the head noun in a relative clause is modified by an adjective, the adjective precedes the relative clause. In other words, the adjective is closer and has scope over only the head noun and thus can not be preceded by the relative clause. Consider the examples in (16) below:

16) a. nàngbǎŋ mɔ̀n-sà sīi àtì bà dà lǎ

bird red-PLU REL.PRO OBJ.CASE 3PLU buy RCM

The red birds which they bought.

b. yé pá:lí đii àtì mǐ ŋmìrìsì lǎ

house new REL.PRO OBJ.CASE 1SG design RCM

The new house which I designed

c. *nàngbǎŋ sí̀i àtì bà dà lǎ mɔ̀n-sà

bird REL.PRO OBJ.CASE 3PLU buy RCM red-PLU

The red birds which they bought.

In example (16a), the adjective mɔ̀n ‘red’ precedes the relative clause sɨ̂i àtɨ̀ bà dà lă ‘which they bought’. A similar observation is made in (16b) where the adjective pá:lí ‘new’ occurs before the relative clause kái àtɨ̀ mɨ̌ ŋmɨ̀rɨ̃sɨ̀ lă ‘which I designed’. Reversing the order of the adjective and the relative clause result in an inadmissible construction as in (16c). In example (16c), the adjective mɔ̀n ‘red’ occurs after the relative clause accounting for its unacceptability.

4.4.3 Numerals and Relative clauses.

Unlike adjectives which can only precede relative clauses, numerals can either precede or be preceded by relative clauses. Accompanying these different orders are different interpretations. Consider first the examples in (17) below.

17) a. núr-bá bà-tà bă̌i àl̃ɨ zù bū: kú lá

man-PLU.DEF CL-three REL.PRO SUBJ.CASE steal goat DEF RCM

The three people who stole the goat

b. núr bă̌i àl̃ɨ zù bū: kú lá bà-tà

man REL.PRO SUBJ.CASE steal goat DEF RCM CL-three

Three of the people who stole the goat

In (17a), the numeral bà-tà ‘three’ appears before the relative clause. The reverse order is shown in (17b) in which the relative clause precedes the numeral. Unlike example (17a) in which the number of people who stole the goat are exactly three, the number in (17b) is more than three people but the speaker in this case is

referring to three people out of the many who stole the goat. The construction in (17b) therefore exemplifies what is termed as partitive in the literature.

A similar observation can be made about example (18) below:

18) a. kpíŋ-sá bà-nà:nsì bái àlì dʒàm lă

orphans-PLU CL-four REL.PRO SUBJ.CASE came RCM

The four orphans who came

b. kpíŋ-sá bái àlì dʒàm lă bà-nà:nsì

Orphans-PLU REL.PRO SUBJ.CASE came RCM CL-four

Four of the orphans who came

The ordering exhibited in (18a) has the numeral bà-nà:nsì 'four' preceding the relative clause. When the relative clause is put before the numeral as we have in (18b) the partitive construction is resulted, where the speaker picks out four orphans from the rest.

4.4.4 Adjectives, Numerals and Relative clauses.

Where adjectives, numerals and relatives clauses modify a DP, the adjective comes before the numeral which in turn precedes the relative clause as in (19a).

19) a. núr màŋ-sà bà-nú bái ālì lɔ̀ lă

man good-PLU CL-five REL.PRO SUBJ.CASE fall RCM

The five good people who fell

b. *núr bà-nu màŋ-sǎ bái ālì lɔ̀ lǎ

man CL-five good-PLU REL.PRO SUBJ.CASE fall RCM

The five good people who fell

As already explained the numeral can not precede the adjective hence the ungrammaticality of (19b).

4.5 Quantifiers

The next modifying elements considered are quantifiers. These classes of modifiers express the quantity or measure the amount of the noun they modify. This section presents the different types of quantifiers relative to their position in relation to the noun and other modifying elements. The quantifiers include:

20) mé:ná ‘all’

gēlā ‘some’

gēlī ‘half’

màgà ‘little, few’

yègàyègà ‘plenty, many’

ɲî:nî ‘only’

Quantifiers appear post nominally. They are strictly preceded by determiners and adjectives. Quantifiers have flexible word order in relation to numerals. In relation to the relative clause, the quantifier has two positions. It can either occur immediately after the relative pronoun or at the end of the relative clause. In the

following constructions, I give examples to support the above statements beginning with quantifiers and determiners in (21).

21) a. ɲām má mé:ná jām tūkā

parent DEF.PLU all came meeting

All the parents came to the gathering.

b. kpî:ná ŋá gēlā wàrì pē:lîm

guineafowl.PLU DEF.PLU some remained outside

Some of the guinea fowls remained outside.

c. *kpî:ná gēlā ŋá wárî pé:lìm

guineafowl.PLU some DEF.PLU remained outside

(Some of the guineafowls remained outside.)

In example (21), it is observed that the subjects in both sentences are modified by quantifiers. In (21a), the quantifier mé:ná ‘all’ modifies ɲām‘parents’ but it is seen that the definite determiner má ‘the’ intervenes between them. Similarly in (21b), the quantifier gēlā ‘some’ is found occurring to the right of the noun after the definite determiner ŋá ‘the’. Unlike numerals which have flexible word order relative to determiners: they can precede or be preceded by determiners; quantifiers must strictly be preceded by determiners. The ungrammaticality of (21c) is attributed to the order of quantifier preceding the determiner.

The addition of other modifying elements like adjectives further pushes the quantifier away from the noun it modifies. Consider (22a-b) below:

22) a. nǐpò: dʒètǐ-sá ɲǐ:nǐ

woman slim-PLU only

Only slim women

b. *Nǐpò: ɲǐ:nǐ dʒétǐ-sà

woman only slim-PLU

Only slim women

Example (22a) shows that the adjective dʒètì-sa 'slim' occurs before the quantifier ɲǐ:nǐ 'only'. The inadmissibility of example (22b) explains the fact that the quantifier ɲǐ:ni 'only' never precedes the adjective. The examples in (21) and (22) corroborate the fact that quantifiers follow but never precede determiners and adjectives.

The order between quantifiers and numerals is flexible. Quantifiers can precede and be preceded by numerals. Take the constructions in (23a-b) for instance:

23) a. nǐpò: dʒètì-sá bà-nà:nsì ɲǐ:nǐ

woman slim-PLU CL-four only

Only four slim women

b. nǐpò: dʒètì-sá ɲǐ:nǐ bà-nà:nsì

woman slim-PLU only CL-four

Only four slim women

As exemplified in (22a), the numeral bà-nà:nsi ‘four’ precedes the quantifier ɲí:ní ‘only’. In example (22b) the reverse order is realised, in which the quantifier ɲí:ní ‘only’ appears before the numeral bà-nà:nsì ‘four’ in the sequence.

Quantifiers have a relatively free distribution in relation to relative clauses. They are found to either appear after the relative pronoun or at the end of the relative clause. The different positions occupied by the quantifier however do not correspond to different semantic interpretations. In other words there is no meaning difference with regard to where the quantifier occurs. As an illustration consider example (24).

24) a. gbáŋ sîi mé:ná àtì bà dà lă

book REL.PRO all OBJ.CASE 3PLU buy.PST RCM

All the books that they bought.

b. gbáŋ sîi àtì bà dà lă mé:ná

book REL.PRO OBJ.CASE 3PLU buy.PST RCM all

All the books that they bought

Comparing the examples in (24), we notice that the quantifier mé:na ‘all’ in (24a) occurs between the relative pronoun and case marker in this instance object case. In (24b) however, the quantifier is found at the end of the relative clause. As the English translation shows in both constructions there is no traceable difference in meaning between them though they have different configurations.

4.6 Associative Construction.

This section investigates the structure of the associative construction. This construction expresses possessive relation between two entities, the possessor and the possessed. Many languages adopt different strategies in expressing this relation. In Buli, the associative construction is expressed structurally with no clear associative markers linking them as found in other languages. The head noun (possessor) is put adjacent to the associative noun (possessed). In this, the possessor precedes the possessed. Consider the following examples in (25).

25) a. Abìlì yérí

Abili house

Abili's house

b. bí: ká gbáŋ

child DET book

the child's book

c. bà tēŋ

3PLU land

Their land.

Example (25) apart from clearly indicating that possessors usually precede the possessed entities, it also informs us that personal names (25a), ordinary nouns (25b) and pronouns (25c) can all function as possessors in Buli.

A Possessed noun in its position can be marked for definiteness. The presence of the definite marker is accompanied with some pragmatic function of emphasis. When a possessed noun is followed by a definite determiner, it implies that both the speaker and listener share knowledge of the possessed entity. Consider the examples in (26) below:

26) a. Abìlì yén nî

Abili house DEF

Abili's house

b. bî: ká gbáŋ ká

child DET book DEF

the child's book

c. bî: ká gbáŋ

child DET book.INDEF

the child's book

In examples (26), the possessed nouns yénnî 'the house' in (26a) and gbáŋká 'the book' in (26b) are both marked for definiteness. This means that the possessed nouns are known to both the speaker and the listener. In (26c), however, the indefinite form of the noun gbáŋ 'a book' is used implying that the listener in this

case has no knowledge of the possessed noun. Thus in the associative construction, whether the possessed noun will be marked for definiteness or indefiniteness will depend of the level of information shared by both the speaker and the listener.

