UNIVERSITY OF CAPE COAST

MORPHOLOGY OF PLANT NAMES IN AŋLɔ

SAMUEL KUAGBEDZI

Thesis submitted to the Department of Ghanaian Languages and Linguistics of the faculty of Arts, College of Humanities and Legal Studies, University of Cape Coast, in partial fulfilment of the requirement for the award of Master of Philosophy degree in Ghanaian Language (Eʋe)

JUNE, 2019

DECLARATION

Candidate Declaration:

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature …….. Date: …….

Name: SAMUEL KUAGBEDZI

Supervisor's Declaration:

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature: ……... Date: ……..

Name: PROF. EDOH TORGAH

Co- Supervisor's Signature: ……..... Date: ……

Name: DR. VINCENT ERSKINE AZIAKU

ABSTRACT

The thesis is the study of the morphology of plant names in Aŋlɔ. Ɛvɛ names in general are formed as root names or derived names (Atakpa, 1997). Agbedor and Johnson (2005) also say that Ɛvɛ names carry semantic loads therefore one can only understand Ɛvɛ names when one dissects the names. This presupposes that understanding of plant names hinges on a critical look at the internal structure of the names, hence this study aims at establishing the internal morphological structures of plant names and to identify word formation strategies employed in formulating Aŋlɔ plant names. The method used to collect information for this study was elicitation. Pictures of plants were subjected to scrutiny by the indigenous Aŋlɔ speakers for correct pronunciation of the plant names in order to construe the meaning of the names. Alongside the elicitation, the researcher used some selected books on plant names as a secondary data. Over one hundred and forty plant names were collected and analysed using Hockett's (1954) Item and Arrangement and Item and Process Models. This research has revealed various morphological strategies that include compounding, reduplication and borrowing. Aside from the nominalization strategies, the various morphological structures were discussed. Finally, the study established the internal structures of plant names and identified word formation strategies of plant names in Aŋlɔ.

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my supervisors Prof. Edoh Torgah and Dr. Vincent Erskine Aziaku of the Department of Ghanaian Languages and Linguistics for their professional guidance, advice, encouragement and the goodwill with which they guided this work. I am really very grateful.

I am also grateful to Dr. E. A. Ofori, Dr. Mrs. Gladys Mansah Akyea, Dr. Sampson Korsah, Dr. K. B. Abrefa and Emmanuel Asubonteng for their generous encouragement to make this work better.

I am grateful to Miss Ernestine Abla Segbedzi for her unflinching support throughout this research.

My heartfelt gratitude goes to my wife Elizabeth Abla Hattoh and my brothers and sisters, Peter Kuagbedzi, John Kuagbedzi, Janet Kuagbedzi and Elizabeth Kuagbedzi for their support throughout this study. I say thank you.

I also thank my nephews, Prosper Kovey and Jerry-Joshua Kovey. I really appreciate your support.

Finally, I wish to thank my friends and teachers for their support, especially my friends Seth Vidzro, Eugene Zanu-Ahiable, Samuel Nukporfe, Jerry Djietror, John Golo, Thomas Cudjoe, Richard Galley, Gideon Dumedah and Raphael Lokpoh, my teachers Kremesh Ahafia, Cephas Asase, Philip Abadzivor, John Agbadi, Sebastian Amegashie and Rev. Tesuka.

Akpe na ame sia ame.

DEDICATION

To my children

Etornam

Edudzi

Eyram

LIST OF ABBREVIATIONS

POSS	:	Possession
NEG	:	Negation
PRON	:	Pronoun
LOC	:	Location
QT	:	Quantifier
QL	:	Qualifier
SVC	:	Serial Verb Construction
SVO	:	Subject Verb Object
N	:	Noun
V	:	Verb
INDEF	:	Indefinite Article
DEM	:	Demonstrative
PL	:	Plural Marker
DET	:	Determiner
CQ	:	Content Question Marker
NP	:	Noun Phrase

TABLE OF CONTENTS

CHAPTER TWO – REVIEW OF RELATED LITERATURE

CHAPTER THREE: METHODOLOGY

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND DISCUSSION

CHAPTER FIVE: SUMMARY, FINDING, SUGGESTIONS, RECOMMENDATION & CONCLUSION

CHAPTER ONE

1.0 INTRODUCTION

Aŋlɔ speakers are the people who form part of the southern Eʋe of the Volta Region of Ghana. They are mainly found in the Keta Municipality. Aŋlɔ refers to both the language and the people. The Eʋe language varies not only across borders but also at community levels. It is also a common phenomenon to note different expressions within the same group of people (Westermman, 1930; Duthie,1996). The morphology of Aŋlɔ dialect has so far been studied in several ways to the extent that the internal structure of the Aŋlɔ noun is analysed. However, upon review of literature on plant names and their morphology in Aŋlɔ, it is obvious that not much work has been done in this area.

Names are words given to entities in the world. According to Amegashie (2004), names are words that are used to identify things. Amegashie added that names can be given to gods, people, days, continents, countries, rivers, mountains and plants. The present study examines the morphology of plant names in Aŋlɔ. It analyses morphologically plant names in Aŋlɔ that have been collected from secondary and primary sources.

In this chapter, the researcher presents an introduction and background to the language. He also presents the background to the study. The statement of the problem, the objectives of the study, the research questions that will be addressed in order to achieve these aims are also discussed in

addition to the significance of the study, delimitation, limitation and the structure of the thesis.

1.1 Background to the study

This research focuses on morphology of plant names in Aŋlɔ.The etymology of the term "morphology" in the Greek word *morphé* and *logos*, which are equivalent to "form" and "the study of something" respectively in English (Aronoff and Fudeman, 2011). According to Thakur (2010), the word "morphology" consists of two word-elements: *morph* which means "form" and *ology*, which means "the study of". But the term "morphology" became current in linguistics fromthe nineteenth century, appearing first in the 1860s in Oxford English Dictionary (then called OED) (Matthews, 1974). Morphology therefore refers to "the study and analysis of the structural forms and classes of words" (Hartman and Stork, 1972: 142). Morphology therefore "primarily consists of "breaking up words into their parts and establishing rules that govern the co-occurrence of these parts" (Haspelmath, 2002: 89). What this means is that if we have a word like "ʊuti" silk cotton tree, *Grevillea robusta*, by the morphology of the word "ʊuti", it can be broken down into two parts called morphemes. These parts are "ʊu+ati" which are noun + noun.

This morphological study of plant names in Aŋlɔ is carried out in the current Keta municipality. Although there are four other districts, as Ketu South, Ketu North, Akatsi South and Akatsi North that are considered as Aŋlɔ, the people in these districts are uniquely identified with their names as Afɩao, Some and Klikɔ for Ketu South, Dzodze, Ƒenyi, Ʊeta, Afɩfe for Ketu North, Avenɔ for

Akatsi South and Ave for Akatsi North. According to Nukunya (1997), Aŋlɔ is not so easy to define because it is a term with more than one referent. It is used as a generic term for the Keta municipality together with sub-units forming Ketu and Akatsi districts partly because of their close culture and historical affinity with Aŋlɔ. The researcher used Hockett's (1954) structuralist Item and Arrangement (IA) and Item and Process (IP) models. IA and IP, as morphological models, emphasize the morphological analysis of the words in a syntactic pattern. These plant names in Aŋlɔ were morphologically analysed to determine how the plant names have been formed.

1.2 Background to the Language

The term "Eʋe" is the name of an ethnic group in Ghana. The language spoken by the Eʋe is called "Eʋegbe" which means Eʋe language. The dialects of Eʋe in Ghana according to Ansre (2000) are Aŋlɔ, Tɔŋu and Eʋedomegbe. According to Duthie (1996), the Eʋelanguage in Ghana has many dialects and even communities that are very close may use distinctive varieties of Eʋe. These dialects are Aŋlɔ, Avenɔ, Vɛ, Tɔŋu, Aveɖakpa, Awudome, Peki, Ho, Aŋfɔɛ, Kpando, Fodome, Gbi and Danyi. According to Aziaku (2016), these dialect differences occur in all aspects of the linguistic features of the language: lexis, grammar and phonology. Atakpa (1997) classifies all dialects of Eʋe in the Volta Region of Ghana as Aŋlɔ, Tɔŋu and Eʋeme/Ʋeme. This present study (morphology of plant names) is carried out in one of the three dialects of Eʋe which is Aŋlɔ.

1.3 Statement of the problem

Most early studies on plant names were carried by Irvine (1933 and 1969), Carpenter (1944), Oku (1983) and Tweneboa (1998). These works document; plant names and other properties of the plants which did not have any study on the internal structure of the names. The various ways these names are composed remain uninvestigated. These works primarily focused on the documentation of plant names and not the morphological structure of the plant names. Aziaku (2016) on the other hand, worked extensively on the linguistic study of animal names which looked at various aspects including morphology of animal names. Similarly, the present study examines the morphological structure of plant names in Aŋlɔ to build on morphology of animal names of Aziaku (2016).

1.4 Objectives of the study

The general objective of this study is to analyse morphologically plant names in Aŋlɔ. Specifically, the study aims to:

- Establish the internal morphological structures of plant names in Aŋlɔ.
- Identify word formation strategies of plant names in Aŋlɔ.

1.5 The research questions

The following research questions will guide the researcher to achieve the objectives and also help the researcher to focus on the targeted area.

- What are the internal morphological structures of plant names in Aŋlɔ?
- What are the identifiable compositional strategies of plant names in Aŋlɔ?

1.6 Significance of the study

This research is on morphology of plant names in Aŋlɔ. The research will provide a fresh insight into how plant names can be analysed in Eʋe because it will be the first of its kind to analyse morphologically plant names in Aŋlɔ. The morphological analysis will also build on Aziaku's (2016) taxanomy of animal names in Ewe. Hence, will offer new perspective of names and naming practices in Aŋlɔ.This study describes the various nominalization processes employed in the formation of plant names and will also add up to existing literature on plant names in Aŋlɔ for references.

1.7 Delimitation

This research is mainly centred on secondary data sources. The work draws on the recordings of Irvine (1933) and (1969), Oku (1983), Tweneboa (1998) and other related books. However, all information gathered from these books on plant names were confirmed by the indigenous speakers of Aŋlɔ in the designated areas as Abor, Asaɖame and Aŋlɔgã all in the Keta municipality before they were used in the research. The researcher extends the scope of the research to cover people in the aforementioned communities to confirm some of the secondary data sources because this could help the researcher realise if there have been changes in the plant names in Aŋlɔ. These three communities have been carefully selected by the researcher because their (Abor, Asaɖame and Aŋlɔgã) vegetation is covered with plants. These people also speak the indigenous Aŋlɔ dialect.

Also, as I indicated earlier, morphology has not been adequately studied in terms of plant names in Aŋlɔ.

1.8 Limitations

Although the researcher envisaged that the research journey would be smooth, he has faced some impediments.

There was a substantial amount of financial commitment to this research. This is because the researcher needed to travel in search of books or works that discuss the morphology of plant names. The researcher visited the libraries of the University of Cape Coast, the University of Ghana, the Kwame Nkrumah University of Science and Technology and the University of Education, Winneba.

