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DEDICATION

This dissertation is dedicated to my late father Justice Ahmadu Abdullahi Biri and my mother Hajiya Rahmatu Abubakar.

CERTIFICATION

This dissertation by Saleh Ahmad Abdullahi with Admission Number (14210105005) has met the requirements for the award of the degree of Master of Arts (English Language) of the Usmanu Danfodiyo University, Sokoto and is approved for its contribution to knowledge.

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LIST OF ABBREVIATIONS

AD	Anno Domini
ADJP	Adjectival Phrase
ADVP	Adverbial Phrase
AM	Associative Marker
ART	Article
Ch.	Chapter
Cl.	Classifier
DEF. ART	Definite Article
Dem.	Demonstrative
DET	Determiner
Det.	Determiner
DNs	Derived Nouns
DO	dependent Object
DP	Determiner Phrase
GB	Government and Binding theory
HN	Head Noun
INDEF.	Indefinite
IO	independent Object
MHQ	Modification Head Qualification
N	Noun

N+N	Noun + Noun
NP	Noun phrase
Num.	Numerals
PI	Potential Inference
PL	Plural
Plp	plural person
POM	Post-modifier
PP	Prepositional Phrase
PREM	Pre-modifier
Pro.	Pronoun
Q	Quantifier
Qtf.	Quantifier
RD	Referential Distance
Spec.	Specifier
SV	Subject Verb
SVO	Subject Verb Object
UCLA	University of California, Los Angeles

DECLARATION

I Saleh Ahmad Abdullahi do hereby declare that; this Dissertation titled “Modifier Placement: A Comparative Study of English and Fulfulde Languages” was written by me and it is a record of my own research work. It has not been presented in any previous application for a higher degree. All quotations are indicated and the sources of information are specifically acknowledged by way of reference.

ABSTRACT

The aim of this study is modifier placement in English and Fulfulde languages. The dissertation owes its motivation to the fact that comparative syntax necessarily involves work on more than one language. It attempts to characterize and delineate the parameters that ultimately underlie cross-linguistic differences in Syntax. Even though, the present study is simply a descriptive one, yet it serves significant resource and input to descriptive analysis. This work explores modification in English and Fulfulde, putting into cognizance their distribution, forms and functions and their syntactic properties and position they occupy in the languages. This study obtained its data from primary and secondary sources. The primary source was of self introspection which was indispensable owing to the fact that the researcher is a native speaker of Fulfulde and the secondary source made use of materials drawn from existing documents. This study reveals; Fulfulde nominal modifications do not occur in pre-position but the Adjectives in the language do occur. However, English nominal modifications do not occur in the attributive position but the Adjectives in the language do occur in both predicative and attributive position. They always follow the Head Noun they modify and exhibit an agreement property in both languages.

CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction

This research primarily aims at comparative study of the modifier placement patterns in English and Fulfulde. The study focuses on the description of modifiers in English and Fulfulde within the Noun Phrase with a view to syntactically identify and characterize the forms and functions of modification in the two languages on a comparative note.

According to Crystal (2007), modification is a term used in syntax to refer to the structural dependence of one grammatical unit upon another but with different restriction in the scope of the term being introduced by different approaches. He goes on to say that; “some reserve the term for structural dependence within any endocentric phrase as in “the big man in the garden”, both “the big” and “in the garden” modify “man”, characterized as pre-modification and post-modification respectively. He further added that; some linguists reserve the term for the pre-modifying structures only: in Hallidayan grammar, for example, the above phrase would have the structure M. H. Q, standing for; MODIFICATION-HEAD-QUALIFICATION. Traditional grammar, he furthermore suggested “reserved the term for adverbial units which were dependent on the VERB. A closer look at the above exposition of the term modification suggests that it is a syntactic phenomenon that occurs within various constituent types that include Noun phrases, verb phrases, prepositional phrases as well as adverbial phrases. And that modifiers can be placed either in pre-positions and post-positions. Thus, we need to also define more precisely the twin terms pre-modification and post-modification.

Pre-modification is a term used in some models of grammatical description that refers to all the items which occur before the HEAD of the phrase (i.e an endocentric phrase) as in for instance “All those big red foreign cars have been sold”. It is suggested that in the literature that determiners and adjectives are the main classes which pre-modify (i.e occur in pre-modifying position) in English, but there are several other categories involved in the full description of this complex area, such as quantifiers, intensifiers etc (Crystal, 2008).

On the other hand, post-modification is a construct used in some grammatical descriptions to refer to all the items which occur after the HEAD of a phrase, typically in endocentric phrase, as in the following English construction “the cars are in the garage are expensive” (Crystal, 2008).

According to Crystal (ibid) there are three main types of post-modifying structure are recognized in English: pre-positional phrases as in “the cars in the garage....; finite (relative) clauses, demonstrated in “the car which was in the garage....” and non-finite (infinitive or participial) clauses, instantiated by “the car parked in the street; the car to buy.....”

The focus of present investigation is the nature of modification within the Noun phrase in the two languages compared. The study focuses on the modification within the noun phrase (NP) as basic supplementary structure in the Grammar of both languages. The NP is one of the three large constituents of the Fulfulde sentence. It is described here by ascertaining the computation of the smaller units that make it up. This leads us to ascertain the agreement patterns exhibited within the constituent.

1.1 Basic Linguistic Profile of English Language

English language belongs to the Germanic sub-group of the large Indo-European language family. (Brown & Sarah, 2009). Although Chinese is spoken by greater number of

people, English is spoken around the globe with a wider dispersion than any other language. From its earlier home in Britain (now with 60 million speakers) it has spread to nearby Ireland (4 million), across the Atlantic to North American (where some 215 million residents over the age of five speak it in the United States and as many as 20 million in Canada) and across the world to Australia and New Zealand (with more than 20 million speakers).

English is the sole official language in more than a score of other Countries; Ghana, Liberia, Nigeria, Uganda, and Zimbabwe in Africa; Jamaica, Bahamas, Dominica and Barbados in the Caribbean; and the Solomon Islands in the Pacific to name a sample. Elsewhere it shares official status with one or more Languages in a score of nations including Tonga, Tanzania, Cameroon, Kenya, Nigeria, South Africa, Singapore, the Philippines, Western Samoa, Kiribati, Pakistan and India (where it is an associate official language alongside Hindi) (Comrie, 2009). The canonical clause structure of English is SVO order. The Noun Phrase structure is such that nouns can be pre-modified by determiners, adjectives, and noun modifiers, in that order. Complex hierarchical structuring is possibly facilitated by the freedom with which nouns can act as modifiers; some determiners show number agreement; pre-modifying nouns are generally said to be unmarked for number. Relative clauses post-modify as do non-finite clausal modifiers. Relativized NPs can function as subjects; direct or oblique objects or possessives in relative clauses. Restrictive relative clauses is said to have a hybrid character: they can be integrated into a preceding noun phrase by simple juxtaposition by a relativizer (that), or by a relative pronoun (who, whom, which), which functions as an argument in the relative clause. The choice is subject to complex syntactic and stylistic constraints (Brown & Sarah, 2009).

1.2 The Linguistic Profile of Fulfulde Language

Fulfulde (otherwise called Ful, Fula, Fulani, Pulaar, Pular; French: *Peul*) is an atlantic language. Its closest relatives are Wolof and Sereer (Serer). Atlantic is a sub-branch of the Niger-Congo language family. Fulfulde language in fact constitutes one large dialect continuum in Africa stretching over thousands of Kilometers from Mauritania, Senegal and Guinea in the West to as far as Sudan and Ethiopia in the east and to Cameroon, the central African Republic and Congo in the South (Breedvald, 1995). The Fulbe call their own language Pulaar or Pular in the dialect areas of Fuuta Tooro (Senegal, Mauritania) and Futaa Jaloo (Guinea, Sierra Leone) and Fulfulde in all other dialect areas, such as Maasina (Mali), Liptaako (Burkina Faso), Gombe (Nigeria), and Aadaamaawa (Cameroon), (Breedveld, 1995).

The basic clause structure is similarly SVO. However, the language morpho-syntactically differs from English, by virtue of the fact that it has a complex noun class system and verbal system. The dialect on which the present study makes it bases is Gombe dialect. The estimate number of speakers varies wildly. Gordon (2005) puts the number at approximately four and a half million, but suggests that in total, speakers may number as high as twelve million. The UCLA Language Materials Project puts the number at between 12-15 million speakers. Estimates of dialects vary from two (as in Taylor, 1953) to six (as in (Arnott, 1970). Arnott's monograph is based on the Gombe dialect, spoken in North Eastern Nigeria, which he considers "more typical of Fula as a whole" (Arnott, 1970).

Fula is a five vowel language (with contrasting long vowels). However, Arnott marks what he terms the "salient syllable" with the diacritic (ˊ) over the relevant vowel (Arnott, 1970).

The consonant system contains 28 sounds, including four “glottalized” consonants. The language allows geminated consonants and has a full array of pre-nasalized stops.

Fula boasts a complex and unusual system of suffixally-marked noun class and concord. Each class suffix has several allomorphs or “grades” (as Arnott calls them), which combine with stems of the same “grade”. This fact has an effect on agreement morphology: since the “grade” of the suffix is determined by the individual stem, agreement phrases show suffixes of the same class, but not necessarily the same form:

1. **loo-ŋgel6alee-yel**

pot-class 3 (smallness singular)

black-class 3 (smallness singular)

“a small black pot” (Arnott, 1970).

2. **Examples of the Noun Class System of Fula**

(after Arnott, 1970):

Class 1 Animate (human) (s) **-o gork-o** “man”

Class 2 Animate (human) (p) **-6ewor-6e** “men”

Class 3 Small person/thing (s) **-ŋgel6i-ŋgel** “small child”

Class 6 Small persons/things (p) **-kon6ik-kon** “small children”

Class 7 Large item/quantity (s) **-ŋgad6em-ŋga** “big tongue”

Class 8 Large items/quantities (p) **-kod6em-ko** “big tongues”

An especially intriguing feature of the concord system, seen in the singular/plural pairs in classes 1 and 2 above, involves the alternation of the stem-initial consonants. This consonant alternation (referred to by some authors as “phonetic chiasmus”, from the Greek letter chi (X), by others as “consonant mutation”) is exemplified below:

3. The consonant alternation system of Fula

Sapir (1971), each column represents a single phoneme, with allomorphs of increasingly “stronger” grades: thus, for instance, [g] is a stronger variant of [w], [p] a stronger variant of [f], etc.

- i. f t s h w(b) r(d) y(j) y w ʔ(g)
- ii. p t c k b d j g gg
- iii. p t c k mbndnjǵǵǵǵǵǵǵ

More so, Fula is generally S V (IO) (DO). This is the default order in main clauses. In some subordinate clauses (as in examples (5) and (6) below), the order of subject and verb is reversed. There is a morphologically-based change in position of the invariable element **-no-** as variant from English language. It appears at final, after the suffix and negative marker in what I am calling “simple” forms (as in Arnott’s “General Past” and “Future”), but after the “auxiliary-type” element **donin** “complex” forms. The following examples show the default word order including objects, both pronominal and nominal, in main clauses.

4. a. One object:

mi-sood-iinagge

(1s-buy-“General Past Active” cow (DO))

“I bought/have bought a cow.” (Adapted from Arnott 1970:319)

b. Two pronominal objects:

6e-hokk-ii-no-mo-dum

(3p-give-“General Past Active”-shifter-IO (him)-DO (it))

“They had given him it.”

However, in the case where both a (pronominal) “object element” and a “noun object” occur, “the object element (being part of the “verbal complex”) always precedes the noun object” (Arnott, 1970).

c. Two objects (one pronoun, one NP object):

mi-hokk-ii-ndipuccu 'am

1s-give-“General Past Active”-DO (it = **gawri**=corn“) horse (IO) my

“I gave it to my horse.”

Predications with three objects are possible, but rare, and invariably involves a verbal extension which „licenses“ the third object. Here, the noun “care” is licensed by the extension - **ir-**:

d. Three NP objects:

o-mabb-it-ir-an-ii

3s-close-reversive-“modal”-dative-“General Past Active”

Bello yolnde hakkilo

(Bello door care)

He carefully opened the door for Bello (Arnott, 1970).

The so-called “relative tenses” may appear in all three voices, (Arnott, 1970). They are said to generally occur in subordinate clauses, resultative clauses, after certain particles including question particles, and in reported speech. In relative tenses, the past perfective (“General Past Active”) suffix **-ii** is replaced by **-u** and the order of subject and verb can be reversed in some, but not all, persons:

5. a. **Ndaa nagge (ŋge)**

(this cow (which))

shood-u-mi

(buy-“Relative Past Active”-1s)

“This is the cow (which) I bought” (Arnott, 1970)

Compare: **mi-soodii nagge** (“I bought a cow.”)

The S V order is reversed in certain persons in subordinate clauses in the “Relative Future” as well:

6. **wi’-am monodd-ay-mi**

(tell-me whom call-“FUT”-1s)

“Tell me whom I am to call” (adapted from Arnott, 1970)

1.3 Statement of the Problem

Breedveld (1995) asserts that, quite a number of research works have been carried out on Fulfulde, but the use of modifiers in languages (i.e) English and Fulfulde differ in their position especially articles, demonstratives and quantifiers, but they are akin to one another in the angle of adjectives as they are dynamic in the position they appear.

As language the cornerstone of information and communication, the Fulfulde native speakers consider the use of modifiers as having the same position with the one of English language and they are up for misplacing the modifiers especially those in the city.

As a result of this, therefore, the study answers such critical questions as;

- i. Does the structure of modification in both languages has fixed or regular patterns?
- ii. If yes, what are the patterns and why should they be strictly conformed to?
- iii. If no, what possible effect(s) does the irregular pattern have on the languages?

1.4 Aim and Objectives of the Study

The aim of this work is to identify and characterize the nature of modifier placement in English and Fulfulde with a view to compare and contrast the grammatical properties of

modification in the two languages. This study therefore, seeks to achieve the following objectives:

- i. To identify the structural differences of Noun Phrases in English and Fulfulde.
- ii. To examine various forms and functions of modifiers in English and Fulfulde within the Noun Phrase.
- iii. To compare and contrast the properties of nominal modification in both Languages.

1.5 Research Questions

This research seeks to find answers to the following fundamental questions:

- i. What are the structural differences of Noun Phrases in English and Fulfulde?
- ii. What are the forms and functions of modification within the Noun Phrase in English and Fulfulde?
- iii. Is there any resemblance or point of divergent in the properties of nominal modification in English and Fulfulde languages?

1.6 Scope of the Study

This research dwells on the modifier placement of English and Fulfulde language. This is to be done by way of comparing the modification properties in Noun Phrases (NP) within the purview of general framework of linguistic analysis (i.e) English and Fulfulde Languages.

The subject of this study is the speakers of Gombe, because many corpus can easily be obtained due to available access to published materials.

1.7 Justification of the Study

Indigenous languages are undoubtedly facing extinction or are becoming endangered because languages of global recognition like English, French, and Arabic languages for example have continuously maintained the status quo as the number of their non – native speakers keeps

increasing. The language choices made by these non – native speakers reflect negatively on their own native languages and as such, their own native languages are de-relegated to the background and given a local status without prestige.

In this quest to be part of the global village voices, and sometimes to exhibit some level of modernity, most educated parents keep mother-tongue out of their homes and sometimes one could find a language whose surviving speakers are the old aged group. In order to prevent such languages from dying out, academic research, development, and documentation are the only remedy. Although Fulfulde still has many speakers, their communication habits of code-mixing and code-switching are gradually stripping the language of its original form and if heed is not taken to develop, document, and preserve the language, there will be no future references on this language.

1.8 Significance of the Study

According to Arnott (1970), quite a number of research works have been carried out on Fulfulde in French, German and in English. Some of the works appeared over a hundred years ago. The only Fulfulde Grammar written in English are the 1953 reprint of Taylor's (1921) Grammar of the Adamawa Dialect and Lloyd Swift's Pedagogic Basic Course (based on the Gambian variety).

The researcher considers it valuable addition into English and Fulfulde languages with the specific interest to study modifier placement. Bankole (2015) posit that, any grammatical unit is opposite to the enhancement of language usage. Modifier placement in both languages has modifier but differ in their structural formation, they also consider modifier as a basic supplementary component in their sentence formation which does not usually affect the grammaticality of the sentence when removed.

Nevertheless, Fulfulde nominal modifiers can only appear in the post-modification position and some adjectives appear in pre- and post-modify position within an NP, whereas English nominal modifiers usually appear in the pre-modify position while adjectives occur in pre- and post-modify position.

1.9 Structure of the Study

The research work is made up of four chapters and each chapter had been subdivided into subsections depending on the subject matter discussed. Chapter one which captures the general introduction of the present study, Linguistic Credentials of English and Fulfulde, statement of the problem, research questions, aims and objectives as well as other preliminary ideas. Chapter two which is the literature review, here the study reviews some related works done with a view to appreciating scholarly works in the field and fill in the existing gaps. The review was made on the descriptive overview of NP modifiers in English and Fulfulde. It presents a modifier distribution in such languages by showing their position in both languages. Chapter three examines the principles employed for the fieldwork of the research and how these principles are put into use. Chapter four focuses on interpretation and distribution of different categories of nominal modifier as well as the agreement pattern within the NP of Fulfulde and English Languages. The final chapter, which is chapter five provides the summary, findings of the study and conclude the research work.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

As many languages of the world, Fulfulde has attracted a lots of scholarly attention. Nowadays, there is reasonable number of published works on Fulfulde grammar in different dialects which appear to be in advanced specialized forms rather than being merely pedagogical (Daudu, 2001).

