

**UNIVERSITY OF EDUCATION, WINNEBA**

**NOUN CLASS SYSTEM IN NAWURI**



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**UNIVERSITY OF EDUCATION, WINNEBA**

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## DECLARATION

### STUDENT'S DECLARATION

I, **NYAMEKYE LYDIA OWUSUWAA**, declare that this thesis, with the exception of quotations and references contained in published works and Nawuri written texts which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted either in part or whole, for another degree elsewhere.

Signature: .....

Date: .....

### SUPERVISOR'S DECLARATION

I, **DR. REGINA O. CAESAR**, hereby declare that the preparation and presentation of the thesis was supervised in accordance with the guidelines for supervision of thesis as laid down by the University of Education, Winneba.

Signature: .....

Date: .....

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## **DEDICATION**

I dedicate this work to my adorable DAUGHTER, HADASSAH FUAH NTAAH



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## LIST OF ABBREVIATIONS

ATR	Advanced Tongue Root
DET	Determiner
ED	Elicited Data
G.E	Gujjolaay Eegimaa
G.E.S	Ghana Education Service
GILLBT	Ghana Institute of Linguistics, Literacy and Bible Translation
GW	Gambian Wolof
HA	Homorganic Nasal Assimilation
HAB	Habitual
NALAP	National Literacy Acceleration Programme
NC	Noun class
NP	Noun Phrase
PBC	Proto-Benue-Congo
PERF	Perfect tense
PL	Plural
PRT	Particle
RD	Recorded Data
SG	Singular
SGD	Self-Generated Data
SIL	Summer Institute of Linguistics
SVO	Subject, Verb, Object
SW	Senegalese Wolof
TD	Textual Data
Ø	Nul

## ABSTRACT

This study provides an overview of the Noun Class System of Nawuri; one of the Guang languages which is a closely related group of languages, spoken largely in Ghana, Cote d'Ivoire, Togo and Benin. The study presents the analyses of nouns into classes in Nawuri. It examines the various mechanisms and motivating factor for Nawuri nominal classification. The study further looks at the patterns of inflection and derivation in Nawuri. Data were collected from primary and secondary sources. The primary data were collected through interviews, self-generated and recordings of spontaneous speech, daily conversations, folktales and songs in Nawuri. The secondary data were collected from Nawuri books. The study shows that Nawuri nouns can be derived from other lexical word classes such as verbs, adjectives and other nouns. It also shows that Nawuri Noun Class employs a mix of phonological and morphological assignment criteria to divide Nawuri nouns into twelve classes based on the similarity of both the singular and the plural affixes. The study showed that Nawuri has eight singular prefixes, ten plural prefixes and one plural suffix. It was established that the motivation for noun classification in Nawuri is mainly morpho-phonological. It is hoped that the findings will contribute to studies on the typology of noun classification.



## CHAPTER ONE

### THE GENERAL OVERVIEW OF THE THESIS

#### 1.0 Introduction

This thesis examines the Noun Class System of Nawuri. Noun classification has been a subject that has received much discussion in the literature of linguistics, notably among these are scholars of African linguistics such as Hoffmann (1967), Schuh (1995), Avea (2002) and Bobuafor (2009). It is evident also that noun classification has been discussed among scholars of non-African languages such as Zubin & Köpeke (1986) and Sutton (2010). These research works attempt to create appropriate systems of noun categorization suitable for particular languages. The Noun Class System of Nawuri has not been thoroughly researched into. It is based on this that, I attempt to describe the Noun Class System of Nawuri, a Kwa Niger-Congo language.

#### 1.1 Background to the Study

Noun Classes have long played an important role in the understanding of Language structure and human categorization. The attraction of Noun Classes lies in their connection to diverse aspects of language. Noun categorization is relevant for understanding lexical access and agreement patterns in languages such as Spanish and Swahili (Levelt, 1993) and Vigliocco, Lauer, Damian & Levelt (2002). The issue of „Noun Classes“ has played an important role since the beginning of the study of Niger-Congo languages. This is so because on one hand, their structures and mechanisms are far easier to elicit than other linguistic systems and on other hand, they often constitute the starting point for grammatical reconstructions due to their relatively stable retention rate with regard to evolutionary processes (Miehe & Kerstin, 2007).

Nouns are the most numerous part of speech and arguably carry the most information about what the speaker wants to communicate to the listener. In conversation, speakers must be able to identify and differentiate several discourse referents initiated by nouns. One of the most common sites where learners lack skilfulness in speaking or writing in English is at the determiner preceding a noun, and the more complex the noun, the more errors occur (Clark & Wasow, 1998). Nouns are the most common sites for incorrect lexical retrieval and a host of other speech errors (Vigliocco, 1997) and noun class marking may play a part in alleviating these burdens (Futrell, 2010).

Within Niger-Congo languages, noun classification has been well demonstrated for Bantu, Benue-Congo, Atlantic and for Gur languages (Miehe & Kerstin, 2007). It is based on this that this research focuses on describing the Noun Class System of the Nawuri language because not much work has been done on it as compared to other Niger-Congo languages in Ghana such as Akan, Ewe, Gur and Ga.

## **1.2 A Brief Background of Nawuri**

The Nawuri language is one of the Guang languages: a closely related group spoken largely in Ghana, Cote D'Ivoire, Togo and Benin (Sherwood 1982). The Guang group of languages in Ghana are also a sub-group of the languages of Western Kwa. The Nawuri language is classified as belonging to the Northern Guang sub-group of the Guang group of languages as opposed to other counterparts in the southern and central parts of Ghana, which is closely related to other North Guang languages such as Gichode, Krachi, Chumbourung and Gonja (Casali, 1988). Although Cleal (1974) concludes that Nawuri does not clearly belong to any of the established sub-groups of Northern Guang, there is general agreement by Sherwood (1982), Casali (1988) and

Snider (1988) on the inclusion of Nawuri within the Northern Guang sub-group. The Guang group of languages is closely related to the Twi-Fante, Anyi-Baule and Abijan lagoon language groups. They are remotely related to Ga, Ewe, Yoruba, Igbo, Nupe and Bini (Sherwood 1982).

A reference to the Guang language is found in a work by Christaller (1887). The Guang group of language also appears in subsequent studies and classifications such as Westermann (1922), Snider (1988), Painter (1967), Stewart (1970), Manessy (1987) and Snider (1989). Cleal (1974) gives a brief survey of previous classifications of Guang. Sherwood (1982) asserts that a crescent of small pockets of non-Northern Guang languages is found in southern Ghana from Winneba (on the coast 41 miles west of Accra) through the Akuapim hills (35 miles north of Accra from Anum and Wurupong on the lower Volta River, east of Accra). She further explains that the main northern block of Guang languages cover most part of the Northern Region of Ghana.

The Nawuri speaking area is within the Northern region of Ghana, just north of the confluence of Daka and Oti Rivers (Sherwood, 1982). The people share the Western and Southern borders with the Nchumburungs; the speakers of Nawuri are bordered at the North with Nanumbas and at the Eastern side just across the Oti River with Adeles and Achodes. Kpandai, where the Paramount Chief of Nawuri resides, is the central part of the Nawuri speaking area.

The language is spoken by approximately 18,000 native speakers in approximately eleven towns and villages (figures are based on 2010 Ghana Population and Housing Census figures). There appear to be slight dialectal variations within the area; these seem primarily to involve lexical items but no thorough investigations of the

differences has been undertaken. Even though Twi is the dominant language of the area, people of other language groups such as Basare, Konkomba, Chokosi, Bato, Guruma, Nchumurung, Dagomba and Kotokoli understand the Nawuri language. In the villages, Nawuri is the language predominantly spoken among the people. The speakers of Nawuri refer to themselves as the Nawuri. The details of the geographical distribution of the language are shown in the language map in figure 1 on page 5. The general sentence pattern of Nawuri is subject, verb, and object (SVO). It is a tonal language, which means that meaning can be distinguished using the pitch with which syllables are said. There are two contrastive tone levels in Nawuri, high and low.







### **1.3 Statement of the Problem**

Nawuri has been one of the least studied languages in Ghana. Data on the morphology, phonology and syntax of Nawuri are very scanty. The few materials one may refer to include wordlists by Snider (1989), Sherwood (1982) and Casali (1990). There is a limited linguistic research in the language and very little extensive work has been done on Noun Class System which is considered to be an important feature of African languages. This is because they often constitute the starting point for grammatical reconstruction. Aikhenvald (2000) sums up the linguistic relevance in the study of classifiers and noun categorization systems when he asserts that research into noun class systems of languages "... is intrinsically connected with many issues which are crucial in modern linguistics, such as agreement, processes in language development and obsolescence." He therefore argues that the identification and distinction between derivation, inflection and types of possessive constructions in languages, depend primarily on the noun class systems. Following the argument of Aikhenvald (2000), it is important to investigate and classify Nawuri nouns so that the patterns of derivation, inflection as well as the general syntactic properties of the various classes of nouns in Nawuri, would further help linguists research into the grammar of Nawuri.

Also, many languages in the world today are endangered because the speakers do not speak nor teach their young ones how to speak them. Ladefoged & Maddieson (1996) claim that there are about 7,000 languages in the world today, but there will probably be only 3,000 or so in 100 years' time. Nawuri is likely to be one of the endangered languages if Ladefoged & Maddieson (1996) claim is to be taken into consideration. The reason is that Nawuri is gradually experiencing a language shift because, children from this linguistic background are taught in Twi following the

implementation of the National Literacy Acceleration Programme (NALAP) in 2009 by the government of Ghana. This is because Nawuri has not been well documented and for that matter, it has not been recognized by the Ministry of Education of Ghana for use in Basic schools. It therefore does not come as a surprise when Lewis (2009) reveals that literacy rate in Nawuri among the speakers is below 1%. There is therefore the need to research into, and document the linguistic knowledge of Nawuri to fill in the knowledge gap and to ensure its survival.

Outside Ghana, various scholars have tried to describe and examine the noun class systems of various languages. Zubin and Köpeke (1986) in German, Sutton (2010) in Kiowa-Tanoan, Hombert (1980) in Bebidj, Taraldsen (2010) in Nguni, Mc Laughlin (1997) in Wolof, Hoffmann (1967) in Dakarkari as well as Denny and Creider (1986) in Proto Bantu.

In Ghana, several research works have been carried out on Noun Class Systems. These include Osam (1993) in Akan, Schuh (1995) in Avatime, Avey (2002) in Gurene and Bobuafor (2009) in Tafi. In spite of this growing impetus in research into Noun Class Systems in other languages, that of Nawuri is very limited. The only work on Nawuri Noun Class System is Sherwood (1982). There is the urgent need to conduct a research into the Noun Class System of Nawuri to see how new data from this relatively under researched language can contribute to the on-going research into Noun Class Systems. It is upon this background that the research aims to describe the Noun Class System of Nawuri.

#### **1.4 Purpose of the Study**

The purpose of the study is to describe the Noun Class System of Nawuri, a Kwa language of the Volta-Comoe (Guang) sub-group, closely related to Chumburung.

The research is also to determine whether the motivating factor for noun class classification in Nawuri is phonological, morphological or semantic.

### **1.5 Objectives of the Study**

The study aims at describing the Noun Class System of Nawuri by examining the various mechanisms for Nawuri nominal classifications. The study also examines the motivating factor(s) for noun classification in Nawuri. The patterns of inflection and derivation are also investigated.

### **1.6 Research Questions**

1. What are some of the criterion for the classification of Nawuri Noun Class System?
2. What is the motivating factor(s) for noun classification in Nawuri?
3. What are the patterns of inflection and derivation in Nawuri?

### **1.7 Significance of the Study**

It is hoped that the study when completed, will provide a comprehensive description of the Noun Class System of Nawuri. There have been several typological studies to identify the structural similarities and differences in different languages. Corbett (1991), cited in Cobbinah (2013) for instance, concentrates on noun class/gender in Bantu languages and ignores the very complex and somewhat different systems of Atlantic languages, mainly for lack of data. Sapir (1971), Wilson (2007) and Doneux (1975) cited in Cobbinah (2013) give sweeping typological overviews of a variety of Atlantic languages and issues concerning nominal classification. Therefore, a research into the Noun Class System in Nawuri will contribute to the on-going cross-linguistic discourse about Noun Class Systems. This research will contribute immensely to

unearth some interesting linguistic features and phenomena about Nawuri Noun Class Systems.

Findings of the research will contribute to the documentation process of the language. The study will also serve as a point of reference for future research work by others interested in the Nawuri language.

### **1.8 Limitations of the Study**

There is no database of nouns of Nawuri and therefore nouns for the research were elicited from some speakers of Nawuri. There is the likelihood that some nouns of Nawuri would be omitted. To address this, a large number of both primary and secondary sources of data were used to reduce the number of nouns that were likely to have been omitted.

### **1.9 Delimitations of the Study**

The study focuses on giving a systematic description of the noun classes of Nawuri.

### **1.10 Organisation of the Study**

The study is organized in five chapters and each of the chapters has specific sub-topics. Chapter one is the introductory chapter to the research. Sub-topics discussed under this chapter include the background to the study, statement of the problem, the objectives of the study, research questions, significance of the study as well organisation of the study. Chapter two reviews related literature on Noun Class Systems. The chapter contains data on discussions and summaries of other early studies that are related to the research topic under investigation.

The research methodology used for the study is outlined in chapter three. In chapter four, an analysis is made on the data collected for the research. Chapter five

gives the summary and conclusions. It also gives recommendations for further research.

### **1.11 Summary**

The chapter discusses the background to the study. It outlined the problem statement, the objectives as well as research questions that guided the research. It also states the significance of the study and gives the outline of the study.



## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.0 Overview**

This chapter focuses on the review of related literature on noun classes in order to provide some insight into the position and perspectives of researchers on noun classes. The review will also contextualise the work in the current literature on noun classes. The chapter is structured into five sections. Section 2.1 discusses general issues on nouns while section 2.2 provides an overview of noun classes and gender. Section 2.3 examines and discusses noun classes and their classifiers in natural languages. A general review of literature on the functions of gender and noun classes is in section 2.4. Section 2.5 examines the various strategies that are adopted in the classification of nouns in languages.

#### **2.1 Concept of Nouns**

A noun is a word used as the name of a person, place or thing (Wren & Martin, 1990). Summer Institute of Linguistics (2004) also defines a noun as a member of a syntactic class that includes words which refer to people, places, things, ideas or concept whose members may act as any of the following: subjects of the verb, objects of the verb (direct and indirect) or object of a preposition (or postposition) and most of whose members have inherently determined grammatical gender. Maurer (2000) argues that nouns are one of the most crucial elements of speech since pronouns and adjectives rely on them to determine their presence. They also play a vital role in determining the inflectional affixes a verb takes or the inflection of a verb.

There are many types of nouns. According to their kinds, nouns can be classified into proper and common nouns. A proper noun, according to Maurer (2000) is a name of a

particular individual, person, place, or thing who/which is usually unique and they usually begin with a capital letter regardless of wherever they occur in a clause. A common noun however, according to Wren & Martin (1990), is a name given to every person or thing of the same class or kind. This sort of nouns usually has all the letters written in small letters anywhere they occur in a clause with the exception of the sentence initial position where capital letters are used. Wren & Martin (1990), further posit that common nouns can be classified into abstract, individual, and collective nouns. An abstract noun is a word used to name an idea, activity, action, a quality or state such as *kindness*, *theft*, *boyhood*, and *grammar* which are “considered apart from the object to which it belongs” (Wren & Martin, 2000).

According to Wren & Martin (2000), an individual noun is a word that represents a typical member of a group and may include most concrete nouns which are words that can be perceived by human senses. This category of nouns can be exemplified by words in English such as *student*, *lawyer*, *flower* and *plant*. A collective noun on the other hand names a group, number or collection of persons, objects, or things “taken together and spoken of as one whole” (Wren & Martin, 2000), for example, *fleet*, *police*, and *crowd*.

Maurer (2000) argues that when the classification of nouns is made on the basis of their grammatical distinctions, common nouns may be grouped into countable nouns which are made up of individual and collective nouns and uncountable nouns which are mostly made up from abstract nouns. Eckersley and Eckersley (1973) ascertain the claim of Maurer (2000) when they affirm that uncountable nouns stand “for substances that cannot be counted” but “can only be measured”.



Quirk and Greenbaum (1973) however, divide nouns into two categories – invariable and variable nouns. The classification rests on whether or not the noun changes from its form as it changes its number. Invariable nouns are those nouns that do not exhibit any change as they change from singular to plural. They include non-count nouns such as *sheep*, proper nouns such as *England* and summation plurals such as *scissors*. Quirk and Greenbaum (1973) define variable nouns as nouns that exhibit change in form as they undergo transformation from singular to plural. Variable nouns are further divided by Quirk and Greenbaum (1973) into regular and non-regular nouns. Regular nouns they argue are nouns that follow a predictable pattern as they change their number and they take the inflection *-s* or *-es* to form their plurals which makes it easier for one to predict their plural forms. Examples include *boy=boys*, *toy=toys* and *class=classes*. Irregular variable nouns however, do not follow any pattern to form their plurals and therefore resist prediction. They are unpredictable and have to be learnt as individual items (Quirk and Greenbaum, 1973).

## **2.2 Noun Classes and Gender**

Systems of nominal classification referred to as noun class and gender are subtypes of one bigger category of noun categorization devices whose main definitional criterion is the presence of agreement (Aikhenvald, 2000; Corbett, 1991; Creissels, 1994, 1999; Dixon, 1982, 1986; Greenberg, 1978; Grinevald, 2000; Heine, 1982). Corbett (1991) asserts that in descriptive linguistics, the term “gender” and “noun class” are often used interchangeably as cover terms for systems of nominal classification that are based on the presence of agreement. He noted that these two terms also have more specific usages depending on the tradition in linguistic research. “Gender” is generally used more specifically to refer to systems found in Indo-European languages such as French, and Afro-Asiatic languages which are often referred to as

“sex-based” gender languages. These languages make a distinction between masculine, feminine and also neuter sets (Greenberg, 1978; Heine, 1982). On the other hand, the term noun class, according to Seifart (2005) mainly refers to systems that do not make a distinction based on the biological sex of the referent such as Niger-Congo, Bantu, Atlantic languages and Amazonian languages. In this subsection, the various notions of noun classes and the concept of gender as they pertain to the classification of noun classes are examined.

Schuh (1995) refers to “class” as a single set of morphological concords which may show up as affixes on noun stems.” Thus, a noun class can be defined as a group of words that distinguish themselves in a language by a common affix. According to Schuh (1995), the term, „noun class“ has been used in at least two senses in African languages. In one use, it refers to „a single set of morphological concords“. In another sense, it refers to „a paired set of morphological concords“ where the member of the pair refers to singular and the other member is its plural equivalent. In this study, the term noun class is used in relation to the first sense as posited by Schuh (1995).

Dixon (1986) also argues that a noun class (NC) is a grammatical category to which a noun is assigned and that the NC can be marked as a prefix to the noun and its constituents while serving as an obligatory article or as an inflectional suffix. In the view of Bate (1987), noun classes are a group of words that distinguish themselves in a language by the acquisition of a common affix. He however, argues that the assignment of common affixes is not the only determinant factor since there are instances where a tone on the prefix makes all the difference. This observation by Bate (1987) is ascertained by Dorvlo (2009) in his study of the Noun Class System in Logba.

De Wolf (1971) opines that a Noun Class System is a more complicated kind of gender in that there are generally more than three classes which distinguish animate versus inanimate as well as human versus non-human. This accounts for the frequent interchangeable use of “gender” (Greenberg , 1978; Heine, 1982; Corbett, 1991; Creissels,1999) or “noun class” (Aikhenvald, 2000; Dixon, 1982) as cover terms in the description of these grammaticalised systems of nominal classification.

A noun class, as defined by Aikhenvald (2000), is a noun categorization device that:

- is realized outside of the noun itself within a head-modifier noun phrase
- is realized as agreement markers on modifiers such as adjectives
- may also be realized outside of the noun phrase
- is most often marked by affixes
- usually contain references to inherent properties of nouns

He posits that generally, in a noun class language of the Niger-Congo family, nouns have a particular prefix in the singular, while for the plural a different prefix is used. He also states that, there are some nouns, especially mass nouns which, as a result of their meaning, do not have a number differentiation. This situation is likely to be found in Nawuri. He explains further that there is the presence of a system of morphological concord between a nominal and the verb.

Sobkowiak (2010) argues that all the nouns of a language are subject to noun class assignment and the number of noun classes usually falls between 2 and 20. After a typological research on noun classes and noun classification, Dixon (1986) argues that noun classes always constitute a closed grammatical system, and there is little

variation between speakers in the use of noun classes, as “differences in registers and style [...] tend to be marked by lexical and syntactic features” (Dixon, 1986: 107).