One other limitation of this research is about the respondents who confirmed the names of the plants. The researcher had to sacrifice weekends to be able to meet the respondents because most of them go to work on week days. The people's refusal to talk to the researcher for the fear that the information may not be used for the intended purpose was another limitation. Some of the informants also demanded money after the exercise. This was as a result of their time that has been used in the interview. Although this demand for the compensation is justifiable, it affected the researcher economically. Also, the identification of pictures by the respondents was one of the main problems faced by the researcher in the data collection. The absence of some plants during the study period made the researcher adopt the use of pictures. Pictures were shown to the respondents who were to identify and name the plants. However, the aged could not see the pictures clearly. Although, these

problems arose, the researcher hopes that the findings are representative enough.

1.9 Organization of the chapters

The whole research is divided into five (5) chapters including introduction and conclusion. Chapter one (1) covers the introduction to the study comprising a brief background to the research, a brief background of the language as well as statement of the problem, statement of the objectives, the research questions, significance of the study, delimitation and limitations of the study; and the organization of the chapters.

In chapter two (2) of the study, the theoretical framework is stated. The review around which the study is built and key concepts are also explored. Related works to the research are also reviewed. Aspects of the various works which are related to the field of the study are emphasized. The review was organized in the manner that all important aspects of the study were covered. Also, there was a critique of what these authors proposed in relation to the research.

Chapter three (3) covers the methodology of the research. Items that were looked at are research design of the study, data collection procedure, methods of data collection and analysis.

The fourth (4th) chapter discusses the internal structures of plant names in Aŋlɔ, ascertaining the identifiable word formation strategies used in forming plant names in Aŋlɔ, and the categorisation of plant names in Aŋlɔ. Finally, a conclusion is drawn to provide a summary of the chapter.

The final chapter entails the summary, research findings, conclusion, recommendations and suggestions.

CHAPTER TWO

REVIEW OF RELATED LITERATURE AND THEORETICAL FRAMEWORK

2.0 Introduction

This chapter discusses works that are related to the study. The review examines various morphological concepts and processes that are significantly related to the present study. The researcher also reviews and critiques the various models of morphological theories in the study of morphology. Consequently, the review of the related literature resulted in the identification of a theoretical framework in which the study is situated. These works helped the researcher to fine tune the study

2.1 Morphology

Traditional grammar first begins by studying words as the basis of language study. Plato (in his 'cratylus') and Panini (in his study of Sanskrit) could be said to be the first to classify words into classes around fourth century B.C. (Lyons, 1969). In traditional grammar, words are considered as the basic units of language. On the other hand, traditional grammar treats the variations in the form of a word as 'inflections' but under grammar and this lays a long tradition in Western Linguistic studies. Western Linguists, until the nineteenth century, thought of grammar as consisting primarily of structure (Haspelmath, 2002: 12). The thrust of this view is derived from the preoccupation of traditional grammar with the study of classical languages of Greek and Latin. These languages are considered to have 'rich' inflectional patterns and this is today studied under inflectional morphology. Therefore, traditional grammar

could be said to have inadvertently laid the foundation of morphological study. Yet, the history of morphological study could be traced to as far back as 1600 B.C. The clay tablets from ancient Mesopotania contained "well-structured list of morphological forms of Sumerian words. Sumerian was the traditional literary language of Mesopotamia" (Haspelmath, 2002:12). Based on this, Haspelmath (2002) concludes that the first linguists were primarily morphologists. But it was only in the second half of the nineteenth century that a German philosopher, Johann Wolfgang von Goethe used morphology in a biological context'. Since then the term has become current in linguistics (Aronoff and Fudeman, 2005)

Morphology, in the present linguistic studies is concerned with the study of the internal structure of words. The goals of morphological study are to identify the principles, rules, processes and patterns that are inherent in the structure of a language. The study of morphology is important to the general study of language because "of all the distinct aspects of language, morphology is the most deeply intertwined with the others" (Aronoff and Fudeman, 2005:22).

The study of morphology is important to the study of language universals. There are morphological features that are universal and this partly facilitates the classification of world languages. Greenberg (1966), for example, used the morphological criterion, among others, to classify world languages. Greenberg's 'universal 26' says "if a language has discontinuous affixes, it always has prefixing or suffixing or both" (p. 92). Morphology also

facilitates, especially in the nineteenth century, the typology of languages as 'isolating', 'inflecting' and 'agglutinating' types (Matthews, 1974). However, how accurate the typology of languages is further depends on the status of a word in each language and in the general study of language.

2.1.1 Types of morphemes

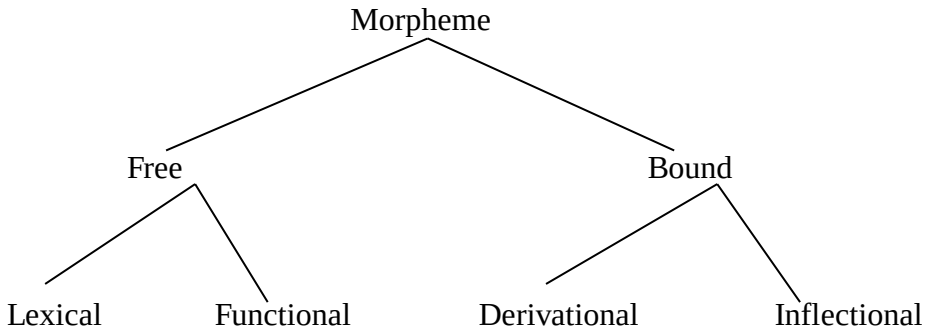
There are different types of morphemes, some of which appear to be the core of words while some are additions or appendages in words. The very 'heart' or core of a word is known as the 'root' of the word to which other morphological pieces are attached. The root cannot be analysed further into constituent morphemes. "A root is that part of a word which remains after all the affixes have been removed. A root, in other words cannot be analysed further in terms of inflectional or in terms of derivational morphology (Thakur, 2010:18). For instance, in Eʋe, "ati" known in English as 'tree' is a root. According to Thakur (2010), a stem is that part of a word which remains after all the affixes have been taken away. For instance, "gbewo" in Eʋe meaning weeds where "gbe" weed is the stem.

A stem can be simple, consisting of one piece (or root) or complex comprising root and other morphemes. Where a word has only one root and no additional free or bound morpheme, it is called 'base word' and where a word consists of at least one root and a number of bound or free morphemes it is called 'derived word' (Tomori, 1977). In many cases, the same part of a word happens to be a root as well as a stem (Thakur, 2010).

Free morphemes subdivide into 'lexical' and 'functional' morphemes. Lexical free morphemes are of the categories of nouns, adjectives, verbs and

adverbs that belong to open-ended class. Functional free morphemes deal with the category of words that belong to close – ended class like pronouns, determiners, prepositions and conjunctions.

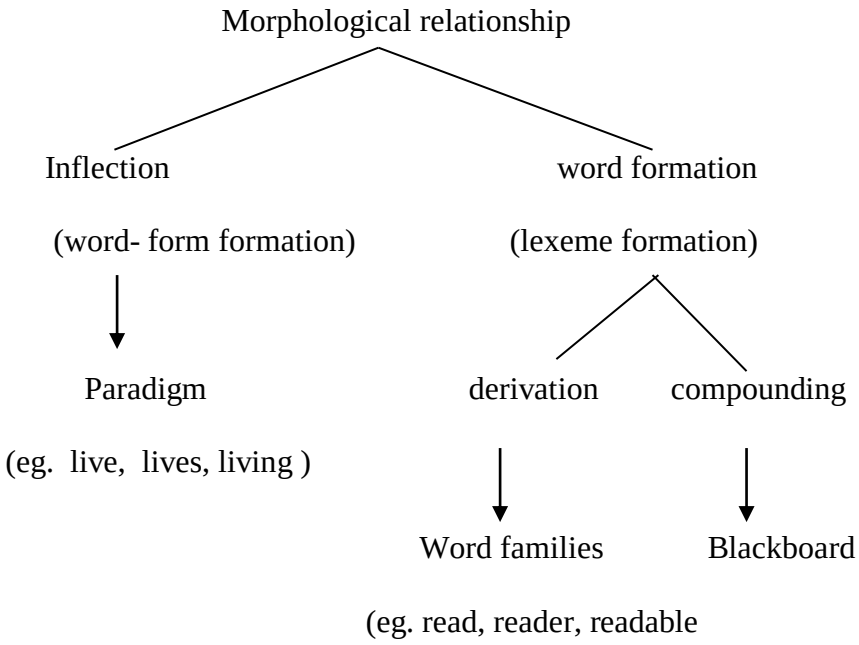
Bound morphemes occur in different forms and at different positions of the word under the collective term "affixes". Affixes are morphemes that are added either to the beginning or middle or end of a word. The morpheme that is added to the beginning of the root morpheme is called a prefix while the morpheme that is added to the end of the root morpheme is called "suffix". Yule (1985) shows the basic morphological concepts as below.



(Yule, 1985: 62)

At another level, there are differences between inflection and derivation. Derivation generally results in change in the meaning or word class of a particular word, while inflection does not. In other words, derivations are creative because they produce new words (new base forms or stems) that other derivational or inflectional affixes can attach to (Akmajian, 2001). Lastly, inflectional morphemes are semantically more regular than derivational morphemes because in the former, the meaning of the morpheme and that of the inflected base is quite regular. For instance, 'ame' (person) is a stem, "amewo" (persons), 'wo' (s) is inflectional morpheme.

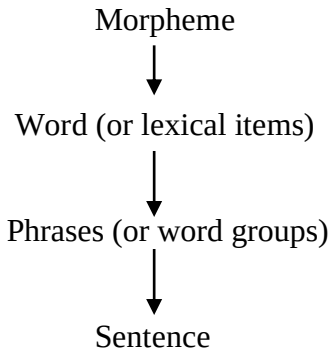
Haspelmath (2002) illustrates the distinction between inflection and derivation with the following diagram.



(Haspelmath, 2002)

2.1.2 Morphological concepts

Morphology as a subfield of linguistics, has developed some necessary concepts like any other field of study so as to be able to describe and analyse adequately the structure of words in languages. The minimal unit of grammatical analysis in language is the 'morpheme'. It is the unit of the 'lowest' rank out of which other larger units are built up from successive stages, viz:



(Matthews, 1974: 78)

In morphology, morphemes are the 'morphological atoms' and therefore the ultimate elements of morphological analysis (Haspelmath, 2002). The morpheme in this study is defined as the smallest (or indivisible) unit of language that has semantic or grammatical meaning.

2.1.3 Language Typologies

The status of a word in many languages is still not sufficiently clarified despite the typology of world languages (Palmer, 1971). Palmer (1971:55) bases the typology largely on the morphological structure of languages and as a result, classified all the languages of the world into three: 'isolating', 'inflecting' and 'agglutinating'. These three types belong to 'analytical' class. An isolating language is one in which "all words are invariable" (Lyons, 1969:186); or lack bound morphemes (Radford and Atkinson, 2005) of which there is "no derivational or inflectional process of any kind" (Aronoff and Fudeman, 2005:170-171). Chinese and Vietnamese are often cited as examples of isolating languages (Lyons, 1969). Eʋe language exhibits features of isolating language. For example, 'Agbesi dzi ha'. 'Agbesi sang a song'. Each word in the sentence stands alone without taking any derivational or inflectional morpheme. "An agglutinating language is made up of words of

great complexity, consisting of many morphemes "strung out quite separately, each expressing a single notion and easily identified" (Aronoff and Fudeman, 2005:171). The fact that the English word 'encouragement' can be segmented into 'en-courage-ment' and similarly in Aŋlɔ 'yevuti' horse radish tree (*Moringa pterygosperma)* can be segmented into 'yevu-ti' shows that both exhibit agglutinating features as well. In Eglish Language, 'cooked' which is the past tense of 'cook' has 'cook + ed'. Also, in Eʋe, the future tense of 'dzo' meaning 'go' in English is 'adzo' 'will go'.