Many researches were conducted on different aspect of language such as; Grammar, literature, sociolinguistics and language-culture related issues. Being nomads with migratory tradition, the Fulani's are often extremely difficult to be researched; this creates a problem of discontinuity. More so, the different dialects of the language vary remarkably progress have been made on the aspect of research studies and a number of commendable works have been recorded.

2.1 Different Approaches to the Study of Modification

Several scholarly works have appeared on modification. In this chapter we would highlight some of these with a view to providing a thorough and analytical framework for our study.

To begin with, Fries (1951) contends that it is counter-productive to attempt a study of modification based on the “conventional” definition, such as Braun’s (1947) that “a modifier is a word or group of words that adds to the meaning of another word”. He further strengthens his argument on the premise that “modifiers” cannot be defined in terms of meaning content but on the basis of structures. As such, he opines that modifiers must be described in terms of the formal units of which they are composed and the characteristics arrangements of these units.

More so, in the analysis of Christophersen & sandved (1969), they maintain that a structure of modification contains a head and a modifier. For example, according to them in “fresh air helps”, “fresh” is the modifier of the head word “air”. Although they assert that there are other than ones with nominal head, much of their analysis centres on the types of modifier with nominal head.

In addition, Cook (1969) in his Tagmemic theory analysis approach describes the modification structure as a subordinate endocentric structure in which “there is one head slot and a series of (optional) modifier slots”. He goes further to sub-classify Head-modifier constructions according to the form-class of the word filling the head slot in the construction.

Yet another reference point in our study is Matthew’s (1981) proposition on modification structure, its relationship with the structure of complementation, and issues of optional and obligatory constituents. This is due to the divergent (and often contentious) views held by many linguists on the subject matter. Examining the general level of relationship among the constituents in a sentence structure, he reviews the notion of “endocentricity” which was introduced by Leonard Bloomfield in the 30’s. In the accounts of Hockett (1958) & Robins (1964), a construction is endocentric “if at least one of its elements can be substituted for the whole” (Matthew, 1981).

Further to the above, Stageberg (1981) assert that modifier is a subordinate element in an endocentric structure: “a word or group word that affects the meaning of a head word in that it describes, limits intensifies, and/or add to the meaning of the head. Thus, in the noun phrase “the blue Shirt,” it limits by excluding all other colours, and it adds to the plain meaning of Shirt.

Finally, we would consider the issue of obligatory and optional constituents in modification structure as enunciated by (Brown & Miller, 1991). According to them, a modifier is “a constituent that restricts the possible range of reference of some other constituent- the head.”

2.2 Types of Modification

There is indeed, a plethora of formal classification of modification, such that a separate study could be devoted to them. For the purpose of this study, however, the classification made by Christophersen & Sandved (1969), Quirk & Greenbaurn (1973), Stageberg (1981), would provide us the basis for analysis.

- i. **Sentence Modifiers:** these are adverbials that tell something extra about the action, happening, or state described by the rest of the sentence. Examples
 7. **a. Luckly,** the man is around.
 - b. Since the man was not around,** we left the house.
- ii. **The noun Phrase (Prenominal Modifiers):** these are words that immediately precede the nominals. Examples:
 8. **a. The Low garden** fence.
 - b. Epecially all the first three rotund young Africa sea,** Horses.
- iii. **The Noun Phrase (Post Nominal Modifiers):** these are the words that come after the nominals. Examples:
 9. a. the apartment, Spotlessly clean.
 - b. The weather this morning.
- iv. **The Verb Phrase (one-word Adverbials):** one-word adverbials are placed immediately close to the verb it modifies. Examples:

10. a. Shouted **angrily**.

b. May dance **instead**.

- v. **The Verb Phrase (word-Group Adverbials):** these word group adverbials can have a number of different structures. Examples:

11. a. Bukky was playing **with great skill** (prepositional Phrase).

b. John was playing **to win** (an infinitive)

- vi. **Apposition Modification:** two or more noun phrases which occur next to each other and refer to the same person or thing are said to be in apposition. Examples:

12. a. Nigerian Head of State, **General John Killer**, died this morning.

b. A friend of mine, **Yusuf Haro**, will be visiting us this evening.

2.3 Nominal modifiers and other kinds of modification within the noun phrase

As already noted, it is well-known that modification of nouns by nouns is not the only form of specifying the reference of a head noun. There are other items which, more or less prototypically, can modify the head noun of an NP. These prototypical components in English language are mainly adjectives and genitive phrases, which occur in pre-modifying position, and also prepositional phrases and relative clauses, which occur in post-modifying position, while in the case of Fulfulde all the prototypical items mentioned are mostly occur in post-modifying position as Iya (2011) affirms.

One of the questions that the use of nouns as modifiers may raise is: why do we use them instead of other devices, such as prepositional phrases or adjectives, when, as is often the case, they are semantically analogous? In what follows, a survey of these other kinds of modification is offered. Also, reasons for the preference of one option over another will also be briefly considered.

2.3.1 *The pre-modifying position*

Modification in noun phrase structure, whether by adjectives or genitive phrases, has been discussed extensively in the literature. Grammars such as those of Huddleston and Pullum (2002) and Quirk (1985) contain useful surveys of the functions and uses of both kinds of pre-modifying items. As regards the contrasts between them and nouns, the work by Rosenbach (2007) on the variation between determiner genitives and noun modifiers in English hypothesizes that there is fuzziness between the functions of genitive constructions and N+N combinations. Examples;

13. a. Bush's Administration

b. The Bush Administration

Another study on this topic is Taylor (2000). Taylor argues that, there is a continuum between nouns and genitive modifiers based on the animacy and the referentiality of the N+N construction. He considers that what he calls possessive compounds (e. g. *Achilles' heel*) are part of the category of nominal compounds (e. g. *dog food*), the only difference between them being the presence or absence of the possessive morpheme. These possessive compounds differ from prenominal possessives (e. g. *John's aunt*) in that they entail neither topicality, nor prior mention or knowledge about the pre-modifying item.

However, not all noun modifiers behave in the same way and sometimes pre-modifying nouns lack a corresponding adjective. As an illustration, Giegerich (2004) considers that in N+N combinations such as *steel bridge* N1 plays the same role as a descriptive adjective. In the event that such an adjective existed, it would have to be denominal, that is, **steelen*, like *golden*. However, this process of formation of denominal adjectives with *-en* is no longer productive, and very few examples are now found in English, while none were found in Fulfulde. In

addition, most of these few examples have a metaphorical meaning which differs from the meaning of the noun as a modifier.

Nevertheless, Pre-modifiers are optional elements in the noun phrase, given that their presence or absence does not affect the grammaticality of its structure. However, pre-modifiers provide the noun phrase with important features, since they identify, classify and define the head noun. Indeed, pre-modifiers have the potential to be present in all kinds of linguistic interchanges and situations. Furthermore, they contribute to the saving of space.

In addition, as pointed out by Varantola (1993), pre-modifiers are seen as permanent, as opposed to post-modifiers, which are more dynamic and variable. Nouns and adjectives, which tend to be stative, are the prototypical categories that fill the pre-modifier position. Thus, pre-modifiers tend to describe permanent features of the noun they modify. In the following subsections attention will be paid to the role of the different component parts of pre-modification, as well as to their order of appearance and the possible combinations that may be found in pre-modifying position.

2.3.1.1 Component parts of pre-modification

Pre-modifying position is usually and prototypically filled by adjectives (*a **sad** scene*), but also by participles (*the **stolen** book /the **rising** sun*) and nouns (*a **car** crash*). In addition, there are other less frequent types of pre-modifying items, such as genitives (*this **airplane's** crew*), phrases (*a **round-the-corner** shop*), and sentences (***I don't know how many** people*). As has been previously noted in English language, nouns and adjectives as pre-modifiers which provide the noun phrase with a static character since they themselves are static. Nevertheless, this tendency towards some sort of permanence is also observed in the case of participles. Thus, a working man is not a man who is working at a given time but a man who works habitually.

2.3.1.2 Order of pre-modifiers

As we know, the sequence into which these modifying items may appear is not entirely free, since there is an order that depends on a number of factors, such as the intended meaning and the type of pre-modifier. In the noun phrase structure, two different ordering constraints can be found. *Rigid ordering constraint* simply that their violation must give rise to an ungrammatical structure. For example, changing the order of the indefinite article and noun in English gives rise to an ungrammatical NP.

- 14. a. an apple
- b. *apple an

Labile ordering constraints, on the other hand, imply that a change of order will not give rise to an ungrammatical structure; such constraints simply give the preferred order in the default case. Thus, departures from this order will often be of questionable acceptability but may be justified by considerations of scope and information packaging (Payne & Huddleston, 2002) Thus, in examples below;

- 15 a. I want to wear a long red dress
- b. I want to wear a red long dress

2.3.1.3 Possible combinations

Multiple pre-modification also implies that pre-modifying items may be coordinated. There are examples of coordinated pre-modifiers.

- 16 a. She was an **absent and forgetful** person
- b. He gave me some **honey and jam** jars

In both examples, there are two coordinated pre-modifiers which belong to the same category: two adjectives in the case of (32a) and two nouns in the case of (32b). Quirk (1985) note that, there is no possibility for a coordination of pre-modifiers from different categories, such as a noun and an adjective.

17. *the local and water board authorities

Likewise, there are cases in which the coordination is placed in head position.

18. Body fluids and chemicals

in which a single noun pre-modifies the coordinated head nouns *fluids and chemicals*. This kind of construction may yield some sort of ambiguity, since one may wonder whether the single modifier is referring to one or both of the coordinated head nouns.

2.3.2 The post-modifying position

As noted, Levi (1978) views N+N structures as deriving from underlying sentences which depend on a set of nine different predicates. In most cases, nominal combinations can indeed be replaced by underlying sentences with a relative clause.

19. a. a stone wall

b. a wall which is made of stone

c. a wall of stone

As far as meaning is concerned, the three constructions apparently mean the same thing. However, differences are found in the permanence of a given referent in time or in its utility as a means of communicating efficiently and economically. These are the reasons why speakers choose to use one or the other, depending on the effect they wish to achieve on their audience.

To conclude, the choice of one or the other modifying element depends on two main factors: subtle meaning differences and pragmatic differences of permanence and specificity. Speakers are generally not consciously aware of these differences and choose among the possibilities available to create a specific construct according to their communicative goals.

2.3.3 Noun phrases and nominal

The syntactic function of noun phrases is another defining property which helps to clarify their status and role. Thus, Payne & Huddleston (2002) state: “NPs are prototypically capable, when placed in an appropriate case-form, of functioning as a complement in clause structure, i. e., as subject (***The doctor*** arrived), object (We need ***a doctor***), or predicative complement (John is ***a doctor***).” From this definition, it can be inferred that the syntactic function of noun phrases is restricted to the above mentioned functions. However, noun phrases can also function as complements in prepositional phrases (*The food is in **the kitchen***). In connection to this, Payne & Huddleston (2002) distinguish another category, one which is intermediate between the noun phrase and the noun. This is the *nominal*, which fills another syntactic function, that of nominal modifiers; which is the focus of this study.

Considering Fulfulde in the case of Arnott (1970), Fulfulde has a similar pattern in its sentence construction, where nouns are restricted to the functions mentioned. For Example;

20 a. *likitajo warri* (*likitajo* as a subject)

(doctor arrived)

the doctor arrived

b. *min ngidi likitajo* (as an object)

(we need doctor)

we need a doctor

c. *Jauro dun likitajo* (as predicate complement)

(Jauro Art. Doctor)

Jauro is a doctor

d. *nyiri dun don nder badauru* (as complements in prepositional phrases)

(food Art. is in kitchen)

the food is in the kitchen

In 20d, the definite article is the determiner of the head noun *nyirii* while the definite article *dun* stands as a determiner of *nyirii*. This expression is not a single word, hence it is not a noun, but it is not an NP either, since it cannot function as a subject, object, PP complement, etc. but in some cases of Fulfulde language when making some expression, must not necessarily witness their appearance like (*firowal bodewa*). Hence, the expression is a nominal, which *firowal* is head of the noun phrase, but can also functions as pre-head dependent.

The nominal also serves to discriminate internal from external dependents in NP structure, Biber (1999) also include the term *nominal* in their grammar, but the specific function of nominal in Payne & Huddleston (2002) as an intermediate category becomes more explicit when they assert: “Note that the term *noun phrase*, or *NP*, is frequently used more widely for any unit which appears in the positions characteristic of noun-headed structures (including clauses). If needed, noun phrases in this broad sense may be singled out as nominals.”

2.4 Nominal modifiers

As we know, the construction of a noun phrase is recursive, that is, we may add new items to its head which help to specify and characterize the extra-linguistic referent that the NP is alluding to. The head noun allows the insertion of items to both its left and right sides with pre-

and post-dependents, whether they are internal or external (Quirk 1985; Payne & Huddleston, 2002). The pre-modifier position can be filled by different categories, such as adjectives (e. g. *a red car*), participles (e. g. *the missing documents*) or nouns (e. g. *a gold watch*). Adjectives are the prototypical category fulfilling this position (Jucker 1992; Biber & Clark 2002). As a matter of fact, adjectives are classified depending on the properties they lend the noun which they modify. Their place and order within the noun phrase has been a frequent subject of study (Bache 1978; De Mönnink 2000; Rijkhoff 2002).

In spite of the status of adjectives as the prototypical pre-modifying category, there is evidence of the increasing use of nouns as pre-modifiers. Biber (1999) observe that, within pre-modification, nouns are nearly as frequent as attributive adjectives in the *Longman Spoken and Written English (LSWE) Corpus*, a compilation of about 40 million words distributed into four different genres, namely conversation, fiction, news and academic prose; this tendency was especially notable in news and academic prose. Within post-modification, prepositional phrases are the most frequently used dependents, which means that non-clausal modification shows a clear supremacy in Present Day English. Furthermore, the work by Biber & Clark (2002) on the spread of nouns as pre-modifiers in the Present Day English noun phrase is just another example of this tendency and the interest it has raised among scholars. Hence, it will be of interest to consider why nominal pre-modifiers are now on the rise, and which specific functional reasons there might be for this.

2.4.1 Nouns as modifiers

A noun may be defined as the category which characteristically occupies the head position in an NP. It usually inflects for number and it may be accompanied by various dependents, such as determinatives, adjective phrases and relative clauses. Such a definition

clearly allows for the possibility that nouns may adopt new functions, since the function of the head is seen as *characteristic* but not the only possible one. Nouns as dependents accompany the head of the noun phrase, providing it with those specific qualities that are singular to the given entity. They specify and characterize the head noun, and by providing additional information become essential ingredients in the process of exchanging information within a given communicative process.

Modifiers can also be nominals (understood as a category intermediate between the noun phrase and the noun), owing to the fact that they themselves can contain their own post-head dependents in Fulfulde while pre head dependents in English language as seen in (21a). However, English language cannot usually take dependents to their right side as in (21b).

21 a. rubber white hanger

[Taridanewa] lirulgol

[white rubber] hanger

b. *a [white rubber of high quality] hanger

Nonetheless, there are exceptions, and such is the case of institutional proper names (Payne & Huddleston, 2002).

22. [Institute of Development] Studies

Where the pre-modifying noun *Institute* is itself modified by a post-modifying prepositional phrase *of Development*. Nouns as dependents can be of two kinds: complements or adjuncts. As complements, they and the head noun are part of an unbreakable combination (e. g. *a linguistics student*). As adjuncts, they freely combine with the head noun (e. g. *an Oxford student*). Payne & Huddleston (2002) make a sharp distinction between these two types of noun dependents. However, when dealing with nouns as complements, it is sometimes difficult to

discern whether they are part of a syntactic phrase or, rather, whether they combine with another noun to form a morphological compound (Bauer 1998; Bisetto 1999; Giegerich 2004; Rosenbach 2007). The distinction is intimately related to the order of pre-modifying nouns within noun phrase structure. Thus, the *Principle of Head Proximity* (Rijkhoff, 2002) captures the idea that in a subordinate domain the preferred position of the head constituent is as close as possible to the head of the super-ordinate domain. This implies that, given an NP as a super-ordinate domain, the head constituent of a subordinate domain (that is, a modifier) is as close as possible to the head of the NP. In relation to this, there are differences among categories, thus nouns are closer to the head noun than attributive adjectives. The distinction between complements and adjuncts may serve to explain why there is such a fixed order of occurrence. Complements are mainly realized by nouns or nominals, as in *a linguistics student*; adjuncts, on the other hand, are mainly realized by attributive adjectives, such as *white* in *a white skirt*. As has already been noted, the relationship between a complement and the head noun is tighter than in the case of adjuncts, a further reason why those complements are closer to the head noun than adjuncts such as adjectives (e. g. *a smart linguistics student*). However, there are exceptions to this, and adjectives which are complements can be found (Payne & Huddleston, 2002), as with *criminal* in *criminal lawyer*, or nouns which are adjuncts, as with *London* in *London Psychiatric Hospital*, in which there is a modifying noun followed by a modifying adjective.