Bate (1987) notes that noun classes usually divide nouns into singular and plural pairs. These pairs constitute what is generally known as genders. On the other hand, there are certain classes, for example, those of liquids that often do not have plurals. Among the genders of nouns, are double class genders and single class genders. The double class genders are those that normally have singular and plural forms and the single class genders are those that have only singular forms. These properties of noun classes outlined by Bate (1987) may seem to be true of Nawuri since there is likely to be a clear manifestation of both double class and single class genders in Nawuri.

Creissels (2000) argues that “noun class languages” typically exclude the biological sex-based differentiation, even though very few of them include some aspects of masculine and feminine distinction. She points out that, “Noun Class System” is traditionally used to refer to nominal classification systems found in most branches of the Niger-Congo phylum, as for instance, in Atlantic and Bantu.

Dorvlo (2009) posits that in a noun class language of the Niger-Congo family generally, nouns have a particular prefix in the singular while for the plural, a different prefix is used. There are some nouns, especially mass nouns which as a result of their meaning, do not have a number differentiation. Also, there is a system of morphological concord between a nominal and the verb. He states that, Logba shares the general features that noun class languages of the Niger-Congo family are known to have. Drovlo (2009) notes that in Logba, the singular and plural states of nouns are distinguished morphologically by prefixes as demonstrated in Table 1.

**Table 1: Singular and Plural Prefixes in Logba**

Prefix	Singular	Prefix	Plural	Semantics
<b>a-</b>	<b>a-bia</b> „chair“ <b>a- gbé</b> „dog“	<b>N-</b>	<b>m-bia</b> „chairs“ <b>ŋ-gbé</b> „dogs“	animals, insects, artefacts
<b>u-</b>	<b>u-gusa</b> „brother“ <b>u-bome</b> „town“	<b>e-/ε-</b>	<b>e-gusa</b> brothers“ <b>e-bome</b> „towns“	kinship terms, social group terms.
<b>e-/ε-</b>	<b>e-fieyi</b> „calabash“ <b>e-kele</b> „grass“	<b>N</b>	<b>n-fieyi</b> „calabashes“ <b>n-</b> kele „grasses“	natural elements, items for ritual and religious practices
<b>o-/ɔ-</b>	<b>ɔ-sɔ</b> „horse“ <b>o-dro</b> „elephant“	<b>i-</b>	<b>i-sɔ</b> „horses“ <b>i-dro</b> „elephants“	God, big animals
<b>Non-Count Nouns</b>				
<b>N-</b>	<b>n-da</b> „liquor“	<b>-</b>	<b>-</b>	liquids, pourable substances
<b>i-</b>	<b>i-nɔ</b> ‘meat’	<b>-</b>	<b>-</b>	mass nouns, abstract substances

**Source: Dorvlo, (2009:249)**

In the above examples, the prefixes **ɔ**, **a**, **n** and **m** distinguish the plural and singular forms of „horse“ and „chair“. It appears that Nawuri nouns have a particular prefix used to express a singular number and a different prefix to express plural as well as mass nouns which according to Dorvlo (2009) are general features that noun class languages of the Niger-Congo family are known to have. Data from Nawuri is likely to indicate that in Nawuri, the singular and plural states of nouns are distinguished morphologically by prefixes.

Bate (1987) opines that one other pertinent point that should be made mention of concerning noun classes is that nouns of a particular class are at times semantically correlated and are often put in the same class and nouns which possess semantic content such as abstracts, diminutives, infinitives, derived nouns, liquids, human (persons) and borrowed words tend to belong to the same class.

Bodomo & Marfo (2006) indicate that a language may be said to have a noun class system if that language has grammatical gender or if the nouns of the language can be categorized according to a system of concord or affixal markings on the nouns. However, Bodomo & Marfo (2006) claim that sometimes the term, “Noun Class” is used without considering gender languages. Sagna (2008) affirms this by stating that in both gender and noun class subsystems, all nouns are assigned to a class which is usually signalled in Noun Class Systems by the combination of an affix with a noun stem and agreement on dependent elements (e.g. the definite article and the demonstrative) and the verb. According to Heine (1982), cited in Bodomo & Marfo (2006), two out of every three African languages have a system of noun classification but not in the same way between languages or groups of languages.

### **2.2.1 Gender and nominal classification**

Gender is another prominent feature that is employed in the explanation of nominal classification. According to Corbett (2006), gender is a grammatical and a morpho-syntactic feature of nouns that determines whether a particular noun is feminine or masculine. Corbett (2006) further argues that gender is an inherent feature of nouns and a contextual feature (determined through agreement) for any other elements that have to agree with the nouns in this feature (e.g. adjectives, verbs, etc.). Typically, gender is lexically supplied and its value is fixed for the noun. Thus, the lexical entries of nouns in a gendered language must specify either that the noun has a fixed gender value or that it is capable of taking on different gender values as dictated by the semantics. This notion is affirmed by Kibort & Corbett (2008).

The notion of gender adopted in this study refers to that of the mainstream typological literature, in which gender and noun classes are viewed as the same grammatical

phenomenon. The term „gender“, according to Seifart (2005) is used as a hyperonym of the two. On the other hand, the term „noun class“, mainly refers to systems that do not make a distinction based on the biological sex of the referent such as Niger-Congo, Bantu and Atlantic languages but also Amazonian languages amongst others (Seifart, 2005).

In a similar vein, Hockett (1958) posits that genders are classes of nouns reflected in the behaviour of associated words. This is more or less the definition adopted by Corbett (1991) and Aikhenvald (2000). Ibrahim (1973) describes gender as a secondary grammatical category. That is, one that is not vital to the proper functioning of the language or less as an “unessential category, which serves no useful purpose that cannot be served by some other means”.

Corbett (1991) asserts that in descriptive linguistics, the term “gender” is used to refer to systems of nominal classification found in Indo-European languages such as French and Afro-Asiatic languages which are often referred to as “sex-based” gender languages which make a distinction between masculine, feminine and also neuter sets. Sagna (2008) however, remarks that despite the fact that gender systems are usually more of the overt type, both are to a large extent structurally similar, because they are defined and identified through the presence of agreement. Nouns in these systems, he said belong to a finite number of sets and trigger agreement on agreeing elements, which include definite determiners, adjectives, demonstratives, numerals and anaphoric pronouns.

In this study, I follow the traditional use of the term “noun class” used for Niger-Congo languages that exhibit such systems, since it has the advantage of

typically excluding the biological sex differentiation which is likely not to be found in Nawuri.

### **2.3 Noun Classes and Noun Classifiers**

Noun classes as discussed earlier in this chapter are systems of nominal classifications in languages where a noun may belong to a given class because of characteristic features of its referent such as sex, animacy or shape. Aikhenvald (2000) states that the term „classifiers“ is used to denote a continuum of methods of categorization. Thus, Senft (2000:21) defines Noun classifiers as “morphemes that classify and quantify nouns according to semantic criteria”. According to Dixon (1986), it is important to distinguish between noun classes, including most types of gender system and noun classification, including classifiers which share similar semantic roles in a language, but have different grammatical status. In this sub-section, a distinction between noun classes and noun classifiers is examined.

Oi-man (2006) states that both noun classes and noun classifiers provide information about physical design function or use cognitive categories in a given culture and also social roles and interaction. However, a noun class affix or article is a term in a grammatical system and has a fairly fixed meaning. Alternatively, a classifier is a lexeme and it can be described as structural, generic, pragmatic and referential. He explains that it cannot be seen apart from particular contexts. The implication is that noun classes and noun classifiers may be of different morphological types but perform similar semantic roles. Knowledge of these intrinsic characteristics and uniqueness of the semantic and morphological complementation and variation between nouns and noun classifiers is vital in the classification of noun systems in any language.



Dixon (1986) posits that noun classes constitute an obligatory grammatical system where each noun chooses one from a small number of possibilities. Ways of marking noun class include a prefix to the noun, an obligatory article or an inflectional suffix.

Craig (1992) also argues that noun classes constitute a closed grammatical system, equal with number, case and tense and thus, may be coded as affixes, or as separate grammatical words or clitics such as articles. Craig (1992) opines that if a noun indicates class by an affix on itself, then such affix will also apply to some other words in the sentence. Classifiers however, behave quite differently because there is rarely any reference to classifiers outside the noun phrase in which they co-occur with in the specific noun. Classifiers, therefore, have a wide distributional range, appearing in noun phrases and also as affixes to predicates. This position by Craig (1992) is buttressed by Oi-man (2006) who ascertains that Noun Class Systems and sets of noun classifiers perform the same semantic tasks and operate in terms of obligatory morphological system with a limited number of possible choices.

Oi-man (2006) argues that noun classifiers are always separate lexemes which are syntactically conditioned when they occur with other nouns. Oi-man (2006) further notes that even though noun classifiers are morphologically free forms which occur in the same noun phrase as the noun it qualifies, there is usually a separate constituent which does not form a morphological unit with the noun but rather with the numeral. This he says, means that systems of noun classes and sets of noun classifiers have rather different formal characteristics which must be critically examined and considered in the classification of nouns. The adherence to such formal features as posited by Oi-man (2006), makes it less difficult to easily distinguish between any two noun classes since any forms of classification of NC involve a grouping of all the

nouns of a language into a small number of classes ranging from at least two (2) to at most twenty (20).

Typologically, Oi-man (2006) argues that a noun only belongs to one class though in Chinese there is a small number of nouns that may select more than one class and in such instances, there are usually a fair number of classifiers with over 100 being common and for a few languages. Due to the multiplicity of choices available for the classifier, many of the nouns in this category will be able to occur with more than one classifier.

Senft (2000) also states that nominal referents are classified and categorized according to their specific characteristics in classifier languages. This kind of classification is based on semantic principles and results in the ordering of objects, living beings, concepts, actions and events. Thus, classifiers can be grouped together and then be regarded as constituting certain semantic domains and these semantic domains constituted by classificatory particles in the language, represent the semantic structures of a classifier language. Based on Senft's study, the description of the semantic criteria that structure classifying systems generally give are the following features: [+/- Human]; Human and Social Status; Human and Kinship relations; [+/- Animate]; Sex; Shape or Dimension; Size; Consistency; Function; Arrangement; Habitat; Number or Amount or Mass or Group; Measure; Weight; Time; Action; [+/- Visible] (Senft 2000).

Aikhenvald (2000) and Grinevald (2000) also indicate that noun classifiers are non-agreeing free morphemes that occur in a noun phrase which may function as determiners or independent pronouns, as in Jakaltek and may in some cases be cliticized to a noun or occur as a subclass of nouns. They further reveal that,

although they are similar to numeral classifiers, one of the characteristics that differentiates them with noun class/gender systems is that, not all nouns take a classifier in noun classifier languages. However, it is possible for different noun classifiers to occur with the same noun to express semantic differences. Noun classifier systems they state, may comprise a “small closed set or fairly large open set”, whose choice is semantically based. Noun classifier systems they argue, have been reported in some Mesoamerican languages, a number of Australian languages where they are referred to as “generics or generic classifiers”, Amazonian languages, East and South East Asian languages amongst others. However, there has not been any report of the presence of a noun classifier system in Nawuri.

#### **2.4 The Function of Noun Class/Gender**

In the study of noun classes, one debate that has gained prominence is the fact that the classification and the morphological variations of noun classes are influenced by the gender of the nouns. In this section, I investigate the functions of gender or noun classes.

According to Ibrahim (1973), gender is a secondary grammatical category that is not vital to the proper functioning of the language or less as an “unessential category. This means that in the view of Ibrahim (1973), gender serves no useful semantic or lexical purpose since it has very little impact on how meaning is constructed in gendered languages. Trudgill (1999) and McWhorter (2001) also argue that gender is a useless feature in human communication, and its appearance in grammar is the result of chance and operates due to grammaticalisation of the nominal element rather than functional necessity.

In another sense, Greenberg (1978) argues that gender systems are functional and are mostly connected with reference tracking and disambiguation. He indicates further that in gendered languages, the assignment of the appropriate gender tags to nouns is syntactically imperative since it helps to disambiguate expressions which could have been ambiguous. This assertion of Greenberg (1978) is buttressed by Foley & Van Valin (1984) who posit that gender markedness is an indispensable grammatical feature of languages that mark gender.

Dahl (2004) provides an insight into the understanding of the function of gender with the argument that the position by scholars which suggest that gender is devoid of any communicative function, does not mesh with its diachronic stability and the frequency of its use in gendered languages. According to Dahl (2004), gender systems synchronically function similarly to checksum digit systems. That is, gender systems act as devices for error checking in the online process of lexical item selection by speakers of a language. He stated that in a language such as French, in which grammatical gender is marked on the article, speakers “know that a masculine article has to go with a masculine noun,” and any other combination is perceived as a signal that “something has gone wrong”.

According to Futrell (2010) there are three (3) main functions that noun class markers serve in languages in which they are found. In the first place, Futrell (2010) claims that noun class serves as a sort of “Nominal Protection Device”, alleviating the linguistic difficulties inherent in nouns by reducing uncertainty about nouns. This means that Noun class markers help language users predict nouns in a number of ways: they predict the form of the noun, they predict the semantics of the noun, and they predict which discourse referent a pronoun points to in reference tracking in the

sense of Barlow (1992), who, in extrapolating the importance of noun class markers opines that, they help in restricting the meaning of expression in a sentence.

Futrell (2010) further argues that noun classes predict the form of the noun simply by narrowing the number of nouns that can occur in a specific context. In doing so, they reduce the nouns „entropy“; an information-theoretic measure of their uncertainty. He points out that another way that noun classes reduce uncertainty about nouns is by cueing for their semantics. For instance, alcoholic drinks in German are nearly all masculine (Köpcke, 1982). He asserts that in certain contexts, the gender marking could be a cue that nouns that stand for alcoholic beverages are masculine. This function would motivate the existence of semantic clusters in gender assignment.

The third claim by Futrell (2010) is that noun class markers provide reference tracking in pronouns because, when we use a pronoun in an expression, there is always some uncertainty about what noun or what discourse referent, that pronoun stands for,, but mandatory gender marking reduces that uncertainty.

Ramskar & Inbal (2009) also argue that noun class marking helps language users learn nouns and the way in which it helps users learn nouns makes noun class learning essential. Noun classes, they note, provide a set of linguistic cues to all nouns. That fact is captured in the description of noun classes as reducing nominal entropy and they bear some of the informational load of nouns. It will be shown later in this thesis that this situation is likely to be found in Nawuri.

According to Oi-man (2006) noun classes provide information about physical design, function or use cognitive categories in a given culture and also social roles and

interaction. However, a noun class affix or article is a term in a grammatical system and has a fairly fixed meaning.

## **2.5 Noun Classification Strategies**

In the literature of Noun Class Systems, it has been argued that there are many parameters that determine the classification of Noun Class Systems in different languages. These parameters could be said to be language specific since different language families employ different parameters. This sub-section reviews literature on the various parameters and it aims at finding out which of the said parameter(s) hold(s) for Nawuri.

Models of the mechanisms by which nouns are allotted to genders or classes are called „assignment systems“ (Corbett, 2006). The label noun classification strategy is conventionally used to refer to heterogeneous sets of grammatical constructions that are specialized in the categorization of nouns (Aikhenvald, 2003). Sobkowiak (2010) argues that assignment may involve two sorts of information about the noun: its meaning and its forms and the assignment rules for particular noun classes can be grouped into three main strategies: semantic, phonological and morphological.

However, Corbett (2006) considers phonological and morphological strategies as one strategy and gives them the cover name „formal properties“. He states that, nouns can be assigned to a given gender on the basis of a combination of semantic and formal (morphological and/or phonological) properties. Data from Nawuri are used to demonstrate that Nawuri nouns are assigned to classes on the basis of a combination morphological and/or phonological properties in chapter four of this thesis.

### **2.5.1 Semantic class assignment**

Semantic class assignment is the process of classifying nouns based on a shared meaning. This assertion is deduced from the definition of semantics by Lyons (1977) and Kreidler (1998). Lyons (1977) defines semantics as the study of meaning. Kreidler (1998) affirms this notion by stating that semantics is the study of how languages organise and express meaning. The starting point for most studies on nominal classification systems is trying to uncover what semantic categories are encoded in a given noun class language. The semantic underpinnings of the gender system of a language can be very blurred in actual use; Corbett (1991), Dahl (2000), Aikhenvald (2003) among others. These scholars argue that it is possible to recall the fundamental semantic notion(s) on which the categorization is based, even if only for a restricted portion of the nominal lexicon of a language.

Corbett (1991) posits that it took a number of typological analyses of classifying languages to conclude that strict semantic systems are very rare and are usually limited to languages with only two or three genders. In this sub-section, I discuss how languages classify nouns using the semantic class assignment strategy.

Corbett (2006) argues that semantic class assignment may depend on two sorts of information about the noun: its meaning and its form. Dahl (2000) notes that semantic gender assignment generally involves nouns referring to animate entities with the cut-off points within the domain of animacy being highly language-specific: “between humans and animals, between higher and lower animals, or between animals and inanimate”. Corbett (2011) asserts that animacy, sex, shape and size are the most common semantic notions upon which a gender system is based. Their distribution across language-specific gender systems is not equal: sex based systems are more

frequent than the other types of systems, which are generally built upon some notion of animacy.

He notes further that on a general basis, animacy and sex are more frequent criteria of gender assignment than physical properties (shape and size) to which Aikhenvald (2003) affirms that in many languages physical properties are relevant for the categorization of inanimate entities and are rarely employed to assign genders to animates.

Corbett (2006) states there are two types of semantic assignment systems in languages that make a distinction based on biological sex. These are strict and predominantly semantic assignment systems. In strict semantic assignment systems, the meaning of a noun is sufficient to determine its gender and therefore no information about the form of a noun is needed to determine its gender.

Sridhar (1990) asserts that languages with strict semantic assignment systems often have two or three genders. He states that this type is found in Dravidian languages like Kannada, a southern Indian language. Sridhar (1990) notes further that in Kannada, nouns denoting male humans are masculine and those denoting female humans are feminine. He argues that there are also deities, demons and heavenly bodies in these genders. All remaining nouns, including those denoting infants and animals, are neuter. Thus, *appa* „father“ and *candra* „moon“ are masculine, *amma* „mother“ is feminine and *na:yi* „dog“ is neuter. This situation is affirmed by Bani (1987) who comments that in Kannada, a language spoken on the Western Torres Straits Islands, nouns denoting males and the moon are masculine and all other nouns belong to the feminine gender. A similar situation is found in Bagvalal as posited by Kibrik (2001: 64) that nouns denoting male humans (and only those) are



masculine while those denoting female humans are feminine. He states that all remaining nouns are neuter. For example; in Bagvalal as argued by Kibrik (2001) *waša* „boy“ is a masculine noun, *jaš* „girl“ is a feminine noun and *šama* „donkey“ is neuter. This indicates that semantically, there is an intrinsic morphological attachment to the noun classes and gender.

Corbett (2006) posits that languages with predominantly semantic assignment systems have semantic assignment rules that are less comprehensive and do not discuss the noun inventory completely. He notes that languages of this general type are widespread. For some of them, researchers have proposed that abstract semantic criteria partly miss the point, and that if one can gain a better grasp of the worldview of the speakers, one can understand the assignment system more fully (Corbett, 2006). Dixon (1982) affirms this by stating that Dyirbal (North Queensland), which has four genders; that for male humans and non-human animates, female humans, non-flesh food and the residue.

Corbett (2006) reveals that semantic criteria on which languages assign semantic systems include animate/inanimate, human/non-human and male/female. He explains that sometimes there is a gender for diminutives like that found in some Bantu languages, that is, non-flesh foods (Dyirbal) and insects (Rikvani). Corbett (2006) indicates that a criterion that is sufficient to define a gender in one language may just be one factor in the assignment of gender in another. He argues that the Bantu language Chichewa has a gender for diminutives, while in the Omotic language Dizi, diminutives together with nouns denoting females form a gender.

Summer Institute of Linguistics (SIL) International (2003) argues that the modern English gender system is clearly based on semantic criteria although it does not state

whether it uses the strict or predominantly semantic assignment system. This situation is also found in the subsequent literature reviewed in this sub-section. According to SIL international, the shift of English from grammatical to natural gender renders English unusual among Indo-Germanic languages. Having lost nominal and adnominal inflectional endings by the Middle English period, English has become a pronominal gender system in which the personal pronouns: *He* (male person), *She* (female person) and *It* (object, abstraction or animal) and their other inflected forms, reflect a triple-gender system and the relative pronouns *Who/Which* distinguish only between the animate and the inanimate. A few nouns also exhibit vestigial noun classes, such as *stewardess*, where the suffix *-ess* added to *steward* denotes a female person. This type of noun affixation is not very frequent in English, but quite common in languages which have the true grammatical gender, including most of the Indo-European family, to which English belongs.