4.7 Linear Order of Modifiers.

As discussed, all modifiers appear postnominally in the language. The modifiers occupy different positions relative to one another. In this section, we consider the order when all the possible modifiers are present in a single construction. The linear order of modifiers in a determiner phrase is represented in (27).

27) Noun-Adjective-Numeral-{Determiner/Relative clause}-Quantifier.

Buli has a strict postnominal position for modifiers. The adjective precedes the numeral which in turn has a determiner or relative clause following it. The elements in curly brackets mean that only one of them can be selected in a single construction. In other words, a construction will be rendered ungrammatical if both the determiner and relative clause are present. The quantifier occurs at the final position in the phrase. The example in (28) illustrates instances in which all the modifiers are present.

28) a. núr màŋ-sà bà-nù mà dɛ́ mé:ná

man good-PLU CL-five DEF DEM all

all these four good people

b. nùim pè:lì-sà ŋà-yùebì ŋāi àlî kpì lă ɲì:nî

bird white-PLU CL-six REL.PRO SUBJ.CASE die RCM only

only the six white birds that died.

c. *nùim pè:lì-sà ŋà-yùebì ŋǎ ŋāî ālì kpì lǎ

bird white-PLU CL-six DET REL.PRO SUBJ.CASE die RCM

ɲî:nî

only

The constituent order depicted by (28a) is Noun-Adjective-Numeral-Demonstrative-Quantifier. In place of the demonstrative in (28b) is the relative clause giving us a Noun-Adjective-Numeral-Relative clause-quantifier order. The ungrammatical (28c) can be rectified by omitting either the relative clause or the determiner from the structure.

4.8 Chapter Summary.

This chapter has discussed the nature of modifiers and their distribution in Buli. The modifiers discussed include: adjectives, numerals, relative clauses, quantifiers and possessed nouns. It is established that all modifiers are postnominal and in this position they compete for nearness to the noun. In line with the basic aim of outlining the constituent order of modifiers, it is concluded that when all the possible modifiers are present in a single construction, the linear order of modifiers in a determiner phrase is: Noun-Adjective-Numeral-{Determiner/Relative clause}-Quantifier, where the determiner and relative clause exclude each other.

In the next chapter we ‘chart’ the Determiner phrase and how the order we have is arrived at from a theoretical point of view.

CHAPTER FIVE

THE DETERMINER PHRASE: DERIVING THE SURFACE ORDER

5.0 Introduction

Previous chapters of this thesis have been devoted to describing the determiner phrase (DP) and its constituents. This chapter attempts an analysis that will account for the surface postnominal order of modifiers. Though I make proposals to capture the constituent order of elements, they are not novel, similar proposals already exist in the DP literature. This makes the DP in Buli similar to the DPs in other languages. This not withstanding, language particular idiosyncrasies are identified and accounted for. The analysis accounts for the structural positions of constituents within the DP.

5.1 Basic DP Structure

As I already indicated in the preceding chapters of this thesis, the noun head occurs at the left edge of the DP. This implies that the noun precedes all its modifiers, and nothing in the class of modifiers can precede it. As we have in (1) below, the noun precedes a determiner in (1a), an adjective in (1b) and a numeral in (1c).

1) a. gbáŋ ká

book DEF.SG

The book

b.núr wɔ̀ŋ kŭ

man tall DEF

the tall man.

c. núrbá bà-yɛ̀ mà

people CL-two DEF

the two people

d.*wɔ̀ŋ núr kŭ

tall man DEF

the tall man.

The order in (1d) shows that no modifier can precede the noun.

Following Abney's (1987) DP-hypothesis, most analyses of DP structures put the NP as a complement to D. Granting this, languages that have the complement of the D preceding it, assumed that the complement has undergone a movement operation to the left of D. In this work, I assume a movement analysis granting that the NP complement precedes its head D in Buli. Different types of movement have been proposed in the literature to account for languages that have the NP complement preceding the determiner. This is either Noun (N) movement to D: Bernstein (1993), Longobardi (1994), Davies & Dresser (2005) or NP movement

to specifier DP (Bhattacharya 1998; Aboh 2004; Cinque 2005). As will be seen, there is reason in Buli to assume the latter type of movement-NP to Spec DP.

In the languages that assume N to D movement, definiteness is realized on a particle suffixed to the Noun. An example of N to D movement is represented in (2) from Javenese.

2) Kucing-é nyolong iwak.

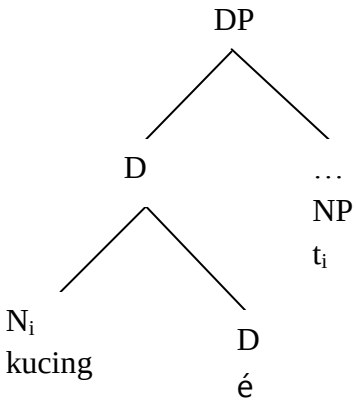
cat-DEF AV.steal fish

The cat stole (some) fish.

(Davies & Dresser 2005:61.example 14a)

Davies & Dresser (2005) explain that the particle (-é) suffixed to the noun functions as the definite element. This particle is the head of the DP and it possesses the feature for definiteness. Based on this they proposed that the movement of N to D is motivated by the need for N to check the definite feature at D thereby adjoining to it as represented in (3).

3)



(Davies & Dresser 2005:61.example 15b)

This N to D movement by (Davies & Dresser 2005) is similar to Bernstein's (1993) analysis of Romanian, where the morphological features of the definite article are checked by N raising to D in overt syntax.

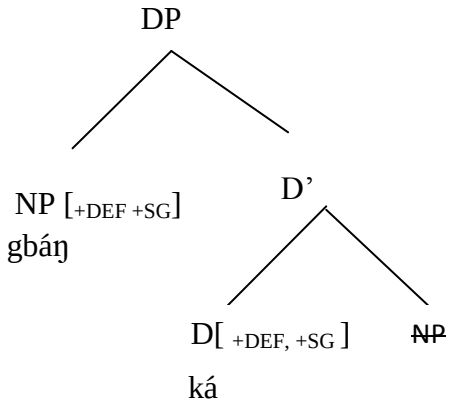
Explaining why NP movement to specifier of DP is preferred to N moving to D in Gungbe, Aboh (2004) argues that the Gbe languages lack inflectional morphology compared to the Romance languages where N-raising is prevalent. The absence of inflectional morphology on the nouns should be regarded as a sign of the lack of N-raising in these languages. Similarly in Buli features like definiteness, and deixis are represented by separate categories. They are not affixed to the noun as we have in Javenese (Davies & Dresser 2005) and Romanian (Bernstein 1993). For this reason, I assume following Bhattacharya (1998), Aboh (2004), Cinque (2005) that it is the NP that moves to the specifier of DP. Adopting Chomsky's (1995) checking theory, I propose that the movement of NP to Spec DP is due to the need of the noun to check its [definite, deixis and number] features under D. This checking is however possible in a Spec-Head configuration similar to Wh-movement in English, where the Wh-word moves to Spec CP to check the [+Q +WH] features at C (Carnie 2007). In view of the above discussion, a basic DP construction in (1a) repeated here as (4a) without any modifiers will have a structure as (4b).

4) a. gbáŋ ká

book DEF.SG

The book

b.



The fact that the noun precedes the determiner in Buli implies that the NP moved to a higher position than D. This movement results from the need for the N to check its [+DEF +SG] features in D. This structure will be modified as more elements are introduced in the DP. First let us consider adjectives.

5.2 Adjectives.

The normal order for adjectives is that they generally must follow the noun but must precede the determiner. Consider the examples (5):

5) a. núr wɔ̀ŋ kŭ

man tall DEF.SG

the tall man.

b. *wɔŋ núr kŭ

tall man DEF.SG

c. gbáŋ pá:lík ká

book new DEF.SG

this new book.