Another classification which resembles Payne & Huddleston's is the distinction between *restrictive* and *non-restrictive* modifiers (Warren, 1993). Nouns as modifiers are usually restrictive, since they combine with their heads to form units with a specific reference (e. g. *flower seller*), whereas adjectives as modifiers tend to be non-restrictive, since they simply provide the head of the noun phrase with additional information about the referent (e. g. *an*

amusing joke). As restrictive modifiers, nouns can be *defining* or *classifying*, in this latter case narrowing the denotational class of the head noun to a subset denoted by that head (e. g. *telephone box*, since this is not a kind of box but it refers to another kind of entity) (De Mönnink 2000; Rosenbach 2007). As restrictive modifiers, nouns can also be *identifying*, when they restrict the reference of the head noun (e. g. *winter clothes*, restricting *clothes* to the ones that are usually worn in winter). However, there are occasions when nouns as modifiers are non-restrictive, such as *an Oxford old residence*, in which context makes it evident that *Oxford* neither identifies which particular residence is not referred to, nor indicates a particular type of residence (Warren, 1993).

As noted in Warren (1993), this distinction would explain the phonological, morphological and syntactic features of nouns as modifiers: Nominal modifiers, because of their restrictive function, tend to be part of a stress pattern involving stress reduction, lose their ability to be inflected and, when combined with another modifier, have no predictable scope of modification, so that this has to be indicated by position or coordinating conjunctions. Warren refers here to the stress pattern characteristic of nouns when combining with other nouns. She also notes that modifying nouns are not inflected for plural even if they refer to plural referents and goes on to identify the problem of ambiguity when nouns as modifiers co-occur with other nominal modifiers. These issues will be taken up in what follows.

2.4.2 The variability of stress patterns

The syntactic vs. morphological nature of N+N structures is a question. However, it should be noted that this issue has a bearing on the consideration of stress as a defining characteristic of each syntactic or morphological nominal construction. In fact, stress in N+N structures has often been used to argue against or in favour of the distinction between syntactic

phrases and morphological units (Giegerich 2004). Marchand (1969), for instance, claims that stress may serve to distinguish syntactic phrases from compounds. He maintains that any *substantive* may be used to *determine* another *substantive*, by which is meant that the first is *transposed* from the position of head (*determinatum*) to that of modifier (*determinant*). This is a syntactic phenomenon which has nothing to do with word-formation and whose basic stress pattern is that of double stress (e. g. ‘*stone* ‘*wall*). On the other hand, there are fore-stressed combinations which show a lexical relation between a dependent and its head and which is part of a word-formation process (e. g. ‘*suitcase*). Thus, for any N+N combination whose first constituent is transposed, the rule is that of syntactic double stress. Marchand (1969) points out that a deviation from that rule must be accounted for by special semantic and/or grammatical reasons. Such a contrast can be seen in examples (23a) and (23b).

23. a. girlfriend → syntactic phrase with double stress

b. girlfriend → morphological group with fore-stress

Olsen (2000a), on the other hand, considers that all N+N sequences are morphological compounds, and thus stress depends on two patterns of interpretation. So, left hand stress provides an interpretation based on a compound internal inferred relation between the two constituents, whereas right hand stress provides an interpretation based on a compound external modifier-like relation between the two constituents. The stress falls on the first element if the second constituent is deverbal (e. g. *drug dealer*) or if it denotes a semantic relation which may be applied to the first element (e. g. *pizza shop*). Also, left hand stress occurs in compounds “[...] where a relational notion is not overtly expressed by the head noun, but is inferable on the basis of the meaning of one of the constituents [...] The inferred relation is then used to combine the meanings of the two elements in the compound.” (Olsen, 2000a). This implies that there is a

semantic relation between the constituents to which we can have access through the application of the cultural background of a given speech community. Hence, *stock market* is a compound because the two constituents are semantically related to each other through the semantic field of economics and business. In other words, Olsen (2000a) relates the variability of stress placement on N+N structures to the semantic relation between their constituents. As a result, all N+N structures receive left hand stress with the exception of:

- (i) Copulative compounds (e. g. *woman 'doctor*).
- (ii) When the first constituent is acting as either a locative or temporal modifier (e. g. *hotel 'room, August 'contest*).
- (iii) When the first constituent denotes the material out of which something is made (e. g. *silk 'dress*).
- (iv) when a predicative relation is established (e. g. *key 'word*).

As can be appreciated, these structures are based on the compound external relations of coordination and modification (Olsen, 2000a). However, despite differences of stress and interpretation, Olsen is of the opinion that these differences are not enough to be considered indicative of a change in structure. Payne & Huddleston (2002) rely on the syntactic tests of coordination and modification to determine whether an N+N structure is a *composite nominal* (their term for syntactic constructions of this kind) or a *compound noun*. However, they also mention other, non-syntactic methods, including stress. Thus, the compound noun has stress on the first element, whereas the composite nominal has stress on the second (e. g. *'blackbird* vs. *black 'bird*). However, they recognize the imperfect nature of such tests, given that there are cases of composite nominals with left-hand stress (e. g. *'biology teacher*) and compounds with right-hand stress (e. g. *ice 'cream* for many speakers). As a consequence, when there is no

correlation of the syntactic criteria of coordination and modification and non-syntactic criteria such as stress, they favour the syntactic tests in the analysis of compounds and composite nominals.

Giegerich (2004, 2005b) bases his account of variable stress patterns on what he calls a *split site model*, whereby N+N structures are generated on split sites: both in the syntax and in the lexicon. Thus, stress patterns are predicted for some N+N structures whereas there is a variable stress pattern for a distinct class of other structures. Accordingly, he distinguishes between [complement + head] structures which originate in the lexicon and are left-stressed (e. g. *ˈwatch maker*), and [attribute + head] structures which originate in the syntax and are right-stressed (e. g. *steel ˈbridge*). Those constructions which, in spite of being fore-stressed, are [attribute + head] constructions (e. g. *ˈorange juice*), then, can finally be explained as the result of a lexicalization process, where this process may have been accompanied by a gradual loss of syntactic characteristics that identify an N+N structure as a syntactic construct.

Plag (2006), though, has reviewed this assumption, and maintains that the variability of stress assignment in N+N structures depends on the combination of structural, semantic and analogical features. Thus, as far as structure is concerned, we recall that [complement + head] structures are left-stressed (e. g. *ˈtruck driver*), whereas [attribute + head] structures are end-stressed (e. g. *wood ˈbridge*). However, Plag raises the following question: why are all forms not phrases, since they all have the same superficial structure?

Furthermore, if the stress pattern of N+N constructions were as Giegerich (2004) claimed, then all novel [attribute + head] structures should receive right-hand stress to begin with; this is not always the case, though, and attributive N+N structures with left hand stress can indeed be found (e. g. *ˈchocolate cake*). As a consequence, further opinions as to a convincing

explanation of stress variability need to be taken into account. From a semantic point of view, meaning relations among the elements of a compound may explain why some are left-stressed and others are right-stressed. Thus, all compounds are usually left-stressed but copulative compounds (e. g. *scholar* ´activist), those which express a temporal or locative meaning relationship (e. g. *summer* ´night, cf. Olsen 2000a, mentioned above), or those with a causative meaning which is usually paraphrased as “made for” or “created by” (e. g. *Shakespeare* ´sonnet), are right-stressed. Plag (2006), however, is able to cite some exceptions, such as ´man servant, ´summer camp or ´day job.

Finally, analogy may also explain such stress variability, based on the fact that many N+N structures choose their stress pattern in analogy with combinations that have the same head, i. e., and the rightward element:

24. a. street → ´Oxford Street > ´Main Street, ´Fourth Street

b. avenue → Fifth ´Avenue > Madison ´Avenue

The combinations with *street* as the second element here show leftward stress, whereas combinations with *avenue* as a second element show rightward stress. It follows, then, that [attribute + head] constructions show variable rightward and leftward stress. However, Plag (2006) considers that this variability cannot be explained in terms of lexicalisation, as Giegerich (2004) has proposed, asserting that “what is considered the effect of lexicalization in some approaches (Giegerich, 2004) would emerge naturally in an analogical system, in which existing (i. e., lexicalized) compounds influence new (i. e., non-lexicalized) compounds to behave similarly.” (Giegerich, 2004). As a result, both the type of semantic relation and analogy play an important role in the determination of the variability of stress assignment. As far as the status of N+N structures is concerned, Plag (2006) remains “agnostic with regard to the issue of whether

NN constructions should be analyzed as compounds or phrases” and talks mainly about “NN constructs”, even though he believes that the majority of N+N structures he uses in his article would be regarded as compounds by most analysts. In a more recent study, based on a corpus of spoken discourse (*The Boston University Radio Speech Corpus*), Plag and others have proposed a further hypothesis regarding the variability of stress patterns in compounds, in which the frequency of appearance of certain N+N constructs is taken into account: “[...] compounds with a relatively high frequency will show less variability than compounds with a relatively less frequency.” (Plag, 2008). They present evidence that there is variability of stress patterns not only between types but also between tokens of the same type. As a consequence, it seems reasonable to suppose that variability in stress patterns is manifest in those N+N sequences which are less frequent; hence, when the token is low in frequency, there is a low representational strength, which implies that the stress pattern may be directed by the two constituent families to which N1 and N2 belong. Therefore, the constituent families suggest two competing stress patterns, and as a result the outcome will be unclear, giving way to variability. However, as Plag (2008) themselves point out, this is merely a hypothesis, and requires further refinement.

2.4.3 Morphological properties of nouns as modifiers

As Warren (1993) reminds us, nominal modifiers, because of their restrictive function, tend to lose their ability to be inflected and thus usually appear in singular form. For example in Fulfulde:

25. *Soroowo depte*

(Seller book)

Book seller

There are even cases of nouns which usually have a plural inflection in their referential uses. Example;

26. Sarla – trouser; sgl

Sarlaji – trousers

(which identify an inflection in its referential use).

Nevertheless, Adams (1973) raises the possibility of considering the first elements in N+N structures as grammatically *neutral* rather than morphologically singular, arguing that on some occasions it is in fact the s genitive rather than the plural s that is lost (e. g. *pigtail* <*pig's tail*). The lack of plural marking might also be a consequence of the reduced referentiality of noun modifiers, a conclusion drawn by Rosenbach (2005) on the basis of web-based analysis. They found that the dependent *Bush* in *the Bush Administration* was less likely to be referred to in the previous or subsequent context than in the case of a genitive like *Bush's Administration*. This implied that the modifying noun *Bush* was less salient, i. e., more backgrounded than the genitive.

However, as Quirk (1985) point out, the plural attributive construction (e. g. *grants committee*) is on the increase, particularly in British English, where it is more common than in American English. The use of these plural modifying nouns may also be due to a process of institutionalization. They are referred to by Quirk (1985) as *exclusive plurals*: whereas the singular form is more generic and ambiguous, the plural form is not ambiguous and its interpretation is more accessible. They tend to occur with collective nouns and names of institutions as heads, and the stress tends to be on the pre-modifying plural, as in examples given by Arnott (1975).

27. a. *Soroowo depte Gime*

(poetry books seller)

b. *Soroowo deptere*

Books seller

In (27a) the modifying noun *books* is in plural form because it refers to a particular kind of books (more specific), whereas in (27b) the modifying noun is in the singular (*book*), because it refers to books in general (more generic), but the reverse is the case on the Fulfulde samples where (27a) referring to a singular noun *depte* and (27b) a plural *deptere*.

Taylor (2000) considers that plural forms, such as *sports* in the N+N structure *sports administrator*, are acceptable may be because those plural nouns have been subject to semantic drift and have acquired a semantic connotation that is lacking in the singular form.

28. a. telecommunication → communication at distance

b. telecommunications → technology

The construction of an N+N structure with one or the other modifying noun will result in two different meanings, and thus the kind of specification will also be different. This can be seen as a consequence of something akin to Goldberg's (1995) *Principle of the No Synonymy of Form* (see also Bolinger 1977; Givón 1985; Wierzbicka 1988), which implies that the smallest change in the form of an item necessarily implies a change in its meaning. The use of singular or plural forms for modifying nouns can also be a reason to avoid ambiguities. Example as Geiri (2009);

29. a. *Kare Shagoruu*/goods shop

b. *Shagoruu wundu*/good shop

In spite of this, Taylor (2000) reminds us that this is an area in which many confusing and idiosyncratic exceptions exist. Another morphological issue regarding nouns as modifiers has to do with irregular plurals. N+N structures can be made from irregular plural forms (e. g. *mice*

eater) but rarely from regular plural forms (e. g. *books shop*), since, as Pinker (1994) points out, irregular plurals are unusual and thus have to be stored in the mental dictionary as roots or stems (it is supposed that they are not to be generated by rule) and are attached to another noun in an N+N structure as independent stems. On the contrary, regular plurals are not stems stored in the mental dictionary but, rather, are formed by a rule; they are words which are assembled with an inflectional plural whenever this is needed, independently of their union to another noun, to form a new structure (whether lexical or syntactic). Interestingly, in an experiment with children discussed by Pinker, children constructed N+N structures *mice-eater* and *rat-eater* from *mice* and *rats*. They used the irregular plural form of *mice* but never *rats* in its regular plural form, even though they had no evidence from adult speech that this is how languages function. Thus: “[...] children automatically distinguish between roots stored in the mental dictionary and inflected words created by a rule.” (Pinker, 1994).

2.5 Reasons for the use of N+N sequences

Given what has been said above, we may wonder why these constructions are needed in English and Fulfulde, that is, why there is a need to express concepts by means of sequences of two or more nouns. As will be noted later on, the use of noun combinations is a very productive pattern for expressing new concepts. However, there are clauses and other syntactic resources which may convey the same meaning as N+N structures.

30. a. consumer complaints

b. the complaints which are expressed by consumers

Varantola (1993) suggests why these compact sequences of nouns are used in PDE: Pre-modification is a functional means of creating compact packages of information. It is space-saving and non-redundant; it captures a static, crystallized image of an extra-linguistic object,

event or process shared by a set of readers. It makes no difference whether this set consists of the general public in a particular society or a group of specialists.

In contrast, longer sentences or post-modifiers give rise to more dynamic expressions, which describe, rather than classify, extra-linguistic referents. N+N sequences are created with the supposition that they will persist in the language. Phrases such as *drug addiction*, it is supposed, will remain useful over time, whereas a relative clause like *the girl who is playing football with your friends* is transient, to be used at a specific moment for a specific purpose, without the expectation that it will constitute part of an inventory for a later use. These, then, are some of the reasons used to explain the use of N+N sequences. In what follows, a more detailed account of the possible motivations for the use of complex nominal combinations will be presented.

2.5.1 The Notion of Compactness

Levi (1978) refers to compactness to explain the increasing use of these sequences of nouns from a Transformational Grammar point of view. Thus, what could have been said by means of a longer underlying sentence is now said through the juxtaposition of (usually) two words, which obviously results in a shorter combination. This can be linked to the idea of *economic motivation* Haiman (1985), whereby shorter structures tend to be favoured when the ideas expressed by them occur frequently in speech.

2.5.2 The Availability Factor

The formation of complex noun sequences is a recursive phenomenon, in that new items can be added in order to create compact packages of information (e. g. *A kitchen table* > *A restaurant kitchen table* > *A London restaurant kitchen table*). However, in this process, some of the components (such as verbs or prepositions) of the longer sentences that imply the same

meaning as those compact packages are omitted, since they are considered superfluous. Varantola (1993) explains that this lack of verbs and prepositions leads to a loss of explicit textual information and obviously requires more shared knowledge between interlocutors. As a result, the more familiar a concept is to interlocutors, the more *available* it is for both of them (Baayen & Renouf, 1996).

2.5.3 The concept of Predictability

Another reason for the use of N+N sequences has to do with the ability of speakers to predict the presence and role of a particular concept (Baayen & Renouf, 1996). Accessibility to that concept by the hearer or reader might be affected by several factors (Givón, 1989):

- (i) Distance from last mention.
- (ii) Recent mention of other potential referents.
- (iii) Semantic information from within the clause.
- (iv) Thematic information from the preceding discourse.

According to Givón, the first two factors are easy to measure in discourse, using text-based measurements of *Referential Distance* (RD) and *Potential Interference* (PI). *Referential Distance* refers to the number of clauses that have elapsed since the previous occurrence in the discourse, and *Potential Interference* quantifies the number of semantically compatible referents within the preceding three clauses. Factors (iii) and (iv), however, are much harder to measure. As a final remark on this issue, Givón (1989) notes that there is a relation between the degree of predictability of a given referent and the phonological size of the grammatical device used to code it. This is known as the *Code-Quantity Principle*: “The less predictable/accessible a referent is the more phonological material will be used to code it”, by which is meant that material which

is highly predictable by the interlocutors needs less coding material, since the information provided is more available or highly activated in memory.

2.6 Structural patterns

An NP is formed by a noun to which some dependents may be added. Those component parts offer a wide range of possible combinations in noun phrases, which gives rise to different structural patterns. A preliminary distinction can be made between simple vs. complex noun phrases. Example;

31. a. The dog

b. the lovely hairy black dog with a red collar standing at the door of the house.