Futrell (2010) examines the gender system of Standard German with an eye toward detecting function. The research revealed that German divides all nouns into classes traditionally labelled masculine, feminine, and neuter. The German gender system is manifested in agreement in articles and adjectives, which precede nouns within Noun Phrases. Articles and adjectives also mark plurality and four cases, nominative (usually for subjects of verbs), accusative (usually for objects of verbs), dative (marking an indirect object or the complement of a preposition), and genitive (marking possession). The research concentrated much on examining noun class only as manifested on definite articles immediately preceding nouns. Data demonstrating the syncretisms in the marking of the definite article in German as presented by Futrell (2010) is presented in table 2.

**Table 2: Gender, Case, and Number Marking in German Definite Articles**

<b>Case</b>	<b>Masculine</b>	<b>Feminine</b>	<b>Neuter</b>	<b>Plural</b>
<b>Nominative</b>	Der	Die	Das	Die
<b>Accusative</b>	Den	Die	Das	Die
<b>Dative</b>	Dem	Der	Dem	Den
<b>Genitive</b>	Des	Der	Des	Der

**Source: Futrell, (2010:6).**

With regard to the function of noun classes, he claims that noun class serves as a sort of Nominal Protection Device alleviating the linguistic difficulties inherent in nouns by reducing uncertainty about nouns. Noun class markers also help language users predict nouns in a number of ways by helping the language users to predict the form of the noun, the semantics of the noun, and the discourse referent a pronoun points to in reference tracking.

Avea (2002) reveals that Gurene has eleven noun classes and seven genders. Following earlier classifications by Wilson (1971), Rapp (1966) and Dakubu (1996) who grouped Gurene nominal according to their suffixes based on genetic, semantic, morphological, gender and syntactic basis, Avea (2002) adapted these methods to meet his own judgment. In the research, both singular and plural classes were numbered instead of maintaining the binary system as classes like what will be done for Nawuri because there is not always a systematic correspondence between the singular and plural suffixes. All singular classes bear odd numbers whilst their plural counterparts bear even numbers. Verbal nouns in Gurene were discovered to be part of other classes because they also take class suffixes that may fall within any of the classes. The research revealed that the nominal in Gurene may be classified according to semantic features.

Sagna (2008) investigates the formal and semantic properties of the nominal classification systems of Gujjolaay Eegimaa (G. E). Based on cross-linguistic and language-specific research, he discovers fifteen new classes in G. E. He argues that the G. E. Noun Class System has semantic motivations because some nouns in G.E. are classified on the basis of shared properties as stipulated in the Classical Theory of categorization. Although most of the classification of the G. E. nouns is based on prototypically and extension of such prototypes by family resemblance, chaining process, metaphor and metonymy as argued in the prototype theory from cognitive semantics. He concludes that the parameters of categorization that fruitfully account for the semantic basis of G. E. nominal classification system are both universal and cultural-specific.

Dorvlo (2009) investigates the semantics of Logba noun classification and the associated agreement. The class markers of the nouns were first presented before the semantics of each class was examined. Six noun classes were identified. The classes were the **a-class** which is made up sub-groups like mammals, visible body parts and artifacts. The **u-class** has kingship and human category terms. The **o-class** has God and important people, big animals and soft and attached body parts. The **N-class** is also made up of nouns referring to liquids and other pourable substances. The **i-class** is for non-count mass nouns and the **e-class** contains items used for ritual and religious practices. It was realized that, the selection of a vowel prefix depends on the class of the noun and the [ATR] value of the vowel in the stem. The paper also indicated that there are agreement relations within the Noun Phrase (NP), however, adjectives and intensifiers which are constituents in the NP do not show any agreement relation with the head noun a situation that is likely to occur in Nawuri.

### 2.5.2 Morphological class assignment

Katamba (1993) defines morphology as the study of word structure. Akmajian (2001) also sees morphology as a subfield of linguistics that studies the internal structure of words. These assertions are affirmed by Aziza (2007) who states that morphology is the internal structure of words and the rules that govern word formation in a language. An examination of the definitions above, one can say that morphological class assignment is the process of categorizing nouns based on their similarity in structure. This sub-section discusses how some languages use morphological class assignment to categorise nouns.

Di Garbo (2013) asserts that in morphological class assignment, individual word-formation strategies and/or inflectional classes tend to be associated with a particular gender. The nature of these associations is often problematic, and it is not obvious how or if one dimension (gender or morphological class) derives from the other. The regularity of these associations is largely language-specific and within languages, it can vary according to individual morphological patterns. Di Garbo (2013) argues that in Italian, for example, the suffix for action nominalizations, „-zione“; is used to derive feminine nouns. This means that when the morphological criterion and the gender value that would be assigned to a noun according to its semantics are in conflict, morphology can be overridden by semantics. Di Garbo (2013) argues that the Italian noun *soprano* is morphologically equivalent to the noun *vaso* „vase“ since both nouns are grammatically masculine. Contextually, however, *soprano* typically denotes female singers, so speakers tend to treat it as feminine.

Within the vast Niger-Congo family, noun class markers may surface as prefixes, suffixes or in some cases both, leading Welmers (1973) to conclude that nouns in all classes had both prefixed and suffixed markers in the protolanguage and were thus, doubly marked for class.

In Arabic too, gender is assigned according to morphology (Cowell, 1964). In Kuot, a language isolate of New Ireland, Lindström (2002) states that there are eleven inflectional classes for nouns and the assignment of nouns to the genders could be predicted to a significant extent on the basis of the inflectional class.

Di Garbo (2013) examines that nouns in Russian denoting males are masculine and those denoting females are feminine. But unlike the situation in languages like Kannada, the residue is shared between the three genders, with the neuter gender not even receiving the majority. Thus, the nouns of the semantic residue are scattered across the three genders in Russian. He explains that in order to see how the remaining nouns are assigned, their morphology is looked at instead of their meaning. There are four main inflectional classes in Russian, each with several thousands of nouns. He asserts that the assignment rules in Russian are straightforward. Nouns in class I are masculine, those in classes II and III are feminine, and those in IV are neuter. Although further rules are required in Russian for indeclinable nouns, like *taksi* „taxi“, which is indeclinable and neuter; however, indeclinability is itself a morphological property.

Corbett (2006) posits that because the assignment rules in Russia are straightforward, one might be tempted to think that one could dispense with the semantic assignment, since *mal'čik* „boy“ is in class I, while *sestra* „sister“ is in class II, and *mat'* „mother“ is in class III. Thus, many of the sex-differentiable nouns would be assigned to the

appropriate gender by the morphological assignment rules. But there are also instances where this is not so, for instance, *djadja* „uncle“, which denotes a male is in class II, whose nouns are typically feminine. *Djadja* „uncle“ is masculine. Nouns like this confirm, once again, that we do not find languages where formal assignment rules are sufficient.

O’Grady, Dobrovolsky & Aronoff (1993) assert that Siswati (a Bantu language) makes use of prefixes to distinguish among more than a dozen noun classes. The noun class prefixes of Siswati are presented in table 3.

**Table 3: Noun Class Prefixes of Siswati**

Prefix	Example	Description	Class
um(u)-	um-fama	boy	person
li-	li-duolo	knee	body parts /fruits
s(lg)-	si-lja	plates	instruments
m-	in-ja	dog	animals

**Source: O’Grady et al. (1993:46)**

The analysis of the Noun Class System of Siswati is significant to the current study as the class system will guide me to group the Nawuri nouns into various classes based on affixation.

As indicated in the Siswati data, one realizes that a common group of nouns select a particular prefix. In other words, a human noun cannot be put in the same group with an animal one. Data from Nawuri will show that this situation is not likely to be found in Nawuri.

Bate (1987) identifies fourteen (14) noun classes in Bakweri although the Proto-Bantu system which is its mother group has twenty-three (23) noun classes. From a list of 2000 words obtained from the Summer Institute of Linguistics (SIL), 850 nouns were

selected for the research. The method of prefixation was used to group nouns having identical prefixes and same concords into classes. As the analysis progressed, a further testing of the distinctiveness of the various classes was done, taking note of affinities with Bantu generalities as the parent group of Bakweri.

The research revealed that Bakweri has only prefixes in contrast to other languages that have both prefixes and suffixes. Classes that have identical prefixes are differentiated either by their semantic content or the tone of the prefixes. It was discovered that Bakweri like other Bantu languages has what is known as “alliterative concord”, a situation whereby the prefix of the noun is repeated in elements that follow it. One striking point about the classes of this language is that, class 19 takes its plural form in both class 13 and class 8. This is a situation that could not be given an instant explanation and the writer attributed it to time constraints. This was the only case that was found.

Smith (2007) discusses the Noun Class System of Ut-Ma<sup>o</sup>in, a West Kainji language of Nigeria with emphasis on the Ror variety although Ut- Ma<sup>o</sup>in was used throughout the research. The study also discusses how Ut-Ma<sup>o</sup>in noun classes map to Proto-Benue- Congo (PBC) noun classes. Based on the agreement patterns of the language, Smith comes out with thirteen distinct noun classes even though three classes share the same  $\bar{U}$  prefix, each is distinguished by the unique combination of agreement elements required by the different classes. Using the examples;

- a.  $\bar{U}$ -*mákt*                    „barren woman“
- b.  $\bar{U}$ -*bù*                            „house“
- c.  $\bar{U}$ -*nin*                            „tooth“



Although, the three (3) words have the same prefix “*Ū*”, Smith (2007) argues that the nouns agree with three different pronouns. Thus, *Ū-mákt* „barren woman“ requires „*Wa*“; *Ū-bù* „house“ requires „*jà*“. Based on these three different agreement elements, Smith argues that the nouns belong to three distinct classes.

His research also revealed that four classes have a null  $\emptyset$  – prefix on the noun, but these four classes can again be distinguished by the agreement elements. The research with regards to relation to PBC, revealed Ut-Ma“in classes 1u, 1 $\emptyset$ , 3u, 3 $\emptyset$  and 5 relate directly back to their PBC counterparts. Class 6m relate back to PBC class 6a. Class 2 represents a merger of PBC class 10 and 2. Class 4 and 6 represent a split of PBC class 13, and classes 7u and 7 $\emptyset$  relate back to PBC class 9.

Gibbard, Rohde and Rose (2009) provide a description and classification of the noun classes in Moro by identifying class prefixes, concord consonants and semantic connotations of classes when such are present. The study showed that Moro, like other Kordofanian languages, has an extensive system of noun classes. Like other Niger-Congo languages, noun class is indicated by prefixation on the noun to distinguish between singular and plural forms. They identified eight main noun class singular/plural pairings, five unpaired classes (mass nouns, verbal nouns) and five minor categories.

The major challenge posed by noun classes in Moro that Gibbard et al (2009) reveal was the status of vowel-initial nouns. Noun class prefixes in Moro normally consist of a single consonant, but vowel-initial nouns do occur sometimes and it was not obvious whether an initial vowel constitutes a prefix or whether the vowel is part of the root leaving the noun class without prefix. However, they concluded that both patterns exist.

Semantic cohesiveness they note, was evident only in some classes however, it did not apply to all members of that class. Vowel-initial nouns in Moro according to the research, fall into two groups: those that have vowel prefixes (the j/j class pairing) and those in which vowels are part of the root, though they may delete or reduce following the plural prefix. This latter type was found in the g/l and g/n classes. For the unpaired classes, although it was hard to be certain as there were no alternations, they were unified with paired classes by positing both a root vowel analysis and a prefix analysis.

Agbetsoamedo (2014) describes the Noun Class System of Sɛlɛɛ. The thesis shows that Sɛlɛɛ has eight morphological noun classes identified by the forms of their prefixes and of their concordial agreement, analogous to the Bantu Noun Class Systems. These eight individual classes were labelled noun classes. Using the Niger-Congo tradition, the individual noun classes were paired according to the type of number value that they convey. Thus, a noun class pair consists of one singular class and one plural class where odd numbered classes indicate singular and even numbered ones, plural.

Data from Sɛlɛɛ showing the eight classes, their markers and examples of nouns that occur with the class prefixes is represented in Table 4.

**Table 4: Noun Classes in Sɛlɛɛ**

Classes	Class Prefixes	Example of Nouns	English Gloss
CL 1	o-/ɔ-/Ø-	o-bi	child
		ɔ-sɔfɔ	wife
		Ø-bɛɛsi	plate
CL2	ba-	ba-wewee	dogs
CL3	ka-	ka-nya	mouth
CL4	si-/se-/sɛ-	si-si	yams
		se-le	language
		sɛ-tɔ	fires
CL5	di-/ni-le-/lɛ-	di-si	head
		ni-nu	eye
		le-yo	house
		le-fata	leaf
CL6	n-	n-tu	water
CL7	ku-/ko-/kɔ-	ku-kũ	book
		ko-fe	farm
		kɔ-tɛ	sand
CL8	a-	a-pipi	sweat

**Source: Agbetsoamedo, (2014:18)**

In her thesis, the singular and plural pairings were also referred to as gender. Coincidentally, eight genders were also revealed: five frequent and three inqorate genders. Inqorate genders according to Corbett (1991), and explained by Agbetsoamedo (2014:21), are “the controller counterpart to over-differentiated targets. [...], inqorate genders are those postulated on the basis of an insufficient number of nouns which should instead, be lexically marked as exceptions.”

Assignment of nouns to a particular gender or class in Sɛlɛɛ is partly arbitrary and partly semantically motivated. Thus, each gender can be semantically characterized to some extent, but also, has nouns that seem arbitrarily assigned to it.

### 2.5.3 Phonological class assignment

SIL 2004 defines phonology as the study of how sounds are organised and used in natural languages. Based on this definition, one can say phonological class assignment is the process of assigning nouns to classes based on the organisation and use of sounds in the language. Phonological class assignment is sometimes very difficult to tear apart from that of morphological assignment. In order to distinguish between the two, Corbett (1991: 51) proposes the following rules:

- i. *If the gender of a noun can be established by taking into consideration more than one form, we are dealing with morphological assignment.*
- ii. *If the gender of a noun can be established based on one form only, we are dealing with an assignment rule that is also a phonological rule.*

This sub-section examines how some languages classify nouns using phonological class assignment strategy.

The most frequently quoted language with phonological gender assignment is Qafar (Afro-Asiatic, Cushitic, East Cushitic). Corbett (1991) explains that in Qafar, nouns whose citation form ends in an accented vowel are assigned to the feminine gender. The overlap between semantic and phonological properties of nouns is generally systematic. With a few animate nouns, phonology and semantics are in conflict; in such cases, semantics wins. Thus, the word for „father“ *abb`a*, despite its phonology (it ends in an accented vowel), is assigned to the Masculine Gender.

Discussions of gender in natural language by Aronoff (1994) and Corbett (1991) attest to instances of inflectional systems that are partially determined by phonological form. In such cases the phonological form of a given stem can be correlated with a specific gender. They noted that in Hausa, for example, there is an assignment rule by

which nouns ending in the string -aa are assigned to the feminine gender (Corbett, 1991), while in Yimas, a language of New Guinea, nouns ending in the string -mp are assigned to gender VII (Aronoff, 1994; Corbett, 1991).

It has long been noted (Rambaud, 1898; Delafosse, 1927; Ward, 1939; Senghor, 1943) that in Wolof the phonological form of a noun may serve as the basis for determining the noun class to which it is assigned. Moreover, in considering patterns of change in noun class assignment between nineteenth century data and her own data from modern Wolof, Irvine (1978) remarks that one type of shift is towards a phonological basis of class assignment so that the class marker 'harmonizes' with the initial consonant of the noun.

Languages may use a combination of semantic, phonological and morphological rules to classify their nouns. At this point, I review how some scholars use a combination of these rules to classify the nouns of some languages in this section.

Karūrū (2013) reveals that in Gīkūyū, a Bantu language, a combination of morphological and semantic strategies are used to classify its nouns (loanwords inclusive) into seventeen noun classes. Morphologically, the Gīkūyū noun consists of a class prefix and a stem (and also a terminal vowel in the case of derivatives). The prefix designates the class membership. In the case of loanwords, the borrowed lexical items undergo morphological adaptation process before they fit into a given class.

He explains further that Classes 1/2 include nouns denoting human beings and human attributes. Classes 3/4 are impersonal nouns which include nouns denoting trees, plants, diseases and other things that take {mo-} as singular prefix and {me-} as the

plural prefix. In classes 3/4 also are found nouns representing the body and some of its parts. Classes 5/6 consists of nouns referring to geographical features, inanimate objects, nouns denoting one in a pair, nouns with religious connotations and mass nouns among others. Classes 7/8 consist of inanimate objects, be they man-made or natural. Classes 9 /10 consist of abstract nouns, objects, names of animals and creatures. Classes 11/10 on the other hand denote inanimate objects, geographical features and parts of the body. Classes 12/13 are nouns which denote the diminutive forms of things. Classes 14/6 consist of abstract nouns which are not pluralized; classes 15/6 are nouns that denote a pair while classes 16/17 are nouns that denote places.

Mc Laughlin (1997) examines the Wolof (a North Atlantic sub-group of the Atlantic family of Niger-Congo languages) Noun Class System. The article revealed that the Wolof Noun Class System exhibits a variety of class assignment strategies based on the intersection of semantic, morphological, phonological and sociolinguistic criteria in the comparative context of its two closest sister languages, Seereer-Siin and Pulaar. This was done to see if some conclusion might be reached about why the Noun Class System of Wolof is moving towards a default and also to see if noun classification in Wolof can reveal something about noun classification in general.

With regard to the first aim, the paper shows that Wolof differs from its sister languages in the sense that the disappearance of a class prefix did not require a replacement by suffixation. This single but extremely important factor gave rise to a lack of class marking on the noun, other than in vestigial cases of consonant mutation, thereby making agreement much more difficult than in languages like Pulaar or Seereer-Siin where nouns are doubly marked for class. The strategies in addition to

the semantic one that were employed by Mc Laughlin (1997) in order to assign nouns to a class were the copy process and the expansion of the default class.

On the issue of noun classification in general, the paper revealed that there is more than one way to classify a noun and that classification systems may incorporate a variety of different and intersecting parameters, namely semantic, morphological, phonological and even sociolinguistic parameters. The Wolof noun classification system, rather than being the result of a single means of classification, shows evidence of several, sometimes competing means of classification. The noun classification also reveals that when two classification strategies compete or overlap, a situation which is likely not to be seen in Nawuri, they may be rank-ordered or variation may occur.

Sobkowiak (2010) examines the principles behind the classification of nominal borrowings in two Wolof dialects: Senegalese (SW) and Gambian (GW). A comparative analysis is made between these two Wolof varieties with respect to source languages of loanwords, the classes the borrowed words were assigned to and the assignment strategies that were applied in the categorization process. The study reveals that Wolof Noun Class System employs a mix of semantic, phonological, morphological and sociolinguistic assignment criteria.

She indicates that despite the fact that Senegalese and Gambian Wolof borrow from different languages, the trends in the assignment strategies were discovered to be similar and are conditioned mostly by how productive a strategy was at the acquisition time of a certain loan. Most loans in both varieties were assigned to the b-class on the default class allocation basis. She further explains that although, a degree of overlap between the default b-class assignment and other strategies (phonological

and semantic) was discovered, the default strategy was often employed. The trend that was found in both Wolof varieties was that, the more recent a borrowing is, the more likely it is that it will be assigned to the b- class.

The analysis of the data reveals that Arabic and Portuguese loanwords that were borrowed several centuries ago and are well established in the Wolof lexicon are therefore more likely to fall into the g-, j-, m-, s- or w- class. That was also the case with the Mandinka loans in Gambian Wolof. The more recently acquired nouns from French and English, on the other hand, were put into the default b- class of both languages.

With respect to the languages the two varieties borrow their nouns from, Sobkowiak (2010) reveals that French was the favourite source language of the borrowings in both languages. However, English which also had a lot of loans in GW were scarce in SW, a situation she considered surprising due to the fact that the American English culture is so present in modern day Senegal. Although the default b- class is the most popular class for loans, she notes that, there were still instances of borrowed nouns which were assigned to different classes on other basis, such as semantic or phonological.

Bodomo & Marfo (2006) establish that the Noun Class Systems of Dagaare and Akan like that of most other African languages, involve a grammatical interplay of various phonological, morphological, syntactic, semantic and conceptual processes. They argued for and defended the position that a more principled and rigorous methodology in setting up and understanding this system is to carefully consider how phonological and morphological rules interact in the system. They believe that, the most appropriate criterion that can be used to set up noun classes in Dagaare and Akan is



number; that is singular and plural categorization which is marked in Dagaare mainly by suffixes and in Akan by prefixes.

Their paper reveals that each noun in Dagaare and Akan is composed of a stem and affixes. The stems and affixes are of different types and they form the morphological basis for a broad classification of nouns into classes. This broad classification was further subcategorized depending on the phonological processes at play; some of which, like vowel harmony, were persistent and universal across the entire classes. Others such as vowel lengthening, nasalization and homorganic assimilation were more localized, but interacted with the universals to thoroughly account for word formation in Dagaare and Akan.