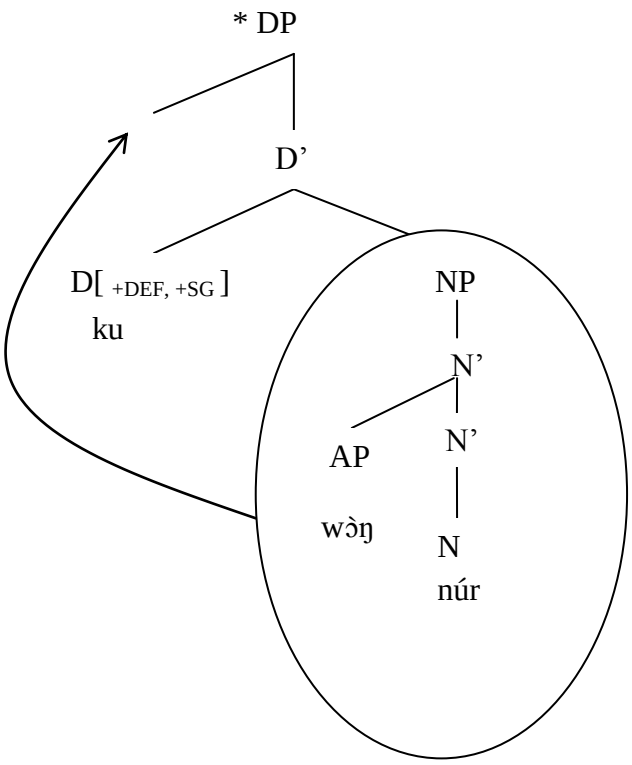
d. *pá:lík gbáŋ ká

new book DEF.SG

The adjectives in example (5a&c) are preceded by their respective nouns. Examples (5b&d) are ungrammatical because the adjectives precede the nouns. For more on the order of adjectives consult chapter four.

As noted earlier on, the noun precedes the adjective. In line with the proposal that NPs move to spec DPs, the occurrence of the adjective between the noun and determiner at surface structure requires some modification of the structure in (4b). If we consider the adjective as an adjunct to the noun, the current analysis where NP moves to Spec DP will not yield the right order of elements in which the adjective intervenes between the noun and the determiner but rather this will result in an inadmissible construction in which we will have the adjective occurring at the left edge of the DP as exemplified in (6).

6)

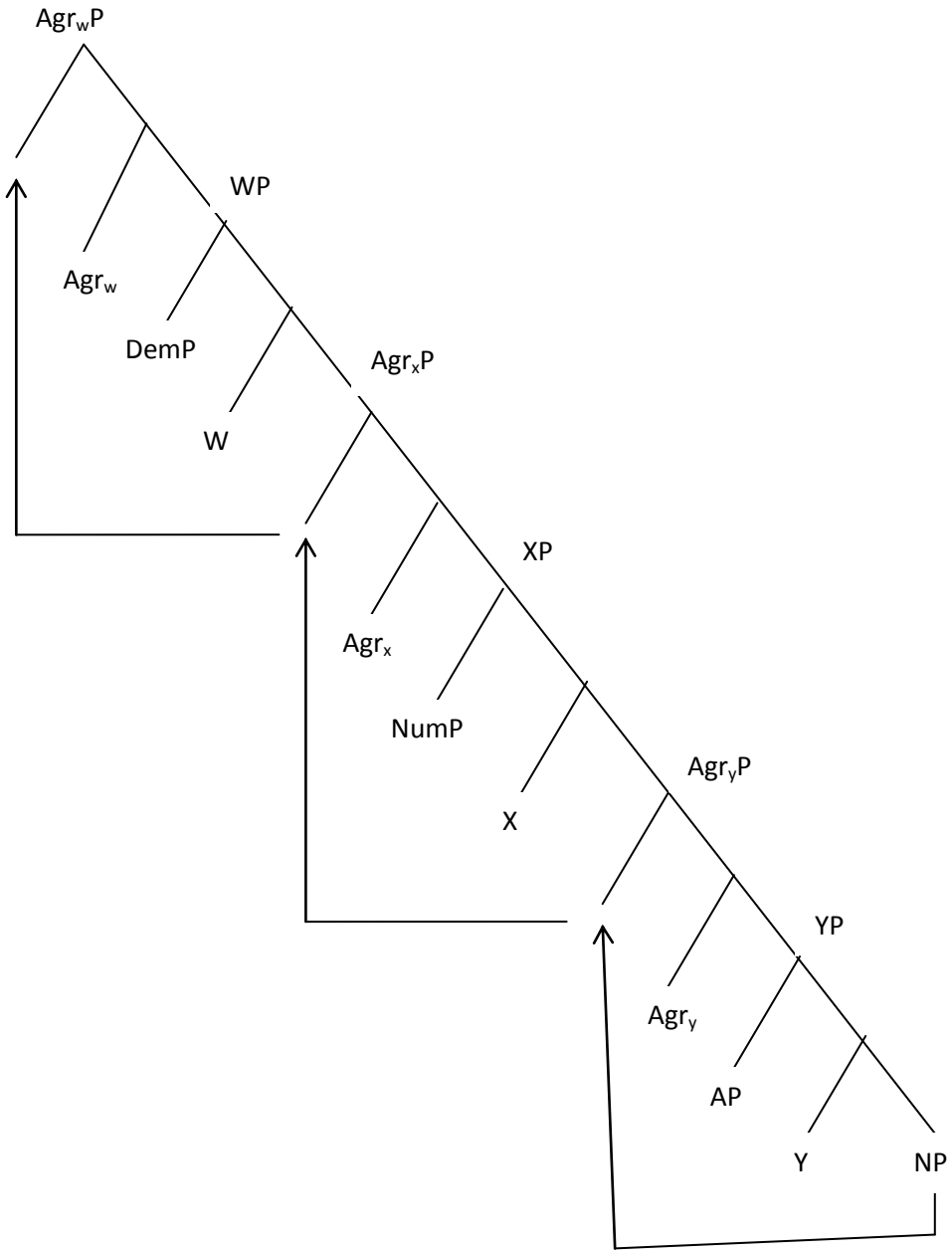


Taking the structure in (6) and applying NP movement to Spec DP to it, it will result in a surface structure of [Adjective-Noun-Determiner], where the adjective precedes the noun and determiner as shown in the ungrammatical construction of (5c) above contrary to the right order of [Noun-Adjective-Determiner].

Solution to this is found if one assumes Kayne’s (1994) Antisymmetry theory which posits that all languages are of the type specifier-head-complement order. Assuming this theory and following works like Fassi Fehri (1999); Aboh (2004); and Cinque (2005), adjectives like other modifiers are hosted by functional projections and intervene between the DP and NP.

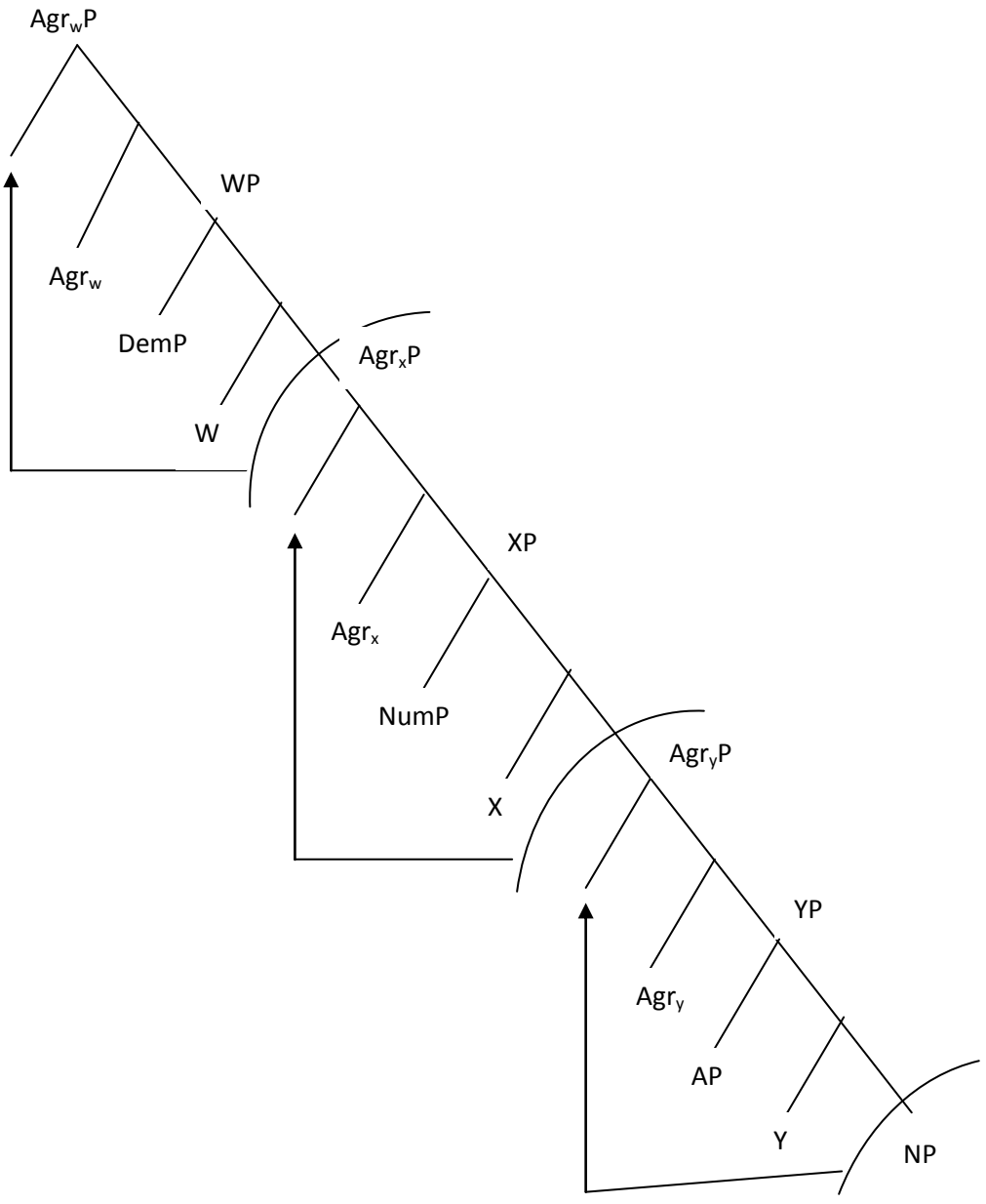
In line with this suggestion, there are two possible ways by which the postnominal order of modifiers could be achieved. The NP either moves cyclically through the specifier positions of the agreement phrases to the specifier of DP or it moves in a successive roll-up derivation through the specifier positions and pied-piping the modifiers to arrive at the postnominal order. These derivations are represented in (7a-b) below:

7) a.