The head of the NP is defined by De Mönnink (2000) as the “dominant member of the NP.” This is rejected by generativists and also by Cognitive Grammar, where it is alleged that the determiner is the most prominent member which establishes the relationship between the type and its instance. However, from a less symbolic point of view, and if we restrict ourselves to the parameters of syntactic constituency, the rest of the NP components are placed around the head to specify the meaning and function of that head. The head may be filled by a noun as seen in Iya (2011);

32. a. *Kutiiru dun*

(dog the)

or by a **nominal**

b. *Kutiiru baleru dun*

(dog black the)

As a consequence, there are two kinds of head: an ultimate head (*Kutiiru/dog*) and an immediate head (*Kutiiru baleru/black dog*). Other fillers of NP head are pronouns, numerals, or adjectives such as *poor* in *the poor*. The construction of an NP is always recursive since a number of dependents can be added to the head element. Some dependents may precede the head and others may follow it. From a grammatical point of view, the determiner is the most important dependent in the NP, owing to the fact that this dependent is obligatory in many instances. Example;

33. a. *Kutiiru dun don wooha nder ngesa*

(Dog the is barking in the farm)

The dog is barking in the farm

b. *kutiiru don wooha nder ngesa*

(dog is barking in farm)

****dog is barking in the farm***

This position is usually filled by a determiner proper (e. g. *kutiingel/this dog*) but might also be filled by a genitive noun phrase (e. g. *leso kutiiru/the dog's bed*). Furthermore, a more detailed analysis in English of this position reveals that pre-determiners can also appear here (e. g. ***both these books***), as well as central determiners (e. g. *both these books*) and post-determiners (e. g. *the many books you have*). On the same line, Payne and Huddleston (2002) refer to the position of the pre-determiner by making another distinction between internal and external dependents; the definition of each, they argue, depends on the place they take in relation to the nominal. Thus, among the external dependents there are pre-determiners (e. g. ***both my skirts***, ***such a wonderful day***) and peripheral modifiers (e. g. *the cat alone*). As far as internal dependents are concerned, they are placed within the nominal constituent and therefore they

follow the determiner and other external dependents (post-determiners for Quirk (1985). Payne & Huddleston (2002) make a distinction between internal dependents that depend on their position in the NP (as preceding or following the head noun) and those that depend on their function (as complements or modifiers). When defining those dependents, the differences among them and their features are not clear enough: “The pre-head dependents are modifiers, while complements are seen in *the finance minister, our legal advisor*, and the like. Of the post-head dependents, *of Paris* is a complement and the rest modifiers.”

However, no definition exists which may help to discern the differences among dependents. Payne and Huddleston shed some further light on the issue when they put forward criteria for distinguishing complements from modifiers, pointing out similarities between the two in terms of sentence structure (2002):

- i. Complements must be licensed by the head noun and the choices between the types of items that appear as complements depend on the head noun. Example;

34. a. *an injury of the wrist*

b. **an injury to the wrist*

- ii. Scope of anaphora. The pronominal *one* precedes any internal dependents. An input which is a complement. Example;

35. a. *you must take the bus to the station and not the one to the hospital,*
where *to the station* and *to the hospital* are complements

b. *This bus is not the same as the one to the hospital,* where *to the hospital* is a modifier.

- iii. Correlation with syntactic category. Adjectives are typically modifiers in noun phrase structure; however, there are exceptions, such as in the case of *rural policeman*. Example;

36. **The policeman is rural.*

- iv. Positional mobility. The position of complements tends to be more restrictive than that of modifiers; this is especially the case of pre-head complements, which must be positioned adjacent to the head noun. Example;

37. *a polite rural policeman*

- v. Complements express semantic arguments of the head noun. This is especially so when the noun is a semantic predicate denoting some property, relation, process or action and the complement represents an involved entity like the bearer of a property or a term in the relation. Example;

38. *The softness **of your skin***

- vi. Semantic roles of complements depend on the head noun. This is especially the case of complements headed by the preposition *of*, for example in

39. *The decease **of his father***, where *his father* is agent, or in *the election **of his father***, where *his father* is patient.

Semantic selection restrictions in noun phrases involve complements. Example;

40. a. *The reading **of the poem***

b. **the reading **of the desk***

Payne & Huddleston's (2002) overview on NP structure is, despite some gaps, relatively comprehensive. Quirk (1985), on the other hand, restrict those dependents to modifiers, and make a distinction regarding their position within the noun phrase (whether they precede or follow the head noun). Nevertheless, they differentiate among the following various kinds of modification: restrictive (e. g. *my **younger** sister*), non-restrictive (e. g. *my **lovely** dog*). Restrictive modifiers are those dependents that can create a subclass of the class denoted by the

head of the NP, whereas non-restrictive or descriptive modifiers are those which describe the referent of the NP in terms of a particular quality it possesses (also De Mönnink, 2000). Also, a further distinction between temporary and permanent modifiers can be made. Pre-modifiers tend to be permanent (*the **lovely** girl*) whereas post-modifiers may be temporary. Thus, temporary modifiers cannot usually be placed in pre-modifying position (e. g. **the **ready** man*). The categories which are employed as modifiers are mainly adjectives, which are placed in pre-modifying position, but nominals are also common categories filling this position. Participles ending in *-ing* and *-ed* may also function as pre-modifiers. On the other hand, the post-modifier position may be held by relative clauses, *-ing* and *-ed* clauses, *to infinitive* clauses, prepositional phrases and noun phrases in apposition.

As pointed out above, the head noun in an NP is traditionally the element around which all the dependents are placed, and one can usually recognize a prototypical NP structure in which the order of each of its elements can be observed. De Mönnink (2000) divides a prototypical NP into the following constituent elements: limiter, determiner, pre-modifier, head and post-modifier. The limiter is not the same as Payne & Huddleston's (2002) *external dependent*, neither is it the *pre-determiner* in Quirk (1985) account. The differences with this analysis have to do with the fact that De Mönnink includes a new analysis of the determiner position which is fulfilled by a determiner phrase. Thus, the pre-determiner, central determiner and post-determiner that Quirk (1985) resorted to are here part of the determiner phrase and thus the **limiter** is another kind of dependent. It is similar to the English determiner phrase pre-modifier because it precedes other determiners and it is realized by an adverb phrase (e. g. ***only** my books*). However, a limiter cannot co-occur with a determiner phrase pre-modifier. The differences lie in the fact that the determiner phrase pre-modifier can obviously occur only if the determiner

phrase slot is also realized. Furthermore, the stress will fall on the following item (e. g. **around** *twó days*). On the other hand, the limiter is not dependent on the realization of the determiner phrase slot and receives the stress, since it restricts the reference of the NP (e. g. **just** *your friend*).

The second element (DET) is the determinative, whose occurrence depends largely on the head noun of the NP. The pre-modifier (PREM) is the following dependent. As previously noted, this function is mainly filled by adjectives, adjective phrases, and nouns, but also by *-ed* and *-ing* participles, genitives, adverbs and other phrases. Pre-modifiers can co-occur, and the order in which they appear as a sequence is not entirely free. As De Mönnink (2000) observes, “[...] the ordering is dependent on the syntactic and semantic class membership of the items concerned [...] the general rule is to place the more objective and undisputable qualifications closer to the noun, and the more subjective, opinion like ones farther away.” This implies that descriptive adjectives precede classifying ones, whereas nouns will appear after the other pre-modifiers. Quirk (1985) further sub-classify pre-modifiers from the furthest to the closest to the head noun as follows:

- (1) General (*small, big*)
- (2) Age (*old, young*)
- (3) Colour (*black, red*)
- (4) Participle (*disturbing, closed*)
- (5) Provenance (*Spanish, English*)
- (6) Noun (*air, Paris*)
- (7) Denominal (*personal, human*)

In spite of this possible ordering of pre-modifiers in noun phrase structure, it should be pointed out that pre-modifiers may exhibit a certain weakness in their constraints. The head (HEAD) is the following element, and indeed the most important one, since all the other items in the NP depend on it. Post-modifiers (POM) follow the head and can prototypically be filled by prepositional phrases and clauses, but also by adjective phrases and noun phrases. This is the prototypical structural pattern that noun phrases may exhibit. Yet there are other possible combinations that NPs can display which deviate from this prototypical ordering. Thus, De Mönnink (2000) puts forward a comprehensive classification of noun phrases depending on the kind of mobility that they present. It can be summarized as follows:

Type A. NP with a deferred modifier → the modifier (ADJP, ADVP, NP) follows the head (example; *the breakfast **this morning***).

Type B. Noun phrase with a floating 3 deferred modifier → a clause or a phrase is outside the NP boundaries (example; *the news were suddenly spread **that he was coming back soon***).

Type C. Noun phrase with a fronted modifier → a clause precedes the head (example; *the **insert coin** icon*).

Type D. Noun phrase with a discontinuous⁴ modifier → the constituents of an adjective phrase do not occur adjacent to each other (example; *She seems to be **quite a different person from the one I used to know***).

Type E. Noun phrase with a deferred determiner → part of the determiner follows the NP head (example; *the problem does not affect us **all***).

Type F. Noun phrase with floating deferred determiner → the determiner occurs outside the NP boundaries (example; *they are **both** playing tennis*).

Type G. Noun phrase with a discontinuous determiner (example; *my friends **both** went to the party*).

Type H. Noun phrase with a deferred limiter→ the limiter occurs after the NP head (example; *He asked for nothing **at all***).

Type I. Noun phrase with a floating deferred emphasizer → the emphasizer occurs outside NP boundaries (example; *She already knew that he was **himself** outside the city*).

2.7 Previous account of the structure of NPs in English

Wekker (1985) examined the distribution and the internal structure of Noun Phrase in English. They are argued that the central element in a NP is a noun. However, there is the possibility of pre-modifications and post-modifications. Basically, NPs function as either subject or object of declarative sentences. They further claimed that NPs in English usually have the following structure given in the table below (Wekker, 1988):

Category	Pre- Det	Centre Det	Post Det	Adj P/....	N	S/PP.....
	Half, both, all, double	Art Poss Pron Dem. Pron	Num			
Function	Specifier			Pre mod.	Head	Post mod.

Half	The	Two		Tramp	With red hair
Both	his	ten		Page	Who survive the
All	these		Lovely	Magazine	crash
	that		German	Children	
			French	Boys	of English
		five		Girl	
				Soldiers	in bottles
	no		Dutch	They	
	the tramp's			Students	that he was
	the			Milk	
				John	
				He	
				Magazine	
				News	

They go on to propose that together with the central determiner (which may be zero), the head (“trap”, “page”, “magazine” etc) constitutes the kernel of the NP.

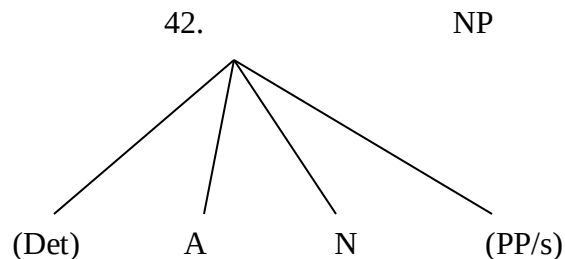
Aarts (2001) provides an interesting and insightful description of NPs in English. He explored both the internal structure of NPs in English as well as the distribution of NPs within the sentence as arguments and non-arguments. He suggested that NPs function both as subjects as well as objects in sentences in English and that determine the form of the verb with which they co-occur with suggesting various agreement relationships (p.11). He further defined NPs in English as “strings of words whose central element is a noun” (p.31). He also argued that the Grammatical Function (GF) of subject can be defined in terms of structural configuration as “the

NP immediately dominated by S-node notated as [NP,S]; whereas, the GF of direct object is the first NP immediately dominated by VP, notated as [NP, VP] (P. 67).”

Kim (2007) is another exploration of NP in English who claimed that the Noun Phrase in English, typically comprises three component parts, the central element, head and its complements (which are optional). This is captured by Kim (2007):

41. NP $\longrightarrow$ (Det) A V (PP/s)

The above rule is said to characterize a phrase and is one instance of a phrase structure rule. The rule indicates that an NP in English, can consist of an optional Det, any number of optional A, and obligatory N, and then an optional PP or a modifying S. the start indicate different options for the same place in the linear order. These options in the NP rule can according to Kim (2007) be represented in a tree structure as thus;



On the other hand, McIntosh’s (1984) Fulfulde syntax and verbal morphology is a seminal work on Fulfulde. The study is based on the Fulfulde of several informants of the Kececcere’en clan (Majority of these Fulanis are resident in the Kafancan – Kagoro – Zonkwa area and those that are not regularly visit their family there). The study is both morphological and syntactic in nature, where Fulfulde sentences, comprising verbal complexes and Noun Phrases are considered. In particular, the work investigates topic and focus constructions in Fulfulde. The aspect of the work that is crucial to the present study are the “nominal class system” and “the structure of the Noun Phrase”. Mc Intosh’s (1984) identified three criteria for identifying NPs in

Fulfulde, these include the ability of a constituent to stand as one of the following: topic, focus, and answer to a question. According to her “a topic is a constituent in sentence initial position, which the rest of the sentence in some sense comments on”. She further cited the following examples to instantiate this phenomenon:

43. a. Nagge ngee, nge-rim-ii

(cow this it give)

birth

topic VAP

b. Kaddiraaawo 'am “e-mo-wood-i 'endam.

(Neighbour my she has kindness)

TOPIC VAP

“(As for) my neighbour, she’s kind”

She further states that “the focus of a sentence is a constituent that represents new, or highlighted information and which after, though not necessarily receives contrastive stress.” This fact is evidenced in the sentences provided by McIntosh (1984): where she claimed that the constituent’s “Dere” and “Ngaari” in the examples are the syllables bearing contrastive stress are preceded by inverted commas:

44. a. “Dere te'-ay-mi

(Dere marry I)

FOCUS VAP

“ I will marry Dere

b. “ Ngaari sood-u- daa?

(Bull buy you)

“Did you (sg.) buy a bull”.

With regards to answer to a question she considered one-word non-verbal answers to wh-questions in order to identify Noun Phrases in Fulfulde.

Finally, he argued that Deictic Pronouns, Interrogative Pronouns, and Independent Pronouns, are NPs, but that independent pronouns are not (p.92).

Another yet interesting work on Fulfulde, even though not directly related to the present study is Mukoshy (1984). The work is entitled “the Sound and Morpheme of Fulfulde: An examination of Fulfulde Phonology and Morphology: the study provides an in depth study of the major morphological and phonological phenomenon. In particular, it examines the various derivational patterns of Phonemes and morphemes of the language. It also attempted to establish the phonotactic and morphotactic behavior of the language. It also attempted to provide the phonological rules governing the morphophonemic changes evident in the language.

Fagerli (1993) considered verbal derivations in Fulfulde. The study is a description of verbal derivations in Adamawa Fulfulde within the framework of Hellaa’s (1988), the theory of lexical description. He claimed that the derivations appear as suffixes on the verb, and they have various effects on the verbal concept, semantically and syntactically. Some affect the argument frame of the verb, and some have more peripheral effects. Thus, according to him, the description varies in line with the types of derivation. The derivations considered include reversive, reflexive, repetitive, associative, completive, causative, modal, instrumental, benefactive/goal, reciprocal, distantive, colerative and simulative. He further explored the combinatorial possibilities of two and more derivations in which the order of the affixes occur

under such circumstances. This work is considered here for reason of completeness, because it is not relevant in our discussion of internal structure of NP in Fulfulde.

Daudu, (2005) attempted a study of movement operations in Fulfulde within the Government and Binding theory. The work basically is an analysis of sentence structure in Fulfulde with focus on constituents that move. This involves movement in Fulfulde under operator and non-operator movements based on Radford (1988). He observed that several constituents in Fulfulde undergo movement. These include; interrogative focus, negation and stabilizer. Tool analysis is proposed in this work with regards to landing site for operator and non-operator movement: in operator movement, the landing site is Spec-CP, while in non-operator movement, IP is the landing site. Generally verbs do not move in the language contrary to popular view and it is observed that movement triggers conjugational suffixes in verbs.

2.8 Previous Studies on English, Fulfulde and other Human Languages

Comparative study between two or more languages from a grammatical point of view or otherwise is not new in the literature. Sometimes the comparison takes a descriptive approach, sometimes it is formulated within a particular theory. A recent descriptive comparative study that readily comes to mind is Dantata (2014) where the study examines and identifies the distribution and interpretation of the various canonical NP types in English and Kambari, with a view to comparing and contrasting their morpho-syntactic and semantic properties within the purview of Binding Theory, a sub-module of Government and Binding (GB) Theory outlined by Chomsky (1981, 1986 and subsequent works). Although English and Kambari are from different language phyla, (English is a West Germanic language extraction while Kambari is a Niger Congo), yet NPs in the two languages (Full NPs, Pronominals and Anaphors) appear to pattern in the same way in so many respects and can be argued to satisfy the same Binding Conditions encoded in

Binding Theory. This might not be unconnected with the fact that they entail an SVO word order. Perhaps one major difference which follows from their morphology is the fact that even though both English and Kambari reflexives are bimorphemic, English differs from Kambari in that its reflexives agree with their antecedents in person, number and gender, contrary to Kambari which lacks gender distinction.

Another interesting comparative study is Biloa (2007) that deals with a syntactic analysis of Tuki, a Bantu language of Cameroon, within the framework of the Principles and Parameters Theory. Wherever possible/necessary, some minimalist notions are appealed to. Overall, the theoretical framework is the cartographic approach to syntactic structures. The outline of the latter approach is proposed in the introduction of the book. Generative research on Tuki started in Biloa (1992) that was later published in 1995. The bulk of the data described and analyzed in Biloa (1992, 1995) is reanalyzed there in view of the new developments in the field (Kayne 1994; Rizzi 1997; Cinque 1999; Cinque 2002a; Belletti 2004b; Rizzi 2004a). And the results obtained are sometimes radically different from the previous ones.

Nevertheless, Josh Ard (1979) also made a comparative investigation of periphrastic verbal constructions developed from locative expressions in Fula. First, a comparison of relevant features in the verbal systems of nine Fula dialects is given. Second, the dynamics of the verbal system of Fula is reconstructed through an analysis of these data. It is shown that the most significant and linguistically relevant aspects of the developments were several semantic shifts, some motivated by the appearance of new items in the verbal paradigm which led to changes in the status of existing items. An explanation of the direction and nature of these changes is offered. This explanation requires the notion of a prototype, as developed by Rosch (1973), and

thereby argues for its utility in modelling semantic changes. Moreover, implications of these results for aspectual theory are presented.