An inflecting language on the other hand, is "one whose words cannot be neatly or consistently segmented into morphemes" (Lyons, 1969:191). It is a 'fusional' language whose method of inflection is 'stem-based'. In Eʋe, for instance, 'va' which means came in English, does not have a past tense marker to indicate the past form. This means that the word does not have any morpheme attached to it. Eʋe language therefore does not belong to any particular language typology. It exhibits features of all the three language typologies.

2.1.4 Morphological Processes.

Morphemes are the morphological 'atom' and the ultimate elements of morphological analysis. On the other hand, morphemes are also the 'primitive' elements (root or bound morphemes) upon which morphological processes operate to create new forms of words (Owu-Ewie, 2014).

Morphological processes are primarily concerned with the various ways by which forms of words can be derived from a stem or root. As a result,

morphological analysis of any language needs to identify the morphemes of the language and the formative processes of word forms to facilitate the analysis of the structure of words. The following morphological processes are considered pertinent to this study.

2. 1. 5 Compound formation strategies

One of the areas of importance in linguistic studies is the study of how new words are formed. Thakur (2010) identifies ten (10) processes by which new words are formed in English. These are compound formation, duplication, derivation, backformation, conversion, clipping, acronymy, blending, word-manufacture and multiple functions. A great deal of research would have to be done before it could be ascertained whether most of these processes, if any at all, are used for the formation of new words in all other languages as well. It can be assumed however that many of these word formation strategies are used in many languages other than English. Aziaku (2016) identifies compound names within the general framework of compounding as a word formation process in the view of Spencer and Zwick (1998) and Štekauer (1998). He centred on the various types of compounds that exist in the name data which are broadly categorised as Determinative Compounds and Phrase Compounds.

2.1.5.1 Compounding

Compounding refers to the process of combining two or more already existing base or free words into a single morphological unit called 'compound'. 'A compound is a unit consisting of two or more bases that have an independent existence and also functions in sentences as a single word' (Malmkjaer, 1991:39). Furthermore, in English Language, compounds do

express syntactic relationship between the compounding words but the word class of the "right most member of the compound" called the 'head' determines the word class of the whole compound" (Akmajian, 2001: 33). For example, 'pickpocket' is a compound word formed from the verb 'pick' and noun 'pocket' (verb + noun) but the head of the compound is pocket and thus, the whole compound is a noun. In Aŋlɔ Eʋe, 'klika' white lead tree *Leucaenaleuco cephala* is a combination of verb 'kli' meaning 'stamble' and 'ka' meaning 'rope' which is also a noun (kli + ka) where the head is 'ka'.

Where a compound is a hyponym of the head word or in its meaning, names the entire thing by specifying some features related to the compounding base word, it is endocentric compound. Bauer (1978) and Spencer and Zwicky (1998) categorise the constituents of compounds into head and non-head. Bauer further states that endocentric and exocentric compounds are headed. Ameka (1991) emphasises that nominals can be compounded syntactically to establish a permanent relationship between the constituents and it is impossible to isolate the constituents to derive the meaning of the word.

2.1.5.2 Endocentric Compounds

In endocentric compounds, the head determines the meaning and the grammatical category of the compounds (Bauer 1978). For example, 'football', 'wristwatch' are endocentric compounds. Also, in Eʋe 'deti' 'palm tree' which stands for 'palm fruit + tree' has 'de' as the semantic head. Showing a hyponym relationship, we can establish that 'deti' 'palm tree' is the hyponym of the superordinate term 'ati' 'tree'. The determination of the meaning of the compound 'deti' is in terms of a sub-set relationship between the head 'ati'

'tree' and the referent of the compound, a palm fruit. This means that 'ati' 'tree' is a more general term showing a category into which 'deti' falls. Hence, 'ati' 'tree' is a hyponym of 'deti' 'palm tree'.

2.1.5.3 Exocentric Compounds

The exocentric compound is characterised with unexpressed semantic heads and these heads may be a person, a plant or an animal. The head name does not straight forwardly define the meaning of the compound (Bauer, 1978). There are two types of exocentric compounds. In one category, the constituent words belong to a different word class than their head. For instance, the compound 'nya + kpe' which is the combination of 'word + heavy' meaning 'kigelia sausage', consists of a head, 'nya' 'word' and an adjective 'kpe' 'heavy'. The compound is exocentric because none of the constituents defines the meaning of the name. That is, 'nyakpe' is not a type of word but a plant. Therfore, 'kigelia sausage' is the unexpressed semantic head.

In the second category, a constituent functions syntactically as the head. For example, 'gbolo + aba' 'prostitute + mat' which stands for 'sodom apple', consists of 'gbolo' 'prostitute' a noun, and 'aba' 'mat', also a noun. However, the compound 'gboloba' is not a type of mat but a leaf. This shows that the referent of the compound belongs to a different thing than the constituents. When one establishes the semantic relationship, it is clear that 'gboloba' 'sodom apple', a leaf, is not a hyponym of mat.

The observation is that a constituent of a compound, either head or non–head, has independent status within a compound in terms of belonging to a lexical category (Spencer & Zwicky 1998), and compounds tend to have fixed

meanings. This explains the fact that the meaning of most Eʋe compounds is non–compositional because their meaning cannot be freely generated and should therefore be considered as lexemes (Westermann 1930; Spencer & Zwicky 1998).

Amegashie (2004) also discusses into detail common nouns or what I will describe as "non-personal names". Amegashie (2004) identifies sixteen forms of names out of which eight are formed from compounds. Below is the summary of Amegashie (2004) compound formation strategies. Noun can be formed from the combination of two or more nouns. For instance, 'abolo + kpo' = 'abolokpo' 'bread oven', where 'abolo' is bread which is a noun and 'kpo' is oven which is also a noun. Nouns are also formed through the combination of nouns and adjectives. For instance, 'nya + nyui' = nyanyui (gospel), where 'nya' is 'word' and 'nyui' which is 'good'. Nouns are formed through the combination of an adjective and 'tɔ'. For instance, 'xoxotɔ' where 'xoxo' 'old' and 'tɔ' is 'one' rendering the compound to mean 'old one'. Similarly, nouns can be added to 'tɔ' to form a new name. For example, 'agbletɔ', meaning 'farm owner'. Where 'agble' is farm and 'tɔ' is 'owner'. Amegashie (2004) also discusses that a name can be formed through the combination of a noun, a verb and another noun. For instance, 'ameƒoti', where 'ame' refers to 'person', 'ƒo' means 'beat' and 'ati' means 'cane'. Also, a noun can be formed through the combination of a noun, a verb and 'la'. For instance, 'amedzula' where 'ame' is 'person', 'dzu' means 'insult' and 'la' means 'doer'. Also, a compound can be formed through the combination of a noun, a verb

and ‘tɔ’ in ‘nyasetɔ’ where ‘nya’ is ‘word’ ‘se’ is ‘listen’ ‘tɔ’is ‘owner’. One other form of compound name that Amegashie discussed is the combination of a noun a verb. For example, ‘Mawuli’ where ‘Mawu’ is ‘God’ and ‘li’ is ‘exists’.

2.1.6 Determinative Compounds

Determinative compounds are characterised by a subordinate relation in which one of the constituents modifies the other. The modified constituent functions morpho-syntactically and also semantically as the head of the construction. The determinative combination can be categorized as head name plus adjective, head name plus quantifier and head name plus preposition. Below are the examples of determinative combination.

2.1.6.1 Head Name + adjective (Qualifier)

The head name plus adjective compound appears in two forms, in one instance, the adjective precedes the head name and in the other instance, the word-by-word adjective follows the head name. For instance, ‘agbitsasue’ ‘agbitsa + sue’ ‘garden egg + small’ ‘sunberry’ *Solanumnigrum guineensis,* where ‘agbitsa’ is the noun preceding ‘sue’ which is the adjective. Also, in other plant names, ‘bedzã’, ‘be + dzã’ ‘thatch + red’ where ‘be’ is the noun and dzã is adjective spear grass *Imperata cylindricas*. This occurs when the adjective follows the noun immediately providing the quality of the noun. The second category indicated by Aziaku (2016) which is ‘gbemumuda’ ‘gbemumu + da’ ‘green + snake’ indicates that a substantive or the head name which is ‘da’ is preceded by ‘gbemumu’ an adjective. Also, prepositions or place names can combine with nouns to qualify the head name or the substantive. For

instance, ‘atiŋukali’ that is ‘atiŋu + kali’ = ‘atiŋukali’ climbing black pepper *Pipper guineense,* where ‘atiŋu’ is the adjective or the qualifier and ‘kali’ is the substantive or the head name.

2.1.7 Phrase Compounds

Phrase compounds are generally derived from verbal constructions which bear social, cultural and biological information that is interpretable depending on the individual constituents and their referents (Aziaku 2016). Also, the verbs that occur in the compound as observed include imperative and subjunctive verbs. The compound may be with or without overt subjects and objects. Any aspect of the phrase could be back-grounded and the structure / phrase can be complete or incomplete (Štekauer, 2005). This discussion focuses on nouns with serial verbs, and a verb with another verb.

2.1.7.1 Head Name with serial verbs

The head name with serial verb form of noun formation process discusses the SVC characteristics. Collins (1997:461) defines a serial verb construction as “a succession of verbs, their complements (if any) with one subject and one tense value that are not separated by any overt marker of coordination or subordination”. Ofori (2002) and Duthie (1996) observe that SVCs also undergo a kind of nominalization in Ɛvɛ. The serial verb construction, also known as verb serialization or verb stacking, is a syntactic phenomenon in which two or more verbs or verb phrases are strung together in a single clause. For instance, ‘dɔaɖemakpɔwɔe’ dɔ + aɖe + ma + kpɔ + wɔe, in ‘work + some + don’t + see + do + it’. In this instance, there are two

verbs in the phrase which are' kpɔ' and 'wɔ' 'see' and 'do'. Also, in verb + verb we have an example of 'wɔkɛ'. 'Wɔ' is verb and 'ka' which becomes 'kɛ' to show diminutive, is also a verb.

2.1.8 Affixation (derivational Processes)

Prefixation refers to the process of adding a bound morpheme to the beginning of a base or stem (Radford and Atkinson, 2005:87). The bound morpheme added may be a 'prefix' (when it comes in front of the stem) an infix (when it is inserted into the stem), a suffix (when it comes after the stem), or a circumfix (when part of the morpheme comes in front of the stem and part comes after the stem) (Quirk and Greenbaum, 1973:431-441). However, most of the derivational morphemes in Aŋlɔ are suffixes as in the examples below:

1. *kpúí* + *é* → *kpúié*
   short affix
   ' briefly'

2. *nyúí* + *é* → *nyúié*
   good affix
   'well'

2.1.9 Reduplication

Reduplication is a morphological process that refers to the repetition of two or more base words that are identical or only slightly different to form a new word. For example, there are reduplication like 'goody-goody', 'wishy-washy', 'hanky–pankey' (Quirk and Greenbaum, 1973: 448). In Aŋlɔ Eʋe, we have an example as 'mitsimitsi' khaki weed, *Alternanthera repens*, where *"mitsi"* means mucus.