(Cinque 2005: 317)

b.



(Cinque 2005:318)

The structure in (7a) represents a situation where the NP moves from specifier to specifier of agreement projections to arrive at the postnominal order of modifiers while (7b) exemplify phrasal movement and pied-piping in a roll-up fashion where the NP first moves to the specifier of the agreement phrase hosting the AP, to obtain the order [Noun-Adjective], the order [Noun-Adjective] rolls-up to the specifier of the next agreement phrase to arrive at the order [Noun-Adjective-Numeral], this [Noun-Adjective-Numeral] order equally rolls-up to the specifier of the agreement phrase hosting the DemP resulting in the order [Noun-Adjective-Numeral-Demonstrative].

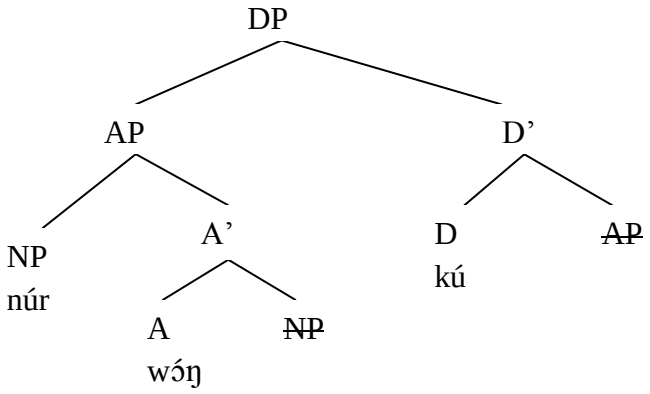
In the following paragraphs, I adopt the structure in (7b) and explain how it accounts for the data in Buli. I will argue that a functional category namely number (singular/plural) is required in this structure to be able to adequately explain the behavior of the plural morpheme in the Buli DP. Suspending all other modifiers our attention is drawn to only adjectives for now. To see how this structure really works, consider the example in (5a) repeated as (8) for convenience, in which the noun precedes the adjective which in turn precedes the determiner.

8) a. núr wɔŋ kŭ

man tall DEF.SG

the tall man

b.



In terms of the present analysis, the construction in (8a) is derived from the movement of the NP complement to Spec AP to get the sequence noun-adjective. The noun-adjective sequence moves to the Spec DP to arrive at the order noun-adjective-determiner as represented in (8b). This type of movement is what is termed in the literature as Generalized Pied-piping (Chomsky 1995), or Snowballing movement Aboh (2004). "This movement…consists of successive XP movement of the noun phrase and modifiers". It "…raises the NP to the left of the adjective. The sequence noun-adjective moves to the left of the numeral. Subsequently, the sequence noun-adjective-numeral moves to the left of the demonstrative" Aboh (2004:79). Snowballing movement, according to him is a type of disguised head movement employed by languages that lack head movement. "…snowballing seeks to raise only the head. When the head cannot be extracted from the projection it heads, the whole projection is pied-pied to the shortest specifier position and so on" Aboh (2004:109). This is similar to what Chomsky (1995) said "the operation move seeks to raise just F. whatever "extra

baggage" is required for convergence involves a kind of "generalized pied-piping." In an optimal theory, nothing more should be said about the matter; bare output conditions should determine just what is carried along, if anything, when F is raised" Chomsky (1995: 262). With respect to the Buli data, it can be concluded that the target for movement is the noun, because the head cannot be extracted, the whole noun phrase is pied-piped to the specifier of the AP and then to the specifier of the DP.

5.3 Number as a Functional Category.

In this section I would like to motivate the need for a functional category namely number (±plural) as part of the Buli DP. As discussed in the previous chapter (section 4.1), empirically the plural morpheme shifts systematically from the noun unto the last adjective to its right as in (9):

9) a. ní: ŋá

cow.**PLU** DEF.PLU

the cows

b. ná: mɔ̀n-**tà**ŋǎ

cow red-**PLU** DEF.PLU

the red cows

c. ná: mɔ̀nùg wɔ̀ŋ-**tà**ŋǎ

cow red tall-**PLU** DEF.PLU

the tall red cows

d. *ná: mɔ́n-**ta** wɔ̀ŋ-**tá**ŋá

cow red-**PLU** tall-**PLU** DEF.PLU

the tall red cows

When the noun occurs alone without adjectival modification it carries the plural morpheme as shown in (9a). However, it is observed that when it is modified by an adjective, the plural morpheme occurs on the adjective as exhibited in (9b). It is further observed in (9c) that the plural morpheme occurs on the final adjective in the phrase. Example (9d) is ungrammatical because the adjectives in the DP mɔ́n-tà 'red' and wɔ̀ŋ-ta 'tall' both inflect for number. The implication of this is that there can only be one plural morpheme per DP. Following this, I postulate that number is a functional category projecting its own phrase in the DP. The reasoning is that if number is considered an inherent feature of a noun, it implies that it forms part of the NP and any operation affecting the NP will necessarily affect it. In an analysis that assumes NP movement, anytime the NP is moving, the plural morpheme moves along with it since they are inseparable. This creates two problems in the analysis.

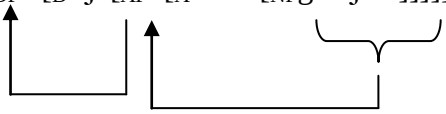
First, where adjective modifiers are present within the DP, an NP raising to the specifier of DP results in a surface structure where the plural morpheme appears on the noun which according to the data is inadmissible. Consider (10) below:

10) a.*gbaŋ-sa sɔbli ŋa

book-PLU black DEF.PLU

The black books

b. *[$_{DP}$ [$_{D}$ ŋa[$_{AP}$ [$_{A}$sɔbli [$_{NP}$gbaŋ-sa]]]]]



The inadmissible phrase in (10a) is derived in (10b) as follows; the NP with the plural morpheme on it gbaŋ-sa 'books' moves to Spec AP; then the AP gbaŋ-sa sɔbli 'books black' moves to Spec DP to form gbaŋ-sa sɔbli ŋa 'books black the'. This is ungrammatical because the plural morpheme appears on the noun; this suggests that it is not an inherent feature of the noun in Buli. If it were an inherent feature of the noun, we expect to see it on the noun wherever the noun occurs in the DP but this expectation is not borne out.

Second, explaining how an inherent property of a noun ends up with an adjective in the DP becomes problematic. Take for instance the construction in (11) in which the plural morpheme is found on the adjective instead.

11) gbáŋ sɔ́blɪ́-**sá** ŋă

book black-**PLU** DEF.PLU

The black books

These two problems can be solved by creating a functional category namely number phrase (NumP) in the DP. This number phrase is placed in the structure above the noun and when adjectives are present they intervene between the NP

and NumP. The number (±plural) of the DP is indicated by this functional phrase. I propose that the NumP is always present. Its head Num is overt when the DP is (+plural) but null when it is (-plural). In other words, a (+plural) DP will have the Num position occupied by an overt plural morpheme while a (-plural) DP will have the Num position occupied by a null (ø) morpheme.