Similarly, Ahmed & Abdulkadir (2013) compared Passivization and Theta (i`) Role in Arabic and Fulfulde where they discussed how i`-role is assigned to passive structures in Arabic and Fulfulde. It is noteworthy that Arabic and Fulfulde are from different language groups: Arabic being a Semitic language and Fulfulde a Niger-Congo language. However as a result of language contact, Fulfulde has borrowed many lexical items from Arabic especially due to the religious affiliation between the two languages. In Fulfulde, i`-role is assigned on active sentence before movement of the arguments to derive passive structures. In Arabic, both transitive and intransitive verbs take passive forms, while in Fulfulde only transitive verb has passive forms.

2.9 An Overview of Modification Cross-Linguistically

Patterns in modifier ordering have long been noted, and have been characterized in impressionistic semantic terms: “inherent” properties are expressed closer to the noun (Whorf, 1945), or “objective” properties are (Stennes, 1967). Such characterizations have proven difficult to evaluate, but cross-linguistic examinations regularly show that similar patterns hold across languages to a striking degree (e.g. Sproat & Shih, 1991). Cinque (1994) suggests that; these orders can be captured in terms of a layered functional structure in the DP: different layers of nominal structure correspond to the attachment sites of different categories of modifiers. Scott (2002) and Laenzlinger (2005) expand on Cinque’s hierarchy of nominal functional projections with this aim in mind. At the same time, expansions of DP-internal functional structure have been undertaken on independent grounds, for example by Vangsnes (1999); Zamparelli (2000); Rijkhoff (2002); Omoregbe (2000); Seydou (1998) and others.

Moreover, the independently motivated structures for modifier do not provide the kind of fine-grained differentiation suggested by, for example, Scott, 2002) for adjectival ordering. However, they do provide a basic framework which, I suggest, goes a long way toward explaining the cross linguistically valid generalizations that can be made regarding the order of attributive adjectives. A side issue which is necessarily taken up in the course of this review is that of the order of DP-internal elements more broadly. In principle, there are three different factors which can affect word order: the basic hierarchical structure (which I assume is determined by something roughly like function–argument semantics), the order in which the function and the argument linearize when they combine, and movement. The first factor is generally taken to be invariant. Kayne (1994) has proposed essentially that the second factor is invariant as well, leaving movement as the only important factor in word order variation across languages. To be plausible, this requires several additional assumptions. Consider, for example, the possibility that attributive adjectives attach inside DP in a way different from that of relative clauses. A language might exclusively rely on the relative clause strategy or the attributive strategy for modifying noun phrases, leading to a superficial difference between two languages which is not due to movement, but to facts about the inventories of functional items employed in the two languages, for example one has no relative head, or the other has no head that can be used to construct attributive adjectives.

According to Taylor (1921), there are some serious problems with the so-called predicative and attributive position of modifiers. The problem seems to stem from confusion between function and structural position. The general remarks to set the scene is noun phrase (NP) consists of a Noun (N) plus a number of modifiers, e.g. the article/determiner, adjectives, demonstratives, numerals, participles (relative clauses in English). Fulfulde is different from

English in that the Noun very often is implicit (rare in English - the good, the bad and the ugly). If it is implicit it is either inferred from the context or it is a very general concept like "thing" or "person". However, there are rules about the relative position of the N and its modifiers for any language, but the order of modifiers as well as word order in general is far less restricted in Fulfulde than in English. A NP can even be split apart by other elements not part of the NP in Fulfulde.

Nevertheless, in order to describe the relative position of the modifiers within a NP, it is helpful to classify them, but the detail of this classification is unique to the language. It is more helpful to describe Fulfulde from an analysis of Fulfulde structure rather than an analysis of Latin, German or English structure. In a different class, a few restrictive modifiers like "all" and the demonstratives. The article needs its own class, but numerals and ordinals may be in the same class as the descriptive modifiers (adjectives proper). The relative position of these modifiers needs to be described in terms of their membership in such classes.

According to Quirk (1985), have classified modifiers on the basis of their position in the noun phrase (NP) in relation to each other, thus we do not find central determiner + pre-determiner (* their all trouble), or post determiner + central determiner + pre-determiner (*five the all boys) , but only the order of pre-determiner + central determiner + post determiner is found.

2.9.1 Mirror in Nominal Morphology

Many languages have articles which express definiteness, specificity, or indefiniteness (Dryer 1989b). Another piece of nominal functional structure which is found in many languages is some overt marker of plurality (sometimes also duality or paucality; Delfitto & Schroten 1991; Borer 2005a). If we compare the relative order of these markers across languages, the order Art

>Pl >N emerges as the most plausible underlying hierarchy; some examples of Art–Pl–N order are provided in (7) (the glosses def, art, and indefare retained from the original sources).

45. a. hun-lii-šta~a~n

(def-pl-armadillo)

“the armadillos”

(MisantlaTotonac, from MacKay 1999).

b. o bi gotta

(artpl tree)

“trees”

(Galela, from Rijkhoff 2002).

In many cases, prenominal articles and plural markers are not strictly adjacent to the noun (Dryer 1989a), permitting adjectives and numerals, for instance, to intervene.

Another relatively common order is that in which the article precedes, but the plural marker follows, the noun (English is such a language). Some examples are given below;

46. he pi’ mi~~s ?aHk~~s

(The little boy pl)

“the little boys”

(Mixe, from Dryer 1989a).

In this case, the article is often separable from the noun by adjectives and other material, but the plural marker more rarely so; this suggests that N–Pl order may be the result of some kind of cluster formation (Svenonius, 2007).

Finally, there are many examples of “mirror” order (the reverse of Art– Pl–N), in which N precedes Pl and both precede Art. These very often show cluster effects, with the three elements not allowing interruption by adjectives or other phrasal material.

2.9.2 Classifiers

Many languages have head-like elements in the DP which are called “classifiers” (Aikhenvald 2000 for an overview). These show a range of uses, from determiner-like (Cheng, 1999 on Chinese) to being involved in enumeration, quantification, or division of masses (Borer 2005a) and other functions (i.e.) On the distinction between classifiers and markers of noun class or gender like the nominal prefixes of the Bantu languages, cf. e.g. Heine (1982), Dixon (1986). Classifiers often serve two or more of these functions simultaneously and are often furthermore in complementary distribution with determiners or plural markers, making general statements about relative order difficult, but some generalizations emerge. For example, the most typical classifier sorts nominal referents by characteristics such as shape (a “sortal” classifier), and makes them countable or quantifiable (a “numeral” classifier). Grinevald (2000) in particular argues that it is typical of numeral classifiers that they sort by shape. But a few languages differentiate the two functions, in which case the numeral classifier can be seen to be outside the sortal classifier, as in the **Mayan language** Akatek as described by Zavala (2000).

47. a. kaa-b’ sulan aw-aan
(two-inan smooth A2-corn cob)
“your two corn cobs”
b. ’ox-eb’ jilan ’aan
(three-inan long.3d corn cob)
“three corn cobs”

c. kaa-b' b'ilan poon yalixh-taj

(two-inan small.round plum small-pl)

“two small plums”

Numeral classifiers in this language distinguish human, animal, and inanimate nouns (here only the inanimate one is shown). The sortal classifier distinguishes a dozen or more shapes (“smooth,” “long three-dimensional,” “erect,” “half-circle,” “round,” “wide flat,” “small spherical,” “separate,” etc.). Note in above that; the same noun can appear with different classifiers, depending on how the referent is perceived.

A third important type of classifier is the noun classifier, which typically sorts nouns by material qualities or essences (see Craig 1986, Grinevald 2000). These sometimes co-occur with sortal or numeral classifiers, and again, Akatek provides an example of co-occurrence. Akatek has a set of fourteen noun classifiers (“man,” “woman,” “animal,” “tree,” “corn,” “water,” “salt,” etc.) alongside the three numeral classifiers and the set of sortal classifiers. All three types are illustrated below (adapted from Zavala, 2007).

48. a. 'ox-k'onkupan no' wakax

(three-anim half.circle animal cow)

“three cows’ (lying down)

b. 'ox-eb' kupan'iximpaat

(three-inan half.circle corn tortilla)

“three (folded) tortillas”

c. 'ox-eb' xoyan 'iximpaat

(three-inan round corn tortilla)

“three tortillas”

Noun classifier systems may resemble gender systems, in that a noun may be conventionally associated with a single noun classifier, and may develop into gender systems (Greenberg 1978). It is sometimes argued that nominal gender corresponds to a functional projection (e.g. Spanish *abuelo* ‘grandfather’ ~ *abuela* ‘grandmother’ or *monje* ‘monk’ ~ *monja* ‘nun’; cf. Ritter 1993 for references and a dissenting view). If so, it is clear that it is lower than number (e.g. *abuelas* ‘grandmothers’ etc.).

In general, if a language has plural markers it does not have classifiers, and vice versa (see Borer 2005a: ch. 4 for references and discussion). In some languages, there are plural markers for animate nouns but classifiers for inanimate. In Akatek, the numeral classifier for inanimate, *eb*’ (cf. 38b–c), is also used as a separate plural marker for human plurals, and may co-occur not only with numeral classifiers but also with noun classifiers.

On the basis of these considerations, three levels of classifier can be identified; I will refer to the numeral classifier as unit, as this is the unit which is counted (it can be equated with Borer’s 2005a), and to the sortal classifier as sort (like Borer’s *Cl*); and I will refer to the noun classifier as *n*, following the discussion in Marantz (2001) of the nature of nominalizing affixes on roots.

In sum, the following hierarchy of classifier types can be discerned, though it should be stressed that most classifier languages have just one which spans two or more of these properties, as argued by Borer (2005a):

49. unit > sort > *n*

Putting these together with the Art > Pl > N hierarchy from the above, it is relatively clear that Art is above these classifiers, while N is below. The exact position of Pl is partly a matter of

guesswork due to the scarcity of clear co-occurrences, but the following seems to be a plausible hypothesis:

50. Art > unit > Pl/sort > *n* > N

The category Pl/sort suggests that those cases in which plurals are noted to co-occur with classifiers have involved either unit classifiers or noun classifiers, not sort classifiers. It has repeatedly been argued that classifiers exist to individuate masses for quantification and counting (in particular Borer 2005a).

2.9.3 Greenberg's Universal

Greenberg's (1963) Universal is stated as follows:

Universal: When any or all of the elements (demonstrative, numeral, and descriptive adjective) precede the noun, they are always found in that order. If they follow, the order is either the same or its exact opposite.

Subsequent work has confirmed the essentials of this observation (Hawkins 1983; Dryer 1992; Cinque 2005), though the order N–Dem–Num–A turns out not to be terribly common. The most common orders are apparently the following (judging from Hawkins 1983; Cinque 2005; and searches in the *World Atlas of Linguistic Structures*, Haspelmath et al. 2005):

51.

- a. Dem NumAdjN
- b. Dem Num N Adj
- c. Dem N AdjNum
- d. N AdjNum Dem
- e. Num N Adj Dem

The most common orders are N-initial and N-final ones (273 languages in Haspelmath et al. 2005 have N preceding all of Dem, Num, and Adj, while another 191 have N following all three). The other three orders listed in (51) are about equally common (between fifty and seventy-five languages each in Haspelmath et al. 2005). No other orders are at all common (i.e) Haspelmath et al. (2005) give the relative order of the noun and each dependent; thus, it can be determined, for example, that sixty-nine languages have Numeral before Noun, and Noun before both Adjective and Demonstrative; the database itself does not indicate how many of these sixty-nine are Num-N-Adj-Dem and how many are Num-N-Dem-Adj. Independent investigation shows that the former is much more common than the latter. See for example Hawkins (1983), who lists seven Num-N-Adj-Dem languages and no Num-N-Dem-Adj ones. For a detailed analysis of this order in Semitic languages see Shlonsky (2004).

If we take as the null hypothesis that the most common order of phrasal elements directly reflects the underlying universal hierarchy, the hierarchy is Dem > Num > Adj > N. The order in (51b) is simply derived by moving N to the left of Adj. The order in (51c) is derived by combining that step with an additional step moving the [N-Adj] sequence across Num. And the order in (51d) involves yet another step, moving [[N-Adj]-Num] across Dem. Cinque (2005) notes that N-raising orders are all attested, for example Dem-N-Num-A, in which the N moves across the Num and A.

Combining Dem-Num-Adj with Art-Pl-N

How do these orders relate to the order of Art and Pl and N discussed above, and to the order of classifiers discussed? Greenberg suggest that Dem, Num, and Adj are generally to be thought of as phrasal modifiers of functional projections in the DP. Demonstratives may lexicalize to D heads, and the numeral “one” in particular often seems to lexicalize as a head.

Adjectival elements may also sometimes directly represent heads in the extended projection of N. But in the general case, a demonstrative can be thought of as modifying a DP, while a numeral can be thought of as modifying a PIP, and a typical adjective can be thought of as modifying an NP.

This would give an order something like Dem >Art >Num>Pl >Adj>N. The surface word order, however, is complicated by the facts of cluster formation; specifically, the tendency of heads like Pl to form a morphological cluster with N changes the linear order with respect to phrasal modifiers like adjectives. Despite such complications, a pattern like the expected one can be discerned. For example, in Rijkhoff's (2002) balanced survey of eighty five languages, six allow Demonstrative to co-occur with an article; in three of those, the order is as given in (52a), and in three others it is as in (52b).

52. a. Dem–Art–N: Abkhaz, Guarani, Hungarian

b. Art–N–Dem: Berbice Dutch Creole, Galela, Samoan

A couple of illustrations are given in example (53).

53. a. wəy a-jyab

(that.oneart-girl)

“that girl”

(Abkhaz, Rijkhoff 2002: 183)

b. o tahumanena

(arthousethis)

“this house”

(Galela, Rijkhoff 2002).

Most typically, definite articles are in complementary distribution with demonstratives. According to Rijkhoff, four of the six languages which allow co-occurrence have a “stage II” article, in the sense of Greenberg (1978), that is not associated with definiteness, but with specificity.

On the basis of these observations, it can conclude that demonstratives are basically higher than articles (also Julien 2005), but in languages like Galela (illustrated in (53b)) the [Art–N] sequence moves to the left of the demonstrative. It remains to be investigated what drives this movement, but it might be triggered by a requirement for N–Dem adjacency.

The relative position of Adjectives with respect to the Art–Pl–N hierarchy is the most difficult question. Clearly, most adjectives are lower than Art; rare cases of gradable descriptive adjectives higher than articles clearly involve movement (as in *how big a house*, with the *wh*-operator *how*).

54. *Combining Dem–Num–Adj with unit, sort, and n*

Turning to the classifiers, it is clear that the unit classifier is below numerals; it is presumably the same category identified by Szabolcsi (1994) as *Num* [ber], by Julien (2005) as *Card* [inality], or by Schwarzschild (2006) as *Mon*[otonicity]. Word order facts suggest that; the unit classifier is above adjectives. The *n*, on the other hand is lower, just above N; it comes close to being a gender or noun class marker (compare also Truswell’s 2004 category *same*). As suggested above, sort can probably be conflated with Pl; it can be compared with Delfitto and Schroten’s (1991) treatment of the plural marker, or Borer’s (2005a) *Cl*[assifier]. This gives an extended hierarchy as in (45):

55. Dem > Art > Num > unit > Pl/sort > Adj > *n* > N

Muromatsu (2001) argues, in effect, that adjectives can be split into two classes, those which are sensitive to shape and merge above classifiers (here, sort classifiers) and those which are not sensitive to shape and merge below. For example, although in general adjectives follow classifiers in Chinese, certain adjectives can precede certain classifiers (examples from Cheng and Sybesma 1999).

56. a. yizhi da gou

(onecl big dog)

“a big dog”

b. yi da zhangzhi

(one big sheet paper)

“a big sheet of paper”

The adjective *da* ‘big’ in (56) follows the unit classifier *zhi* but precedes *zhang* ‘sheet’ which would be a sort classifier. However, most adjectives, even in Chinese, are lower in the hierarchy than most classifiers.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Methodological Consideration

This study obtained its data from both primary and secondary sources. The primary source was that of self introspection which was indispensable owing to the fact that the researcher is a native speaker of Fulfulde and equally has the expertise and linguistic skills to research on the syntax of Fulfulde especially in the process of modifier placement. It was also an iterative process with other Fulfulde speakers. This study has to do with rigorous brainstorming by the researcher because we didn't come across any preserved data on Fulfulde modifier placement. We had to originally compose the data that is used in the work for analysis.

On the other hand, secondary sources made use of materials drawn from existing documents, published and unpublished materials, books, and dictionaries. Libraries were also of tremendous importance to us; electronic libraries and internet sources were not left out.

The following steps were taken to present and analyze the data:

1. The formal description of both the English and Fulfulde modifier was discussed.
2. The various categories and position of modifiers in both languages were discussed. This includes their syntactic functions, their types, as well as their formation patterns.
3. A taxonomical and descriptive analysis was carried out on the presented data and this helped in bringing out the similarities and differences.

3.1 Research Design

The research study used the descriptive comparison technique which examines two (or more) cases or events. This was deliberately chosen because it is the most reliable technique that can be used in a comparative study like this. The present study investigates the modifier

placement in English and Fulfulde within NP. The study used the Test instruments which assessed the placement of modifiers in Fulfulde and English, This was achieved through recording the dialogues of the native speakers.

3.2 Research Instruments

The study's instrument was based on the test of the ability to use Fulfulde modifiers. The data for the study was obtained through recording of dialogues which contained various aspects of the Fulfulde modifier. The modifiers in Fulfulde NP occurred in two positions, the pre- and post-modify positions of the NP were tested in those positions to enable us assess their uniqueness, resemblance and differences in their various environments.