There are two main categories of reduplication. These are complete and partial reduplications. The categorisation of reduplication is premised on the

manner in which an existing stem is copied. The terms used to describe the types of reduplication are total or complete reduplication and partial reduplication.

2.1 9.1 Complete Reduplication

Complete reduplication can simply be defined as one lexeme which consists two or more identical parts. Al-Hassan (1998) says complete reduplication is realised when the stem of word is repeated without any alteration. For instance,

	Stem				**Reduplicated form**
3.	*mìtsí*	+	*mìtsí*	→	*mítsìmítsí*
	mucus		mucus		
	'khaki weed'				

2.1.9.2 Partial Reduplication

Partial reduplication means that a portion of the simple or complex form, smaller than the whole is copied or in the case of lexical reduplication, that the lexeme contains certain segmented string twice or more. Al – Hassan (1998) defines partial reduplication as a process where part of the stem is repeated. Fabb (1998) notes that in partial reduplication the stem is slightly modified. Partial reduplication in Eʋe shows consistence with the deletion of a liquid in the first syllable. For instance, 'kplɔ' sweep undergoes reduplication with some modification to the stem. Thus, kplɔ is partially reduplicated as kpɔkplɔ in "kpɔkplɔti"

2.2 Borrowing

Borrowing refers to the process by which a language borrows words from another language. Yule (1996:40) indicates that "borrowing is taking over of words from other languages". He added that "in this process, there is a direct translation of the elements of a word into the borrowing languages. Most languages borrow from other languages in various forms. As a result of the contacts that the speakers of Eʋe have with other language speakers and as a mark of multilingualism in Ghana, substantial amount of vocabulary, have been borrowed from other languages. In the view of Yule (1996), borrowing is the commonest type of word formation process.

According to Green (2009), borrowing is a natural process among the world's languages and occurs quite frequently when speakers of different languages come into extended contact with each other. The term is used to refer to the process whereby foreign lexical items (words or phrases) are used by speakers of one language either to refer to completely new concepts or objects which never had their own term in the language or to replace lexical items which already existed in the language (Green 2009). When foreign terms are used to refer to completely new concepts, such as computers or the internet, the borrowing does not necessarily encroach on the language, although speakers of some languages make it a point of always coining new terms for these things, for example, taking the word for 'spider web' in their language and using it to refer to the internet. However, when the foreign termsreplace terms which already existed in the language such as when the English greeting "morning" is used by Eʋe speakers despite the previous existence of situations whereby Eʋe

speakers greeted each other prior to noon, this borrowing constitutes a loss of knowledge among the community.

Some plant names in Eʋe came into being because some of the plants are exotic species often introduced into the area due to agriculture. These include cocoa, coffee, bamboo, mango, moringa, tomato and guava which are called respectively in Aŋlɔ Eʋe as kokoo, kɔfi, mangɔ, mɔringa, tomato, and aguwa. Many of these new names have undergone slightly phonological changes, and may have been acquired directly from English or through neighbouring languages. While the plant names may have been introduced to Ghana by English – speaking people, one should note that the English language borrowed most of them from other languages at some point, and the names are not of English origin either. Words such as 'Odumti' Odum – *Chlorophora excels',* 'mahoganiti' mahogany – *Khaya senegalensis,* 'mangɔ' mango – *Mangifera indica*, 'liliti' neem – *Azadirachta indica* are, all borrowed names into the Eʋe language.

2.3 Eʋe naming system

Although, this present study focuses on plant names in Aŋlɔ, it is also important to throw light on other naming systems in Aŋlɔ. Scholars who carried out research on Eʋe personal names conclude that the names are drawn from their cultural milieu. Aziaku (2016) states that the naming system of animals among the Eʋe of Ghana characterizes the naming process from morphological perspectives. Agbedor and Johnson (2005), also say that personal names have linguistic structures. Clearly, the understanding is that in as much as personal

and animal names in Eʋe have linguistic structures, plant names in Eʋe would also have linguistic structures.

In this section, works that discuss the typology of personal names are reviewed. The review shows the types of personal names that exist in Eʋe language and how these names are formed. Egblewogbe's (1977) and Abadzivor's (2007) work on personal names in Eʋe were reviewed. The review of the personal names is relevant to this study because these names conform to the composition of plant names in Eʋe language. For instance, 'Mawuli' 'God exists' is the combination of 'Mawu' 'God' which is a noun and 'li' 'exists' which is also a verb.

A name is a word or a set of words by which a person or a thing is known, addressed or referred to. According to Abadzivor (2007: 109), a personal name is a word that is used to identify people. Abadzivor (2007) classifies personal names in Eʋe intothree groups. These are: Azãgbeŋkɔwo (birthday names), Dzidziteʃeŋkɔwo (place of birth names) and Dzidzinɔnɔmeŋkɔwo (manner of birth names). Manner of birth names are classified into twenty-eight groups including God's names (Mawuli, Mawunyo), god's names (Afaxoe, Afayome, Agbowugbe, Sonexoe) while Egblewogbe (1977) categorised Eʋe names into four major naming systems. These systems are categorised according to 'dzɔdzɔmeŋkɔwo' (natural names), 'ŋkɔnanawo' given names, 'ŋkɔtsɔtsɔwo' acquired names and 'subɔsubɔŋkɔwo' religious names. The natural names are said to be names which the child comes into the world with. These names may denote the circumstances surrounding

the child's birth or the day of the week on which the child is born. The given names are given to an individual at birth or later in life but the acquired names are the names taken on later in life by the individual. The religious names denote the religious affiliation of the child or its parents (Abdul, 2014).

2.3.1 The typology and etymology of personal names

The structure and morphology of Eʋe personal names show how names function as speech act in establishing aspects of the socio-cultural life and thought of Eʋe. Abadzivor's (2007) groupings of personal names are the same as Egblewogbe's (1977) groupings (cf. 2.1.8). Egblewogbe establishes ten Eʋe naming systems which he classified into four major groups. Each group consists of other sub groups as shown below.

2.3.2 'Dzɔdzɔmeŋkɔwo' natural names

According to Agyekum (2006), this category of names is the first automatic name every Akan child gets based onthe day s/he was born even before s/he is officially named. Except in few cases**,** this first name is not tempered with. The Akans call it *kradin* (lit.) 'soul's name' and they believe that this is a name that a person's soul offers him/her. According to Abdul (2014), the Eʋe birthday names are given based on the days of the week as with the Akan. These days are Dzoɖa, Blaɖa, Kuɖa, Yawoɖa, Fiɖa, Memliɖa and Kɔsiɖa. (Monday, Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday) respectively. According to Abdul (2014), it is believed that people can use the name to cast a spell on the bearer. This assertion may not be wholly true because Eʋes use birthday names either as first names or middle names. This

belief in the assertion of casting spell on someone is rather the opposite. It is a general belief among the Eʋe that when people know the bearer by the birthday name and call him or her as such, the 'spell' would not work. But if the birthday name is not known and called by the people, it is then that the 'spell would work if the person casting the spell happens to know the birthday name. So, it is advantageous to bear the birthday name than not to bear it.

- **Sub- types of dzɔdzɔmeŋkɔwo (natural names)**

i. 'dzigbeŋkɔwo' birthday names

ii. 'dzidzimeŋkɔwo' order of birth names

iii. 'tɔŋkɔwo' patrilineal names

iv. 'ŋkɔtɔxɛwo' circumstantial names

2. 3 .3 'ŋkɔnanawo' other names given at birth and later / given names.

According to Egblewogbe (1977), other names given at birth or later in life are derived from circumstances that do not have any direct bearing on the children themselves rather, they are socially oriented in that the ideas they express centre around man and society, his general nature , his relationship with others and the gods. These names allow the name givers to transmit a personal message to (specific) members of the society. The messages contained in an allusive name are not directed at the name bearer but to the third party or parties. Through these names, the givers indirectly express criticism or mockery of other persons or send a warning message to them.

According to Abdul (2014), hiding behind these names to put across their message, name givers avoid open confrontations and conflicts with their

target recipients. Generally, among the Ɛvɛ, Abdul's (2014) assertion may not be wholly true in the case of allusive names because givers of allusive names rather pronounce the names openly to put their messages across. But in the case of nicknames, name givers and callers avoid open confrontation therefore, they don't call the names openly.

Examples of the allusive names are:

Menyawo (I know them)

Dzidzienyo (procreation is good)

Tsɔekewo (forgive them)

Agbekomebia (I only asked for life)

- **Sub-types of ŋkɔnanawo (given names)**

i. 'ahamaŋkɔwo' allusive names

ii. 'dɔwɔnaŋkɔwo' vocational names

iii. 'megbeŋkɔwo' nicknames

2.3.4 'ŋkɔtsɔtsɔwo' names taken in life or acquired names

Names taken in life or acquired names depend on the choice of the bearer of the name. Most of these names show bravery or fun (Abdul, 2014). These names are mostly called by one's peers. These names are referred to as 'appelation/praise' names or 'guy names'. If the name is an appellation, both elders and one's peers pronounce it. But if it is a 'guy name', it is only one's peers that pronounce it. An example of appellations or praise names in Ɛvɛ is:

Gbemekplɔaxɔmeo (weeds are not used to sweep room)

'ahanoŋkɔwo' praise names

2.3.5 'subɔsubɔŋkɔwo' religious names

Religious names among the Eʋes are known as 'subɔsubɔŋkɔwo' (Egblewogbe, 1977). They are names which reveal the religious affiliation of the name givers or the name bearers. According to Obeng (2001:14), "African religious names reveal the African belief that God is the giver of joy, wealth and peace and also the protector of humankind**".** Through religious names the Eʋes show their reverence and gratitude to God for His mercies and kindness towards them. Their religious names manifest the omnipotence of God. Examples of Eʋe traditional religious names are: 'Hutɔ' (a cult name), 'Amuzu' (a divination name). Examples of Eʋe Christian religious names are: Eyram (God blessed me), Elikplim (God is with me).

- **Sub-types of subɔsubɔŋkɔwo (religious names)**

i. 'huŋkɔwo' cult names

ii. 'tsidetaŋkɔwo' baptismal names

According to Egblewogbe (1977), personal names in Eʋe generally come from the personal experience of the name bearers and the name givers and the circumstances surrounding the birth of the child.

Another work which discusses the etymology of personal names among the Eʋe is Agozie (2000). Agozie's (2000) work discusses the etymology of indigenous religious names and the attitudes these names invoke in the name bearer and name callers in the Ʋeta traditional area. Agozie (2000) focuses on the naming systems associated with three esoteric cults, namely; the Yeʋe cult, the Da cult, and Afa cult. According to Agozie (2000), personal names relating

to these cults are chosen based on the manifestations of the various cult spirits in the initiates but rituals and ritual objects can also be used as personal names by cult members. For instance, "Ase" is a metal rod with a V shape at the top with bells attached to it. It represents the office of the cult priest and it is used by only the 'Midawo' Chief priest. "Agozi" is a small perforated pot used in rituals and the "Agbayiza" (also known as adodo) is a metal rattle used by cult members during cult festivities. "Sokpe" is a sacred stone associated with thunder bolt and the "avlaya" is a skirt made from pieces of cloth and it is worn by the male cult members.