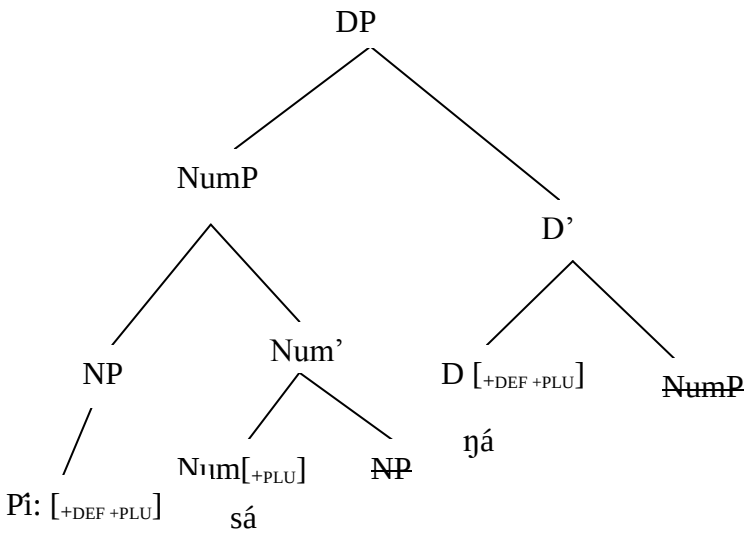
Considering the plural morpheme as a functional category, easily accounts for why it appears on nouns when the DP has no adjective modifiers and also how it ends up on the adjective when they appear in the DP as modifiers. First, we consider how the plural morpheme ends up on the noun when it is not modified by an adjective. A construction like (12a) is assigned a build up structure as (12b).

12) a. pî: sá ŋá

sheep PLU DEF.PLU

the sheep.

b.



In the structure in (12b), a functional phrase NumP is projected. Because the DP is (+plural), an overt plural morpheme (sa) occupies the head position of the NumP. In this analysis, since the motivation for movement is determined by the need for feature checking, the NP moves to Spec NumP to check the (+plural) feature at Num, at this stage the plural morpheme appears to the right of the noun explaining how come we find the plural morpheme on the noun when adjective modifiers are not present. The NumP with NP in its Spec moves to the Spec of the DP to get the sequence [noun-plural-determiner] as we have in (12a).

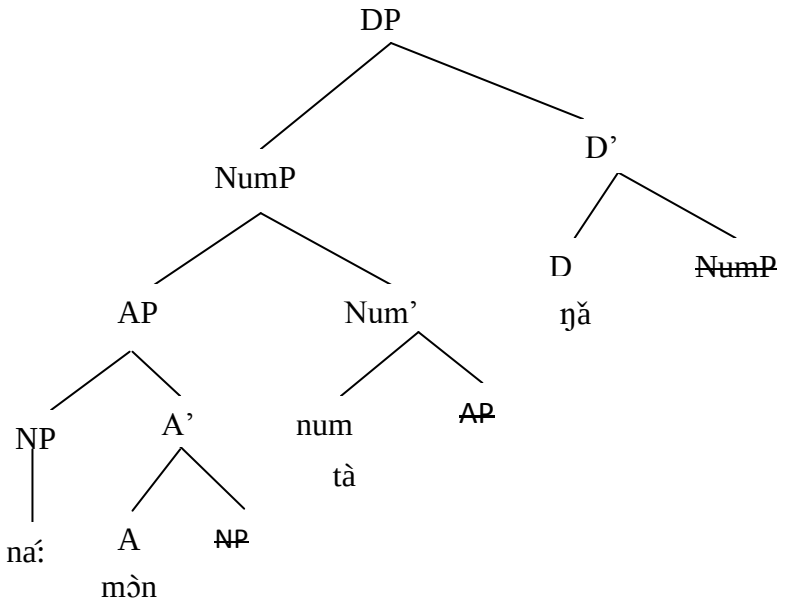
Second, we now consider how the plural morpheme appears on the adjective when adjectival modifiers are present in the DP. When the adjective is present, it intervenes between NumP and NP as we saw earlier. Let us consider a construction like (13a) where the plural morpheme is found on the adjective instead of the noun and explain how this happened. The derivation is represented in (13b).

13) a. ná: mɔ̀n-**tà** ŋǎ

cow red-**PLU** DEF.PLU

the red cows

b.



Following the analysis assumed in this work so far, the sequence in (13a) can be derived by moving the NP to Spec AP. At this position the noun precedes the adjective and the sequence noun-adjective is derived. The whole AP moves to the Spec of NumP. At this stage of the derivation, the AP in the Spec of NumP makes the adjective closer to Num explaining how Num appears on the adjective. This gives us the sequence noun-adjective-Plural. Finally, NumP moves to the Spec of DP to give the order noun-adjective-plural-determiner as illustrated in (13b).

To summarize, number projects a functional phrase NumP in the Buli DP. It shows whether a DP is either (+plural) or (-plural). When the DP is (+plural) an overt plural morpheme occupies the head of NumP. On the other hand, a null morpheme (ø), occupies the head of NumP when the DP is (-plural). The Projection of number phrase in the Buli DP helps account for why we have the plural morpheme

on the noun when there are no adjective modifiers in the DP and how the plural morpheme appears on the adjective when the adjective is present in the DP.

5.4 Class markers and Numerals

The relationship between numerals and class markers as discussed in chapter four (section 4.2.1) needs some theoretical considerations with regards to the structure of the DP. Do they constitute a single functional projection? Or Are they treated as heading distinct functional projections in the DP?

Both views are found in the literature of classifier languages like Japanese and Chinese. Kawashima (1993) and Muromatsu (1998) consider classifiers and numerals as constituting a single functional unit in the DP. Pan (1990), Tang (1990), Li (1999), Borer (2005), Simpson (2005) and Watanabe (2006), on the other hand view classifiers and numerals as distinct functional heads in the DP. Some of the reasons advanced for the latter view as noted by Simpson (2005) include 1) A cursory observation shows that two different morphemes appear in the sequences of numeral classifier indicating that two different functional heads are involved, 2) Classifiers and numerals are argued to contribute different semantic inputs to the DPs they occur in, accounting for why classifiers in languages like Vietnamese, Hmong, and Nung can occur alone without numerals, and in other languages like Burmese, Jingpo, and Thai numerals may occur without classifiers indicating that classifiers and numerals occupy two distinct syntactic heads. 3) The classifier and numeral are found in certain languages such as Nung and Chinese, to have nouns and adjectives intervening between them

respectively, once again supporting the separate heads analysis for classifiers and numerals. The question then is what is the status of class markers (CLs) in the structure of the DP in Buli?

In this work, I would assume and argue for the projection of two separate heads for CLs and numerals in the Buli DP. Morphologically, two different morphemes are in the sequence of CLs and numerals in Buli. This observation is in tune with the first reason given above for considering the CLs and numerals as belonging to two discrete syntactic heads as noted by Simpson (2005). Consider the examples below:

14) a. kpí:ná **ŋà**-tà

guineafowl.PLU **CL**-three

three guinea fowls.

b. núr bá **bà**-nà:nsɨ̀

man PLU **CL**-four

four people

c. tì: sà **sɨ̀**-nà:nsɨ̀

tree.PLU **CL**-four

four trees.

The morphological make up of the CLs and numerals are different as shown in (14). The class marker in (14a) is **ŋà**-, that of (14b) is **bà**-, and that of (14c) is **sɨ̀**-.

This suggests naturally that two components are involved and as such should be regarded as heading distinct projections in the DP.

The second argument in favour of the two head analysis of CLs and numerals in Buli comes from the optional nature of CLs in relation to some numerals. Some numerals in Buli can occur without any CLs accompanying them as explained earlier (section: 4.2.1). The numeral, one, can either occur with or without a class marker. Secondly, the numerals eight to ten can occur alone without any class markers. Take the following constructions in (15) for instance:

15) a. kpɔ̄ŋ yēŋ

guineafowl one

one guinea fowl

b. kpɔ̄ŋ **kù**-ɲī

guineafowl **CL**-one

one guinea fowl

As shown in (15a), the numeral yēŋ ‘one’ can occur without any class marker. Example (15b) on the other hand gives an instance where the numeral is accompanied by a class marker. These two instances point to the fact that the numeral and class marker do not constitute a single syntactic unit thus rendering plausible the analysis that the numeral and class marker can be considered as discrete heads in the DP. This position is further backed by the omission of class markers with numerals from eight to ten in the language. Consider (16a-c) below

where the numerals are not accompanied by any class markers. An attempt to introduce a class marker renders this ungrammatical as shown in (16d).