The paper also identified some semantic and other conceptual factors in the systems, but this did not in any way disprove their hypothesis that the system is a product of morphological and phonological processes. This, they said, was because some of those processes were more universal, appearing constantly across the system and enabling them to attain a better and more consistent analysis of the noun class systems of Dagaare and Akan. The various literature reviewed will go a long way to help in the selection of the appropriate noun classification strategy or strategies to employ to classify Nawuri nouns.

## **2.6 Summary**

This chapter reviewed related literature on noun classes. It discussed general issues on nouns and provided an overview of noun classes and gender. Section 2.3 of the chapter discussed noun classes and noun classifiers while section 2.4 provided the function of gender/noun class. Various noun classification strategies were examined in section 2.5. Section 2.5 of the chapter further reviewed literature to determine how

some scholars have used these noun classification strategies to classify the nouns of some languages.



## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 Introduction**

This chapter discusses the methods and techniques used in collecting data for this research. Section 1 examines the fieldwork setting which discusses the field site and the nature of data that were gathered. The various sources of data that are used in the research, are also discussed in section 2 while information about the role of the language consultants is provided in section 3. Section 4 provides an insight into the analysis of the data and section 5 sums up the discussions in the chapter.

#### **3.1 Fieldwork Setting**

In linguistic research, the collection of primary data through extensive fieldwork is important in the documentation of data and an understanding of the linguistic behaviour of speakers in their natural contexts (Austin, 2006). The data collected for this study is based on field visits to Kpandai and the Ghana Institute of Linguistics, Literacy and Bible translation (GILLBT) office in Tamale. Kpandai was selected because it is the capital of the Nawuri speaking area. The second reason was that the researcher is a native of Kpandai and therefore is familiar with some of the people and variety of the Nawuri dialect spoken in that area. The researcher chose the Kpandai variety of the Nawuri dialect because it is the dialect which has been used extensively in writing by GILLBT.

The Kpandai District is one of the twenty (20) districts in the Northern Region of Ghana. It was carved out of the East Gonja district in February 2008 by Legislative Instrument 1885 with its capital located at Kpandai (Ghana Statistical Service, 2014). The district is located at the South-Eastern corner of the Northern

Region of Ghana and lies between latitudes 8° N and 9.29° N and longitudes 0.29° E and 1.26°W. It is bordered to the North by Nanumba South district, East Gonja to the West, Krachi West district to the South-West and Nkwanta North district to the East. It has a total land surface area of 1,132.9 Km Square. It is strategically located at the central point between the northern and southern part of the eastern corridor of Ghana. The population of Kpandai District, according to the 2010 Population and Housing Census, is 108,816 representing 4.4 percent of total population of the Northern Region of Ghana (Ghana Statistical Service, 2014). There are fifty-six (56) Kindergartens, ninety-one (91) Primary schools, nineteen (19) Junior High Schools and one (1) Senior High School (District office of GES, Kpandai, 2009).

Most of the data (spontaneous speech, daily conversations, folktale and songs in Nawuri) that were collected were recorded on an Ipad 5 Asia digital voice recorder and later transcribed by the researcher. I also used elicitation to collect data on Nouns in Nawuri by asking native speakers to provide nouns of Nawuri. The elicitation approach was adopted from Himmelmann's (1998) types of communicative events.

### **3.2 Data Sources**

The data used in this study is categorised into four main types; natural data, textual data, elicited data and self-generated data. The sub-sections that follow describe each type of data and how it contributes to the study.

#### **3.2.1 Natural data**

During the field visit, natural data which comprised communicative acts, folktales, songs and conversations in Nawuri were collected. The spontaneous speech data were collected through observed communicative events such as daily interactions and

recorded conversations. The recordings were usually done in noise free areas to ensure that the recordings were of good quality to facilitate transcribing.

After the recording was done, I transcribed the recorded data and carefully picked out the nouns in them. Since the texts were on an audio recorder, the researcher had to play, pause and play again the utterances and transcribe the sentences phonetically. I then cross-checked the transcriptions with four (4) language consultants, whom I purposively selected, based on their adept knowledge and proficiency in Nawuri.

The use of the language consultants is necessary because they help to validate elicited data by checking for grammaticality and infelicity. This fact is ascertained by Grimes (1975) who argues that, “speakers of languages display editorial reactions just as regularly as editors who work with paper and pencil”. Grimes (1975) also posits that in discourses, people can still recognise that certain parts of what they say can still be improved by the substitution of expressions that are less consistent with the discourse as a whole by other expressions that fit the structure and the context better.

### **3.2.2 Elicited data**

Elicited data gathered by the researcher were given to consultants for validation. I undertook lexical elicitation using the Nawuri word lists compiled by Snider (1989) and the Nawuri Preliminary Dictionary 4 by GILLBT (2003).

Consultants were expected to give the singular and plural forms of nouns and comment on their possible uses. I also used “contextualizing elicitation” (Himmelman, 1998) to collect a few proverbs based on the lexical elicitation; a list of plants and trees, proper nouns, place names, objects, animals and insects.

### 3.2.3 Textual data

Another source of the data used in this study is drawn from existing works of Nawuri. The selected texts were studied by the researcher and expressions that contained nouns were selected for the purpose of the study. The various nouns in the expressions were written down. The singular nouns were separated from the plural nouns and their appropriate counterparts were provided by the researcher and some native speakers.

Some of the selected texts were historically true narratives, while others were fictional. The text corpus data were drawn from Nawuri texts such as: *Mi Gisirikpan Nde-oo!* (folktales in Nawuri, GILLBT, 1987), *Ɔwvli Bulasa 1 and 2* (Readers, Casali, E. & Casali, R., F. 1993), *Ɔwvli Bulasa 4* (Casali, R., F. 1999). *Gitalapv Alanfiya* (Healthy motherhood, Attah, D., Otu, S. & Asuo, J. 2002), *Ibwaare Katɔwe* (The Nawuri Old Testament Bible, GILLBT 2012), the Nawuri Preliminary Dictionary 4 (GILLBT, 2013), *AIDS bv ani gakyina-to gasintin* (living with AIDS in the community, Attah, D., Otu, S. & Asuo, J. 2002), *Sigarete ye tabaa gunuu abɛɛ alanfiya?* (Smoking or Health? Attah, D., Otu, S. & Asuo, J. 2002) *Ginyapv-kyu nkvn gi sa* (Exclusive breastfeeding, GILLBT 2003), *Ghana gibani nbara ɔwvli lala* (1992 Constitution of Ghana Abridged, GILLBT & NCCE, 2001), *Nawuri alewu-sin* (History of Nawuri wars, Henry, A.K., 1987) and *Asin mv nu ibv sakasaka gi yii to* (Facts about immunization, Attah, D., Otu, S. & Asuo, J. 2002). These data taken from written texts were very instrumental as they helped to augment the natural and elicited data that have been collected for the study.

### **3.2.4 Self-generated data**

The researcher who is a native speaker of Nawuri also constructed some of the data for the study. The constructed data consisted of the formation of both singular and plural forms of some nouns. The constructed data were given to the four (4) language consultants separately for each one to study in order to reduce the number of nouns that could have been omitted and also reduce errors that are likely to be made by the researcher.

### **3.3 Language Consultants**

Four (4) native speaker consultants comprising two males and two females examined the nouns presented during the elicitation sessions. The consultants are all native speakers of the Kpandai variety of the Nawuri dialect. The elicitation sessions were held with each consultant separately and later, the entire group met to discuss the same types of nouns. The group discussions helped a lot since it sometimes provided an opportunity to get variations of some nouns and explanations supporting them and this enriched the study. While the sessions were going on, I wrote down notes and also recorded them with their consent, to capture their explanations for later transcription.

The consultants are people who have been engaged in Nawuri literacy programmes of the Ghana Institute of Linguistics, Literacy and Bible Translation (GILLBT) for more than three years and therefore, have good level of grammatical competence of the language as native speakers who have been working on the language. The first male consultant was an illiterate seventy-five (75) year old farmer and the second male consultant was a forty-seven (47) year old Senior High school teacher. The first female consultant was seventy-three (73) year old farmer while the second female was

a sixty-seven (67) year old retired primary school teacher. The choice of both female and male consultants was to capture possible difference(s) in the phenomenon that may arise as a result of difference in language caused by gender. Considering the fact that bilingualism can affect one's language, I ensured that my language consultants consisted of both monolinguals and bilinguals. The bilingual consultants were selected because they had knowledge of how the Nawuri language is written.

### **3.4 Data Analysis**

The elicited data, transcribed and textual data were coded as follows for easy identification:

1. Elicited Data (ED)
2. Recorded Data (RD)
3. Textual Data (TD)
4. Self-Generated Data (SGD)

Nouns used in the analysis were drawn from these sources and were analysed using a purely descriptive approach.

### **3.5 Summary**

This chapter discussed the field setting, the various kinds of data (natural, elicited, textual and the self-generated data) that were collected for the research as well as the approaches that were used in obtaining the data for the study.

The chapter also discussed the role of the four language consultants that were used in the study and their contribution to the success of the study. The approach that was used in analyzing the data was also mentioned in this chapter.



## CHAPTER FOUR

### NOUN CLASS SYSTEM OF NAWURI

#### 4.0 Introduction

This chapter discusses the Noun Class System in Nawuri. The chapter is in two sections. Section one describes the Noun Class System in Nawuri concentrating on the various mechanisms for Nawuri nominal classifications. I also investigate the motivating factor(s) for noun classification in Nawuri, and attempted to establish the strategies employed in classifying nouns in Nawuri. Section two discusses the patterns of inflection and derivation in Nawuri.

#### 4.1 Overview of Nawuri Nouns

This section gives an overview of nouns in Nawuri. Knowledge of the noun system of Nawuri is essential in understanding the Nawuri Noun Class System. SIL (2004) defines a noun as a member of a syntactic class that includes words which refer to people, places, things, ideas or concept and whose members may act as either subjects of the verb, objects of the verb, indirect object of the verb or object of a preposition (or postposition) and most of whose members have inherently determined grammatical gender. It can be deduced from this definition then that, nouns can be the name of a person, place or thing that can perform certain grammatical functions in languages. In Nawuri, nouns are words that name persons, places, things and concepts. Some Nawuri nouns indicating persons, places, concepts, animals and objects have been represented in table 5 and 6.

As discussed in chapter three, I propose to attach the following abbreviations to the data in the tables to indicate the sources of the data collected for the analysis :

1. Elicited Data (ED)

2. Recorded Data (RD)
3. Textual Data (TD)
4. Self-Generated Data (SGD)

**Table 5: Some Nawuri Nouns indicating Places, Animals and Concepts**

<b>Nouns for Places</b>	<b>Gloss</b>	<b>Nouns for Animals</b>	<b>Gloss</b>	<b>Nouns for Concepts</b>	<b>Gloss</b>
ka-dɛ (SGD)	town	ka-bwe (SGD)	goat	ka-patɛɛ (SGD)	inheritance
Kɪ-gyaakpaa(ED)	refuse dump	ka-masan (TD)	bee	kv-dvɔn (ED)	hatred
kɪ-gya (ED)	market	ɔ-kalan (ED)	crocodile	o-dee (RD)	dream
kɪ-kpaaraa (TD)	house	kyaasɛ (SGD)	fowl	ke-kili (RD)	marriage
kɪ-landɛ (RD)	playground	kukyusonbi (ED)	housefly	ɔ-kyufɔ (ED)	wedding
kɪ-pv (RD)	forest	ɔ-piyaa (TD)	tiger	ke-lewu (TD)	death
ki-kuraa (TD)	village	laasa (TD)	oyster	ka-nyaasin (ED)	wisdom
ɔ-dɛkpa (ED)	sleeping place	kɪ-tɛ (ED)	lizard	kɪ-naa (TD)	war
ndɔɔ (SGD)	farm	kɔtɔɔ (ED)	crab	kɪ-melensi (RD)	foolishness
iduwasie (RD)	toilet	gyɪbata (ED)	bat	adanbatu (RD)	tradition
ɔkpaɪkpa (TD)	place for soothsaying	ndurukun (TD)	falcon	adangana (ED)	Mystery
ɔsuwɔlɛ (ED)	land	nyɔɔma (RD)	camel	kalaba (TD)	destiny
asɔre (RD)	church	ɔpaa (ED)	guinea worm	lamɛgya (ED)	sickness
kyonko (ED)	storage hut	waagɛ (TD)	driver ants	nkpakakpaa (ED)	eternity

**Table 6: Some Nawuri Nouns indicating Objects and Persons**

<b>Nouns for Objects</b>	<b>Gloss</b>	<b>Nouns for Persons</b>	<b>Gloss</b>
ka-gya (SGD)	chair	ɔ-sa (SGD)	person
ke-putuu (SGD)	pillow	ɔ-kpɛ (SGD)	witch
ki-fitiri (ED)	grass	o-wura (ED)	chief
kotoku (ED)	sack	o-bi (SGD)	child
kaakaaduro (ED)	ginger	ɔ-hayipɔ (ED)	tenant
teebuli (TD)	table	ɔ-kyee (SGD)	woman
kufee (ED)	sheath	ɔ-dɔn (TD)	enemy
lapɛ (SGD)	bowl	ɔ-bɪlɪsa (SGD)	elderly person
soomu (ED)	bucket	wɔkyɪman (TD)	watchman
kilantan (TD)	basket	nyurɪpe (TD)	master
baasa (ED)	needle	adangbesi (TD)	unloved wife
broni-ansi (TD)	spectacles	asaabu (RD)	adopted child
bɔɔbɪ (TD)	brassiere	daadimaadi (ED)	human being
busaa (ED)	yam slices	daane (ED)	deformed baby
danta (TD)	canon	ɪbwaare (RD)	god
kibaasaabi (ED)	fruit	nbanaa (TD)	undertaker
sulee (ED)	pesewa	nyɪmɪsa (RD)	person

Nouns in Nawuri can perform several grammatical functions in sentences. Nouns in Nawuri can function as subjects, objects or complements in a sentence. Some of the grammatical functions of Nawuri nouns have been represented in the sentences 1a) and 1b).

1a. **l- kin** mɔ bɔ kyɛmɛ mɔ tɔ.  
 PL fish DET PRT bowl DET PRT  
 „The fishes are in the bowl“.

1b. **ɔ- kyee** mɔ fɛ i- deebi.  
 SG woman DET HAB sell PL knife.  
 „The woman sells knives“.

In sentences 1a) and 1b), the nouns *l-kin* „fishes“ which is the name of an animal and *ɔ-kyee* „woman“, expressing gender, have been used as the subjects of sentences 1a) and 1b).

- 1c. Kofi svla a- kulonku mv.  
Kofi PERF.carry PL- groundnut DET.  
„Kofi carried the groundnuts“.

- 1d. Anatu sula i- gyo mv sa mv nyiripe.  
Anatu PERF.carry PL- yam DET for DET master.  
„Anatu carried the yams for the master“.

In sentences 1c) and 1d), the nouns *a-kulonku* „groundnuts“ and *i-gyo* „yams“ have been used as direct objects of the verb *svla* „carry“ in both sentences. In sentence 1d) however, *nyiripe* „master“ functions as the indirect object of the verb, *svla* „carry“.

- 1e. ɔ- yin mv gye o- wura.  
SG- man DET is SG- chief.  
„The man is a chief“.

- 1f. Me n- yii gye ɔ- kaapɔɔ.  
My SG- mother is SG- teacher.  
„My mother is a teacher“.

The nouns *o-wura* „chief“ and *ɔ-kaapɔɔ* „teacher“ have been used as complements to the verb *gye* „is“ in sentences 1e) and 1f).

Nouns of Nawuri can also be used as descriptive adjectives. Descriptive adjectives are adjectives that add meaning to a noun or a pronoun by describing its qualities, Bloomfield (1933). However, Dakubu (1987) refers to them as epithets. Nouns of

Nawuri that have been used as descriptive adjectives have been represented in sentences 1g) and 1h) below:

1g. **Sukuu** m- bii mv bu o- bu to.  
School PL- child DET PRT SG- room PRT.  
„The school children are in the room“.

1h. Akua dtɔa a- kulonku ipv.  
Akua PERF.cook PL- groundnut soup.  
„Akua cooked groundnut soup“.

In sentence 1g), the noun *sukuu* „school“ has been used to describe the noun *m-bii* „children“. The noun *a-kulonku* „groundnut“ has also been used to describe the noun *ipv* „soup“ in sentence 1h). Therefore, the nouns *a-kulonku* „groundnut“ and *ipv* „soup“ are describing the head nouns thus, are referred to as descriptive adjectives in sentences 1g) and 1h).

The various examples given indicate that Nawuri nouns perform similar functions as nouns in other languages such as English and French.

#### 4.1.1 Types of nouns

There are various types of nouns. They include proper nouns, common nouns, abstract nouns, individual nouns, countable nouns, uncountable nouns and derived nouns. A proper noun is defined by Maurer (2000:105) as a name of a particular individual, person, place, or thing who/which is usually unique. Nawuri proper nouns constitute names of persons, places, days, fetishes, ritual dances, festivals, rivers, institutions among others. Some proper nouns of Nawuri include: *Atorsah* (ED) „name of person“, *Ibwaare* (ED) „God“, *Kpandai* (RD) „name of place“, *Fiida* (RD) „Friday“, *Burukun* (ED) „fétish“, *Kaake* (TD) „ritual dance“ and *Bwaarabi* (ED) „twins“ festival“.

On the other hand, a common noun according to Wren & Martin (1990:5) is a name given to every person or thing of the same class or kind. Some examples of common nouns in Nawuri include: *kasagatee* (SGD) „comb“, *kilan* (ED) „pot“, *kinanse* (SGD) „snake“, *kagya* (ED) „firewood“, *kifatee* (SGD) „leaf“ and *ɔkyusa* (SGD) „female“. An individual noun is another type of noun which according to Wren & Martin (2000:5), is a word that represents a typical member of a group and may include most concrete nouns which are words that can be perceived by human senses. This category of nouns can be exemplified by Nawuri words such as *kagya* (SGD) „chair“, *kibulun* (ED) „hen coop“, *kinyenbi* (TD) „nail“, *wondo* (ED) „skirt“, *bodobodo* (TD) „bread“, *bɔɔli* (TD) „ball“ and *tangiran* (ED) „plate“.

Kirkpatrick (2014:89) also reveals that countable nouns are preceded by the letter „a“ and can exist in a plural form. When the plural form is used it is not usually preceded by a determiner. Some examples of countable nouns in Nawuri are *naate* (SGD) „cow“, *kɪyɛɛ* (ED) „mouse“, *kɪgyakpaa* (ED) „hom“, *danta* (TD) „canon“, *bɔɔta* (RD) „sack“, *kibilaafɛ* (RD) „palm branch“ and *kabɔɔ* (ED) „messenger“. On the other hand, Eckersley and Eckersley (1973:20) claim that uncountable nouns stand “for substances that cannot be counted” but “can only be measured”. Some uncountable nouns of Nawuri include: *sikyiri* (ED) „sugar“, *sinkaafa* (TD) „rice“, *kenyapvntsu* (ED) „milk“, *apurutiti* (TD) „dust“, *nɔɔlɛ* (RD) „salt“ and *masan* (RD) „honey“.

Kirkpatrick (2014) states that an abstract noun refers to something that cannot be touched. In other words, it refers to a quality, concept or idea. The following are examples of abstract nouns in Nawuri; *tɔnɔ* (TD) „profit“, *aluguusi* (RD) „evil“, *nsure* (ED) „sleep“, *awaasa* (RD) „deed“, *kakpɛ* (RD) „witchcraft“, *kabwu* (TD) „convulsion“ and *gyerebi* (RD) „misfortune“.

A derived noun according to the Oxford Advanced American Dictionary is a noun which has been developed or produced from another word or thing. Nawuri has nouns that have been derived from other word classes. Some word classes from which Nawuri derive nouns from, include: verbs, adjectives and other nouns. A derived noun stem in Nawuri may be formed by the addition of one or more derivative affixes to a noun root, a verb root or an adjective root. The derivative affixes employed to form new nouns in Nawuri include: *{wiya}*, *{bi}*, *{ke}*, *{ɔ}*, *{pv}* and *{sa}*. Nouns that have been derived from nouns, verbs and adjective roots have been represented in tables 7, 8 and 9.