"So" thunder names include 'misiso' show reverence to 'so', 'Sofeda' 'So' overcomes 'Da' (snake), 'Sosu' 'So' is sufficient. "Hu/Yevɛ" thunder names include 'Hutɔ' owner of 'Hu/Yevɛ', 'Hudziezɔ' on orders of Hu/Yevɛ and 'Hufɔdzi' on the path of 'Hu/Yevɛ'. Personal names associated with 'Da' snake include 'Dadziezɔ' on the orders of Da, 'Dasi' Da has married her/ Da's wife, and 'Dawuso' 'Da' surpasses 'So'. 'Afa' oracle names include, 'Afagbedzi' the will of Afa, 'Afawogbe' the will of Afa, 'Kpɔlimenya' mystery of Afa. The three esoteric cults mentioned by Agozie (2000) may not be wholly true because Afa cult is different from Yevɛ cult. According to Abadzivor (2007), Afa cult is for divination and the names are diferrent fromYevɛ cult. The three esoteric cults of Yevɛ are 'Da', 'So' and 'Avleketi'. 'Afa' should have been separated from the Yevɛ cult in his work.

Personal names that are classified as Evɛ Christian names are the names which reference the relationship between man and God. For instance,

'Mawusenam' God listened to my prayers, 'Mawulikem' God established me, 'Ɛdinam' He blessed me, 'Esenam' He listened to me, 'Ewoenam' He has done it for me.

2.4 Theoretical Framework

Theoretical overview

According to Aronoff (1994), morphology is the study of words, their internal structure and changes they undergo when altered to form new words. Booij (2012) opines that morphology deals with the systematic correspondence between the form and meaning of words. The study of these regularities comprises domains of word formation. Word formation deals with the creation of new (complex) words by various morphological mechanisms such as compounding and affixation. Compounding is an intensively studied word formation process, (Lieber and Štekauer, 2009). According to Booij (2010), compounding is a defining property that has two or more words (in the sense of lexemes) joining together. The form of the lexemes used is often the stem form.

2.4.1 Models of Morphological Theory

Traditional grammar places emphasis on word and word forms in the studying language and this laid the foundation for the eighteenth-century Western linguists to think of grammar of a language as a matter of word structure. However, the 1940s and early 1950s were noted by Matthews (1974) to be a period of "parallel progress in morphology" as a field of study. From the past to the present, the goals of morphological study are to identify the principles, rules, processes and patterns of the morphology of a language. To achieve these goals, morphologists try to "mimic" the mental organization of

the native speakers' knowledge or replicate the morphological structures of a language by developing different principles, approaches and theoretical models of morphological description / analysis.

2.4.2 Lexical Morphology

Lexical morphology is an approach to morphological description/ analysis of language that is rooted within the broad theory of Generative Grammar. Malmkjaer (1995) states that in the 1970s and 1980s important works on morphology have been produced within the Generative Grammar framework. Generative morphologists like Jakendoff (1990), adopts the lexicalist viewpoint which emphasizes that the rules of word formation are rules for generating words stored in the dictionary (lexicon) within Generative Grammar. This view inevitably creates two schools of 'lexicalist hypothesis' strong and weak lexicalist hypothesis.

The strong lexicalist hypothesis is the view that there is no distinction in principles between inflectional and derivational morphology and they both belong, in Generative Grammar, to the lexicon and not syntax. Lexicon in this hypothesis is seen as a simple sub-component of a Generative Grammar. The main thesis of this hypothesis is expressed in Abdullahi (1999) model of lexical morphology which comprises

a. a list of morphemes.
b. a set of word formation rules otherwise known as (WFRs)
c. a filter and
d. a dictionary (lexicon)

(Addullahi, 1999).

To illustrate how these features of the model operate, a lexical morpheme in English like 'write' has the word formation rules as [write V] + [-er N] and this permits the combination of or joining as 'write + er' but not 'write + ness' , and this subsequently realizes the word 'writer'. Nevertheless, lexical morphology as a model of morphological analysis generally has certain shortcomings. Lexical morphology presumes that a lexical morpheme cannot be analyzed morphologically unless we know the grammatical class of the lexical item or word. The model also proves to be limited because it is concerned only with forms of words in the open–class system that is noun, verb, adjective and adverb. In addition, lexical morphology is based on meaningful morphemes that have clear grammatical information. But it is not all morphemes that are meaningful elements of a language let alone assigning to them a grammatical class. For example, the morpheme 'i' in 'sɔbui' where there are three morphemes 'sɔ +bu +i'. 'sɔ' means horse, 'bu' meaning disappear and 'i' is a pronoun that is 3rd person singular, meaning 'it'. The meaning of 'i' in isolation is difficult to understand because one cannot see and identify it immediately as a pronoun unless it is used with another word class.

2.4.3 The Synthetic Model

The synthetic approach to morphology is more often associated with theory than with methodology. The synthetic approach is like having a lot of little pieces, but the question is how to put them together (Aronoff and Fudeman, 2005). It is within this framework that Haspelmath's (2002) word-based theory of morphology is propounded. The theory is based on the paradigmatic relation

among words that co-exist in the lexicon. The theory emphasizes the significance of the word. Also, the 'relationship between complex words is captured not by splitting them up into parts, but by formulating word –schemas that represent the common features of sets of morphologically related words (Haspelmath, 2002).

The theory is expressed in a form of word-schema which Haspelmath (2002) defines as a lexical entry that contains information on pronunciation, syntactic properties and meaning. The word schema is expressed as follows

/X/

N

'x'

The double slash // represents a slot space for different word entries that are in paradigmatic relations and the X (capital) stands for variable strings of phonological words. The N (capital) represents the grammatical classes of words and the x (small letter) stands for the semantic features of words. For example, the -word-schema of the following words is as follows:

a. 'logo' (oak) 'adịdo' (baobab) 'atiwo' (trees).

b. /X/

N

'x' (tree)

In the above example, the word-schema of the words in (a) show that the words 'match' in a schema since they are names of trees and the schema (brackets) 'subsumes' the words. The words can fill the slot (the double slash) as entries in a paradigmatic relation to further indicate that each word in the slot can be substituted with others within the same set. The word-class of the words is noun and this is represented by 'N' (capital). The common semantic features of the words (represented by 'x' small letter) is expressed as 'trees'. Where you have a different set of words that match, the word –schema changes accordingly. For example, the word-schema of the following can be illustrated this way:

a. 'dzĩ' (red) 'yibɔ' (black) 'amadedewo' (types of colours)

b. /X/

Adj

'x' types of colours

The above implies that in word-based theory, different sets of words have different word –schema as their expression.

Nevertheless, Haspelmath's (2002) theory has little to offer to languages whose morphologies have not been adequately studied. This is because the theory is based on words in a paradigmatic relationship while the nature of the internal structure of words that is important to morphologists is not part of the theory.

2.4.4 Analytical models

Most morphologists describe the morphology of a language either in analytical or synthetic ways. The analytical approach breaks down words into morphemic parts.

Nida's (1949) study is one of the early notable morphological studies that describe the morphology of a language in analytical ways. Nida uses six principles for identifying the morphemes of a language. The principles are derived from the methods Nida adopted as he stated that "we compare and isolate, and it is only by such comparison with other forms that we can discover morphemes" (Nida, 1949:6). To that end, Nida outlined six principles for identifying morphemes of a language. The principles are:

(1) Forms which have a common semantic distinctiveness and an identical phonetic form in all their occurrences constitute a single morpheme.

(ii) Forms which have a common semantic distinctiveness but different phonemic forms (that is the phonemes or order of the phonemes) may constitute a morpheme, provided the distribution of formal differences is phonologically definable.

(iii) Forms which have a common semantic distinctiveness but differ in phonemic form is such a way that their distribution cannot be phonologically defined constitute a single morpheme if the forms are in complementary distribution in accordance with certain stated restrictive conditions.

(iv) An overt formal difference in a structural series constitutes a morpheme if, in any member of such a series; the overt formal difference and a

zero structural difference are the only significant features for distinguishing minimal units of a phonetic–semantic distinctiveness.

(v) Homophonous forms (linguistics forms which sound alike) are identifiable as the same or different morphemes on the basis of certain conditions.

(vi) A morpheme is isolatable if it occurs under certain conditions of isolation (Tomori, 1977).

Nida's (1949) principles can be used to discover, identify and classify different types of morphemes of a language in a form of an inventory. For instance, principle (i) can identify words like "nuŋlɔla", "ɣeɖula", "hadzila", "agbledela" "ameʃola", "amedzula" as morphemes of the same forms since they all end with the same morphemic element "la" that has the same meaning (as 'doer') in the above words.

The weakness of Nida's (1949) approach is that the principles can only lead one to taxonomy of different types of morphemes superficially. This is because the principles are of different types that do not operate as a single formal methodology with general application. The principle presumes that a morpheme can be identified as a type only if it has morphemic forms in comparison with other similar ones. Furthermore, the principles focus on forms of words instead of their internal structures and can therefore confuse the identification of morphemes in some words. For instance, there are forms of words that do not occur alone or in isolation like "redemp' as in redemption or 'reten' as in "retention'. These morphemic forms ('redemp'- or 'reten'-) do not

replicate anywhere other than with the above English words and therefore they are isolatable. This is contrary to Nida's factor of isolation.

2.4.5. Hockett's (1954) Model

Hockett's (1954) uses the analytical method of his morphological studies and distinguishes three approaches to morphological description. These are 'Word and Paradigm (WP), 'Item and Arrangement (IA) and 'Item and Process' (IP). Word and Paradigm (WP) as an approach, has a long-established history going back to ancient classical (traditional) grammars when it was developed for "older Indo-European System" (Matthews, 1974). In this approach, the word is the central unit and the grammatical words are the minimal elements and as a result, the approach focuses on word forms rather than their internal structure. The methodology of WP approach is that "word forms sharing common root or base are grouped into one or more paradigms" (Malmkjaer, 1995:322). The term "paradigm" means 'pattern' in Greek but in WP it refers to the forms of a given noun, verb etc arranged systematically according to their grammatical features" (Matthews, 1997). The paradigm categories include number, person, tense, case (grammatical categories) which are mostly used as inflectional morphemes. For example, the following words constitute paradigm of verb forms, and also noun forms

Verb forms

Verb	**habitual**	**present cont.**	**past part.**	**past**
cook	cooks	cooking	cooked	cooked
walk	walks	walking	walked	walked
see	sees	seeing	saw	saw

Noun forms

noun	**possession**	**plural**
man	man's	men
child	child's	children
house	house's	houses

The paradigms of verb forms are determined by the syntactic features of number (as in 'I cook') where number is usually a noun or pronoun and not a verb, person (as in 'He walks') also, a noun or pronoun and tense (as in 'He cooked') which is a verb.

Similarly, the paradigms of noun forms are determined by number such as singular and plural (as in 'man/ men') and case such as possessive (as in child's care'). Members of such set of the verb and noun forms listed (above) are said to be in paradigmatic relationship with one another (Tomori, 1977).

Nevertheless, the WP approach has some weaknesses. First, the approach focuses on word forms and just lists them in paradigms without explicit analysis. It is simply a rudimentary division between the 'stem' and 'ending' (inflectional suffix) (Matthews, 1970). Secondly, the approach proves workable with languages that inflect like English but not with languages that agglutinate. In addition, the approach appears limited in application and appropriate to the morphological study of verbs that inflect in inflectional languages.