16) a . tí:sà ná:níŋ

tree.PLU eight

eight trees

b. ɗí:nà nōk

room.PLU nine

nine rooms

c. jénà pî

egg.PLU ten

ten eggs

d. ɗí:nà ***ŋà-**nōk

room.PLU **CL**-nine

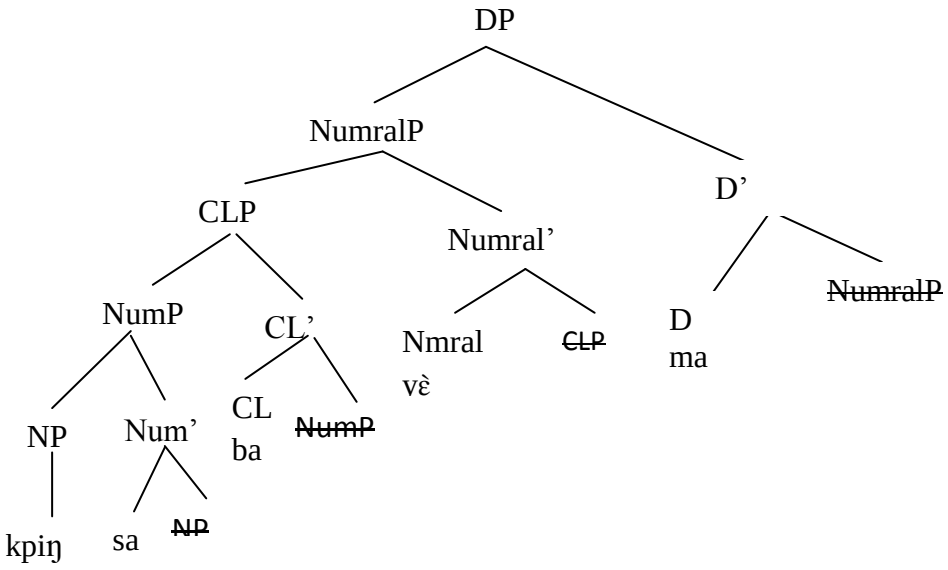
A way of accounting for the facts presented would be to propose along the lines of Borer (2005); Simpson (2005); and Watanabe (2006) that class markers and numerals are distinct functional heads that project their own phrases in the DP. This implies that class markers (CL) and numerals will project CLP and NumeralP in the DP respectively. The DP in this case will have the numeral, class marker and number intervening between it and the NP. Building on this, a DP with a numeral modifier as we have in (17a) will have a derivation as (17b).

17) a. kpíŋ-sá bà-yɛ̀ mă

orphan-PLU CL-two DEF

The two orphans

b.



The sequence in the representation in (17b) is derived through the movement of NP to the Spec of NumP to get kpíŋ-sá 'orphan-PLU'. The sequence kpíŋ-sa ba 'orphan-PLU CL' is derived when NumP moves to Spec CLP. Subsequently, the CLP moves to Spec NumeralP to arrive at kpíŋ-sá bà-yɛ̀ 'orphan-PLU CL-two'. Finally, NumeralP moves to Spec DP to give us the order kpíŋ-sá bà-yɛ̀ mă'orphan-PLU CL-two DEF' as we have in (17a).

Numerals as observed appear postnominally in the DP. When adjectives and numerals are present in the same DP, the adjective precedes the numeral which in turn occurs before the determiner. This order suggests a higher structural position for numerals in the DP. Adjectives are consequently placed below numerals and when CLP and NumP are present they intervene between the numerals and the

adjectives. Consider (18a-b) in which the adjective follows the noun but precedes the numeral and determiner.

18) a. gbáŋsɔ́blĭyéŋ ká

book black one DEF

the one black book

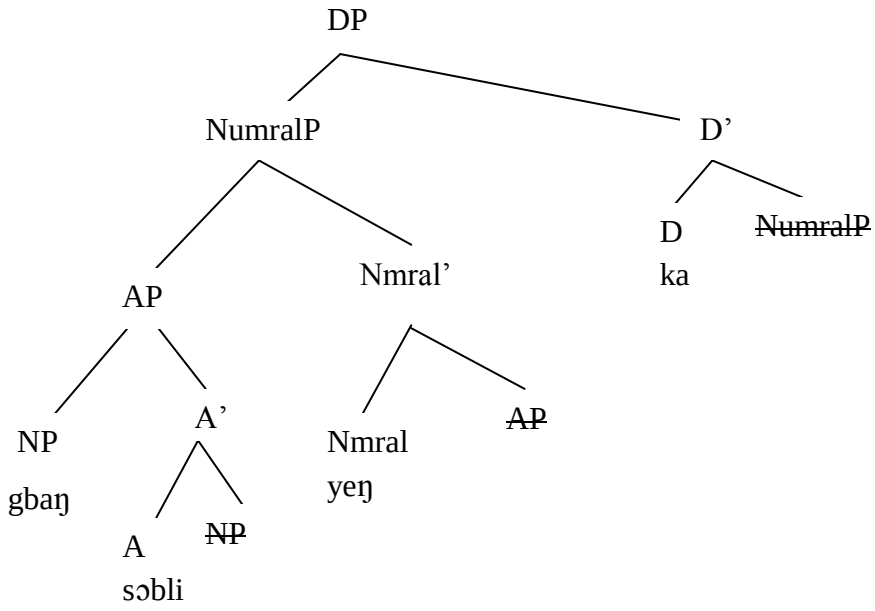
b. gbáŋ sɔ́blĭ-sà sì-yɛ̀ŋǎ

book black-PLU CL-two DEF

the two black books

The building of (18a) involves the NP moving to Spec AP. Then the AP moves to Spec NumeralP to get the sequence noun-adjective-numeral. The NumeralP subsequently moves to Spec DP to derive the right sequence of noun-adjective-numeral-determiner. This derivation process is illustrated in (19).

19)



5.5 Demonstratives

Demonstratives, as explained in earlier chapters, are used to indicate the distal relation between a speaker and an object. In this regard two types were identified: a proximal demonstrative used to indicate that the referent is near the speaker and a distal demonstrative which indicates that the referent is far away from the speaker. Demonstratives are morphologically complex. In the sense that, the proximal demonstratives combine with definite determiners while distal demonstratives are combined with pronouns. For more on this discussion refer to section (3.4.2). Consider the examples in (20):

20) a. núr **má-dɛ**

man **DEF.PLU-DEM**

these people

b. bà**kà-lá**

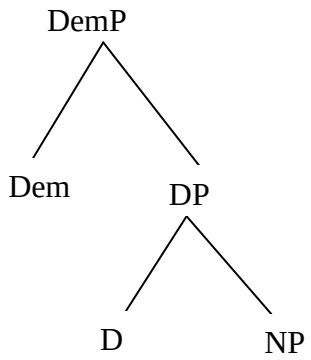
Dog **3SG-DEM**

That dog.

In example (20a), the proximal demonstrative is attached to the definite determiner while in example (20b) the distal demonstrative occurs with a pronoun. The concatenation of the demonstrative to either the definite determiner or pronoun is what this section intends to explain. The question is how we construe this within the analysis assumed in this thesis. Before I start to account for this, I wish to note some distributional facts about demonstratives which will help us understand the

conclusion reached in this thesis. First, demonstratives are licensed by the presence of either the definite determiner or a pronoun. This implies that the proximal demonstrative can not occur alone without the definite determiner. Similarly, the distal demonstrative can not occur without a pronoun. Secondly, in demonstrative constructions, the demonstrative determiners occur last to the right of the phrase. It can be said that while a determiner heads the DP in a proximal demonstrative construction, a pronoun heads the DP in a distal demonstrative construction. To this effect, I suggest that the demonstrative projects a phrase (DemP) which takes a DP as its complement. The order which has the demonstrative occurring phrase finally can be explained by the movement of DP to Spec DemP as a result of the deictic feature at Dem. Following this suggestion, the structure of the Demonstrative phrase will look like (21):

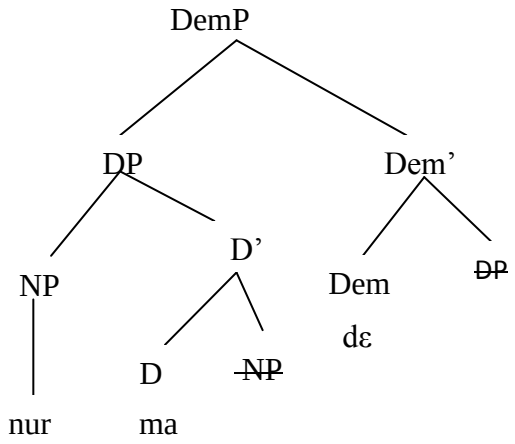
21)



Granting the representation in (21), it is now clear that we can account for the Buli sequence in (20a-b) by arguing that the DP moves to Spec DemP motivated by the deictic feature at Dem, but prior to this movement the NP moves first to Spec DP. Put in other words, the NP has two features to check [+deictic] and [+definite]

under Dem and D respectively. To do this, the NP first moves to the Spec of DP checking the [+definite] feature with one more feature to check [+deictic], the DP rolls up to Spec DemP to form [N D Dem] as shown (22) below:

22)



5.6 The Associative Construction

This section examines the internal constituent structure of the associative construction focusing on the syntactic relation between the two DPs. Buli, unlike languages like Ewe (Agbedor 1996), Bafut and Limbum (Tamanji and Ndamsah 2004), does not have a segmentally realised associative morpheme to indicate the associative relation between the two DPs. This relation is expressed by juxtaposing the two DPs in Buli. When this happens, the possessor precedes the possessed. Take (23) for instance:

23) a. **núr wá** yérî̂

man DEF house

the man's house

b. **nà:b** bĩ:k

chief son

a chief's son

c. **bî: ká** gbáŋ ká

child DET book DET

the child's book

In the examples above, the possessor DPs, <u>núr wá</u> 'the man' in (23a), <u>nà:b</u> 'a chief' in (23b) and <u>bî:ká</u>'the child' in (23c) precede the possessed DPs. Before considering how the possessive structure will look like in Buli, first let us consider how it is treated in English.