3.3 Research Population

The researcher takes into cognizance some demographic variables of the respondents to ensure a cross selection of the data from all speakers of the language. These include gender and age variables. The researcher has recorded dialogues from both genders. Specifically, 4 females and 5 males native speakers to validate some claims made in the work. The indication of this can readily be seen in the claim made by this work that there is possibility of having pre-modifiers in Fulfulde. They have attested to the fact that it is possible the language has such parameter. All people involved in the dialogue have demonstrated some instances where pre-modifiers occur in Fulfulde and had proved the researcher right in his instances of such possibility. The age variable was also considered by this work. Not only had the study considered old ages but also consider the younger ones. This is done to ensure the data collected had not experienced any real time language change.

3.4 Validity of the Data

The researcher attempts to validate his data through other native speakers like Hajiya Aishatu Usman Dajji and verified by other native speaker; Professor M. J. Kuna (non-linguist) together with Ahmad Sosal, a linguist from University of Khartoum, Sudan. It is believed that dialogue has a methodological advantage of being less conscious of the researcher's presence than natural speech that is likely to be inhibited by the intrusion of the data gatherer. The recorded audio material was subjected to careful replay to get a broad transliteration. Also the recorded linguistic data of Fulfulde was translated by a native speaker of the language.

3.5 The Descriptive Model

This model was first propounded by Nida (1949). This descriptive model assesses the syntactic distinctiveness of modifiers in the two languages being compared. This model explores the aspects of modifier placement in these languages and reveals the modifiers position, syntactic functions and their formation patterns.

3.6 The Taxonomic Model.

This model presents language features according to their components and what needs to be described. This model is pioneered by Banathy (1969) and later by Crystal (2003). The items in the inventory are identified in order to establish which of the items are similar or different. It is assumed that what is similar will constitute language universals and common characteristics in the two languages.

3.7 Data Analysis

The data obtain from Fulfulde language was quantified by doing transliteration and translation in order to carry our readers along. All words are grouped under their various word classes, broken down into their various morphemes, described and well explained but this is not

to say that it is exhaustive in itself. A lot still has to be done in this area or in the syntax of Fulfulde as a whole. The meanings of all the words are given either semantically or pragmatically.

However, cognizance was taken of the morpho-syntactic characteristics of English and Fulfulde languages as compared. The Fulfulde written corpus had further been translated at two levels. The first level is what we can refer to as item-for-item (“word for word”) translation. This was then reduced to its “idiomatic” English translation to get the nutshell content of the expression. Below is an example of the transliteration and translation as explained above;

57. “Bello wadd-an-ii. Bubasheede”.

(Bello bring-for-VAP.Buba money)

Bello has brought money for Buba.

(VAP Voice Aspect Polarity suffix).

(Muhammad & Alkali, 2014)

However, the work has tremendously collected some texts that are relevant to this work, read them, make sense of them and reviewed them accordingly.

CHAPTER FOUR

DISTRIBUTION AND INTERPRETATION OF MODIFIERS IN NOUN PHRASE

4.0 Introduction

An attempt has been made to describe aspects of the English and Fulfulde grammar, including the NP, the languages are yet to be fully described. There are still conflicting views on the structure of basic constituents of the sentence, phonological forms, tonal patterns as well as orthographic representations of some sounds. The present analysis recognizes relevant previous works on the Fulfulde NP constituent (Girei 1994, 2000; Gottshiligg 1998; Klingenheben 1927, 1963, Taylor 1921, 1953, Wescot 1962, Dunn 1968, Amayo 1976, Omoruyi 1986, Agheyisi 1990). None of these works however describes the modifier pattern within the NP nor provides a proper description of the constituent in terms of its computation. This analysis attempts to describe the structure of the Fulfulde NP before examining the position of modifiers within the constituents. The NP is one of the three large constituents of the Fulfulde sentence. It is described here by ascertaining the computation of the smaller units that make it up. This leads us to ascertain the modifier patterns exhibited within the constituent.

As in many languages, the Fulfulde NP is made up of an obligatory head, noun (and pronoun) with [N+] feature and other optional items called modifiers and specifiers which may occur after the head noun. The head noun may be inflected for number and there is usually morphological and phi-feature agreement between the noun and its associated constituent units. The data available to us leads to the assertion that Fulfulde nouns are morphologically either simple or complex. The simple nouns consist of only one indivisible form, while the complex nouns (i.e DNs) can be made up of different structural forms which result from different derivational operations. Nominal qualifiers usually restrict the meaning of the modified noun in a

given grammatical structure. The modifiers include determiners, adjectives, nominals and pronominals. By this description, typical NP constituents in Fulfulde may have the structural patterns listed below:

- (i) Noun - Determiner
- (ii) Noun – Determiner - Determiner
- (iii) Noun – Adjective
- (iv) Noun- Determiner – Adjective

A computational analysis of these sequences reveals that the morphological forms of the modifiers greatly determine the type of noun they modify.

4.1 The Head Noun

What is called noun in Fulfulde occurs in two basic forms:

- (i) Simple and
- (ii) Derived.

The head noun (HN) could be any of these forms. In the sections that follow, I describe the internal computation of the two morphological forms.

4.1.1 The Simple Noun

We will describe the noun that comprises only a single morphological form as ‘the simple noun’. In the data in example below, I present the simple root nouns in their different morpheme structure.

Simple Noun	Gloss
Ngesa	farm
dem-gal	tongue

form. Syntactically, each part constitutes a distinct semantic unit whose combination translates to one simple semantic unit.

4.1.3 Derived Noun by Suffixation

Suffixation is the most productive derivational process for expanding the category of nouns in the language. This process involves putting a nominalizing suffix before an appropriate verb and other word classes that can undergo the process. This is the most common process of word derivation in Fulfulde language than any other process mentioned above. For instance;

Base	Suffix	Remarks	Classes
Nbee	nbee-wa	Goat	-wa
Hund	hund-ko	Mouth	-ko
Law	laaw-ol	Path	-ol
Haal	haal-a	Talk	-a

4.2 Nominal Modifiers

Another major constituent part of the Fulfulde NP involves nominal modifiers. In this, we examine the interaction between the Head Noun and its varying modifiers. This interaction results in the structural patterns illustrated in the data. The HN and the modifiers stand in some kind of agreement relation which we discuss in next sub-section of this chapter. The modifiers include determiners, adjectives, nominals and pronominals. Consider some examples below:

4.2.1 The Determiner Category

The determiner refers to a class of items which co-occur with a noun to express a wide range of semantic contrasts such as quantity or number. Determiners in Fulfulde are associated

with nominal classes. The class of the noun determiner is modifying or qualifying select the determiner. For instance;

58. deftere ndemo janngi

(Noun+Dem+pro+verb)

This book she reads

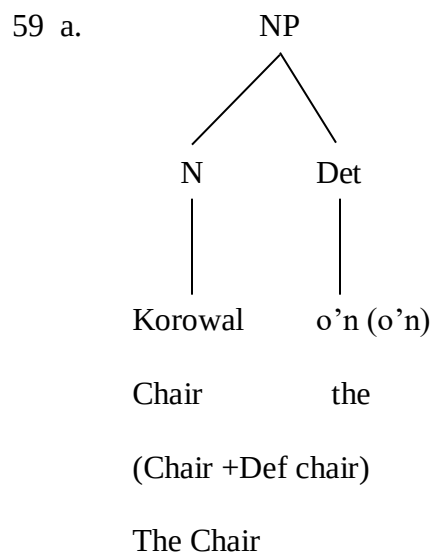
On the above example 'nde' is a noun determiner which modify 'deftere' which has the position as compared with the ones in English language, (i.e) it occupy the post-modify position as in contrast with the ones of English language, but this is what mostly occur in Fulfulde. The determiner group in Fulfulde includes:

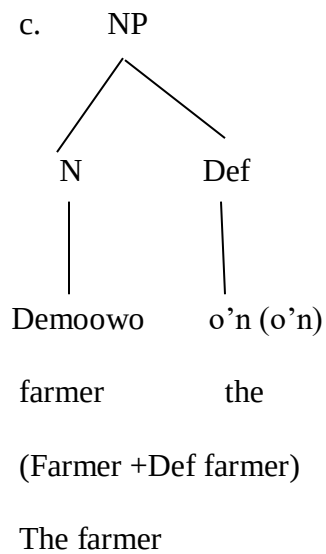
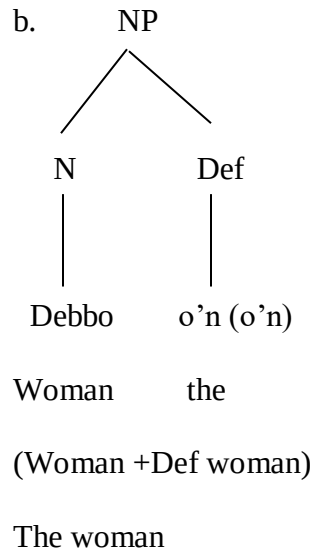
- (i) Article
- (ii) Demonstratives and
- (iii) Quantifiers.

Some of these can occur mostly after a noun in Fulfulde as shown in the data below:

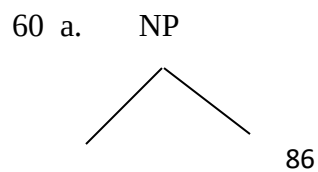
4.2.1.1 Noun +Noun Determiner

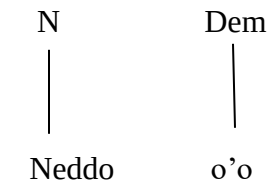
Article





The examples above 59a-c show the modification of nouns with the definite article 'o'n'. This article post-modifies nouns and encodes the notion of definiteness which is commonly characterized in semantic terms involving inclusiveness, uniqueness, accessibility or identifiability. The forms within the optional brackets represent the actual pronunciations of the NPs in rapid speech.

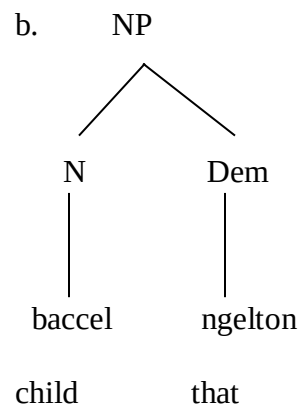




Man this

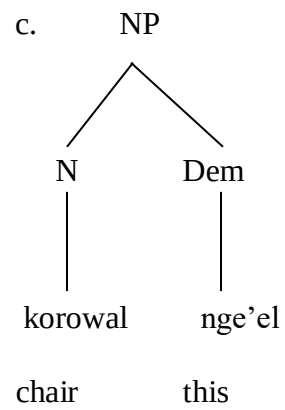
(Man +Dem-this)

This man



(Child +Dem-that)

That child

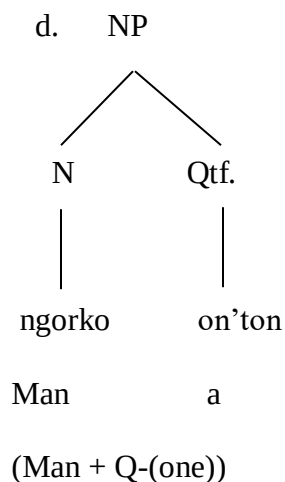


(noun + dem)

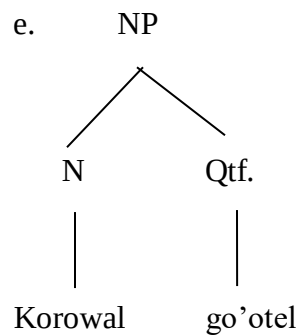
this chair

The examples above 60a-c show the modification of nouns with the demonstrative determiner, nge'el, o'o (this), ngelton (that), nde'e (these) ndenton (those). These demonstratives (dem) also have definite references like the definite article (def. art). The dems post-modify nouns and signal the location of the nouns relative to the speakers' position which is either 'far' or 'near'. More so, in the case of demonstrative singular 'this' in English can be used with any category of nouns, but in Fulfulde o'o can be used for persons only, while nge'el can only be used for things which English did not allude such differences in demonstrative determiner. In the case of demonstrative modifiers in English can mostly be placed in pre-modifying position while in Fulfulde is placed in post-modifying position.

Quantifiers



A man

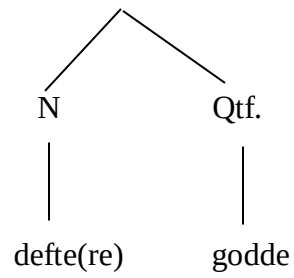


Chair one

(Chair + Q-one)

One chair

f. NP

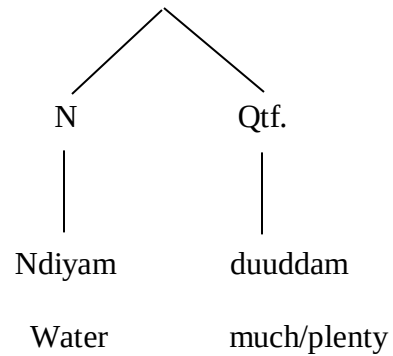


book(s) some

(Book +Q-some, certain book(s))

Some book

g. NP

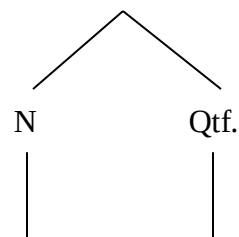


Water much/plenty

(Water +Q-much)

Much/ plenty water

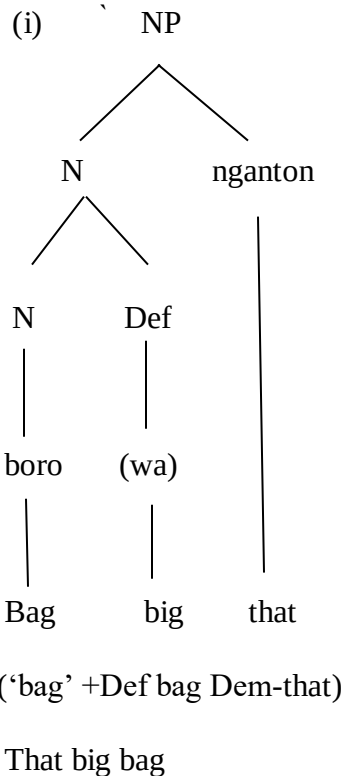
h. NP



Baale duudde

Houses many

(House + Q-many)



g-i shows the modification of noun by quantifiers. These include numeral and non-numeral quantifiers which also post-modify nouns like the demonstratives but not like the ones of English language which pre-modify the noun head. The numerals have definite reference like the def. arts. And dems., the non-numeral quantifiers have indefinite references. Definite numerals are modifiers that make exact specification to referents. (i.e) ‘go’otel’ which has definite reference, while ‘duuddum’ which is the non-numeral quantifiers that has indefinite referent.

The examples in a-l show that the modification of Fulfulde nouns by determiners results in the realization of two different NP-Constructions:

- (i) N + Det and

(ii) N + Det + Det construction.

4.2.2 The Adjectival Category

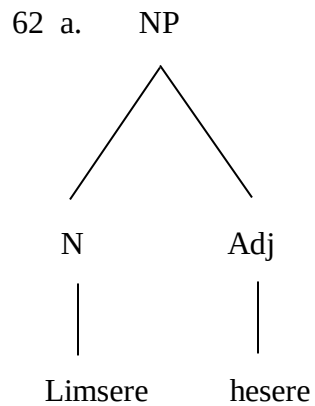
Adjectives are words which describe nouns. Only a few real adjectives are attested in Fulfulde. Many of the adjectives are derived and ideophonic. For instance;

61

Base	Suffix
Balee	(-wal)
Balee	(-yel)
Balee	(-ho)
Bodee	(-ho)
Bodee	(-jo)
Bodee	(-jum)

The data below illustrate the modification of nouns with the different adjectives.

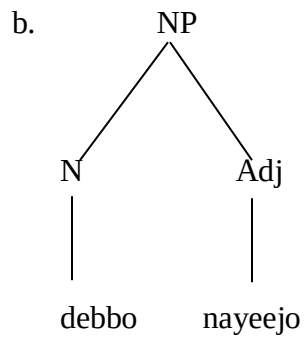
4.2.2.1 Noun + Adjective



Shirt new

(a new shirt)

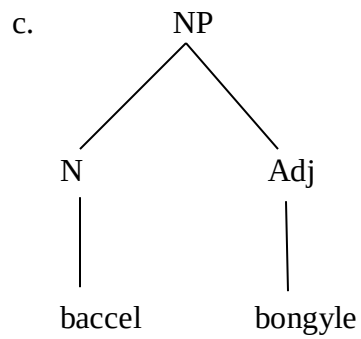
Shirt + new-Adj



Woman old

(woman + old-Adj)

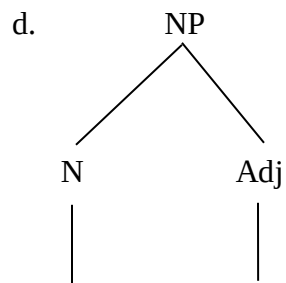
old woman



child beautiful

(child + beautiful-adj)

Beautiful child



ngorko dammudo

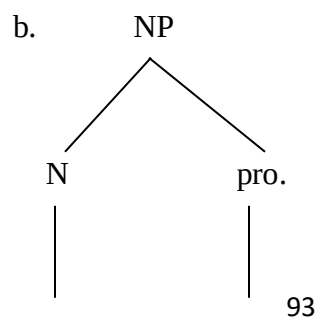
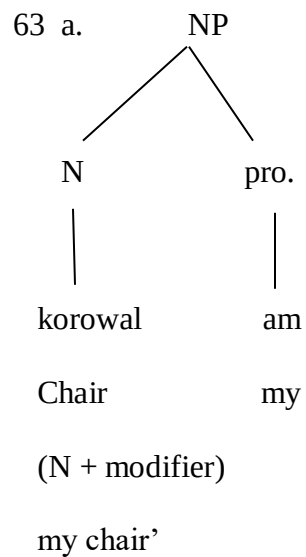
Man short

(Man + short-adj)

Short man

The different adjectives in a-d post-modify nouns like the demonstratives and quantifiers in the above example 60. Notice that the internal structure of the derived adjectives in 62c-d show that they are reduced relative clauses.