Hockett's (1954) Item and Process and Item and Arrangement are associated with "American Structuralist Linguistics, codified by Bloomfield (1933)" (Aronoff and Fudeman, 2005). Item and Process (henceforth, IP) is an approach "in which an initially simple element like root or base word

undergoes successive processes of internal change, affixation" (Matthews, 1977). This morphological conception of morpheme analysis derives its thrust from Bloomfield's (1933) concept of phonetic modification; which is one of the four ways he identifies for arranging morphemes. IP considers the word, not the morpheme, to be the basic unit of grammar, and therefore, the morphology/syntax division is negated (Malmkjaer, 1995). In IP, each morpheme has an underlying form to which processes are applied and labels such as 'plural', 'past tense' are treated as operations rather than forms. the methodology of IP is that it begins by providing the morphemes with the 'basic phonological make up' such as 'SINK', then this interacts with another abstract morpheme like plural, past tense, to trigger of a 'morphological process' (the process of change). Finally, further processes (morpho-phonemic) operate on the changed morpheme to realize the resultant morpheme. For example, to arrive at 'sank' as a past tense form of the lexeme 'SINK', the basic form 'sink' interacts and joins the 'past tense'. But the 'past tense' disappears only to trigger off the morphological process (process of change) that changes [i] in 'sink' to [a] to finally realize the past form 'sank' in place of 'sink'. (Matthews, 1974).

However, Matthews (1974) being an exponent of Hockett's IP, further modifies its concept and methodology. In Matthew's (1974) model of IP , the verb 'sailed' is the 'derivand' (the form which results when a process or operation is applied) and this further consists of the 'operand' 'sail' (operand is the form that derivation is applied to) plus the ' formative ' written as '–ed'. This is given in the following schematic illustration:

O ⟶ O + ed

(where 'o' stands for the verb)

(derivand, eg 'sailed') (operand, eg 'sailed') (formative, eg. '-ed')

The arrow symbol is called 'sandhi' (ie. 'joining') (Matthews, 1974). In fact, "IP concepts form essential parts of what has come to be known as 'generative phonology'" (Matthews, 1970: 106)

IP can explicitly account for all the features of all languages, the notion of synchronic vowels change for example, 'sink' to 'sank' has been criticized to be far removed from the objective description of the morphology of language. Also, IP's methodology is simple and appears less cumbersome. Most importantly, IP appears to be suitable for inflectional languages like English and Ɛvɛ where verbs inflect and can even undergo vowel change. On the other hand, IP appears to be suitable for languages that are tonal and whose word classes take affixal morphemes like Ɛvɛ nouns. In other words, IP can adequately and explicitly analyse the morphology of agglutinating languages.

Item and Arrangement ((IA), according to Aronoff and Fudeman (2005), grew out of the structuralist preoccupation with word analysis, and in particular, with the technique for breaking words down into their component morphemes. This conception of morpheme analysis has foundation in Bloomfield's (1933) concept of 'order' and 'selection' as twin criteria for arranging the morphemes (Palmer, 1971). According to Matthews (1974), IA is Hocketts' clearest model of morphological analysis as it takes the morpheme as the basic unit of morphological description and "treats morphology as syntax" (Abdullahi, 1999: 37).

The goal of IA is to describe the totality of possible sequence of morphemes, especially in 'a strongly agglutinative language', using discrete minimal units (Malmkajaer, 1995). The methodology of IA is to first provide a specification of the inventory of morphemes (the items). This is then followed by a specification of the sequence in which these morphemes can appear (the possible arrangement). Lastly, the methodology provides a specification of how each morpheme can be realised through the link between the grammatical aspect of morphological structure and the phonology (Matthews, 1970). For example, a noun like 'yevuziti' in Eʋe that is breadnut - *Artocarpus incises* can be analysed explicitly as "yevu+azi[a]ti. It therefore shows that Aŋlɔ Eʋe nouns are agglutinating.

The IA method of analysis has the advantage of explicitly identifying types of morphemes. The above example contains three morphemes of which all of them are free morphemes (a morpheme which can be used as a word on its own), that is 'yevu', 'azi' and 'ati'. Secondly, the segmented morphemes in sequence (yevu-azi-ati) are syntactically related because ordering the morphemes in any other way will render the word morphologically incorrect. For example, 'yevu-ati-azi' or 'ati-azi yevu'. It is due to this syntactic element in IA that modern morphologists like Aronoff and Fudeman (2005), associate the approach with the concept of 'concatenative morphology'. This concept brings about the use of 'concatenation symbols (+) to mark morpheme boundaries in words and between words in IA analysis. Lastly, IA methodology is simple to use and it also operates with method of analysis.

In sum, Aŋlɔ uses a large number of morphemes to compose new words or to demonstrate the grammatical relationship between words in a string (Ameka, 2001). Hockett's (1954) generally distinguishes between two basic approaches to morphemes which he calls item - and - arrangement and item - and - process, representing two different points of view. Aronoff and Fudeman (2005) observe that item - and - arrangement proceeds from a picture of each language as a set of elements and the patterns in which those elements occur. In Hockett's (1954) view, item – and – arrangement grew out of the structuralist preoccupation with word analysis, and in particular, with techniques for breaking words down into their component morphemes, which are the items. The construction of words in Eʋe in general and the composition of plant names specifically should be considered as the arrangement of these morphemes into a particular order or structure. However, it is important to note that constituents of Eʋe words may not obliterate their word boundaries hence item may retain their independent status contrary to the position of Aronoff and Fudaman and other scholars. The IA has some weaknesses, that is, it does not consider the final output of the analysed wordbut only the internal analysis. Therefore, this study will adopt Hocket's (1954) Item and Arrangement (IA) and Item and Process (IP) models as the main frameworks.

The reason for the choice of both IA and IP in this study is that while IA looks at morphemes as the basic unit of morphological description, IP also treats words as the basic unit of morohological description. This will help the analysis of the plant names in totality because IA looks at the plant names from morpheme point of view, and IP treats the plant names from the word point of

view. As indicated earlier in this chapter, IA breaks words into the various morphemes while IP considers the word as the final output of the analysis. In both cases, there is an internal analysis.

2.5 Summary of the literature review

This chapter comprises the choice and review of a theoretical framework and review of related literature on the general study of morphology (analysis of internal structure of words). In the review, word formation processes were discussed based on the various compositional features. The review also covers the significance of morphology and its contributions to the general study of language. The review also examines the various morphological issues, concepts and processes that are significantly related to the present study. Though, the work of the various scholars did not discuss plant names, their strategies and the processes conform to this study.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter focuses on the research design, sources of data, method of data collection, data processing and data analysis. As indicated earlier, the study is basically on the morphology of plant names in Aŋlɔ. The study requires adequate knowledge of the Eʋe language and actual people that speak the language as native speakers for the confirmation of the plant names. This prerequisite guarantees the use of elicitation method as one of the methods of generating the data for the research and on the other level, the confirmation of the plant names by the indigenous speakers of the language. According to Nida (1949), a descriptive analysis of a language must be based upon what people say or how people use the language.

3.1 Research Design

Leedy and Ornarod (2005) define research design as a plan for study, providing the overall framework for collecting data. They continue to say that it is a plan for selecting subjects, research sites, and data collection procedures to answer the research question(s). Leedy and Ornarod (2005) further indicated that the goal of a sound research design is to provide results that are judged to be credible. Durrheim (2005) says, research design is a strategic framework for action that serves as a bridge between research questions and the execution or implementation of research strategy. This research is basically structuralist item

–and-arrangement and item-and-process analysis study which analyse the process of noun formation.

The research design of this study therefore, is qualitative research which is a descriptive analysis research. According to Mustafa (2010), qualitative research is concerned with phenomena relating to quality. According to Denzin and Lincoln (1994), a qualitative research focuses on interpretation of phenomena in their natural settings to make sense in terms of the meanings people bring to these settings. Mustafa (2010) says that a descriptive research interprets facts as they are the conditions that exist, the relationship between two events, and the trends that are developing. Plant names in Aŋlɔ can be analysed by descriptive research because noun formation processes in Aŋlɔ conform to the formation of nouns in other languages. The analysis mainly focuses on all forms of morphological processes which are analysable. These forms are employed to enable the researcher to analyse the nouns morphologically.

3.2 Sources of data

Data was collected from both secondary and primary sources. But this data had to be confirmed by the indigenous Aŋlɔ Eʋe speakers to authenticate the right pronunciation of the names and their correct spelling. This is necessary because some of the names gathered from the secondary source might be wrongly spelt, hence the need to fall on the native speakers for their correct pronunciation and spelling. The secondary sources of the data of this research include: Irvine, (1933, 1969), Carpenter, (1944), Oku, (1983). Others are Awuku, Brese, Ofosu, Baiden, (1991), Opoku-Asiamah, Armah, Fiadjoe,

Mensah, Saah, (1993), Tweneboa, (1998) and Green, (2009). There are also some complementary books used in order to obtain a valid and a reliable data for the research. These materials are: Ahiagbenu, (2014) and Dzobo, (2015). These two materials are dictionaries written in Eʋe and translated into English language. The choice of the above-mentioned works is to ensure validity and reliability of the data as mentioned earlier. According to Erlandson, Harris, Skipper, Allen, (1993), validity and reliability rest on trustworthiness; while reliability deals with the degree to which a given tool or work could be repeated by an independent researcher, validity refers to whether or not the test measures what it claims to measure.

3.3 Method of data collection

The method used to collect and to elicit information for this study was to rely on written documents as mentioned earlier and elicitation. To achieve the above-mentioned method, the researcher relied on books on plant names in both English and Eʋe languages. Based on this, the researcher was able to collect data to be used in the study, though corroborated by other data sources like unstructured interview.

The unstructured interview guide was used in this study to elicit information from the native speakers of Aŋlɔ who are familiar with the plant names to authenticate the names gathered from books as mentioned earlier. The interview covered oral questions on how certain plant names are pronounced and their possible meanings.

3.4 Pre-Field Work Preparation

The researcher started the preparation work through library research to be familiar with the literature on plant names. The researcher began from the University of Cape Coast and continued to the University of Education, Winneba and later on proceeded to the University of Ghana, Legon and finally to the Kwame Nkrumah University of Science and Technology, Kumasi. A chunk of books were consulted in order to collect data on plant names. After a careful consultation, ten (10) books were finally selected and used in the exercise. Books used in the data collection have been mentioned under sources of data in chapter three (3). The data collected were kept safely under lock and key for further work to be done on them. This study demands confirmation of the names by the indigenous speakers of Aŋlɔ before they are finally used in the analysis. This took the form of elicitation needed for the authentication of the data.

3.5 Elicitation

This study as indicated earlier, demands some confirmation of the secondary data from the indigenous speakers of Aŋlɔ hence the use of elicitation to authenticate the pronunciation and spelling of the names and collect suggested meanings of the names. Elicitation, according to Vliet and Brinkkemper, (2002), it is an interview process between a researcher and his/her informant(s) with the view of seeking more explanation of certain aspects of the data. Vliet and Brinkkemper, (2002), added that elicitation is

learning, uncovering, extracting, or discovering needs. They continued to say that elicitation is the process of getting information from someone.

According to Nuseibeh and Easterbrook (2000), the choice of elicitation method depends onthe time and resources available to the researcherfor the elicitation. In this research, the method of elicitation adopted is the unstructured interview. The research focused on the unstructured interview as a qualitative research method for data collection.

3.5.1 Unstructured Interview

According to Kumekpor (2002), unstructured interview may not use full-scale interview questionnaire. In most unstructured interviews, the interviewer does not follow any structured pattern. The interviewer can proceed in any order of the questions he deems appropriate. It is an interview in which questions are not pre-arranged.