One of the ways English uses to indicate possessive relation between DPs is the 's-genitive (Carnie 2007). Take for instance the constructions in (24):

24) a. the panther's coat

b. the building's roof

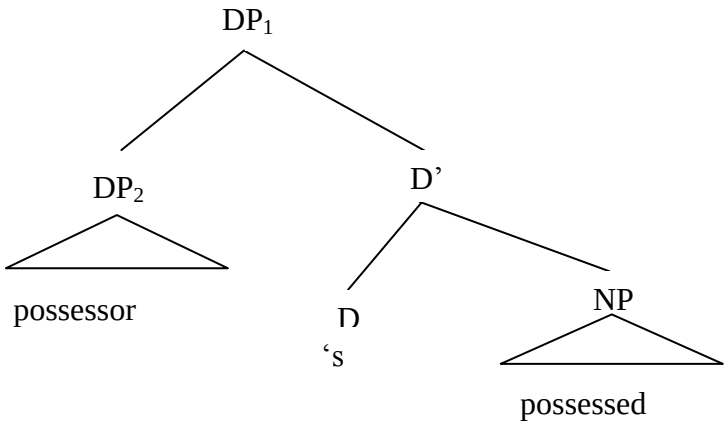
c. the man standing over there's hat

(Carnie 2007:199)

The DP hypothesis (Abney 1987; Carnie 2007) treats the 's-genitive as a determiner. This follows from the fact that the 's-genitive is in complementary distribution with determiners. Just as determiners are heads in DPs, the 's also heads a DP. Building on this, a 's-genitive construction in English will have a

structure like (25), where ‘s is a head and the possessor DP occurs in its specifier position.

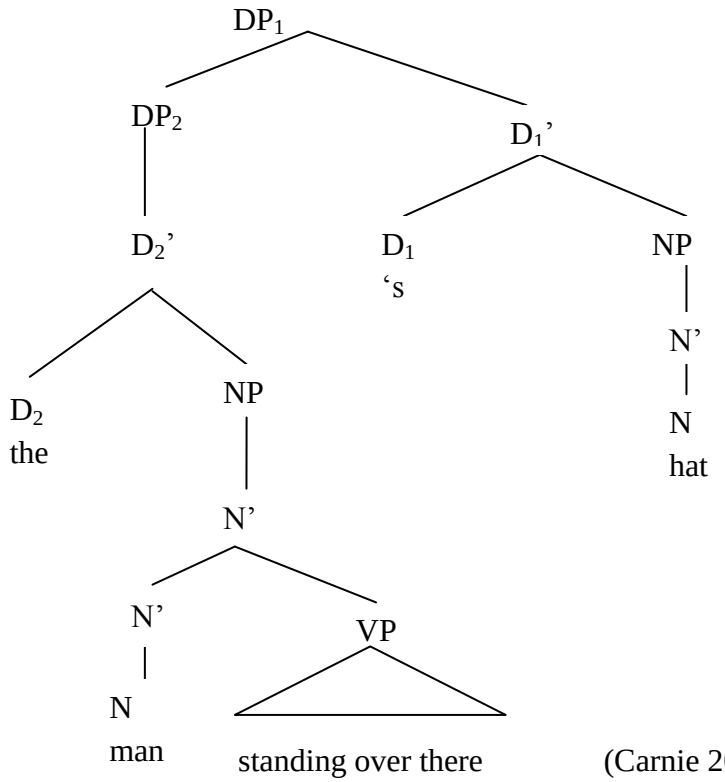
25)



(Carnie 2007:200)

In example (25) the possessor DP occupies the specifier position of the DP that ‘s heads. Thus the construction in (24c) will have a tree as (26):

26)



(Carnie 2007:200)

The possessor DP_2 [*the man standing over there*] occupies the specifier of DP_1, which is headed by ‘s. The possessed NP *[hat]* takes the complement position of ‘s.

From the above discussion, a similarity that can be made between English and Buli is that the possessor precedes the possessed in both languages. However the structure of English as proposed by Abney (1987), Carnie (2007) in (25) above cannot explain the Buli facts without resulting in problems.

In English the possessor DP sits in the specifier of the possessed DP. The analysis adopted in this thesis, where NPs moves to Spec DPs, makes it impossible for the possessor DP in Buli to occupy the specifier of the possessed DP. This Granted, it means that the specifier position of the DP in Buli is reserved for NPs that must check their features. This therefore creates no room for the possessor DP to occupy the same position. In the event where the possessor DP appears in the specifier of the Possessed DP as the case is in English, it will prevent the NP in the possessed DP from moving thereby creating an inadmissible structure. To explain this, let us take example (27) below:

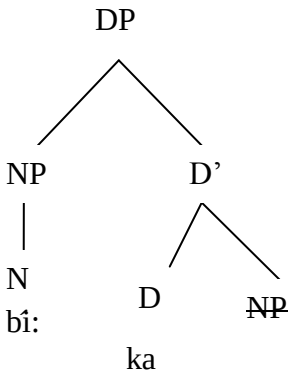
27) **bí: ká** gbáŋká

child DEF book DEF

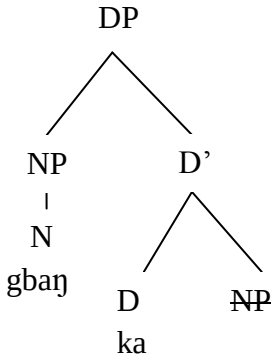
the child's book

In (27) the possessor DP is bí: ká 'the child' while the possessed DP is gbáŋ ká'the book'. In this case the possessor precedes the possessed as we have in English. The individual structure of both the possessor (DP) and possessed (DP) will be as in (28a-b) respectively:

28) a.

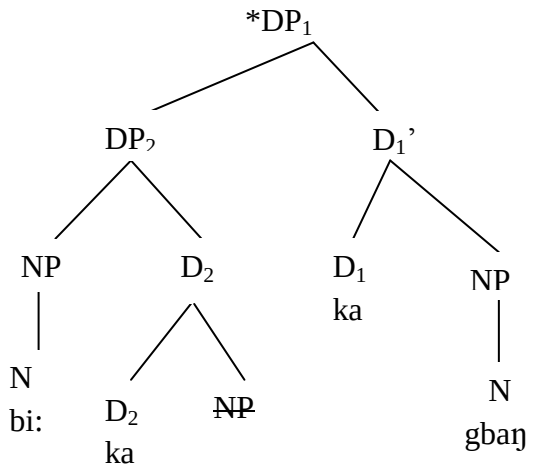


b.



From the structures in (28), it is seen that both specifier positions of the possessor DP (28a) and possessed DP (28b) are occupied by their respective NPs. This analysis does not create room for the possessor DP to appear in the specifier of the possessed DP as we have in English. On the contrary, if the possessor DP is made to occupy the specifier of the possessed DP, it will result in an unacceptable word order as in (29):

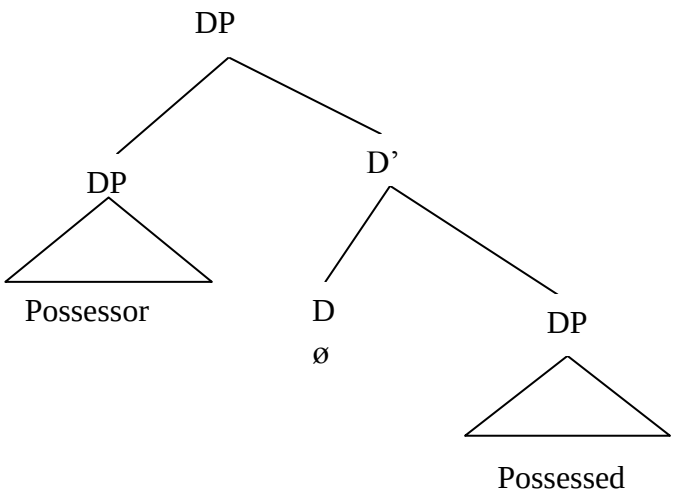
29)



In structure (29), the possessor DP_2, sits in the specifier of the possessed DP_1 similar to what to have in English, however this position forces the NP of DP_1 to remain in-situ resulting to an order where the determiner precedes the noun instead of the correct order, where the determiner is preceded by the noun. This leads to the conclusion that the possessor DP can not sit in the specifier of the possessed DP in Buli contrary to Abney (1987) and Carnie (2007).