**Table 7: Derived Nouns from Noun Roots**

Noun	Gloss	Suffix	Gloss	New Noun	Gloss
afule (TD)	money	wiya	possesive	afulewiya	rich person
kekpara (RD)	house	wiya	possesive	kekparawiya	landlord
kyakya (TD)	hunch	wiya	possesive	kyakyawiya	hunchback
alenfia (RD)	health	wiya	possesive	alenfiawiya	healthy person
ndɔɔ (SGD)	farm	wiya	possesive	ndɔɔwiya	farm owner
atɔ (ED)	things	wiya	possesive	atɔwiya	wealthy person
kubu (ED)	stone	bi	little	kububi	pebble
kadɛ (SGD)	town	bi	little	kadɛbi	village
kaba (ED)	bowl	bi	little	kababi	saucer
kekpa (RD)	road	bi	little	kekpabi	path
kewɔlɛ (RD)	book	bi	little	kewɔlɛbi	booklet
dzonɔ (SGD)	dog	bi	little	dzonɔbi	puppy
kɪya (ED)	leg	bi	little	kɪyabi	toe
kpamfa (RD)	axe	bi	little	kpamfabi	axe blade
kekpara (RD)	house	bi	little	kekparabi	hut
keba (SGD)	hand	bi	little	kebab	finger
kabwɪ (TD)	animal	bi	little	kabwɪbi	bird

Table 7 above contains nouns that have been derived from other nouns. The derived nouns are formed by adding either the suffix *{wiya}* „possesive“ or *{bi}* „little“ to a noun root. The suffix *{wiya}* „possesive“ is added to noun roots to form nouns that refer to persons. For example, the suffix , *{wiya}* „possesive“ has been added to the

nouns *afule* (TD) „money“ and *kekpara* (RD) „house“ to form the nouns *afulewiya* „rich person“ and *kekparawiya* „landlord“ which refer to persons. However, the suffix *{bi}* „little“ is added to noun roots to form nouns that refer to places, things, animals and body parts. When the suffix *{bi}* „little“ is added to the noun roots: *kubu* (ED) „stone“, *kade* (SGD) „town“, *dzonɔ* (SGD) „dog“ and *kiya* (ED) „leg“, the nouns *kububi* „pebble“, *kadebi* „village“, *dzonɔbi* „puppy“ and *kiyabi* „toe“ are derived. These nouns *kububi* „pebble“, *kadebi* „village“, *dzonɔbi* „puppy“ and *kiyabi* „toe“ refer to a thing, a place, an animal and a body part respectively.

**Table 8: Derived Nouns from Verb Roots**

Prefix	Verb Root	Gloss	Suffix	New Noun	Gloss
ke	dɔ̃ɔ	cook	∅	kedɔ̃ɔ (ED)	cooking
ke	dɔɔ	farm	∅	kedɔɔ (RD)	farming
ke	kili	marry	∅	kekili(RD)	marrying
ke	kpé	go	∅	kekpé (ED)	going
ke	kpaŋ	hunt	∅	kekpaŋ (TD)	hunting
ke	sɩɛ	run	∅	kesɩɛ (ED)	running
ke	kyina	sit	∅	kekyina (ED)	sitting
ɔ	dɔɔ	farm	pɔ	ɔdɔɔpɔ(TD)	farmer
ɔ	dʒankpa	lead	pɔ	ɔdʒankpapɔ(TD)	leader
ɔ	fɛ	sell	pɔ	ɔfɛpɔ(SGD)	seller
ɔ	kaapɔ	teach	pɔ	ɔkaapɔpɔ(TD)	teacher
ɔ	kili	marry	pɔ	ɔkilipɔ(RD)	married person
ɔ	kɩɛ	beg	pɔ	ɔkɩɛpɔ(ED)	begger
ɔ	kya	dance	pɔ	ɔkyapɔ(TD)	dancer
ɔ	gyi	eat	pɔ	ɔgyipɔ(RD)	glutton
ɔ	mɔɔɔɔ	save	pɔ	ɔmɔɔɔɔpɔ(RD)	saviour
ɔ	tɔ	bake	pɔ	ɔtɔpɔ(ED)	baker
ɔ	waa	perform	pɔ	ɔwaaɔpɔ(SGD)	performer
ɔ	sɩa	carry	pɔ	ɔsɩlapɔ(ED)	carrier
ɔ	sale	peel	pɔ	ɔsalepɔ(TD)	carver
ɔ	pɔyɩ	build	pɔ	ɔpɔyɩpɔ(TD)	builder
ɔ	mɔɔ	kill	pɔ	ɔmɔɔpɔ(RD)	killer
ɔ	lɔ	weave	pɔ	ɔlɔpɔ (SGD)	weaver



Table 8 represents nouns that have been derived from verbs. Some Nawuri nouns can be derived from verbs by attaching either the prefix  $\{ke-\}$  or  $\{ɔ-\}$  to a verb root and also the suffix  $\{-pv\}$  to a verb root. When the prefix  $\{ke-\}$  is added to a verb root, a gerund is formed. Wren and Martin (2000) argue that, when the present participle of a verb acts as a noun, it is a gerund. The addition of the prefix  $\{ɔ-\}$  and the suffix  $\{-pv\}$  to a verb root produces nouns that refer to humans. In table 8, the prefix  $\{ke-\}$  has been added to the verb roots *kili* „marry“ and *kpaŋ* „hunt“ to form the gerunds *kekili* (RD) „marrying“ and *kekpaŋ* (TD) „hunting“ which have been used in sentences (2a) and (2b).

2a. **kekili** waa kegya.  
Marrying past participle be expensive.  
„Marrying has become expensive“.

2b. **kekpan** sv gifuu.  
Hunting HAB.be dangerous.  
„Hunting is dangerous“.

In sentences (2a) above, the present participle *kekili* (RD) „marrying“ has been used as a noun. A similar situation occurs in sentence (2b) where the present participle *kekpan* (TD) „hunting“, has been used as a noun.

When the prefix  $\{ɔ-\}$  and the suffix  $\{-pv\}$  are attached to a verb roots *dɔɔ* „farm“ and *kya* „dance“; the nouns *ɔdɔɔpv* (TD) „farmer“ and *ɔkyapv* (TD) „dancer“ are formed. The nouns *ɔdɔɔpv* (TD) „farmer“ and *ɔkyapv* (TD) „dancer“, refer to persons.

**Table 9: Derived Nouns from Adjective Roots**

Prefix	Adjective Root	Gloss	Suffix	New Noun	Gloss
ke	bɪlɪ	old	sa	Kebilisa (SGD)	an old one
ke	pɔpɔɛ	new	sa	keɔpɔɛsa (RD)	a new one
ke	bɔrɔn	good	sa	keɔrɔnsa(ED)	a good one
ke	malɛ	sweet	sa	Kemalɛsa(TD)	a sweet one
ke	lɪlɪ	bitter	sa	Kelɪlɪsa(RD)	a bitter one
ke	kyɪrɪkyɪɛ	clean	sa	Kekyɪrɪkyɪɛsa(TD)	a clean one
ke	bii	dirty	sa	Kebiisa(SGD)	a dirty one
ke	pɪpɛ	red	sa	Keɔpɪɛsa(TD)	a red one
ɔ	bɪlɪ	old	sa	ɔbilisa(SGD)	an elder

Table 9 contains derived nouns from adjectives. The prefix  $\{ke-\}$  or  $\{\text{ɔ}-\}$  and the suffix  $\{-sa\}$  are attached to adjectives to produce nouns. Adjective roots that take the prefix  $\{ke-\}$  and the suffix  $\{-sa\}$  produce nouns that are non-animate. However, when the prefix  $\{\text{ɔ}-\}$  and the suffix  $\{-sa\}$  are added to an adjective root, the noun produced refers to a person. In table 9, the prefix  $\{ke-\}$  and suffix  $\{-sa\}$  have been attached to the adjective roots *bɪlɪ* „old“, *pɪpɛ* „new“ and *malɛ* „sweet“ to form the nouns *kebilisa* (SGD) „an old one“, *keɔpɪɛsa* (TD) „a new one“ and *kemalɛsa* (TD) „a sweet one“. These nouns: *kebilisa* „an old one“, *keɔpɪɛsa* (TD) „a new one“ and *kemalɛsa* (TD) „a sweet one“ are inanimate. When the prefix  $\{\text{ɔ}-\}$  and the suffix  $\{-sa\}$  are added to the adjective root, *bɪlɪ* „old“, the noun derived is *ɔbilisa* (SG) „an elder“, a noun that is animate.

#### 4.2 Criteria for Setting up Noun Classes in Nawuri

An overview of Nawuri nominal morphology shows that the most appropriate criterion that can be used to set up Nawuri noun classes is number i.e. singular and plural categorization, which is marked in Nawuri by prefixes, a situation which is similar to what has been observed in genetically related Niger-Congo languages like Bakweri (Bate, 1987), Siswati (O’Grady et al. 1993), Akan (Bodomo & Marfo, 2006) and Selee (Agbetsoamedo, 2014).

Based on number affixation as argued by Bodomo and Marfo (2006), there are at least, two ways by which Nawuri nouns can be set up into classes. They state that one of such ways is to group nouns based on the similarity of their singular affixes and plural affixes. They argue that by this method, nouns with common singular affixes that are put in the same group may not necessarily occur together in another group when their plural formation is considered. One advantage with this approach, they posit is the straightforward manner with which nouns sharing the same singular affixes on the one hand and on the other, the same plural affixes can be categorized. However, the main disadvantage of such morphological classification Bodomo and Marfo (2006) argue, is that, some important phonological (and semantic) generalizations are lost when nouns with the same natural phonological phenomena are put in different classes at one point, but not in another. The other approach Bodomo and Marfo (2006) posit, is to put nouns into classes based on the similarity of both the singular and plural affixes. With this criterion, they argue that nouns are always in the same class, whether in the singular or plural form.

The approach adopted of classifying the nouns in Nawuri in this study, is based on the second alternative where particular noun forms are always found in one and the same class. This situation is similar to what has been observed in genetically related Niger Congo languages such as Dagaare and Akan (Bodomo and Marfo, 2006) and Logba (Dorvlo, 2009).

Nawuri has twelve noun classes which constitute eight (8) singular prefixes, ten (10) plural prefixes and one (1) plural suffix. These noun class prefixes consist of a consonant plus a vowel *{ka-}*, *{ku-}* or a consonant *{N-}*. However, there are situations where a single vowel can function as a prefix, example *{i-}*, *{a-}*. Some classes

however, do not take a prefix. Noun class prefixes of Nawuri do not have meanings when they are in isolation; however, it is the only plural suffix *{-ana}* which has a human connotation.

#### 4.2.1 Nawuri noun class system

The twelve Nawuri Class System is discussed in four parts. Thus, I propose in tables 10, 11, 12 and 13, what constitutes the Noun Class System of Nawuri.

**Table 10: Nawuri Noun Classes One to Three**

Noun Class	Singular Prefix	Examples	Singular Gloss	Plural Prefix	Examples	Plural Gloss			
1	ø-	kpakyaa(ED)	machete	ɪ -	ɪ-kpakyaa	machetes			
		kuruma (RD)	donkey		ɪ-kuruma	donkeys			
		kwaayaa(TD)	soap		ɪ-kwaayaa	soaps			
		kyewɛ (ED)	sun		ɪ-kyewɛ	sun			
		gaabuu (TD)	onion		ɪ-gaabuu	onions			
		gyifa (ED)	pocket		ɪ-gyifa	pockets			
		gyoonɔ(RD)	dog		ɪ-gyoonɔ	dogs			
		gyɔɔtɛ(SGD)	spoon		ɪ-gyɔɔtɛ	spoons			
		2	ø-		kpataɛ (TD)	monkey	a-	a-kpataɛ	monkeys
					laagyipɔ (RD)	soothsayer		a-laagyipɔ	soothsayers
naana (SGD)	grand parent			a-naana	grand parents				
pokoo (ED)	calabash			a-pokoo	calabashes				
sungurun(RD)	young woman			a-sungurun	young women				
wurukun(TD)	firstborn			a-wurukun	firstborns				
3	ka-/ke-	ka-bunɔ (ED)	gate	n-	m-bunɔ	gates			
		ka-bwu (RD)	spirit		m-bwu	spirits			
		ka-kɛɛ (ED)	gift		n-kɛɛ	gifts			
		ka-suswaa (TD)	nest		n-suswaa	nests			
		ke-deribi (TD)	coin		n-deribi	coins			
		ke-li (RD)	funeral		n-li	funerals			
		ke-tawuya (TD)	umbrella		n-tawuya	umbrellas			
		ke-leebi (ED)	flute		n-leebi	flutes			

Table 10 contains nouns class 1, 2 and 3. From Table 10, it can be seen that nouns are put into classes based on the similarities of both the singular and plural affixes. Nouns in the same class have similar singular affixes and similar plural affixes. For example, the nouns *kuruma* „donkey“ and *gyifa* „pocket“ have been put in class 1 because they have the same prefix  $\{\emptyset\}$  in the singular and take the same plural prefix  $\{i-\}$ .

**Table 11: Nawuri Noun Classes Four to Six**

Noun Class	Singular Prefix	Examples	singular Gloss	Plural Prefix	Examples	Plural Gloss
4	ki-/kɪ-	ki-nsi (SGD)	eye	a-	a-nsi	eyes
		ki-sebi (RD)	insult		a-sebi	insults
		ki-sibi (TD)	brick		a-sibi	bricks
		ki-tiriboo (TD)	well		a-tiriboo	wells
		kɪ-baa (SGD)	hand		a-baa	hands
		kɪ-fɛ (TD)	medicine		a-fɛ	medicines
		kɪ-kaa (E D)	head pad		a-kaa	head pads
		kɪ-tu (TD)	name		a-tu	names
		5	ku-		ku-menbi (TD)	pill/tablet
ku-kuntun (TD)	knuckle			i-kuntun	knuckles	
ku-ntun (ED)	wolf			i-ntun	wolves	
ku-kuu (ED)	termite			i-kuu	termites	
ku-mɔrɛ (RD)	argument			i-mɔrɛ	arguments	
6	ku-/kʊ-	ku-dulonbi (ED)	bell	a-	a-dulonbi	bells
		ku-kooroo (ED)	gizzard		a-kooroo	gizzards
		ku-yuu (TD)	boil		a-yuu	boils
		kʊ-kyunkʊn (RD)	mosquito		a-kyunkʊn	mosquitoes
		ku-wura (RD)	chieftaincy		a-wura	chieftaincies
		kʊ-kʊrɛ (ED)	drum		a-kʊrɛ	drums
		kʊ-sʊnswɛɛ (TD)	worm		a-sʊnswɛɛ	worms

Table 11 contains nouns of Noun classes 4, 5, and 6. From Table 11, it can also be seen that nouns are put into classes based on the similarities of both the singular and plural affixes. Nouns in the same class have singular affixes and similar plural affixes. For example, the nouns *ku-kuu* „termite“ and *ku-ntun* „wolf“ belong to class 5 because they have the same singular prefix  $\{ku-\}$  and the same plural prefix  $\{i-\}$ .

**Table 12: Nawuri Noun Classes Seven to Nine**

Noun class	Singular prefix	Examples	Singular gloss	Plural prefix	Examples	Plural gloss
7	o-	o-bi (SGD)	child	a-	a-bi	children
		o-diila (ED)	ladder		a-diila	ladders
		o-nyipɔ (RD)	expert		a-nyipɔ	experts
		o-kisipɔ (ED)	enemy		a-kisipɔ	enemies
		o-seepɔ (ED)	fetish priest		a-seepɔ	fetish priests
8	o-	o-bu (SGD)	room	i-	i-bu	rooms
		o-gee (ED)	valley		i-gee	valleys
		o-gyikin (ED)	mudfish		i-gyikin	mudfishes
		o-kyigya (TD)	hot water		i-kyigya	hot water
		o-lin (ED)	root		i-lin	roots
9	ɔ-	ɔ-dakpa (RD)	fetish	i-/ɪ-	i-dakpa	fetishes
		ɔ-gyan (TD)	thigh		i-gyan	thighs
		ɔ-lanba (ED)	noise		i-lanba	noise
		ɔ-nyan (TD)	arrow		i-nyan	arrows
		ɔ-bɔn (ED)	water body		ɪ-bɔn	water bodies
		ɔ-fɛ (SGD)	broom		ɪ-fɛ	brooms
		ɔ-lɔnbɔpɔ (ED)	musician		ɪ-lɔnbɔpɔ	musicians

Table 12 constitutes Nawuri Noun Classes 7, 8 and 9. Nouns in the same class share similar singular and similar plural affixes. The nouns *o-bu* „room“ and *o-lin* „root“ for instance, have been put in class 7 because they have the same singular prefix {o-} and the same plural prefix {a-}.

**Table 13: Nawuri Noun Classes Ten to Twelve**

<b>Noun Class</b>	<b>Singular Prefix</b>	<b>Examples</b>	<b>Gloss</b>	<b>Plural Prefix</b>	<b>Examples</b>	<b>Gloss</b>
10	ɔ-	ɔ-fɔ (SGD)	visitor		a-fɔ	visitors
		ɔ-kala (RD)	soul		a-kala	souls
		ɔ-nyin (SGD)	man		a-nyin	men
		ɔ-kyanbo (RD)	grave		a-kyanbo	graves
		ɔ-saa (RD)	in-law		a-saa	in-laws
11	mass nouns	nkyu (RD)	water		nkyu	water
		nbuliifo (TD)	urine		nbuliifo	urine
		nkalan (SGD)	blood		nkalan	blood
		ɪseyɪ (ED)	sand		ɪseyɪ	sand
		nkpa (RD)	life		nkpa	life
		nta (TD)	drink		nta	drink
		nkyɔɪ (TD)	saliva		nkyɔɪ	saliva
		ndaara (RD)	ashes		ndaara	ashes
12	ø-	bi (SGD)	child	plural	bi-ana	children
		kyɛmɛ (ED)	friend		kyɛmɛana	friends
		ndɔɔ (TD)	farm		ndɔɔ-ana	farms
		kuli (ED)	husband		kuli-ana	husbands
		kɔɔpɔ (ED)	relative		kɔɔpɔ-ana	relatives
		tɔmaa (RD)	neighbour		tɔmaa-ana	neighbours

Table 13 constitutes Noun Classes 10, 11 and 12. Nouns in class 10 are nouns that share similar singular and plural prefixes. However, nouns in class 11 maintain the same form in the singular and plural. Nouns in class 12 attach a plural suffix *-ana* to form their plurals. A detailed description of the changes that occur within each Noun Class is discussed in section 4.3.

#### **4.3 Motivation behind Noun Class Strategies in Nawuri**

The Noun Class System of Nawuri is based mainly on an interface between the morphological and phonological components of the grammar. One may note that the basic assumption here is mainly morpho-phonological. Thus, this study first

establishes the stem of the noun by comparing its singular and plural forms to identify the affixes attached. For example, the stem form for noun class 9 nouns of Nawuri *dakpa* „fetish“ and *bɔ* „hole“ both take the singular prefix {ɔ-} to form their singular forms. However, when forming their plurals, *dakpa* „fetish“ takes the prefix {i-} to form *i-dakpa* „fetishes“ while *bɔ* „hole“ takes the prefix {ɪ-} to form *ɪ-bɔ* „holes“. From the examples above, it is realized that due to the preference involved in the selection of a particular affix, it is realized that the morphological facts alone do not satisfactorily explain the motivation behind noun class strategies in Nawuri.

Accordingly, the study examines the phonological information that accounts for the change in singular-plural noun formation in Nawuri. The most prominent of the phonological information is the advanced tongue root (ATR) vowel harmony principle. Casali (1988) posits that Nawuri has a nine-vowel system with cross-height ATR vowel harmony. By the vowel harmony principle, the assumption is that vowels in Nawuri fall into two phonetically distinctive classes; that is, a vowel is either produced with an advanced tongue root [+ATR]; /i, e, o, u, a/ or with a retracted tongue root [-ATR]; /ɪ, ɛ, ɔ, v/. Following the distinction, all stem vowels are required to be of a common ATR feature specification (Casali, 1988; Sherwood, 1982). The ATR specification in the stem then dictates that of the vowels in the prefix. In this case, stem vowels that are [+ATR] select the same vowel specification in the prefix and likewise [-ATR] stem vowels. The ATR vowel harmony principle best explains the difference in the plural prefixes of the Noun Class 9 nouns, *dakpa* „fetish“ and *bɔ* „hole“. The reason for the difference in plural prefix is that stem vowels of *dakpa* „fetish“ are /a-a/ which are [+ATR], thus, it selects the plural prefix {i} which is also [+ATR], to form *i-dakpa* „fetishes“. *Bɔ* „hole“ on the other hand, selects the plural prefix {ɪ-} to form *ɪ-bɔ* „holes“ because its stem vowel is /ɔ/ a [-



ATR]. A detailed description of the changes that occur within each class has been discussed below.