3.6 Field Work

Three communities were selected for this research. Respondents were purposively selected in all the three (3) selected communities. The respondents were carefully chosen for this research because they are knowledgeable in the field of plant names. The respondents include farmers, herbalists and Agricultural Science teachers. The researcher began the field work from Aŋlɔgã. The researcher interviewed six (6) people in this community. Two (2) of them were herbalists, two (2) of them were Agricultural Science teachers and the other two (2) were farmers. In Asadame, six (6) people were

interviewed. One (1) of them was a herbalist, three (3) of them were Agricultural Science teachers, two (2) were farmers. In Abor, eight (8) people were interviewed; four (4) of them were Agricultural Science teachers, three (3) were herbalists and one (1) was a farmer. In all, twenty (20) people were interviewed. One hundred and forty-one (141) plant names were collected and, on the average, one (1) person confirmed seven (7) plant names. Also, six (6) respondents were herbalists, nine (9) respondents were Agricultural Science teachers. The last group of respondents were five (5). They were farmers. During the interview, pictures of plants were shown to the respondents to identify. In some cases, the researcher mentioned the names of the plants that he gathered from the books and asked the respondents to pronounce them correctly in Aŋlɔ. The people and names of the plants were randomly selected for the confirmation. In one instance, some of the respondents took the researcher around for identification and documentation of plant and their names. Those plant names which confused the respondents, pictures of the plants were shown to the respondents for identification and pronunciation. In the case of the Agricultural Science teachers and others who can read and write, lists of plant names were given to them for the confirmation of the names. In addition to the secondary data which have been corroborated by respondents, other plant names were also collected from the field. These plant names gathered from the respondents are the primary source components of the data.

3.7 Data Analysis and Data Interpretation

In this present study, qualitative data tools were used to facilitate a systematic analysis of the names. Specifically, morphological analysis from secondary data was used. Osuala (2005), expresses a similar view point that data must be organised and interpretations given in ways that will allow the researcher to realise their patterns, identify themes, discover relationships, develop explanations, make interpretations, mount critiques, and generate theories.

3.7.1 Morphological Analysis

The names have been categorised according to the morphological strategies. Morphological approach was used. The morphological approach breaks down words into morphemic parts. The Item and Arrangement (IA) and Item and Process (IP), according to Aronoff and Fudeman (2005), grew out with word analysis, and in particular, with the technique for breaking words down into their component morphemes. The study used the morphological processes to obtain units of the various domains such as, noun formation strategies thus, Determinative Compounds and Phrase Compounds. These morphological processes have their sub-units. These are: head name + adjective, head name + quantifier and head name with serial verbs. Reduplication and borrowing were also uncovered.

3.8 Justification for the choice of the methods

This section explains the use of the above-mentioned methods of data collection for this study and why the researcher opted for them. In the first place, the researcher opted for the secondary sources in that the information already exists in print and the assumption is that its validity and reliability are high. These pieces of information have been tested and used by other researchers; therefore, it can be relied on. To make these pieces of information (data) more authentic, the researcher consulted the indigenous speakers of Aŋlɔ for the confirmation of the names. The data source although, was a secondary source, it has an aspect of primary source supporting it. The use of this primary source helps the researcher to blend the information gathered.

3.9 Summary

This chapter presented the methods and methodology of the research including the research design, sources of data, method of data collection-elicitation and unstructured interview, data analysis and data interpretation. In the analysis, noun formation strategies were discussed together with other morphological processes. In the data collection, emphasis was laid on the confirmation of the names by the use of unstructured interview a form of elicitation to authenticate the names.

With the above-mentioned methodology, the researcher set the tone for the analysis and discussion of the data

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, DISCUSSION AND ETYMOLOGY

4.0 Introduction

This chapter deals with data presentation, analysis, discussion and etymology of results. In this chapter, the researcher used Hockett's (1954), Item and Arrangement and Item and Process models to form the basis of the discussion. Furthermore, the research analyses and classifies the data according to the morphological structures of different types of nouns in respect of plant names in Aŋlɔ. Also, the present chapter discusses the origin (etymology) of plant names in Aŋlɔ. According to Aziaku (2016), etymology is an investigation that is rare in linguistics except for a few attempts by literary writers and historians. Etymology is the study of the origin of words and the way in which their meanings have changed throughout history (Janda & Joseph, 2005). The meanings are provided based on conjectures as a result of continued observation and the uses of the plants. This practice of the people, relates to what Akyea (2009) termed 'nyadodo' 'word invention' in Eʋe. According to Aziaku (2016), it is a kind of narration tailored to an entity based on its peculiarity.

4.1 Presentation of data, discussion and etymolgy of results.

The discussion is centred on the various types of word formation strategies that exist in plant names in Aŋlɔ. The first set of categorisation is on

compounds. The various types of compounds that exist in the names are broadly categorised as:

a. Determinative compounds.
b. Phrase compounds.

These compounds exhibit different patterns.

4.2. Determinative compounds

According to Olsen (2001), a Determinative compound is a type of compound in which part of it gives information that pertains to the compound's head, but not by acting as modifier. According to Aziaku (2016), the determinative combinations can be categorised as substantive plus adjective, substantive plus quantifier, and substantive plus preposition. According to Thakur (2010), compound names can be classified on the basis of the following underlying syntactic links among the constituent words. Some of the well – known types of compound names are: subject + object, subject + verb, subject + complement, verb + object, and verb + adverbial

4.2.1 Head Name+ Adjective (Qualifier)

The head name with adjective combination appears in two forms. In one instance, the adjective precedes the head name, and in the other instance, the adjective follows the head name. In Eʋe, adjectives are generally shown in the post head position when they form compounds (Amegashie, 2004). For instance, 'azinogui' 'azi' (head name) + 'nogui' (rounded) which is an adjective, 'bambara bean', 'bedzã' 'be' (head name) + 'dzã' (redish) which is an adjective, 'spear grass'. In this instance, the adjectives follow the names

they qualify. In other words, the adjectives depict the quality of the names. For example,

1. *ɬ̀azì* + *nógóé* → *àzìnógúí*
   groundnut rounded
   'bambara bean'

'Azinogui' literally means rounded groundnut. Although, it is a type of bean, it is referred to as a groundnut in Aŋlɔ dialect. In this compound, 'azi' is the head name and 'nogui' is the adjective or the qualifier. The adjective 'nogui' is written 'nogoe' in Standard Eʋe. 'Nogoe' also means rounded, but in Aŋlɔ dialect, when the sound 'e' follows 'o' in a word, the 'o' becomes 'u' and 'e' becomes 'i', hence nogui instead of 'nogoe'. The phonological process in this is vowel raising. In the process, 'o', the mid-back tense rounded vowel raises to 'u' the high tense rounded vowel and this has affected, 'e' the mid-high front unrounded vowel raising to 'i' the high front unrounded vowel because the height of the sounds should be equal.

The following plant names in Aŋlɔ are compound names comprising head names plus adjective forms. The etymology of 'azi' could be traced to how the nut is broken from the shell before eaten. 'Azi' 'groundnut' is being broken by beating it before removing the nut from the shell. 'Nogui' 'round' describes the nature of the groundnut.

2. *bè* + *dzɑ̃́ɬ̀* → *bèdzɑ̃́ɬ̀*
   thatch red
   'spear grass'

In 'bedzɑ̃', 'be', is the head name and 'dzɑ̃' is the adjective or the qualifier. 'Be' 'hide' is a shortened form of the word 'bebeƒe' 'hiding place'.

'Be' 'thatch' is a weed or plant that is used for roofing. When used for roofing, it is mostly used as a place to hide things. One can even hide cutlass in it. The 'dzã' is the colour of the weed. The colour is a blur yellow. It looks like green but a little brighter than green.

3. *àgbìtsá* + *súé* → *àgbítsásúé*
   garden egg small
   'sunburry'

'Agbitsa' is the head name and 'sue' is the adjective or qualifier. The etymology of 'agbitsa' 'garden egg' could be traced to the word 'chaff', meaning 'atsa'. When garden egg is boiled, it becomes soft and malleable. The inner part of a fresh garden egg does not stick together as compared to the boiled one. Folk states that there lived a man called Agbi who was growing vegetables. He cultivated garden eggs and people attempted eating it fresh. After tasting the vegetable, they said, this one is chaff that Agbi gave to us hence 'Agbi ʃe atsa' which becomes 'agbitsa'. 'Sue' is the demunitive form of 'agbitsa' 'garden egg'.

4. *nyà* + *kpè* → *nyàkpè*
   word heavy
   'kigelia sausase'

In this compound, 'nya' is the head name where 'kpe' is the adjective or the qualifier. The fruits of 'nyakpe' are very big and heavy hence, the name 'nyakpe'. The name was therefore derived from the heaviness of the fruit of the plant.

5. *gòdúí* + *vúvú* → *gòdúivúvú*
   loincloth torn
   'juice grass'

In the compound name of 'goduivuvu', 'godui' is head name and 'vuvu' is the adjective (qualifier). This plant is very soft and breaks easily as an old cloth hence, the name.

6. *àɖìdó* + *kpúí* → *àɖìdókpúí*
baobab short
'mountain fig'

In this combination of plant names in Aŋlɔ, 'aɖìdo' is the head name while 'kpui'is the adjective. 'Aɖìdo' could take its source from the hole that is created by the tap root. When a baobab tree is cut and the root got rotten, the hole that is created is so big that when a human being enters it, he or she would be swallowed by the hole. The name was therefore given to this tree due to the dangerous nature of the hole beneath it 'aɖìdo' 'dangerous hole'.

7. *gbè* + *ʋévɪ̃́* → *gbèʋévɪ̃́*
weed scented
'pagoda tree'

The compound has 'gbe' as the head name and 'ʋeʋĩ'as the adjective. This plant was named after its scent. It has a good scent, hence, scented weed.

8. *ʋlɛ̃́* + *àtsú* → *ʋlɛ̃́tsú*
weaverbird male
'goose grass'

In the above formation of the plant name, it is realised that 'a' is deleted in 'atsu' meaning 'male' in the first line to become 'tsu' in the second line. This is a process that deletes an entire segment from a non-final position: either word- final or medial position. A common practice in Aŋlɔ dialect is to delete unstressed vowel in fast speech. This is as a result of **syncope**. In

situations like this, if the second name begins with a vowel, this vowel is deleted.

In the above analysis, it is realized that in Aŋlɔ, names of fruits are used for their plants. This means that plant names can be derived from their fruits. This weed is eaten by 'ʋlɛ̃tsu' 'weaverbirds'. Therefore, the name was given to the plant because it eaten by weaverbirds. It is a fresh greenish creeping weed.

4.2.2 Head Name (Name) + Qualifier (Name + Adjective)

This structure, head name plus adjective or qualifier, is slightly different from the previous compounds in 4.2.1. In this combination, there are two names in a row and an adjective which come together to form another name. In this relationship of the names, the generic name which is the first name 'fla' serves as the head name of the compound and it is qualified by the second name plus the adjective 'togã' which serves as the qualifier. For instance, 'flatogã' 'flã+ togã' consists of 'flã' the generic name for the plant, and 'togã' the size of the plant. The literal translation is 'life plant + big leave'. The structure is not a mere juxtaposition of two names but rather a combination of the generic name of the plant and the reference to its part. The structure shows that a kind of relationship exists between N1 and N2, thus, a relationship between a part and the whole of a plant. N2 has been modified attributively in order to classify the plant.