The Nominal categories in this study include nouns and pronominals. Each of these post-modifies a noun. The modification of nouns by nouns result in the kind of NP they referred to as ‘associative construction’ or Noun-Noun Construction’. A typical N-N construction in Fulfulde consists of two nouns linked by the associative marker (AM). The pronominals occur as nominal modifiers in this section are possessive pronouns as the data presented below show:

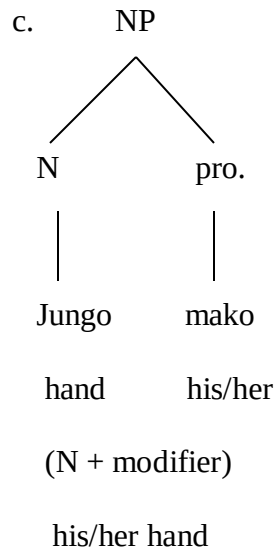


bandu mako

Body your

(N+ modifier)

Your body



The N-N construction in Fulfulde as shown above does not make gender difference whether using ‘mako’ or ‘am’. This shows that not all pronominals in Fulfulde that allow to make differences in gender and this as well show how possessive pronominals act as a modifier to the HN in the phrases 63a-c which appear in the post-modifying position to the HN not like English language which occur in the pre-modifying position.

4.3 Agreement Patterns in the Fulfulde NP

Agreement refers to a formal relationship between elements whereby a form of one word requires a corresponding form of another.

Agreement relations are however, not confined to clauses but extend also to phrasal constructions, like the NP construction in Fulfulde. The basic assumption about the structure of

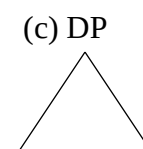
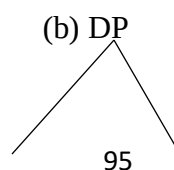
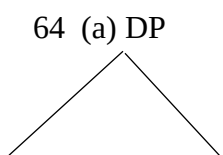
the Fulfulde NP that has been maintained over the years is that; the NP comprises an obligatory noun head and a variety of optional modifiers which occur pre-nominally or post-nominally. These modifiers occur in the NP structures identified in the previous chapter and sub-section above. In each of the constructions, agreement relations hold between the HN and the modifiers.

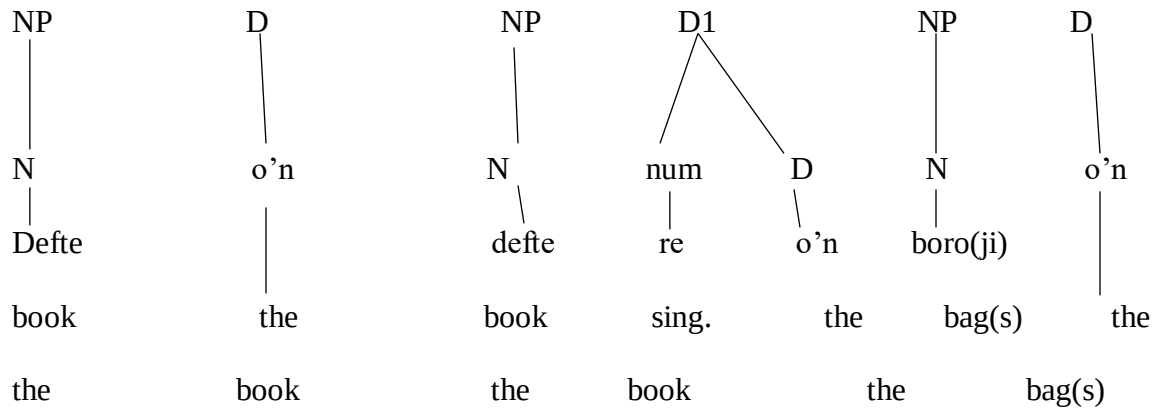
Agreement may be morphological, feature, semantic or even syntactic. The morphological or feature agreement is that a given segment is introduced onto an adjoining lexical item because of the introduction of some parameter. The two lexical items, then exhibit that common feature which otherwise will not be there in its base forms. The agreements in the Fulfulde NP do not present themselves clearly in these forms, but in a variety of other forms which we will discuss in next stage.

4.3.1 N-Det Constructions

The Det-N structure of the Fulfulde NP is illustrated in 60a-c. The phi-feature, number agreement is considered in the agreement relations between the determiner and the nouns in the construction. The constructions in this group involve the definite articles.

Ordinarily, agreement is not morphologically marked in the NPs whose reference is specified by definite articles. The Def. art. selects both singular and plural head nouns. Number agreement is usually marked on the HN which can be pluralized by the different strategies identified in the above section. The phrase markers in 64a-b show the manifestation of this number agreement in the N-Det NP.





The co-occurrence of the elements in this NP construction is governed by the agreement relationship. In 54a, the HN occurs in the singular form. In 64b, the plural morpheme ‘re’ marks number. In both cases, the definite article ‘o’n’ maintains its morphological shape. In 64c, number is also marked on the HN in its final position with suffixation (ji).

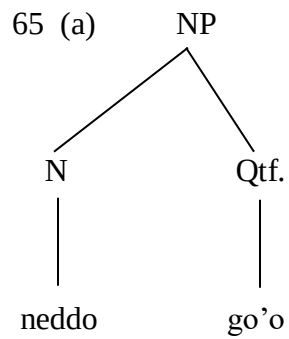
4.3.2 Noun – Determiner Constructions

The Noun – Determiner constructions in Fulfulde have been illustrated in our examples 59d-e which show the use of the two demonstratives: ngelton and nge’el. Like the definite article, agreement is not also marked on the demonstratives. They do not encode agreement features of the noun. Their forms are not changed to conform to singular and plural HNs as in ‘boro nge’el- this bag and boroji nde’e.’ Plurality is base generated in the demonstratives. These examples show some kind of morphological agreement between the HNs and their qualifiers. Here also agreement is controlled by the HN. Number agreement is clearly marked on the end vowel of the nominalized form of the HN. These nominalized forms are capable of occurring alone as the subject or object NP in sentences.

The N–Det constructions also include NPs in which a HN is modified by a quantifier as illustrated in 60f-i. Number agreement is marked on quantifiers in Fulfulde both morphologically

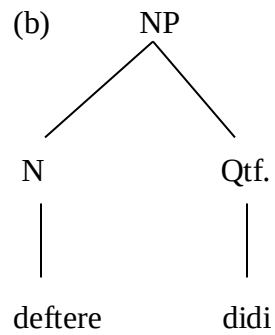
and semantically. All the cardinal numerals except the form for ‘one’ (def) have references. In the NPs involving such numerals, number agreement is marked on both the modifiers and the HNs as the examples in 65 shows:

4.3.3 Noun + Quantifier



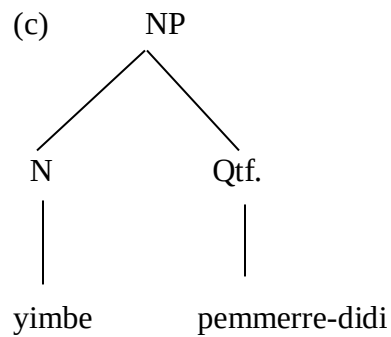
(Man one)

‘one Man’



(Book two)

‘Two books’



(persons two-hundred)

‘two-hundred persons’

(d) *neddo pemmerre didi

(person two-hundred)

‘two-hundred person’

In 65(a) ‘go’o’ is clearly marked for singular number. It selects singular HNs only. The higher numerals in 65b-c select both singular and plural HNs depending on the type of HN involved. These numerals select the plural forms of human – related nouns pluralized by the strategy of adding a suffix on their singular forms as shown by the ungrammaticality of 65(d).

Agreement is also marked on the non-numerals. In example 60f the quantifier ‘godde’ has the grammatical features of both singular and plural number agreement. Its interpretation is based on the user’s knowledge of its context of utterance. The two quantifiers in 60g-h duuddum (much) and duudde (many) have distinct morphological markers of number agreement. The value features that trigger agreement in these items are located within them and can be correctly spelt out in the data below:

66 (a) du-un duuddun

(plentiful/much)

That it be-plenty

(b) be’e duudde

(plentiful/many)

That they be-plenty

(c) ndiyam duuddun

(plentiful/much water)

Water that it be-plenty

(d) wur-ro duudde

(many houses)

House that they be-plenty

In these examples, the suffix ‘un’ in ‘duuddun’ selects plentiful non-count or mass nouns while ‘e’ in ‘duudde’ selects plentiful count nouns. If a construction crashes because of the violation of this agreement rule, then the sentence is regarded as ungrammatical.

4.3.4 N- Det – Det Constructions

In this structural type of the Fulfulde NP, a HN is post modified by the definite article ‘*ton*’ and a demonstrative or quantifier as shown in example 60g and the data below:

67. (a) ndiyam duuddam dam-ton

(Water much that)

That (particular) much water

(b)*ngelton korowal o’n

(that chair the)

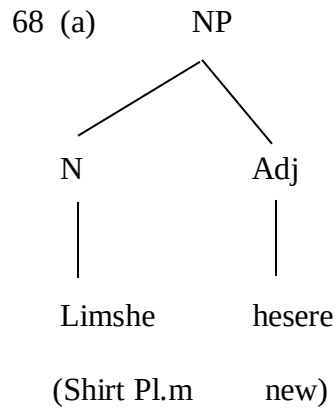
that chair

Number agreement in 67a is marked on the quantifier. The form in bracket gives an indication of a previous definite mention with the use of ‘ton’. 68b crashes because the order of occurrence of the modifiers has been altered.

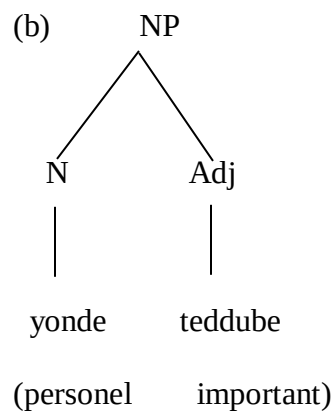
4.4 N – Adj Constructions

Another type of the Fulfulde NP is one in which a HN is post-modified by an adjective as exemplified in 62a-d. Here agreement is not marked between the noun and some of the

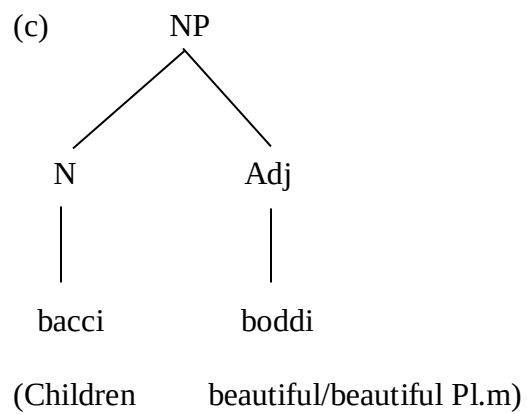
adjectives. Both singular and plural HNs can be modified by the adjectives as in 62a-d and the data below:



‘new shirts’



‘important personnel’



‘beautiful/very beautiful children’

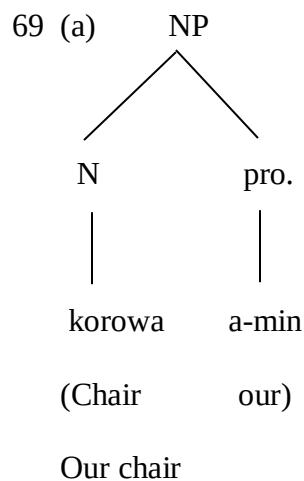
(d) kap-peji maude
 (yam that be-large-large)
 ‘very large tubers of yams’

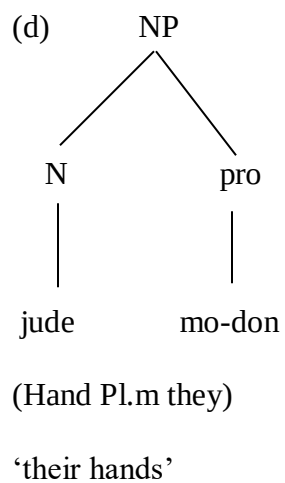
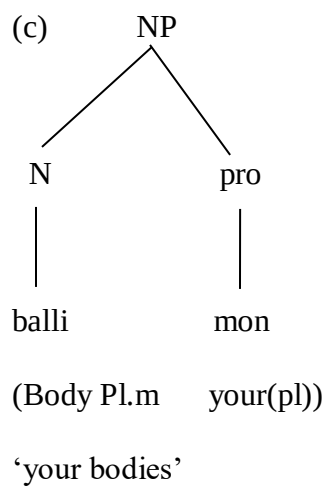
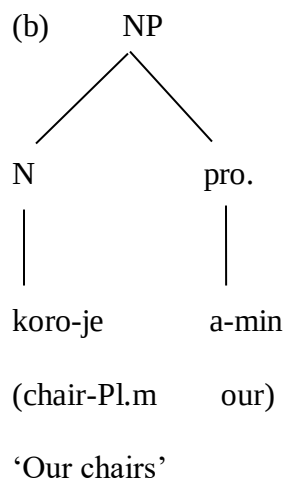
Number agreement is not marked between the Ns and the real adjectives ‘hessere’ and ‘teddube’ in 68a-b. However, notice the number agreement between the plural nouns and the reduplicated forms of the derived adjectives in 68c-d.

4.5 Noun – Noun Constructions

Two basic types of N-N constructions are recognized in Fulfulde: (i) possessive construction (as in ‘hore ma-ko’) and (ii) genitive constructions (as in Jangirde ma-ko). Both constructions involve NPs which comprise two nouns linked by the possessive. In (i), ma-ko marks inalienable possession while in (ii) it functions as a genitive marker which assigns genitive case to N1 in the constructions. The directionality of possession in them from N1 to N2. If this ordering is violated, the NP constructions will crash.

The N-pronominal constructions in 63a-c illustrate another set of alienable and inalienable possessions. Number agreement is marked between the nouns and the possessive pronouns as the data in example 68 show:





4.6 Multiple Modifier NP Constructions

The Fulfulde NP in this category comprises a HN and two or more modifiers. The examples below show that multiple spec-sequences are also possible in Fulfulde. While some of such sequences result in syntactic ill-formedness, other sequences are perfectly grammatical and natural in the language as the data in the below example reveals:

70 (a) Raube Benton fuu

(Women Pl.m that all)

‘All those women’

(b)* fuu ngelton debbo

(Woman Pl.m that all)

‘All that woman’

(c) bee’ejj-di’i fuu boddi

(Goat Pl.m that all beautiful)

‘All those beautiful goats’

(d)*korowal tattj dudde bode

(chair three many beautiful)

(e) kap-pejj-di’i fuu maude

(Yam Pl.m this all very large)

‘All these very large tubers of yams’

(f) wurro ngonton mango hesson wongo-ngo Jaurojo

(House that big new beautiful art. Jauro (jo) possessive)

‘That big new beautiful house belonging to Jauro’

70a-f show possible multiple NP constructions in Fulfulde which involve three modifiers and above in their respective positions of occurrence, some kind of agreement relations hold between the HN and the different modifiers in each example in terms of ordering, positions of occurrence and number. 70b crashes because there is no number agreement between the HN and its post-modifiers. 70d also crashes because the modifier ‘dudde’ cannot co-occur with one HN as they lack agreement in reference. Other such restrictions abound in the language. The data in example 70 above reveals that the longer and more complex the NP constructions are the more cumbersome and clumsy they become in usage and comprehension. Such constructions do not occur often in the speech of the native speakers. Based on the examples in data 68 and 70, it can be established that NP constructions which lack number and other agreements between the HN and the modifiers and between the modifiers themselves are bound to crash. Most of the modifiers in the NP constructions tend to complement one another. They do not represent a compositional unitary meaning which corresponds to a construction expressed by a single modifier. Also, each of the modifiers in the NP constructions can modify a noun independently of the others. In this way, both simple and complex NP constructions are accounted for adequately.

CHAPTER FIVE

SUMMARY AND CONCLUSION

5.0 Introduction

This chapter presents a summary of findings as well as the concluding remarks on general findings. Major findings of the present research are hereby highlighted, and conclusion is drawn from the findings.

5.1 Summary of Findings

This dissertation is undertaken with a view of cross-linguistically studying the distributions and interpretation of modifier placement in English and Fulfulde Languages within Noun Phrase. To achieve what we stated earlier in the objectives, the research found out that:

1. English and Fulfulde languages has modifier but they differ in their structural formation
2. Both languages consider modification as a basic supplementary component in their sentence formation which does not usually affect the grammatical formation the sentence when removed.
3. English and Fulfulde languages places its modifiers close to the Head Nouns, but they differ as to the application of such in their position especially nominal modifiers; English modifiers are usually placed before and after the Head Noun, while Fulfulde consider the application of its modifiers in the post modification.
4. English language recognizes the categories of grammatical articles as definite and indefinite articles, but in the case of Fulfulde does not recognize such classification, because the situation of the phrase/expression in Fulfulde determines the article to be used. For example

a man – Neddo on

the man – Neddo on

Note: you can as well say Neddo dum (the man), the situation of that phrase would determine the appropriate articles to be used.