#### 4.3.1 Noun class one

Noun Class One (1) contains a majority of the loanwords in Nawuri. Loanwords are words that have been borrowed from other languages and have been incorporated into Nawuri. Nawuri has borrowings from languages such as Akan, Hausa and English. Nouns of Noun Class One (1) have a zero realization of the singular morpheme but in the formation of the plural noun form, {t-} is prefixed to the noun root. Some nouns in this class have been represented in table 14

**Table 14: Noun Class One**

<b>Singular Nouns</b>	<b>Gloss</b>	<b>Plural Nouns</b>	<b>Gloss</b>
gyɔɔtɛ (SGD)	spoon	t-gyɔɔtɛ	spoons
gyalantɔv (TD)	hawk	t-gyalantɔv	hawks
kongon (ED)	tin	t-kongon	tins
kpaasi (RD)	rat	t-kpaasi	rats
kubee (RD)	coconut	t-kubee	coconuts
kwaayaa (ED)	soap	t-kwaayaa	soaps
kyaase (ED)	fowl	t-kyaase	fowls
gaabu (SGD)	onion	t-gaabu	onions
gyaɲɛɛ (RD)	pepper	t-gyaɲɛɛ	peppers
kotoku (ED)	sack	t-kotoku	sacks
kyeekyee (RD)	bycicle	t-kyeekyee	bicycles
kɔɔtɔɔ (ED)	crab	t-kɔɔtɔɔ	crabs
lapɛ (SGD)	bowl	t-lapɛ	bowls
laabaakvɔn (ED)	yam (type)	t-laabaakvɔn	yams (type)
lɔɔrɛ (TD)	truck	t-lɔɔrɛ	trucks
menika (ED)	grinding mill	t-menika	grinding mills
deebi (SGD)	knife	t-deebi	knives
digi (TD)	mirror	t-digi	mirrors
bɔɔrɔdɪba (TD)	towel	t-bɔɔrɔdɪba	towels
fitɪlaa (RD)	lamp	t-fitɪlaa	lamps

The examples 3) and 4) show how the singular and plural forms of Nawuri nouns are used in sentences.

3a. Anatu lɔŋɔ **menika** mɔ.  
Anatu PERF. fix cornmill DET.  
„Anatu fixed the cornmill“.

3b. Anatu lɔŋɔ **ɪ- menika** mɔ.  
Anatu PERF.fix PL- corn mill DET.  
„Anatu fixed the corn mills“.

4a. Okyee mɔ sɔ **digi.**  
Woman DET HAB.have mirror.  
„The woman has a mirror“.

4b. Okyee mɔ sɔ **ɪ- digi.**  
Woman DET HAB.have PL- mirror.  
„The woman has mirrors“.

The singular form of the noun *menika* „cornmill“ has been used in sentence 3a) while the plural form of the noun *ɪ- menika* „cornmills“ has been used in sentence 3b). In sentence 4a), the singular form of the noun *digi* „mirror“ has been used and its plural counterpart *ɪ- digi* „mirrors“ is used in sentence 4b).

#### 4.3.2 Noun class two

Nouns of Class Two (2) like Class One also have zero realization of singular morpheme. However, the prefix {a-} is attached when forming the plural. Noun Class Two has a limited number of nouns. Some kinship terms in Nawuri can be found in this class. Some nouns of Noun Class Two are presented in table 15.

**Table 15: Noun Class Two**

<b>Singular Nouns</b>	<b>Gloss</b>	<b>Plural Nouns</b>	<b>Gloss</b>
kpatarɛ (TD)	monkey	a-kpatarɛ	monkeys
kuuri (ED)	pig	a-kuuri	pigs
laagyipɔ (RD)	soothsayer	a-laagyipɔ	soothsayers
naana (SGD)	grandparent	a-naana	grandparents
pu-kyu (ED)	sister	a-pu-kyu	sisters
sundaarɛ (TD)	hawk	a-sundaarɛ	hawks
sunsun (RD)	ant	a-sunsun	ants
sipiyaa (ED)	father's younger brother	a-sipiyaa	father's younger brothers
talapɔ (TD)	nursing mother	a-talapɔ	nursing mothers
pokoo (ED)	calabash (type)	a-pokoo	calabashes
wurukun (ED)	first born	a-wurukun	first borns
wɔntɪn (RD)	bush pig	a-wɔntɪn	bush pigs
wɔpaa (ED)	mother's brother	a-wɔpaa	mother's brothers
pu-nyun (RD)	brother	a-pu-nyun	brothers
laasa (TD)	oyster	a-laasa	oysters
sungurun (RD)	young woman	a-sungurun	young women
wuya (RD)	owner	a-wuya	owners
belen-buni (ED)	carcass	a-belen-buni	carcasses
lɔŋɔ (TD)	rabbit	a-lɔŋɔ	rabbits

The use of singular and plural forms of nouns of Noun Class Two in Nawuri has been demonstrated in the examples 5 and 6.

5a. **Talapɔ** mɛɛ nuu nta.

Nursing mother NEG. HAB.drink alcohol.

„A nursing mother does not drink alcohol“.

5b. **A-talapɔ** mɛɛ nuu nta.

PL-nursing mother NEG. HAB.drink alcohol.

„Nursing mothers do not drink alcohol“.

6a. Kofi fɛ            *lɔŋɔ*.

Kofi HAB.sell rabbit.

„Kofi sells a rabbit“.

6b. Kofi fɛ            a-    *lɔŋɔ*.

Kofi HAB.sell PL.    rabbit.

„Kofi sells rabbits“.

We observe that in sentences 5a) and 6a), the singular form of the nouns *talapv* „nursing mother“ and *lɔŋɔ* „rabbit“ have been used while their plural counterparts *a-talapv* „nursing mothers“ and *a-lɔŋɔ* „rabbits“ occur in sentences 5b) and 6b).

#### 4.3.3 Noun class three

Noun Class Three (3) has the singular prefixes *{ka-}* or *{ke-}* and the plural prefix *{n-}*. A noun may take the singular prefix *{ka-}* or *{ke-}* based on the advanced tongue root [ATR] vowel harmony principle. That is depending on the [ATR] specification of the stem's syllables, the noun may take either *{ka-}* or *{ke-}* as a singular prefix. When the stem has [-ATR] syllables, the singular prefix *{ka-}* is selected. *{ke-}* is however selected, when the stem noun has [+ATR] syllables. The plural prefix is a syllabic nasal homorganic with the initial consonant of the noun root or stem. This means that, there is a homorganic nasal assimilation, a process where a nasal prefix adopts the place of articulation of the stem-initial consonant and the stem-initial consonant becomes a nasal after a nasal prefix. Some of the nouns in this class are in table 16.

**Table 16: Noun Class Three**

<b>Singular Nouns</b>	<b>Gloss</b>	<b>Plural Nouns</b>	<b>Gloss</b>
ka-bunɔ (SGD)	gate	m-bunɔ	gates
ka-bɔlmaa (TD)	back of head	m-bɔlmaa	back of heads
ka-bwaaraabi (RD)	twin	m-bwaaraabi	twins
ka-mpatɛɛ (RD)	inheritance	m-mpatɛɛ	inheritance
ka-pini (ED)	ring	m-pini	rings
ka-wɛ (ED)	calabash	n-wɛ	calabashes
ka-tv (SGD)	spoon	n-tv	spoons
ka-dɛbi (RD)	native	n-dɛbi	natives
ka-kɛ (RD)	day	n-kɛ	days
ka-kyaa (ED)	dance	n-kyaa	dances
ke-bii (RD)	child	m-bii	children
ke-bula (TD)	tail of animal	m-bula	tails of animals
ke-pulii (SGD)	cooking pot	m-pulii	cooking pots
ke-putuu (SGD)	pillow	m-putuu	pillows
ke-su (RD)	year	n-su	years
ke-gyibi (TD)	bead	n-gyibi	beads
ke-gya (SGD)	firewood	n-gya	fire woods
ke-kyookun (ED)	drumstick	n-kyookun	drumsticks
ke-leebe (ED)	flute	n-leebe	flutes

Sentences 7 and 8 provide the context within which singular and plural nouns are used in Nawuri.

7a. ɔ sv **ke- bii.**

He/she has SL- child.

„He/she has a child“.

7b. ɔ sv **m- bii.**

He/she has PL- child.

„He/she has children“.

8a. Ntsu bv **ka- wɛ** mv tv.

Water PRT SM. calabash DET PRT.

„Water is in the calabash“.

8b. Ntsu bv **n-** wε mv tɔ.

Water PRT PL- calabash DET PRT.

„Water is in the calabashes“.

In sentence 7a), the singular form of the noun *ke-bii* „child“ has been used while the plural form of the noun *m-bii* „children“ has been used in sentence 7b). In sentence 7b), the plural prefix *{n-}* has adopted the place of articulation of the initial consonant of the stem *bii* to become the nasal prefix *{m-}*. The singular noun *ka-wε* „calabash“ has occurred in sentence 8a) and the plural form of the noun *n-wε* „calabashes“ is exemplified in sentence 8b).

#### 4.3.4 Noun class four

Noun Class Four (4) has either *{ki-}* or *{kɪ-}* as its singular prefix. This is as a result of vowel harmony variants. When the syllables of the noun stem is [+ATR], the singular prefix *{ki-}* is selected. However, the singular prefix *{kɪ-}* is chosen when the noun stem is [-ATR]. This class is the most productive and constitutes most of the regular and common nouns in Nawuri, such that a learner would easily over-generalize the processes to the other classes. Noun Class Four (4) contains most of the nouns that refer to body parts and diseases. When forming plural of this class, the singular prefix is deleted and the prefix *{a-}* is attached. Some examples of nouns in this class are in table 17.

**Table 17: Noun Class Four**

<b>Singular Nouns</b>	<b>Gloss</b>	<b>Plural nouns</b>	<b>Gloss</b>
ki-besi (SGD)	egg	a-besi	eggs
ki-bi (RD)	seed	a-bi	seeds
ki-buu (SGD)	stone	a-buu	stones
ki-gbin (TD)	cheek	a-gbin	cheeks
ki-gbenbii (ED)	road	a-gbenbii	roads
ki-kubita (TD)	shoe	a-kubita	shoes
ki-puluu (TD)	navel	a-puluu	navels
ki-punibi (TD)	small intestine	a-punibi	small intestines
ki-seekpire (RD)	a type of skin disease	a-seekpire	type of skin disease
ki-sinsinpara (TD)	type of disease	a-sinsinpara	type of disease
ki-baa (SGD)	hand	a-baa	hands
ki-bu (ED)	hill	a-bu	hills
ki-fɛ (ED)	medicine	a-fɛ	medicines
ki-gbikyɛɛ (TD)	liver	a-gbikyɛɛ	livers
ki-nyapɔ (TD)	breast	a-nyapɔ	breast
ki-mɛɛ (ED)	duck	a-mɛɛ	ducks
ki-lanfɔ (TD)	hip joint	a-lanfɔ	hip joints
ki-taa (SGD)	cloth	a-taa	cloths
ki-tɔwɪss (RD)	speech	a-tɔwɪss	speeches
ki-tu (RD)	name	a-tu	names

Consider how the singular and the plural nouns of Noun Class Four occur in the sentences below.

- 9a. N      sɔɔ      **ki- kubita** sa mi nyi.  
 I      PERF.buy SG. Shoe for my mother.  
 „I bought a shoe for my mother“.
- 9b. N      sɔɔ      **a- kubita** sa mi nyi.  
 I      PERF.buy SG Shoe for my mother.  
 „I bought shoes for my mother“.

- 10a. **Kɪ-** **mɛɛ** mɛɛ taalt dii oyu.  
SG- duck NEG can HAB climb tree.  
„A duck cannot climb a tree“.

- 10b. **A-** **mɛɛ** mɛɛ taalt dii oyu.  
SG- duck NEG can HAB climb tree.  
„Ducks cannot climb a tree“.

In sentence 9a), the singular form of the noun *ki-kubita* „shoe“ has been used while the plural form of the noun, *a-kubita* „shoes“ has been used in sentence 9b). The singular noun *ki-mɛɛ* „duck“ has been used in sentence 10a) and the plural form of the noun *a-mɛɛ* „ducks“ has been used in sentence 10b).

#### 4.3.5 Noun class five

Noun Class Five (5) takes {*ku-*} as a singular prefix. The singular prefix always agrees with the noun stem in terms of roundness. Cassali (1988) states that Nawuri has a nine-vowel system with cross-height ATR vowel harmony. Vowels in Nawuri fall into two phonetically distinctive classes; that is, a vowel is either produced with an advanced tongue root [+ATR]; /i, e, o, u, a/ or with a retracted tongue root [-ATR]; /ɪ, ɛ, ɔ, ʊ/. Following the distinction, all stem vowels are required to be of a common ATR feature specification (Cassali, 1988). The Vowel Harmony Principle does not apply to the singular prefix and the noun stems of this class. Although the vowel of the singular prefix {*ku-*}, is [+ATR], it has been attached to noun stems that have [-ATR] syllables like *kyvɔn* „type of a tree“ and *gyomalemale* „sweet potatoes“. The singular prefix {*ku-*} is deleted and {*i-*} is attached to the root word as a prefix to form the plural. The number of nouns found in this class is very limited. This is because from the data collected, nouns in this category were the least. Most of the nouns in



this class are related to things that can be found in the farm although there are some exceptions. Some of the nouns in this class are presented in table 18.

**Table 18: Noun Class Five**

Singular Nouns	Gloss	Plural Nouns	Gloss
ku-gyo (SGD)	yam	ɪ-gyo	yams
ku-gyogyi (ED)	yam festival	ɪ-gyogyi	yam festivals
ku-gyomalemale (RD)	sweet potato	ɪ-gyomalemale	sweet potatoes
ku-konti (ED)	axe	ɪ-konti	axes
ku-kooroo (TD)	gizzard	ɪ-kooroo	gizzards
ku-kyokokun (ED)	hoe stick	ɪ-kyokokun	hoe sticks
ku-kyoopun (TD)	calf of leg	ɪ-kyoopun	calves of legs
ku-gyokuli (ED)	mound	ɪ-gyokuli	mound
ku-gyobuu (ED)	yam store	ɪ-gyobuu	yam stores
ku-gyogyi (ED)	yam festival	ɪ-gyogyi	yam festivals
ku-nun (SGD)	meat	ɪ-nun	meats
ku-kyɔn (TD)	tree (type)	ɪ-kyɔn	trees (type)

The use of singular and plural forms of Noun Class 5 of Nawuri in sentences has been demonstrated in the examples below:

11a. Anewaba sɔɔ *ku- gyo.*

Anewaba PERF.buy SG- yam.

„Anewaba bought a tuber of yam“.

11b. Anewaba sɔɔ *i- gyo.*

Anewaba PERF.buy PL- yam.

„Anewaba bought tubers of yams“.

12a. Kyeekyee tn kebii mv *ku- kyoopun.*

Bicycle PERF.cut child DET SM- calf.

„The bicycle cut the child’s calf“.

12b. Kyeekyee tun kebii mv *ɪ-* ***kyoopun***.

Bicycle PERF.cut child DET PL- calf.

„The bicycle cut the child’s calves“.

The singular nouns *ku-gyo* „yam“ and *ku-kyoopun* „calf“ have occurred in sentences 11a) and 12a). However, we see their plural forms *ɪ-gyo* „yams“ and *ɪ-kyoopun* „calves“ in sentences 11b) and 12b).

#### 4.3.6 Noun class six

Noun Class Six (6) attaches the prefix *{ku-}* or *{kv-}* to a noun stem in marking the singular. The vowel following /k/ is determined by the advanced tongue root [ATR] vowel harmony principle. That is depending on the [ATR] specification of the stem’s first syllables, the noun may take either the singular prefix *{ku-}* or *{kv-}*. If the first vowel of the noun stem is [+ATR], the singular prefix *{ku-}* is selected. *{kv-}* is used if the first vowel of the noun stem is [-ATR]. The singular nouns *kv-ntɛ* „elephant“ and *ku-dundun* „charcoal“ belong to Noun Class Six. However, the two nouns take different singular prefixes. The noun stem *ntɛ* „elephant“, takes the singular prefix *{kv-}* while the noun stem *ku-dundun* „charcoal“ selects the singular prefix *{ku-}*. The [ATR] vowel harmony principle best explains the difference in the singular prefixes. The stem vowels of the noun *dundun* „charcoal“ are /u-u/ which are [+ATR]. Therefore, it selects the singular prefix *{ku-}* which is [+ATR]. The noun stem *ntɛ* „elephant“ however, takes the singular prefix *{kv-}* because the stem vowel of the noun stem *ntɛ* „elephant“ is /ɛ/ which is also [-ATR]. Nouns in this class delete the singular prefix *{ku-}* or *{kv-}* and attach the plural prefix *{a-}* to the noun stem to form its plural. Some nouns of Noun Class Six have been represented in table 19.

**Table 19: Noun Class Six**

<b>Singular Nouns</b>	<b>Gloss</b>	<b>Plural Nouns</b>	<b>Gloss</b>
ku-dundun (RD)	charcoal	a-dundun	charcoals
ku-kotii (SGD)	toe/finger nail	a-kotii	toe/finger nails
ku-mu (RD)	head	a-mu	heads
ku-sun (ED)	work	a-sun	works
ku-wuya (RD)	bone	a-wuya	bones
ku-kutuu (RD)	orange	a-kutuu	oranges
ku-yu (ED)	guinea corn	a-yu	guinea corn
ku-kurunbi (TD)	heart	a-kurunbi	hearts
ku-woriwori (TD)	throat	a-woriwori	throats
ku-kyulee (ED)	mushroom	a-kyulee	mushrooms
kv-dɔnpɔɔ (RD)	shea butter	a-dɔnpɔɔ	shea butter
kv-kɔ (TD)	debt	a-kɔ	debt
kv-lɔpane (TD)	scar	a-lɔpane	scars
kv-ntɛ (ED)	elephant	a-ntɛ	elephants
kv-sv (SGD)	ear	a-sv	ears
kv-tɔ (SGD)	thing	a-tɔ	things
kv-tɔbwaaya (RD)	livestock	a-tɔbwaaya	livestock
kv-dvntɔ (TD)	weapon	a-dvntɔ	weapons
kv-pv (ED)	forest	a-pv	forests
kv-yɔyɔɔ (RD)	type of leaf	a-yɔyɔɔ	type of leaf

The examples 13 and 14 below show how some singular and plural nouns of Noun Class Six of Nawuri, occur in sentences.

13a. Aku taa **ku- wuya** mɔ sa gyonɔ mɔ.

Aku PERF.give SL- bone DET to dog DET.

„Aku gave the bone to the dog“.

13b. Aku taa **a- wuya** mɔ sa gyonɔ mɔ.

Aku PERF.give PL- bone DET to dog DET.

„Aku gave the bones to the dog.“

14a. **Kv- ntɛ** mɔ bu apv tɔ.

SG- elephant DET PRT forest PRT.

„The elephant is in the forest“.

14b. *A- ntε* mʋ bʋ apʋ tɔ.

PL- elephant DET PRT forest PRT.

„The elephants are in the forest“.

The singular form of the noun *ku-wuya* „bone“ occurs in sentence 13a) while the plural form of the noun *a-wuya* „bones“ occur in sentence 13b). In sentence 14a), the singular form of the noun *Kv-ntε* „elephant“ has been used. In sentence 14b) however, the plural form of the noun *a-ntε* „elephants“ has been used.

#### 4.3.7 Noun class seven

Nouns of Noun Class Seven (7) attach the prefix {*o-*} to the root word to express a singular number. It forms the plural by deleting the singular prefix {*o-*} and attaching the plural prefix {*a-*} to the noun root. A few kinship terms can be found in this class. Most nouns in this class are used to refer to humans that have negative connotations or have some form of stigma attached to it. However, there are some exceptions. Some members of this class are represented in table 20.

**Table 20: Noun Class Seven**

<b>Singular Nouns</b>	<b>Gloss</b>	<b>Plural Nouns</b>	<b>Gloss</b>
o-bi (SGD)	child	a-bi	children
o-buni (ED)	corpse	a-buni	corpses
o-diila (ED)	ladder	a-diila	ladders
o-gbentipɔ (RD)	barren woman	a-gbentipɔ	barren women
o-kisipɔ (ED)	enemy	a-kisipɔ	enemies
o-kulapɔ (RD)	widow/widower	a-kulapɔ	widows/widowers
o-kuyuri-bi (TD)	bastard	a-kuyuri-bi	bastards
o-kyenyu (ED)	rafter	a-kyenyu	rafters
o-lewupɔ (RD)	dead person	a-lewupɔ	dead persons
o-melensipɔ (ED)	stupid person	a-melensipɔ	stupid persons
o-nyii (SGD)	mother	a-nyii	mothers
o-seepɔ (RD)	fetish priest	a-seepɔ	fetish priests
o-supu (RD)	younger sibling of the same sex	a-supu	younger siblings of the same sex
o-tiripɔ (TD)	pauper	a-tiripɔ	paupers
o-wura (ED)	owner/chief	a-wura	owners/chiefs
o-yu (RD)	thief	a-yu	thieves
o-boobi (TD)	cripple	a-boobi	cripples
o-bootipɔ (TD)	leper	a-bootipɔ	lepers
o-hayipɔ (RD)	tenant	a-hayipɔ	tenants
o-busaafoɔ (TD)	villain	a-busaafoɔ	villains

The use of singular and plural forms of nouns of Class 7 in Nawuri has been demonstrated in the examples below:

15a. Ba      pula      *o- buni*      mv.