The discussion suggests that the Buli language manifests a different possessive structure for which there is the need to modify Carnie's (2007) structure. One way of doing this is to suggest that there exists a DP in the possessive construction headed by a null element (ø), since there are no overt possessive markers in the language. The possessor DP will appear in the specifier of the DP headed by the null element (ø), and the possessed DP will occur as the complement of the null element. Based on this suggestion, the possessive structure is represented as follows:

30)



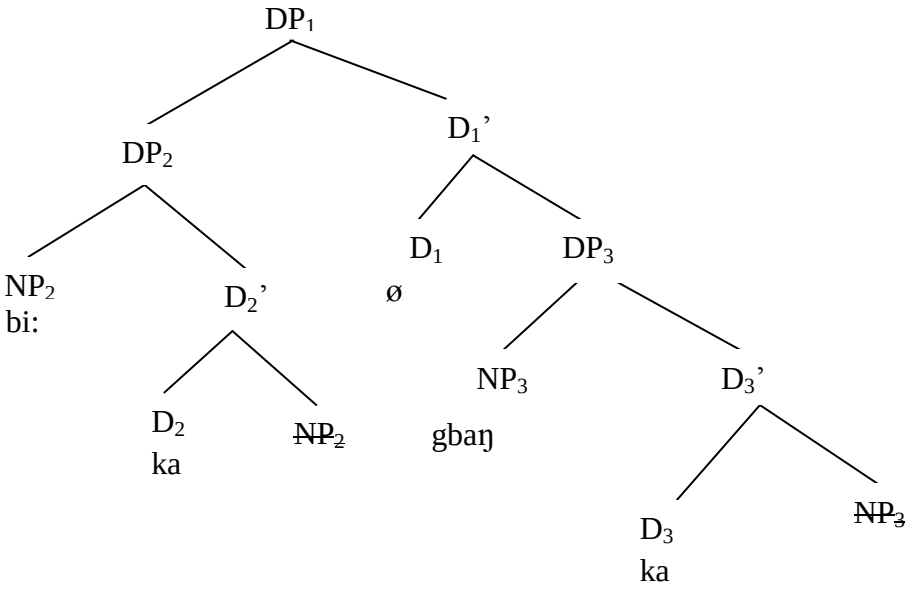
Assuming the structure in (30), the possessive construction in (27) repeated here as (31a) will be represented as (31b) below:

31) a. **bí:** **ká** gbáŋ ká

child DEF book DEF

the child’s book

b.



Notice that there are three DPs in the structure above. DP_1 is headed by the null possessive marker in the language. In the specifier of DP_1 is DP_2, the possessor. The complement of D_1 is DP_3, the possessed entity.

An alternative to the above analysis is to propose the projection of a functional phrase called possessive phrase (PossP), which will be headed by the null possessive marker. The PossP will host the possessor DP in its specifier and take the possessed DP as a complement.

In summary, the possessive construction does not have an overt associative morpheme linking the possessor and possessed in Buli. Buli and English are similar in the sense that in both languages, the possessor precedes the possessed. However, a slight modification of Carnie's (2007) structure is needed to account for Buli's possessive construction.

5.7 Chapter summary

The aim of this chapter has been to present an analysis that will account for the postnominal order of modifiers in the Buli DP. As a result, a movement analysis is assumed to explain the postnominal order of modifiers. It is argued that the NP moves to Spec DP due to the need for N to check its features at D. Adjectives, like other modifiers, are argued to intervene between the DP and NP. The postnominal order of the adjective is, however, arrived at by the leftward movement of the NP to the Spec of AP to get the sequence [noun-adjective]; the sequence [noun-

adjective] also moves to Spec DP to get [noun-adjective-determiner]. This type of movement is what is termed in the literature as "Generalized Pied-piping" (Chomsky 1995), or "Snowballing movement" (Aboh 2004). A functional projection namely number (±plural) is motivated in the DP. The number of the DP is indicated by this functional phrase. I propose that the NumP is always present. Its head Num is overt when the DP is (+plural) but null when it is (-plural). In other words, a (+plural) DP will have the Num position occupied by an overt plural morpheme while a (-plural) DP will have the Num position occupied by a null (ø) morpheme. It is proposed along the lines of Borer (2005); Simpson (2005); and Watanabe (2006) that class markers and numerals are distinct functional heads that project their own phrases in the DP. This implies that class markers (CL) and numerals will project CLP and NumeralP in the Buli DP respectively. With regard to demonstratives, it is suggested that the demonstrative projects a phrase (DemP) which takes a DP as its complement. The order which has the demonstrative occurring phrase finally is explained by the movement of DP to Spec DemP as a result of the deictic feature at Dem.DP moves to Spec DemP motivated by the deictic feature at Dem, but prior to this movement the NP moves first to Spec DP.

CHAPTER SIX

CONCLUSION

6.0 Introduction

The aim of this thesis has been to give a structural description of the determiner phrase in Buli, especially the sequences of the various modifiers found in it. Thus various chapters of this work have been devoted to tackling aspects of this aim. In the following sections, a summary of the individual chapters is given. The chapter concludes by making recommendations for future research.

6.1 Summary of Chapters

Chapter one of this work has been preoccupied with the introduction of the dissertation, laying special emphasis on the language and it speakers, research problem, aims as well as the relevance of the study. Some grammatical properties of the language are highlighted in addition to clarifying some issues in the structure of the noun phrase in Gur. The sources of data used for the study are also mentioned. This chapter concludes on how the thesis is organized.

Chapter two reviews relevant and related literatures in addition to explaining the tenets of the framework used for explaining the data. The reviewed works include: Abney (1987) setting the stage for DP analysis; Logobardi (1994) on the Italian

DP, arguing that only DPs in Italian can function as arguments of clauses further grounding the need for the existence of DPs; Bernstein (1993); Fassi Fehri (1999); and Aboh (2004) in which the DP of Gungbe is 'chartered' within a Split-D system. Under this system, the D is composed of two functional heads D^o and Num^o corresponding to [±specific] and [plural] markers respectively.

The concern of chapter three has been with the discussion of determiners and personal pronouns. Particularly discussed are the semantics, morphology and syntax of determiners. Definiteness, indefiniteness, deixis and number are identified as the feature values contained in determiners. It is noted that determiners assumed different shapes depending on the nouns they specify over. Also mentioned is the fact that determiners terminate phrases they are a part of. An argument is made for an inclusion of a null determiner into the plural indefinite determiners in the language. The syntax of personal pronouns is considered in the final section of this chapter, highlighting the various distributional as well as semantic differences expressed by the various pronouns.

Chapter four looks at the nature of modifiers and their distribution in Buli. The modifiers discussed include: adjectives, numerals, relative clauses, quantifiers and possessed nouns. It is established that all modifiers are postnominal and in this position they compete for nearness to the noun. In line with the basic aim of outlining the constituent order of modifiers, it is concluded that when all the possible modifiers are present in a single construction, the linear order of modifiers in a determiner phrase is:

Noun-Adjective-Numeral-{Determiner/Relative clause}-Quantifier, where the determiner and relative clause exclude each other.

Chapter five presented an analysis that accounted for the postnominal order of modifiers in the Buli DP. As a result, a movement analysis is assumed to explain the postnominal order of modifiers. It is argued that the NP moves to Spec DP due to the need for N to check its features at D. Adjectives, like other modifiers, are argued to intervene between the DP and NP. The postnominal order of the adjective is, however, arrived at by the leftward movement of the NP to the Spec of AP to get the sequence [noun-adjective], the sequence [noun-adjective] also moves to Spec DP to get [noun-adjective-determiner]. This type of movement is what is termed in the literature as Generalized Pied-piping (Chomsky 1995), or Snowballing movement Aboh (2004). A functional projection namely number (±plural) is motivated in the DP. The number of the DP is indicated by this functional phrase. I propose that the NumP is always present. Its head Num is overt when the DP is (+plural) but null when it is (-plural). In other words, a (+plural) DP will have the Num position occupied by an overt plural morpheme while a (-plural) DP will have the Num position occupied by a null (ø) morpheme.

It is proposed along the lines of Borer (2005), Simpson (2005), and Watanabe (2006) that class markers and numerals are distinct functional heads that project their own phrases in the DP. This implies that class markers (CL) and numerals will project CLP and NumeralP in the Buli DP respectively. With regard to demonstratives, it is suggested that the demonstrative projects a phrase (DemP) which takes a DP as its complement. The order which has the demonstrative

occurring phrase finally is explained by the movement of DP to Spec DemP as a result of the deictic feature at Dem.DP moves to Spec DemP motivated by the deictic feature at Dem, but prior to this movement the NP moves first to Spec DP.

6.3 Recommendation for Future Research.

Though the study has provided insights into the structure of the determiner phrase in Buli, there are still more issues that deserve further investigations.

In English, pronouns have been treated as determiners in the DP-hypothesis. Investigating pronouns in Buli and establishing their status within the DP-hypothesis is worth considering.

Future research could look at the effects of movements on tone in the DP. When do tonal changes take place? Is it before or after movements?

Enquiry into the sequencing of adjectives in the Buli DP is worth considering, since adjectives form an important component of the DP.

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