5. Fulfulde nominal modifiers can only appear in the post-modification position and some adjectives appear in pre- and post-modify position within an NP, whereas English nominal modifiers usually appear in the pre-modify position while Adjectives occur in pre- and post-modify position.
6. Demonstratives in Fulfulde behave akin to English demonstratives, because they serve the same function (i.e) as modifier to the Head Noun/pronoun. For example;
 - i. Korowal ngeél woda – that chair is bad
 - ii. ndeé dum debte Faruk – these are Faruk’s books

5.2 Conclusion

This study concludes that the conceptual explanation about Nominal modifier bear a universal appreciation as one of the Syntactic component in a language which specifies, demonstrates, qualifies the HN (i.e Noun or Pronoun).

An attempt has been made in this dissertation to examine the internal composition of the Fulfulde NP bearing in mind the two basic parts: (i) the head Noun and (ii) nominal modifiers. The research identifies five structural types of NP constructions in Fulfulde. Focus has been on the modifier placement and pattern of agreement relation between the various elements found in the NP constructions. The head noun was characterized as constituting both simple and derived forms.

However, most world languages has components that usually help the HN in construction whether in a pre-modifying position, post-modifying position or both positions, so Fulfulde language is not an exception. This study found out that the modifiers in Fulfulde language can only occur in post-modify position, whereas English language accept both pre-modification and post-modification.

Nevertheless, it can be concluded that just like the unique nature of the forms of Fulfulde modifiers with regards to the number of nouns they modify, the structural arrangements of modifiers in relation to the head they modify also present a unique feature of Fulfulde grammar.

The research reveals that different agreement relations hold between the HN and the modifiers in Fulfulde. It also maintains that to avoid crashing of constructions, there must be necessity exist (i.e) identity of features between the noun and its quantifiers. This identity is revealed mainly by the phi-feature number which manifests in different ways in the language. The operations of selecting and merging the appropriate units help to prevent crashing at the interface levels. Some of the NP constructions crashed because of lack of agreement between the units.

More so, in the case of demonstrative singular ‘‘this’’ in English can be used with any category of nouns, but in Fulfulde o’o can be used for persons only, while nge’el can only be used for things which English did not accord such differences in demonstrative determiner. In the case of demonstrative modifiers in English can mostly be placed in pre-modifying position while in Fulfulde is placed in post-modifying position.

However, the N-N construction in Fulfulde does not make gender difference when using ‘mako’ or ‘am’. This shows that not all pronominals in Fulfulde that allow to make differences in gender and this as well reveals how possessive pronominals act as a modifier to the HN as in

‘korowal am’ which appear in the post-modifying position to the HN not like in English language which occur in the pre-modifying position.

Similarly, this study appreciates the excellent efforts and contribution of Arnott 1970, Girei 1994, Gottshiligg 1998; on Fulfulde grammar.

REFERENCES

- Aarts, B. (2001). *English Syntax and Argumentation* (2nd edn) London: Palgrave
- Ard, F. (1979). Morphology of the gerund and its reconstruction in Proto-Ēdoid. In *Studies in African Linguistics*.
- Arnott, D. W. (1956). The Middle Voice in Fula. *Bulletin of the school of Oriental and African Studies*.
- (1959). Some Features of the Nominal class system of Fulain Nigeria, Dahomey and Niger. *Afrika and Ubersee*.
- (1965). Fula Dialects on the Polyglotta Africa in Dalby, *Sierra-Leone Language Review*. African Language Journal of Fourah Bay College, No.4 The University College of Sierra-Leone.
- (1967). Some Reflections on the Content of Individual Classes in Fula and Tiv. *La Classification nominale dans les langues negro-africaines*. (Colloques Internationaux du National de la Recherche Scientifique, Sciences Humaines). Paris: CNRS
- (1969). *A Handbook on their sound system for teachers of English*. Lagos: Longman, Green & co. Ltd.
- (1970). *The Nominal and Verbal Systems of Fula*. Oxford: Clarendon Press.
- (1975). Some Aspects of the Study of Fula Dialects. *Bulletin of the School of Oriental and African Studies*.
- Baayen, H. & Antoinette R. (1996). *Chronicling The Times: productive lexical innovations in an English newspaper*.
- Bache, E. (1978). Nouns and Noun phrases, In *Universals in Linguistic Theory*. Edited by Bachm E. and Robert, J. H., Holt R. and Winston, New York.
- Biola, M. (2007). *Lexical Categories. Verbs, Nouns and Adjectives*. Cambridge University Press:
- Banathy, B. H. (1969). *The Potentials and Limitations of Contrastive Linguistic Analysis*. Oregon; Defence Institute.
- Bauer, K. (1998). When is a sequence of two nouns a compound in English? *English Language and Linguistics Department; Michigan University*.
- Belletti, F. (2004). *An Introduction to Language*. Holt, Rinehart and Winston.

- Biber, J. & Victoria, C. (2002). "Historical shifts in modification patterns with complex noun phrase structures." In Teresa Fanego et al. (eds) *English Historical Syntax and Morphology*. Amsterdam: Benjamins.
- Jucker, A. H. (1999). *Social Stylistics: Syntactic Variation in British Newspapers*. Berlin: Mouton de Gruyter.
- Bisetto, A. & Sergio S. (1999). Compounding, morphology and/ or syntax? In L. Meren (ed.) *Boundaries of Morphology and Syntax*. Amsterdam: John Benjamins.
- Bolinger, D. (1977). *Meaning and Form*. London: Longman.
- Breedveld, J. O. (1995). *Form and Meaning in Fulfulde: A Morpho-phonological study of Maasinankoore*. Netherlands: CNWS, Leiden University, Netherlands.
- Brauns, L. (1947). *English Word Formation*. Cambridge; Cambridge University Press.
- Brown, K. & Sarah, J. (2009). *Concise Encyclopedia of Languages of the World*. Oxford: Elsevier Ltd.
- Borer, E. (1968). *An Introduction to Bini Grammar*. African Monograph No.9 African Studies Centre. Michigan State University, Michigan.
- Cheng, M. (1999). "Pulaar Verbal Extensions and Phonologically Driven Affix Order" in Geest Booiji and Jaap Van Marle (eds) *Year book in Morphology*. Springer, Netherlands.
- Chomsky N. (1981). *Lectures on government and binding* (*Studies in Generative Grammar*, vol. 9). Dordrecht: Foris.
- (1982). *Some concepts and consequences of the theory of Government and Binding* (*Linguistic Inquiry Monographs* vol. 6). Cambridge, MA: MIT Press.
- (1957). *Syntactic Structures*. The Hague: Mouton.
- (1986). *Barriers*. Cambridge, Massachusetts: MIT Press.
- (1995). *The Minimalist Program*. Cambridge Mass: The MIT Press.
- Christophersen, P. & Sandvick, A. O. (1969) *An Advanced English Grammar*. London: Macmillan.
- Cook, W. A. (1969). *Introduction to Tagmemic Analysis*. New York; Holt, Rinehart and Wiston, Inc.
- Comrie, B. (2009). *The world's Major Languages* (2nd edn). London & New York: Routledge.

- Dantata, A. I. (2014). On the Distribution and Interpretation of Noun Phrases in English and Kambari: A GB Theoretical Approach. An unpublished MA Dissertation: Usmanu Danfodiyo University, Sokoto.
- Daudu, G. K. (2005). A Study of Movement Operations in Fulfulde Language. An unpublished PhD thesis, University of Maiduguri- Nigeria.
- Delfitto, R. & Schroten, A. (1991). Pastoralists of the West African Savanna. Manchester: Manchester University press.
- De Mönnink, I. (2000). On the Move: the Mobility of Constituents in the English Noun Phrase: a Multi-method Approach. Amsterdam / Atlanta: Rodopi.
- Dixon, B. O. (1986). Noun class Vestiges in Degema. *Afrika Ubersee*. Band Lix.
- Dryer, S. (1989). Noun class Prefixes in Proto-Ēdoid. Current approaches to African Linguistics (eds) by Ivan R. Duhoff. Vol.1. The Netherlands, Foris publications.
- Fagerli, O.T. (1993). "Verbal Derivations in Fulfulde." A ph.D Thesis, University of Trondheim, Norway
- Fries, C. C. (1951). The Structure of English. Michigan: Ann Arbor.
- Gordon, H. (2005). Le Poular Dialecte Peule du Fouta Senegalais. Tome premier: Etude Morphologique, Textes. E. Leroux.
- Giegerich, H. J. (2004). Compound or phrase? English noun-plus noun constructions and the stress criterion. *English Language and Linguistics* 8.1: 1–24.
- Girei, U. A. (1994). Language Simplification: A case study of Adamawa dialect of Fulfulde. A Final Year Essay, Department of Languages and Linguistics, University of Maiduguri-Nigeria.
- (2000). Comparative Analysis of Morpho-Syntactic Variations Between Adamawa and Gombe Dialects of Fulfulde. An unpublished MA Dissertation, University of Maiduguri-Nigeria.
- (2009). A Survey on the Fulfulde Dialects in Northern Nigeria. An unpublished PhD thesis, University of Maiduguri- Nigeria.
- Givón, T. (1985). Function, structure and language acquisition. In Dan I. Slobin (ed.) *The Cross-linguistic Study of Language Acquisition*, vol. 2. Hillsdale, NY: Lawrence Erlbaum Associates.
- Greenberg, J. (1964). *Universals of Language*. Cambridge: M.I.T. Press

- (1970). *Languages of Africa*. Mouton: the Hague.
- Haegeman, L. (1997). *Introduction to Government & Binding Theory*, 2nd ed. Oxford: Blackwell.
- Haiman, J. (1985). *Iconicity in Syntax: Proceedings of a Symposium on Iconicity in Syntax*, Stanford, June 24–26, 1983. Amsterdam/ Philadelphia: John Benjamins.
- Haspelmath, M. (2002). *Understanding Morphology*. London: Arnold.
- Hallaa, T. (1988). *Structuralism and Semiotics*. Suffolk: Richard Clay (the Chaucer Press) Inc., publishing as Prentice Hall, Inc. New Fetter Lane, London. Jovanovich Co New York
- Hawkins J. A. (1983). *Definiteness and Indefiniteness: A Study in Reference and Grammatical Predictions*. London; Croon Helm.
- Heine, V. (1982). *An Introduction to Modern English Word Formation*. London: Longman.
- Hockett, C. F. (1958). *A Course in Modern Linguistics*. New York: Macmillan.
- Jucker, A. H. (1992). *Social Stylistics: Syntactic Variation in British Newspapers*. Berlin: Mouton de Gruyter.
- Kim J. B. & Sells, P. (2007). *English Syntax: An Introduction*. USA: Centre for the study of language and information
- Levi, J. N. (1978). *The Syntax and Semantics of Complex Nominals*. New York: Academic Press.
- Mackay, O. (1999). *A Modern English Grammar on Historical Principles*. London: George Allen.
- Mahajan, A. K. (1989). *Agreement and Agreement phrases*. MIT, working papers in Linguistics. MIT, Cambridge.
- Marchand, H. (1969). *The Categories and Types of PD English Word Formation: a Synchronic-diachronic Approach*, 2nd edition. Munich: C. H. Beck'scheVerlagsbuchhandlung.
- McGarrity, L & Botne R. (2002). *Between Agreement and Case-Marking in Lamso*. In R.
- McIntosh, M. (1984). *Fulfude Syntax and Verbal Morphology*. London: St Edmundsbury Press Ltd.
- Miller, J. (1991) *Syntax: A linguistic Introduction to Sentence Structure*. London, Routlaedge.

- Matthews P. H. (1981). *Morphology: An Introduction to the Theory of Word Structure*, Cambridge University Press.
- Miyamoto, R. (1989). A Note on Some Features of Sokoto Dialect of Fula. *Journal of Asian and African Studies* 37, 15-30. Mouton: The Hague
- Mukoshy, I. A. (1984). The sound and morphemes of Fulfulde phonology and morphology. An Ph.D dissertation, the University of Khartoum (Institute of African and Asian Studies).
- (1991). A Review of Fulfulde Classes. In: Abba, I. A. & et al. (eds.), *Studies in Fulfulde Language, Literature and Culture. Proceedings of the 1st-4th International Conference on Fulfulde Language, Literature and Culture*. CSNL, Bayero University, Kano.
- Muromatsu, D. (2001). *Dictionnaire Foulfulde-Francais. Dialecte Peule du Diamare, Nord-Cameroun*. Paris: Geuthner
- Nida, F. (1949). Emerging variation: determiner genitives and noun modifiers in English. *English Language and Linguistics*.
- Olsen, S. (2000a). Compounding and stress in English: A closer look at the boundary between morphology and syntax. *Linguistische Berichte*.
- (2000b). "Composition." In Booij, G., Christian Lehmann and Joachim Mugdan (eds) *Morphology. An International Handbook on Inflection and Word Formation*, vol. 1. Berlin / New York: Walter de Gruyter.
- Payne, J. & Rodney, H. (2002). Nouns and noun phrases. In Huddleston, R. and Geoffrey K. Pullum (eds) *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Pinker, S. (1994). *The Language Instinct: the New Science of Language and Mind*. London: Penguin Books.
- Pullum, G. K. (2002). *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Plag, I. (2003). *Word Formation in English*. Cambridge: Cambridge University Press.
- (2006). "The variability of compound stress in English: structural, semantic, and analogical factors." *English Language and Linguistics*.

- , (2008). The role of semantics, argument structure and lexicalization in compound stress assignment in English Language. *Journal of the Linguistic Society of America*.
- Quirk, R. (1985). *A Comprehensive Grammar of the English Language*. London: Longman.
- Radford, A. (1988) *Transformational Grammar*. Cambridge, Cambridge University Press.
- Rijkhoff, J. (2002). *The Noun Phrase*. Oxford: Oxford University Press.
- Rizzi, P. (2004). Research note on the Fulfulde-Pulaar preterit marker “no” in Adamawa. *Mega-Tchad*
- Robins, L. (1964) *Historical Linguistics and Language Change*. Cambridge University Press.
- Rosch, C. (1973). *The Basic Clause in Lamnso*. An Unpublished M.phil Dissertation of the University of Ibadan, Ibadan-Nigeria.
- Rosenbach, A. (2005). On the Track of Noun + Noun Constructions in Modern English. In Houswitscha, C., Gabriele Knappe and Anja Müller (eds) *Papers from the Conference of the German Association of University Teachers of English*. University of Bamberg, 18–21 September 2005. Verlag: Trier.
- Safir, E. (1971). *Language: An Introduction to the Study of Speech*. New York; Harcourt, Brace and Word, Inc.
- Schwarzschild, W. (2006). *Syntactic Categories and Grammatical Relations*. Chicago: University of Chicago Press.
- Scott, C. (2002). Subjects, Specifiers and X-bar Theory. *Alternative conceptions of phrase structure*, edited by Mark Baltin and Anthony Kroch, 232-262. Chicago: University of Chicago Press.
- Seydou, C. (1998). *A Dictionary of Verb Roots in Fulfulde Dialects: Fulfulde-French*. Paris: Karthala Editions.
- Shlonsky, R. N. (2004). *Edo Grammar*. Ms. UNESCO
- Stageberg, N. (1981) *An Introductory to English Grammar*. New York; Holt, Rinehart and Wiinston, Inc.
- Sproat, T. & Shih, K. (1991). *Origins of Phrase Structure*. PhD thesis, MIT.

- Stennes, L. H. (1967). *A Reference Grammar of Adamawa Fulani*. East Lansing: Michigan State University.
- Svenonius, P. P. (1997). *English – Fula Dictionary (Fulfulde, Pular, Fulani), A Multidialectal approach*. Berlin: Dietrich Reimer Verlag.
- Taylor, F. W. (1921). *A First Grammar of the Adamawa Dialect of the Fulani Language*. London: OUP
- , (1953). *A First Grammar of the Adamawa Dialect of the Fulani Language (Fulfulde)*. London: Second Edition. O.U.P
- Taylor, J. R. (1996). *Possessives in English. An Exploration in Cognitive Grammar*. Oxford: Oxford University Press.
- Uwalaka, M. A. (1988). *The Igbo Verb: A Semantic-Syntactic Analysis*. Bertragezur.Afrikanistic (Wien), Band.
- Varantola, F. (1993). Modification of nouns by nouns. Bad by definition? In Andreas H. Jucker (ed.) *The Noun Phrase in English. Its Structure and Variability*. Anglistik und English chunter richt 49. Heidelberg: Winter.
- Warren, G. (1993). Nominal and adjectival modifiers of nouns. In Andreas H. Jucker (ed.) *The Noun Phrase in English. Its Structure and Variability*. Anglistik und English chunter richt 49. Heidelberg: Winter.
- Whorf, E. (194). *African Language Structures*. University of California Press.
- Wekker, H. & Liliane, H. (1985). *A Modern Course in English Syntax*. London; New York.
- Wierzbicka, A. (1988). *The Semantics of Grammar*. Amsterdam: John Benjamins.
- Zamparelli, H. (2000). *The Lamnso Noun Class System and the Chomskyoam Computational Machine*. Research in African Languages and Linguistic.
- Zavala, O. (2000). *A Generative Phonology of Ẹdo (Bini)*. An Ph.D dissertation. University of Ibadan, Ibadan-Nigeria.