They      PERF.burly      SG- corpse      DET.

„They buried the corpse“.

15b. Ba      pula      *a- buni*      mv.

They      PERF.burly      SG- corpse      DET.

„They buried the corpses“.

- 16a. **O-** *hayipv* mɔ ka mɔ afulé.  
SG- tenant DET PERF.pay his money.  
„The tenant paid his money“.
- 16b. **A-** *hayipv* mɔ ka bamɔ afulé.  
PL- tenant DET PERF.pay their money.  
„The tenants paid their money“.

Sentence 15a) demonstrates how the singular noun *o-buni* „corpse“ is used in a sentence and sentence 15b) also demonstrates how the plural noun *a-buni* „corpses“ is used in a sentence. Sentence 16a) shows how the singular noun *o-hayipv* „tenant“ is used in a sentence while sentence 16b) shows how the plural noun *a-hayipv* is used in a sentence.

#### 4.3.8 Noun class eight

Nouns in Class Eight (8) mark a singular number with the prefixation of {*o-*} to the root of the noun. The plural form is however, achieved when the {*o-*} of the singular root is deleted and the prefix {*i-*} is attached to the root noun to express a plural number. It is the class with the second least members and the only class without nouns representing persons. Some nouns of this class are represented in table 21.

**Table 21: Noun Class Eight**

Singular Nouns	Gloss	Plural Nouns	Gloss
o-bu (ED)	room	i-bu	rooms
o-duu (TD)	penis	i-duu	penises
o-gee (TD)	valley	i-gee	valleys
o-gyikun (RD)	mudfish	i-gyikun	mudfishes
o-kyigya (RD)	hot water	i-kyigya	hot waters
o-kyi-nyin (RD)	cool water	i-kyi-nyin	cool waters
o-lin (SGD)	root	i-lin	roots
o-nyin (RD)	shade	i-nyin	shades
o-wii (ED)	thorn	i-wii	thorns
o-yu (SGD)	stick	i-yu	sticks
o-dee (SGD)	dream	i-dee	dreams
o-menbi (TD)	pill	i-menbi	pills
o-nyini (SGD)	hair	i-nyini	hairs

Some Nouns of Class Eight have been used to show how singular and plural nouns in Nawuri are used in sentences below:

17a. **O- gyikun** bu nkyu mu to.

SG- mudfish PRT water DET PRT .

„A mudfish is in the water“.

17b. **I- gyikun** bu nkyu mu to.

PL- mudfish PRT water DET PRT.

„Mudfishes are in the water“.

18a. Kebii mu fɔɛ **o- bu** mu to.

Child DET PERF.sweep SG- room DET PRT.

„The child swept the room“.

18b. Kebii mu fɔɛ **i- bu** mu to.

Child DET PERF.sweep PL- room DET PRT.

„The child swept the rooms“.

How the singular noun *o-gyikin* „mudfish“ is used in a sentence is shown in sentence 17a). The use of *i-gyikin* „mudfishes“ is demonstrated in sentence 17b). In sentence 18a) and 18b) the singular noun *o-bu* „room“ and the plural noun *i-bu* „rooms“ have been used.

#### 4.3.9 Noun class nine

Noun Class Nine (9) has {ɔ-} as the singular prefix. However, the plural of nouns in this class are formed by deleting the singular prefix {ɔ-} and inserting the prefix {i-} or {ɪ-} depending on the [ATR] specification of their host’s first syllables. This means that, if the first vowel of the stem or root of the noun is [+ATR], the plural prefix is {i-} and if the first vowel of the stem or root of the noun is [-ATR], the plural prefix {ɪ-} is selected. This class does not contain any kingship term. Some nouns of this class have been represented in table 22

**Table 22: Noun Class Nine**

<b>Singular Nouns</b>	<b>Gloss</b>	<b>Plural Nouns</b>	<b>Gloss</b>
ɔ-bɔ (SGD)	hole	ɪ-bɔ	holes
ɔ-bʊɛ (SGD)	neck	ɪ-bʊɛ	necks
ɔ-bwaayɛ (RD)	month	ɪ-bwaayɛ	months
ɔ-dʊʋ (ED)	trap	ɪ-dʊʋ	traps
ɔ-fɛ (SGD)	broom	ɪ-fɛ	brooms
ɔ-fɔɛ (RD)	crop bed	ɪ-fɔɛ	crop beds
ɔ-fwu (RD)	pestle	ɪ-fwu	pestles
ɔ-kɪn (SGD)	fish	ɪ-kɪn	fishes
ɔ-kʊɪ (TD)	boat	ɪ-kʊɪ	boats
ɔ-kyɛɛ (RD)	sponge	ɪ-kyɛɛ	sponges
ɔ-lʊn (RD)	song	ɪ-lʊn	songs
ɔ-pʊnʊ (RD)	door	ɪ-pʊnʊ	doors
ɔ-dakpa (TD)	fetish	i-dakpa	fetishes
ɔ-dankpa (TD)	harbor	i-dankpa	harbors
ɔ-gyan (ED)	thigh	i-gyan	thighs
ɔ-kpa (RD)	path	i-kpa	paths
ɔ-lanba (RD)	noise	i-lanba	noises
ɔ-nyan (TD)	arrow	i-nyan	arrows
ɔ-saakuri (TD)	animal (type)	i-saakuri	animal (type)



Sentences 19 and 20 provide situations where the plural and singular forms of Noun Class Nine (9) are used in sentences.

19a. Mi nyii kpé kegya *ɔ- bwaayɛ* kɔmaa.  
My mother HAB.go market SG- month every.  
„My mother goes to the market every month“.

19b. Mi nyii kpé kegya *i- bwaayɛ* anyɔ kɔmaa.  
My mother HAB.go market PL- month two every.  
„My mother goes to the market every two months“.

20a. Adwoa sɔɔ *ɔ- fɛ*.  
Adwoa PERF.buy SG- broom.  
„Adwoa bought a broom“

20b. Adwoa sɔɔ *i- fɛ*.  
Adwoa PERF.buy PL- broom.  
„Adwoa bought brooms“.

We observe that *ɔ-bwaayɛ* „month“ in sentence 19a) has its plural as *i-bwaayɛ* „months“ occurring in sentence 19b) while *ɔ-fɛ* „broom“ in sentence 20a) has its plural form *i-fɛ* „brooms“ occurring in sentence 20b).

#### 4.3.10 Noun class ten

Noun Class ten (10) also has the singular prefix {*ɔ-*} as in Noun Class nine (9). However, the prefix {*a-*} is attached to form plural nouns after the singular prefix {*ɔ-*} has been deleted. This class contains most of the nouns that are used to refer to persons, a situation Bodomo and Marfo (2006) refer to as human-oriented. Most

derived nouns are also found in this class. Most of the derived nouns were found to have been derived from verbs. Consider some nouns of this class in table 23.

**Table 23: Noun Class Ten**

Singular Nouns	Gloss	Plural Nouns	Gloss
ɔ-baawɔɛ (RD)	girl/boyfriend	a-baawɔɛ	girl/boyfriends
ɔ-bɪlɪsɑ (SGD)	elderly person	a-bɪlɪsɑ	elderly persons
ɔ-dɑɑ (RD)	older sibling of the same sex	a-dɑɑ	older siblings of the same sex
ɔ-dɔɔpɔ (ED)	farmer	a-dɔɔpɔ	farmers
ɔ-fɔ (SGD)	stranger	a-fɔ	strangers
ɔ-kaapɔpɔ (TD)	teacher	a-kaapɔpɔ	teachers
ɔ-kɑɑ (RD)	soul	a-kɑɑ	souls
ɔ-kɑɑn (ED)	crocodile	a-kɑɑn	crocodiles
ɔ-kɪtɑ-kpɑ (RD)	handle	a-kɪtɑ-kpɑ	handles
ɔ-kpɑnɔ (ED)	hunter	a-kpɑnɔ	hunters
ɔ-kpɛ (SGD)	witch	a-kpɛ	witches
ɔ-lɔnɔpɔ (TD)	strong person	a-lɔnɔpɔ	strong persons
ɔ-lɔɔpɔ (ED)	weaver	a-lɔɔpɔ	weavers
ɔ-mɔɔɔgɪpɔ (TD)	saviour	a-mɔɔɔgɪpɔ	saviours
ɔ-naɑnɑ-bɪ (ED)	grandchild	a-naɑnɑ-bɪ	grandchildren
ɔ-nɪn (SGD)	man	a-nɪn	man
ɔ-sɑ (SGD)	person	a-sɑ	persons
ɔ-sɑɑ (RD)	in-law	a-sɑɑ	in-laws
ɔ-sɑɛpɔ (ED)	carver	a-sɑɛpɔ	carvers
ɔ-sɔlɑpɔ (ED)	carrier	a-sɔlɑpɔ	carriers

In the examples below, the singular and plural forms of nouns in class ten (10) occur in sentences 21 and 22.

- 21a. Obusaafoɔ mɔ sɔ ɔ- *baawɔɛ*.  
 Villain DET HAB.have SG- girlfriend.  
 „The villain has a girlfriend“.

21b. Obusaafɔɔ mɔ sv a- baawvɛ.

Villain DET HAB.have PL- girlfriend.

„The villain has girlfriends“.

22a. ɔ- sa bɔ obu mɔ tɔ.

SG- person PRT room DET PRT.

„A person is in the room“.

22b. A- sa bɔ obu mɔ tɔ.

PL- person PRT room DET PRT.

„People are in the room“.

The use of the singular noun *ɔ-baawvɛ* „girlfriend“ in a sentence has been demonstrated in sentence 21a) while the use of the plural noun *a-baawvɛ* „girlfriends“ in a sentence has been demonstrated in sentence 21b). The singular noun *ɔ-sa* „person“ has been used in sentence 22a) and the plural noun *a-sa* „people“ has been used in sentence 22b).

#### 4.3.11 Noun class eleven

Nouns in Class Eleven are a collection of mass nouns. Nouns in this group do not have plural forms. Aikhenvald (2000) posits that mass nouns as a result of their meaning do not have a number differentiation. They also appear to be “anumeral” as described by Sherwood (1982) or collective and only occur in one form which is neither singular nor plural. Bodomo and Marfo (2006) refer to them as a „single-sided“ class because they occur in only one form. In some cases, this may simply be due to gaps in the data; some, however, are semantically or clearly collective. In this class both + liquid nouns and + non individuated nouns have been put together. This is

because there is no clear distinction between the prefix these nouns take. For example the noun *nkyu* “water” which is a parable noun takes the nasal prefix {n-} and the noun *nkpa* “life” which is a + non individuated noun also takes the nasal prefix {n-}. This makes the semantic class of the Nawuri noun class defunct. Some nouns of this class are in table 2

**Table 24: Noun Class Eleven**

Nouns	Gloss
n-kyu (SGD)	water
n-daara (RD)	ashes
n-kalan (TD)	blood
n-kpa (RD)	life
t-seyt (RD)	sand
n-ta (SGD)	drink
n-kyɔɫ (TD)	saliva
n-bata (ED)	palm wine
t-lawv (RD)	noise
a-nsi-kyu (ED)	tears
ku-duduu (TD)	sweat
t-pv (SGD)	soup
a-fuu (RD)	wind
i-neisi (RD)	dirt

Some collective nouns have been used in the sentences below :

23. ke- bii mv gyi *agyito* mv.

SG- child DET PERF.eat food DET.

„The child ate the food“.

24. ○ nuu *nbata*.

He/She HAB.drink palm wine.

„He/she drinks palm wine“.

25. Dzonɔ mv twaa *lawv*.

Dog DET PROG. make noise.

„The dog is making noise“.

26. Me nyi dɔɲa *ipv* mv.

My mother PERF.cook soup DET.

„My mother cooked the soup“.

In sentences 23, 24, 25 and 26 above the collective nouns; *agyitɔ* „food“, *nbata* „palm wine“, *lawv* „noise and *ipv* „soup“ have been used respectively.

#### 4.3.12 Noun class twelve

This is the only class that takes an affix. Nouns in this class have a zero singular prefix and take the plural suffix  $\{-ana\}$ . The affix  $\{-ana\}$  is attached to the noun stem as a suffix to form a plural noun. Members of this class are kinship terms. Although most of them can also be found in other groups, one uses this plural form when one wants to show intensity. Vowel harmony fails to hold between the stem and the suffix. This is because, Dolphyne (1988) cited in Bodomo and Marfo (2006) indicates that, vowel harmony is not a progressive rule and this explains why the [ATR] specification is blocked from spreading into the suffix. Some nouns of this class have been represented in table 25.

**Table 25: Noun Class Twelve**

<b>Singular Nouns</b>	<b>Gloss</b>	<b>Plural Nouns</b>	<b>Gloss</b>
supu (ED)	younger sibling	supu-ana	younger sibling
kyɛmunɛ (RD)	friend	kyɛmunɛ-ana	friends
bi (RD)	child	bi-ana	children
naana (ED)	grandparent	naana-ana	grandparents
tɔmaa (RD)	neighbour	tɔmaa-ana	neighbours
bɔɪsa (ED)	elderly person	bɔɪsa-ana	elderly persons
ndɔɔ (SGD)	farm	ndɔɔ-ana	farms
kɔvɔɔ (TD)	relative	kɔvɔɔ-ana	relatives
atɔwiya (RD)	wealthy person	atɔwiya-ana	wealthy persons
dɔn (TD)	strong person	dɔn-ana	strong persons
kuli (SGD)	husband	kuli-ana	husbands
kɛ (SGD)	wife	kɛ-ana	wives
daa (RD)	elderly person	daa-ana	elderly persons
wɔpaa (RD)	uncle	wɔpaa-ana	uncles
pu-kyu (ED)	sister	pu-kyu-ana	sisters
pu-nyun (ED)	brother	pu-nyun-ana	brothers
saa (ED)	in-law	saa-ana	in-laws

Examples 27 and 28 show contexts within which singular and plural nouns of class 12 are used in sentences.

27a. Mɪ *kɔvɔɔ* bɪ kade tɔ.

My relative PRT town PRT.

„My relative is in town“.

27b. Mɪ *kɔvɔɔ -ana* bɪ kade tɔ.

My relative -PL PRT town PRT.

„My relatives are in town“.

28a. Owura mɪ sɪ *kɛ*.

Chief DET HAB.have wife.

„The chief has a wife“.

28b. Owura    mv    sv            *kε -ana*.

Chief    DET    HAB.have    wife -PL.

„The chief has wives“.

In sentence 27a), the use of the singular noun *kvpɔ* „relative“ in a sentence has been demonstrated while the use of the plural noun *kvpɔ-ana* „relatives“ in a sentence has been demonstrated in sentence 27b). The singular noun *kε* „wife“ has been used in sentence 28a) and the plural form of the noun *kε-ana* „wives“ has been used in sentence 28b).

#### 4.4 Summary

This chapter discussed the Noun Class System in Nawuri. I provided a description of the Noun Class System in Nawuri concentrating on the various mechanisms for Nawuri nominal classifications. I also investigated the motivating factor(s) for noun classification in Nawuri, and established the strategies employed in classifying nouns in Nawuri

## CHAPTER FIVE

### SUMMARY, CONCLUSION, AND RECOMMENDATIONS

#### 5.0 Introduction

This thesis described the Noun class system of Nawuri from a purely descriptive point of view. This final chapter presents the summary of the thesis, findings and recommendations for future research. Section 5.1 provides an overview of the thesis while 5.2 gives a summary of the main findings of the study. Section 5.3 presents the conclusions while 5.4 give some recommendations for future research.

#### 5.1 Summary of the Study

The thesis sets out to investigate the Noun class system of Nawuri, a Kwa language of the Volta-Comoe (Guang) sub-group, closely related to Chumburung. The research questions that underpinned this study were to investigate some of the criterion for the classification of Nawuri Noun class system; identify and describe the motivating factor(s) for noun class classification in Nawuri. These questions have been addressed in the discussions in chapter four (4). In the following paragraphs, I summarise the main discussions in relation to these questions.

The first chapter provided a background to the study, discussed the statement of the problem that the study sought to investigate, the research questions, research objectives, purpose of the study and the significance of the study. It establishes that Nawuri is a Guan language. “The Guan language is a closely related group of languages, spoken largely in Ghana, Cote D’Ivoire, Togo and Benin” (Sherwood 1982:1).

Chapter 2 explored and reviewed some relevant related literature on concept of nouns with reference to works carried out by Maurer (2000) and Wren & Martin (1990)



because an understanding of what nouns are, is a sine qua non in explaining their morphological modifications. The chapter also contextualized the review by examining the classes of nouns and issue of gender as a grammatical category of nouns (Aikhenvald, 2000; Bodomo & Marfo, 2006; Creissels, 1994, 1999; Grinevald, 2000; Sobkowiak, 2010). The chapter further provided a cross-linguistic study of noun classes and their classifiers as posited by Craig, (1992), Oi-man (2006) and Senft (2000). Senft (2000:24) for instance, argues that in the classification of nouns, the semantic criteria usually enables a more firm structural classification to result in linguistic features and semantic relations such as: [+/- Human]; Human and Social Status; Human and Kinship relations; [+/- Animate]; Sex; Shape or Dimension; Size; Consistency; Function; Arrangement; Habitat; Number or Amount or Mass or Group; Measure; Weight; Time; Action; [+/- Visible].

Chapter 3 discussed the methodology used in data collection for the study. Section 3.1 presented the setting for the fieldwork and examined the socio-linguistic background of Kpandai where the study was conducted. 3.2 explored the sources of the data used for the study comprising of natural data (recordings of storytelling and radio discussions in Nawuri), textual data, elicited data and self-generated data using native speaker's intuition. A profile description of the language consultants who assisted in the transcription of the data was also given in 3.4.

In Chapter 4, I examined the overview of Nawuri Nouns with specific emphasis on nouns relating to places, animals, concepts, people and objects. The various criteria that were considered in setting up of Nawuri noun classes were also examined. The chapter also described Nawuri nominal morphology that demonstrates that the formation of singular and plural of Nawuri nouns, often requires the presence of

prefixes and not suffixes; a situation which is similar to what has been observed in genetically related Niger-Congo languages like Bakweri (Bate, 1987), Siswati (O'Grady et al. 1993), Akan (Bodomo & Marfo, 2006) and Selee (Agbetsoamedo, 2014).

## 5.2 Findings

This study investigated noun classes in Nawuri, a lesser-researched Guang language spoken mainly within the Northern region of Ghana, just north of the confluence of Daka and Oti Rivers (Sherwood 1982). The purpose of the study was to provide a systematic description of the classification of Nawuri Noun Class Systems. It was discovered that in Nawuri, nouns are words that name persons, places, things and concepts. Some Nawuri nouns indicating persons, places, concepts, animals and objects are as follows: *ka-bwe* „goat“, *kyaase* „fowl“, *kukyusonbi* „housefly“, *ɔ-dekpa* „sleeping place“, *ndɔɔ* „farm“, *duwasie* „toilet“, *asɔre* „church“, *ki-melensi* „foolishness“, *odee* „dream“, *kelewu* „death“, *kɪnaa* „war“, *soomu* „bucket“, *broni-ansi* „spectacles“, *bɔɔbi* „brassier“, *wɔkyɪman* „watchman“, *daadimaadi* „human being“, *ibwaare* „God“ and *nyimisa* „person“.

Some proper nouns of Nawuri include: *Atorsah* „a personal name“, *Ibwaare* „God“, *Kpandai* „a place name“, *Fiida* „Friday“, *Burukun* „name of a god“, *Kaake* „a ritual dance“ and *Bwaarabi* „twins festival“. Some examples of common nouns in Nawuri include: *kasagatɛɛ* „a comb“, *kɪlan* „a pot“, *kɪnanse* „a snake“, *kagya* „firewood“, *kɪfatɛɛ* „leaf“ and *ɔkyusa* „female“. Some examples of countable nouns in Nawuri are *naate* „a cow“, *kɪyɛɛ* „a mouse“, *kɪgyakpaa* „a horn“, *danta* „canon“, *bɔɔta* „a sack“, *kɪbilaafɛ* „a palm branch“ and *kabɔɔ* „a messenger“. Some uncountable nouns of Nawuri include: *sikyiri* „sugar“, *sɪnkaafa* „rice“, *kenyapvntsu* „milk“, *apurutiti* „dust“, *nɔfɔlɛ* „salt“ and

*masan* ‚honey‘. The following are examples of abstract nouns in Nawuri; *tono* ‚profit‘, *aluguusi* ‚evil‘, *nsure* sleep, *awaasa* ‚deed, *kakpe* ‚witchcraft‘, *kabwu* ‚convulsion‘ and *gyerebi* ‚misfortune‘.

Nouns in Nawuri can function as subjects, objects, complements or appositives in a sentence. Nouns of Nawuri can also be used as descriptive adjectives.

The data also indicate that Nawuri nouns can be derived from other word classes such as verbs, adjectives and in some cases, other nouns. A derived noun stem in the language is formed by the addition of one or more derivative affixes to a noun root, a verb root or an adjective root.

The study further investigated the nominal morphology of Nawuri nouns and the findings indicate that the most appropriate criterion that can be used to set up Nawuri noun classes is number. Nouns with common singular affixes that are put in the same group may not necessarily occur together in another group when their plural formation is considered. Also, one can put nouns into classes based on the similarity of both the singular and plural affixes. The study revealed that Nawuri has twelve noun classes with eight (8) singular prefixes, ten (10) plural prefixes and one (1) plural suffix. The Nawuri noun class affixes do not carry meaning when in isolation with the exception of the plural suffix *{-ana}*.

The Noun Class System of Nawuri is based mainly on an interface between the morphological and phonological components of the grammar - one may note that the basic assumption here is mainly morpho-phonological (cf. Aikhenvald, 2003; Sobkowiak, 2010). Noun Class One (1) contains a majority of the loanwords in Nawuri. Nouns of Class Two (2) like Class One (1) also have no singular prefix or

have zero realization of singular morpheme. Noun Class Three (3) attaches the singular prefixes *{ka-}* or *{ke-}* and the plural prefix *{n-}*. Noun Class Four (4) uses either the *{ki-}* or *{ki}* as its singular prefix. Noun Class Five (5) takes *{ku-}* as a singular prefix.

The data showed that, Noun Class Six (6) selects the prefix *{ku-}* or *{kv-}* in marking the singular. Nouns of Noun Class Seven (7) attach the prefix *{o-}* to the root word to express a singular number. Nouns in Class Eight (8) mark a singular number with the prefixation of *{o-}* to the root of the noun. Noun Class Nine (9) has *{ɔ-}* as the singular prefix. Noun Class Ten (10) also uses the singular prefix *{ɔ-}*. Nouns in Class Eleven is a collection of mass nouns. The Noun Class twelve is the only class that takes a suffix *{-ana}* to express the plural form of its nouns.

The study also showed that the semantic class of Nawuri is defunct. This is because nouns that are liquid (+ liquid) and non individuated nouns (+ non individuated) belong to the same class.

### 5.3 Conclusions

In this study, I have demonstrated that in the study of Nawuri Noun Classes, the most appropriate criteria that is used to classify Nawuri noun systems considering Nawuri nominal morphology, is number. Number affixation can be done in two ways. Thus (a) nouns with common singular affixes that are put in the same group may not necessarily occur together in another group when their plural formation is considered; and (b) nouns that are put into classes based on the similarity of both the singular and plural affixes. The latter is most appropriate when classifying Nawuri nouns. It was identified that, Nawuri has eight (8) singular prefixes, ten (10) plural prefixes and one

(1) plural suffix. The motivation for noun classification in Nawuri is mainly morpho-phonological and the semantic class is defunct.

#### **5.4 Recommendations**

From the findings of this study, I make the following recommendations for further study;

In the first place, there is the need for more vigorous research into under researched languages like Nawuri because they have a great potential of contributing to the current research studies into the typology of noun classification and the strategies for the formation of plurals in languages. This will build databases that will help to classify morpho-syntactic properties of natural languages.

There is also the need to conduct further research to investigate the syntactic features of Nawuri nouns and their semantic connotations in different contextual orientations.

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## APPENDIX A

### SECTION A

#### UNSTRUCTURED INTERVIEW GUIDE

Samples of questions used to collect data on Nawuri nouns from native speakers between the ages of 30-75 years.

1. **Mi nyi /sj, nkule fo, sa mj atc mu ne gibu keparaa tc.**

„My mother/father, please name things that are found in the house“.

2. **Mi nyi/sj nkule fo, sa mj atc mu ne gibu ndcc tc.**

„My mother/father, please name things that are found in the farm“.

3. **Mi nyi/sj, nkule fo, sa mj atc mu ne gibu gyaade tc.**

„My mother/father, please name things that are found in the kitchen“.

4. **Mi nyi/sj, nkule fo, sa mj atc mu ne gibu ntsu tc.**

„My mother/father, please name things that are found in water“.

5. **Mi nyi/nkule fo, sa mj atc mu bjtaa waa amamerj.**

„My mother/father, please name things that are used to perform rituals“.

6. **Mi nyi/sj, nkule fo, sa mj mbwj nejbju ntsu yj kefitiritc.**

„My mother/father, please name animals found in water and on land“.

## SECTION B

Informants were made to translate certain concepts while researcher writes the responses in her notebook. Samples of such words includes:

Translate the following words in to Nawuri

1. Marriage
2. Chieftaincy
3. Wedding
4. Tradition
5. Mystery
6. Eternity
7. War
8. Profit
9. Evil
10. Inheritance







## APPENDIX B

### SAMPLES OF SOME NOUNS

The sources of the data collected for the analysis have been attached to the nouns using the following abbreviations:

1. (ED) - Elicited Data
2. (RD) - Recorded Data
3. (TD) - Textual Data
4. (SGD)- Self-Generated Data

#### NOUN CLASS ONE {ɛ-} - {ɪ-}

SINGULAR NOUN	GLOSS
kooni (ED)	deer type
kpaafwu (ED)	fish type
kpaaraa (TD)	squirrel
kpanfa (RD)	axe
kpangilan (ED)	tree type
kaale (SGD)	Dress
kyaa-lenbiri (ED)	type of bird
kyaafaawv (TD)	hippopotamus
kyaakya (TD)	Mattress
kyaapaa (RD)	spider
kyanfɔle (RD)	seed
kyankpaate (TD)	scorpion
kyankpilan (RD)	antelope
kyɛɛkɔkyɛɛ (ED)	type of bird
kyɛmunɛɛ (SGD)	friend
kyɛwɪapɛ (SGD)	afternoon
kyiimu (SGD)	headgear
gbaamigyɪ (ED)	type of fish
gbaata (ED)	tree type
gbanɛɛ (ED)	Horse
gbɛɛlɔɔ (ED)	tortoise
gyalantv (ED)	hawk
gyamanfɔle (TD)	sweet potato
gyɪbita (ED)	bat type
gyɪnbwanɛ (SGD)	cat
kyamɪtɪ (RD)	head pan
kyɪkpaa (ED)	partridge
kyɔɔlogaa-sv (SGD)	earring
kyɔn (ED)	antelope

kyonkyon (TD)	earthworm
kyunputun (RD)	bowl
laabaakun (ED)	yam type
laanfiya (SGD)	pineapple
lenbu (RD)	entrance hall
lentenpu (ED)	cotton
mlifa (RD)	gun
malumali (ED)	fish type
mugyi (TD)	medicine from tree bark
naate (SGD)	cow
nmaluma (TD)	weeds
paape (RD)	cricket
paatiipire (ED)	bird type
panpan (SGD)	porridge
peetoo (RD)	shorts
ponponsii (ED)	tree type
poripori (RD)	pawpaw
puloo (ED)	frog
puruntuwa (RD)	bottle
saba (RD)	talisman
sakase (ED)	scissors
sarasa (TD)	sacrifice
sunkaala (TD)	parable
taakpe (ED)	hunter's pouch
taburita (SGD)	cockroach
takandaa (RD)	sugar cane
tangran (RD)	plate
tenpiren (ED)	spear grass
tentiya (TD)	gun
tiimaalongon (RD)	praying mantis
tunkpaasa (RD)	monitor lizard
tono (ED)	profit
tulootuloo (ED)	turkey
tuukaase (RD)	shorts
waalaa (ED)	python
wondo (SGD)	skirt
wolin (TD)	tsetse fly
bɔnbɔron (RD)	tin can
bɔnte (ED)	rectangular house
bote (ED)	termite
dankore (TD)	loin cloth
darisehn (RD)	cooking pot
dekereke (TD)	Chameleon
fulɛ (ED)	deer
furɔnda (RD)	singlet
kyiimu (SGD)	headgear
kyon (ED)	antelope
lenpoo (TD)	tax

li-wura (RD)	chief mourner
luba (ED)	reincarnation
lɔpɔ (TD)	dove
malifa (ED)	gun
menkeni (RD)	cocoyam
mɔkɔla (RD)	saucepan

**Noun Class Two {ɛ-} – {a-}**

<b>Singular Noun</b>	<b>Gloss</b>
korubusoo (ED)	bird (type of)
kusee (ED)	blessing
kɔnfv (RD)	fetish dancer
kpaasi (RD)	rat
kyafaawv (TD)	hippopotamus
kyankpaatu (ED)	scorpion
kyakpɛɛ (RD)	bean cake
kyɛn-kyu (RD)	favorite wife
kyuu (TD)	type of tortoise
laamigya (TD)	yaws
laanfiya (SGD)	pineapple
lentenpu (ED)	kapok
longon (ED)	type of drum
lugutu (ED)	type of pito beer
lun (ED)	type of bird
mugyi (ED)	type of medicine
nantoo (SGD)	insect
pirɛpɛgyane (ED)	type of bird
pulasa (ED)	cloth for burial
sebilisa (RD)	father's senior brother
wuya (SGD)	owner
wvntun (ED)	bush pig
wvpa (RD)	mother's brother
wvɔkpakyaa (TD)	porcupine
belen-buni (TD)	carcass

**Noun Class Three {ka-/ke-} – {n-}**

<b>Singular Noun</b>	<b>Gloss</b>
ka-baa (ED)	wasp
ka-bɪlɪ (ED)	horn
ka-bʊlɪpʊ (RD)	sheep
ka-bʊlulu (TD)	bile
ka-bʊlɪpʊ (SGD)	sheep
ka-bʊrʊgyaagyaa (ED)	swallow (bird)
ka-bwu (RD)	bird
ka-daakywɛɛ (ED)	gecko
ka-dufaa (RD)	tail
ka-fatadwɛ (ED)	wild animal
ka-firikotoo (ED)	tilapia
ka-fɔlɛ (SGD)	salt
ka-gbɪnɪ (TD)	diaphragm
ka-gbɪn (RD)	thousand
ka-kɔka (TD)	salary
ka- kyaapɛ (ED)	type of fish
ka- kyaasibi (SGD)	chick
ka-kyan (ED)	grave
ka-kyɛɲa (ED)	fish type
ka-kyɔɔ (RD)	axe
ka-kyɔlɛ (RD)	tribal mark
ka-palɛ (SGD)	fufu
ka-pasurɪwa (ED)	cowry shell
ka-dɪndɪmandɛ (RD)	tribe
ka-pɪlɛpɪlɛɛ (ED)	firefly
ka-sagatɛɛ (SGD)	comb
ka-sɛ (SGD)	ground
ka-swu (RD)	hearth
ka-tyaa (ED)	hoe
ka-tɔwɛ (RD)	speech
ka-yaabi (ED)	branch
ke-gbɪni (SGD)	okra

**Noun Class Four {ki-/kɪ-} – {a-}**

<b>Singular Noun</b>	<b>Gloss</b>
ki-bite (SGD)	girl
ki-bonboli (RD)	fresh one
ki-bonbon (ED)	gong gong
ki-bulun (RD)	hen coop
ki-buula (ED)	medicine type
ki-bwaaruu (ED)	water yam
ki-denbii (RD)	shore
ki-fufuli (SGD)	white object
ki-fugifugi (TD)	insect
ki-fulee (SGD)	money
ki-gbeeleebe (ED)	bead type
ki-gyisanba (RD)	gift food
ki-gyinbwi (ED)	vulture
ki-keelii (ED)	kapok tree
ki-kyenbee (RD)	maize
ki-kyibii (SGD)	rag
ki-kyikpebi (ED)	star
ki-libi (RD)	bad deed
ki-melebi (TD)	louse
ki-melensi (RD)	foolishness
ki-mu (SGD)	head
ki-mulii (ED)	knee
ki-furɔkpan (ED)	ladder
ki-kpakparaa (RD)	palm nut
ki-ligyima (RD)	conversation
ki-nsi kilan (TD)	pupil
ki-nyenbi (SGD)	nail
ki-nyi (SGD)	tooth
ki-nyinyiribotoo (ED)	millipede
ki-ɲmangyi (ED)	orphan
ki-ɲmini (ED)	knot
ki-purufa (RD)	stomach
ki-senpuruwa (ED)	type of vegetable
ki-sinsinpara (TD)	type of disease
ki-sintebi (TD)	clitoris
ki-taakuri (ED)	ant-hill
ki-taaya (TD)	jaw
ki-teebe (RD)	cotton
ki-tentenbiri (RD)	darkness
ki-tepu (TD)	vagina
kɪ-ban (ED)	paddle
kɪ-bɛ (RD)	palm nut
kɪ-bɛɛ (RD)	grasshopper
kɪ-bɔlɛ (ED)	gourd plant
kɪ-bwubaa (RD)	guinea corn

kɪ-daakpaa (TD)	side of head
kɪ-danburasa (RD)	good one
kɪ-dɛɛ (ED)	half
kɪ-falaa (RD)	climbing plant
kɪ-fatɛɛ (SGD)	leaf
kɪ-fɔɔre (TD)	goitre
kɪ-fɔfɔv (TD)	lung
kɪ-fɔlɛ (ED)	rock
kɪ-fwɛ (TD)	anus
kɪ-fwɛɛ (TD)	blister
kɪ-gya (SGD)	price
kɪ-gyaakpaa (SGD)	refuse dump
kɪ-gyafwɛ (TD)	covering
kɪ-gya (SGD)	market
kɪ-gyakpaa (RD)	horn
kɪ-gyan (ED)	shed
kɪ-gyu (RD)	gravel
kɪ-gyungyan (SGD)	mat
kɪ-gyɪnpɔɔ (ED)	meat portion from hind leg
kɪ-kaa (SGD)	head pad
kɪ-kankurante (TD)	rib
kɪ-kuraabɔɔ (TD)	bullet
kɪ-kpan (RD)	fish bone
kɪ-bandɛɛ (RD)	wall
kɪ-kpaa (SGD)	rubbish
kɪ-kpaalaa (ED)	wooden trap
kɪ-kpala (RD)	plot for drying farm produce
kɪ-kpalɛ (ED)	type of tree
kɪ-kyaa (ED)	groundnut plant
kɪ-kyan (ED)	guinea fowl
kɪ-kyanpɔlɛnɔ (SGD)	bathroom
kɪ-kyɛ (ED)	bean
kɪ-kyɪna (RD)	sitting
kɪ-lamwɛɛ (ED)	tiger nut
kɪ-lan (RD)	pot
kɪ-landɛ (RD)	playground
kɪ-lanfɔ (TD)	hip joint
kɪ-lantan (SGD)	basket
kɪ-maa (ED)	chewing gum from shea tree
kɪ-mangoo (ED)	mango
kɪ-naa (ED)	war
kɪ-naalɔn (ED)	pen animal
kɪ-nanse (SGD)	snake
kɪ-nawɔrɛ (RD)	food morsel
kɪ-nyan (ED)	tree type
kɪ-nyɛ (TD)	slave
kɪ-nyinkalan	type of grass

ki-nyintaa	garment
ki-nʒasan	proverb
ki-munimuni	gossip
ki-paala	loan
ki-pun	mortar
ki-pʊ	forest
ki-punfa	shrub
ki-punpʊpʊn	balloon
ki-pwɛɛ	guilt
ki-saataa	funeral custom
ki-safa	poisonous plant for fishing
ki-sikpu	forehead
ki-sirikpan	story
ki-tafala	burk rope for making pito
ki-tapʊ	soothsayer's assistant
ki-tɛ	lizard
ki-tɛɛ	feather
ki-warate	shin bone
ki-wɛɛ	testes
ki-yaa	leg
ki-yaafɔɛ	young man
ki-yaakunkun	heel
ki-yɛɛ	mouse
ki-nyumisa	human
ki-nyun-fɔ	baby boy

**Noun Class Five {ku-} – {i-}**

<b>SINGULAR</b>	<b>GLOSS</b>
ku- dudu (RD)	heat
ku-duri (TD)	gun powder
ku-kukuleebi (ED)	snail
ku-kyɔ (ED)	abundance

**Noun Class Six {ku-/kv-} – {a-}**

<b>Singular Noun</b>	<b>Gloss</b>
ku-kyuu(TD)	boil
ku-logologo (ED)	bell used by fetish
ku-woriwori (TD)	throat
kv-kɔtɔɔ (RD)	knocking
kv-kvɔn (SGD)	one
kv-lɔ (SGD)	sickness
kv-lvɛɛ (TD)	hernia
kv-nyɔ (SGD)	two
kv-svɔla (SGD)	load
kv-tvɔ (RD)	shooting
kv-waa (RD)	doing
kv-wvraakpa (ED)	broken calabash

**Noun Class Seven {o-} –{a-}**

<b>Singular noun</b>	<b>Gloss</b>
o-daanobiisi (ED)	person of unknown identity
o-kpapuni (TD)	duodenum
o-kulaapu (RD)	widow/widower
o-libi (SGD)	bad one
o-ligyaa (ED)	final soothsaying

**Noun Class Eight {o-} – {i-}**

<b>Singular Noun</b>	<b>Gloss</b>
o-fen (RD)	scent
o-fuli (TD)	space
o-kuli (SGD)	husband
o-poyii (ED)	type of yam
o-wulii (ED)	type of tree
o-yugasi (TD)	tree trunk



**Noun Class Nine {ɔ-} – {i-/t-}**

<b>Singular</b>	<b>Gloss</b>
ɔ-baatɛɛ (RD)	stick used in tying thatch
ɔ- bɛɛ (ED)	type of animal
ɔ-biri (TD)	bicep
ɔ-bɔlonbo (RD)	gap
ɔ-danbirisa (ED)	a good one
ɔ-dɔkpa (SGD)	bed
ɔ-dɔɔ (TD)	fibre
ɔ-fvvtu (TD)	breath
ɔ-gyaa (ED)	torch
ɔ-kaa (TD)	end
ɔ-kɔn (ED)	happiness
ɔ-kvlu (ED)	boat
ɔ-kpa (SGD)	path
ɔ-kpan (ED)	sun
ɔ-lulu (TD)	bitterness
ɔ-lo (SGD)	sore
ɔ-man (RD)	wrestling
ɔ-man (SGD)	nose
ɔ-pu (SGD)	tail
ɔ-piyaa (ED)	leopard
ɔ-sɛɛ (RD)	fried corn flour
ɔ-svwtɩ (ED)	land
ɔ-tan (TD)	trail of animal
ɔ-tan (RD)	slap
ɔ-tɔ (SGD)	stomach
ɔ-wɔn (ED)	type of fish
ɔ-wvltɩ (SGD)	book

**Noun Class Ten {ɔ-} –{a-}**

<b>Singular Noun</b>	<b>Gloss</b>
ɔ-bayɪpɔ (ED)	blacksmith
ɔ-diboyiɪpɔ (TD)	gossip
ɔ-danbirasa (RD)	good one
ɔ-kusɔpɔ (TD)	care-taker
ɔ-kɪrɪma (RD)	drummer
ɔ-kpalikpa (ED)	place for soothsaying
ɔ-kɔ (SGD)	someone
ɔ-kyaapɔ (TD)	dancer
ɔ-kyaamu (TD)	linguist
ɔ-kyusa (SGD)	female
ɔ-nyinsa (SGD)	male
ɔ-kyɔɔ (RD)	brother in-law
ɔ-luba (RD)	reincarnated person
ɔ-pɔyɪpɔ (ED)	builder
ɔ-sɪn (TD)	pain
ɔ-salɛpɔ (ED)	carver
ɔ-tɔɔmaa (RD)	neighbour

**Noun Class Eleven (Mass Nouns)**

<b>Singular noun</b>	<b>Gloss</b>
Baakyaaga (TD)	ash used in making soap
awaatu (ED)	corn chaff
astraa (TD)	snuff
apaa (ED)	waves
abɛ-nfɔ (SGD)	palm oil
kɪdɪpɔɔ (TD)	mud
kafa (ED)	type of porridge
ipeeli (ED)	shame
kpalagɪ (TD)	vomit
nsɔ (RD)	ashes
nbuli (TD)	sperm
amaalin (ED)	rice
suwa (ED)	gold
fɔlɔn (SGD)	fire
adɪndɪnkpalɛ (TD)	moss
waagaasi (ED)	curd
pito (ED)	type of drink
panpan (RD)	type of porridge
kookoo (RD)	porridge
nfɔlɪ (SGD)	salt
kabɔlɪ (ED)	clay
ibini (TD)	feaces
bɔrɪ (RD)	tz
buyan (TD)	dew

**Noun Class Twelve – Plural Suffix {-ana}**

<b>Singular Noun</b>	<b>Gloss</b>
nyipyia (RD)	junior aunt
kyukyu (RD)	aunt
kyukyu-bi (ED)	nephew/niece
kalɔwɪ (RD)	last born child