9. *flá* + *tógã´* → *flátógã´*
   life plant ear big
   'life plant'

10. *flá* + *tóví* + *á* → *flátóviá*
life plant ear small specifier
'kalanchoe'

In 'flatovia', 'fla' is the head noun of the compound which takes 'tovia' as the adjective or qualifier which shows the diminutive form of the plant. The 'a' which has been added to the 'vi' is the specifier, laying more emphasis on the 'vi'. In the compound formation of the above names, 'togã' and 'tovi' are both noun phrases functioning as modifiers of the head names. 'Fla' is a traditional medicinal plant. Among the Ɛvɐ, it is used for exorcism after a person has been cured from a sickness or disease. The name of the plant takes its source from how it is used. The 'togã' and 'tovi' show the big and small nature respectively of the plant.

11. *àmègã´* + *táɤí* → *àmègãtáɤí*
man head grey
'bachelors button'

This combination in (11) is the same as 4.2.2 (9&10). 'Amegãtaɤi' 'grey headed man' takes its source from its flowers. The flowers are whitish and look like a grey hair. Grey hair is being used to describe the plant.

4.2.3 Head Name (Name & Name) + Adjective (Qualifier)

12. *dɔ̀ŋútí* + *glóŋ* → *dɔ̀ŋùtíglóŋ*
sickness orange rough
'lemon'

In 'dɔŋutiloŋ', the combination in the compound is slightly different from the structure in 4.2.2 (9 & 10). The structure in (9&10) above combined 'to' and the adjectives 'gã' and 'vi' to serve as a qualifier to the head name 'fla' but in (4.2.3) 'dɔ' and 'aŋuti' which are

all nouns combined to serve as the head noun. Vowel deletion has also occurred between 'ɔ' and 'a'. This is because 'a' begins a name which follows 'ɔ' immediately and 'a' must be deleted from the new name to enable the new name to be pronounced in fast speech. As indicated earlier, this phonological process is known as **syncope**. 'Dɔŋuti' 'sickness orange' takes its source from how it is used to treat stomach ache. The fruit of the plant is used to treat stomach ache. Therefore, name originated from the treatment of stomach ache.

4.2.4 Qualifier (Adjective) + Head Name (Name)

This process of qualifier plus head name refers to a noun formation strategy where the qualifier precedes the head name in a compound. The qualifier precedes the head name serving as the first member of the compound and functions as a classifier in the sense that the specified is an existing name.

13. *gbàgblà* + *àyì* → *gbàgblàyì*
big / giant beans
'sword bean'

In 'gbagblayi', as mentioned earlier in **4.2.3 (13),** there is a phonological process of segment deletion which occurred as a result of **syncope**. In Aŋlɔ dialect, segments are deleted when different names are compounded to form new names. This has resulted in deleting 'a' from 'gbagbla[a]yi' to become 'gbagblayi'. The process has also affected 'ati[a]yi' and 'kpokpo[a]yi' to become 'atiyi' and 'kpokpoyi' respectively in **14** and **15** below. The name 'gbagblayi' describes the nature and size of the seed. The seeds are big hence, 'gbagbla' 'giant'.

14 *àtí* + *àyí* → *àtíyí*
tree bean
'pigeon pea'

'Atiyi' means, bean that grows on trees. The standing bean and not the creeping one.

15. *kpòkpò* + *àyí* → *kpòkpòyì*
illness/ sickness bean
'lima bean'

4.2.5 **Head name (Name) + Adjective (Quantifier)**

This structure, head name plus quantifier refers to a name and its adjective (quantifier). According to Westermann (1930), and Ameka (1991), most Eʋe adjectives follow their name heads and all other modifiers come after the adjective. According to Ameka (1991), a number of modifiers can occur in numerals (QT), determiners (DET) or the indefinite article (INDEF) or demonstratives (DEM), or content question markers (CQ), the plural marker (PL) and intensifiers. In the absence of one form of a modifier, the ensuing form in the sequence occupies the position. The example, 'tsaxedɖeka'is exocentric compound that has 'ɖeka' a quantifier, as constituent, and since they lack an adjective of manner, the quantifier follows the name immediately. The present data shows that the said collocation can occur with exocentric compounds since they possess syntactic NP that can be modified. Also, in the discussion, 'ɖeka' has changed to 'ɖekɛ' in the second line. The change has occurred as a result of coalescence where 'ɖeka' plus the dimunitive marker 'e' results in a vowel coalescence of 'a + e' to be come 'ɛ'. In Aŋlɔ dialect, 'ɛ' is

used to indicate the smaller nature of names or adjectives (Abadzivor & Dzamesi, 2008) and (Amegashie, 2011).

16. *tsàxé* + *ɖ̀ɛ́ké* → *tsàxéɖ̀ɛ́kɛ́*
guineafowl one
'dodder'

With the above analysis, 'tsaxe' is the head name while 'ɖekɛ' is the quantifier. 'Tsaxeɖeke' 'one guinea fowl' is a plant named after guinea fowl. The plant is a sticky one which traps birds. Guinea fowls find it difficult to fly when they are caught by this plant.

4.2.6 Qualifier (Name and Place Name) + Head Name (Name)

The above structure, qualifier plus head namehas a location or place name 'dome' which combines with the name 'tɔ' to serve as the qualifier of the structure. The compound formed is 'tɔdome + afla. According to Amagashie (2004), we can combine a name, a postposition and another name to form a new name.

17. *tɔ́⇑* + *dòmè* + *àflá* → *tɔ́⇑dòmèflá*
river LOC gambagagrass
'gamgaba grass'

The deletion of 'a' from the first name which is 'tɔdomeafla' to become 'tɔdomefla' in the second name in the above discussion, is aphonological process of syncope, where the beginning vowel of the proceeding name is deleted to pave way for fast pronunciation. This happens in compound names. 'Afla' literally means upright or stiff. The 'tɔdomefla' is a type of gambaga grass which grows in the middle of a river.

18. *àtí* + *ŋú* + *kàlí* → *àtíŋúkálí*
tree LOC pepper
'climbing pepper'

'Atiŋukali' a type of pepper that grows and climbs trees, hence, the name.

19. *àgù* + *mè* + *àtákú* → *àgùmètákú*
land LOC guinea grains
'ginger'

'Atiŋukali' and 'agumetaku' have the same structure as 'tɔdomeƒla'. 'Agumetakui' means a grain that grows beneath the earth. The name 'agumetakui' was given to this plant because the plant grows its seed from the ground, 'agume'.

4.2.7 Qualifier (Place Name) + Head Name (Name)

This is a category of names that are based on one name qualifying the other. The fact is that two head names cannot combine to form a compound because one must qualify the other. Although the two names 'dzogbe' and 'soli' are nouns, one must qualify the other. Therefore, in the structure, 'dzogbe' is the qualifier while 'soli' is the head name. This structure is an example of a right- headed compound.

20. *dzògbè* + *sòlí* → *dzògbèsòlí*
savanna grass/weed
'seaside pursulane'

Although, the place name is 'dzogbe' which translates as savanna, the weed is not grown in only savanna areas. 'dzogbe' is just a broad term used for this plant to show where it normally grows. 'dzogbe' can refer to a jungle, wilderness, plain view or places near lagoon.

21. *dzògbè* + *kɔ́é* → *dzògbèkɔ́é*
savanna hill
'elephant ear'

'Dzogbekɔe' has the same structure as 'dzogbesoli'. This plant grows around hills in jungles or wilderness, hence, the name.

4.2.8 Qualifier (Name) + Head Name (Name)

In this structure qualifier plus head name, the constituents combine to form a compound in which the elements serve as a reference to an entity. The composition of this compound is qualifier plus possession plus head name, but in Aŋlɔ dialect, possessive marker does not join names together to form one name (Amegashie, 2004, 2008), hence the deletion of the possessive marker. These compounds could be discussed under 4.2.7 but the constituents under 4.2.8. are quite different hence separating the two for clarity and convenience sake. All the names that fall under this composition are affected by this rule

22. *ànàgó* + *sábálá* → *nàgósábálá*
yoruba onion
'onion'

The deletion of the initial 'a' from 'anagosabala' to become 'nagosabala' is aphonological process, as a result of vowel elision. According to Kpodo (2014), vowels that begin names in Aŋlɔ, drop from their initial positions in pronunciation. 'anagosabala' 'onion' was brought into Aŋlɔ land from 'anago' 'Nigeria'. The name 'anago' was added to 'sabala'which means crooked or something which is not upright or straight to become 'anagosabala'

23. *yèvú* + *àtsã́* → yèvútsã́
whiteman cashew
'cashew'

'Atsã' 'beauty' is used to depict the beauty of the fruit. 'Yevutsã' is the foreign or the exotic cashew.

24. *yèvú* + *ànyíklẽ́* → *yèvúnyíklẽ́*
whiteman custard apple
'sweet sop' or 'custard apple'

This plant takes its name from the fruit. The fruit is called 'anyiklẽ'. The plant is also called 'anyiklẽ'. This name means, peel before sucking. The name should have read 'klẽnyi'. But for speech convenience, it is called 'anyiklẽ'.

25. *yèvú* + *àzì* → *yèvúzí*
whiteman nut
'breadnut'

'Yevuzi' is not an original local fruit. It is believed to have been brought into this part of the continent by foreigners. The addition of 'yevu' means it is foreign. 'Azi' as said earlier, means beat to open to remove the seed. This fruit, after chewing the flesh, you need to break the shell to enable you remove the seed.

26. *gbòlò* + *àbà* → *gbòlòbá*
prostitute mat
'sodom apple'

As the name suggests, it is a broad leaf that is used as mat in the farm. Folk also tells us that prostitutes use it in the bush as mat, hence the name.

27. *kèsè* + *bìsí* → *kèsébísí*
monkey colanut.
'colanut'

Folk tells us that this fruit 'ksebisi' was first tasted by monkeys before human beings ate thereby naming the fruit after monkeys.

28. *dzò* + *àgbàlɛ̃́* → *dzògbàlɛ̃́*
fire book
'negro coffee'

29. *yévé* + *né* → *yévúné*
whiteman coconut
'coconut'

30 *àgɔ́ʔ́* + *né* → *àgɔ́ʔ́né*
fan palm coconut
'coconut'

Coconut is popularly referred to as 'yevune' in Aŋlɔ but some people also refer to it as 'agɔne'. Therefore, both words 'yevune' and 'agɔne' are acceptable in this research.

31. *yévú* + *tè* → *yèvúté*
whiteman yam
'Chinese yam'

'Te' means 'swell'. This name 'te' came about as a result of how a part of it is grown (yam sucker) to swell to become big in maturity. In 'yevute', 'yevu' has been added because it is believed to have been imported. 'Anagote' also follows the same naration, except that 'anagote' comes from Nigeria.

32. *ànàgó* + *tè* → *nàgóté*
yoruba yam
'sweet potato'

33. *àbɔ́ʔ́* + *kà* → *àbɔ́ká*
arm thread or rope
'vine rubber'

34. *bòsàm* + *kúkú* → *bòsámkúkú*
satan hat
'stag's horn fern'

35. *àwúsá + ŋ̀ùí → àwúsáŋ̀úí*
Hawusa thorn
'hausa thorn'

36. *àɖàtsì + gò → àɖàtsìgò*
tears gourd
'tulip tree'

'Aɖatsigo' is a type of plant that harbours fluid in its fruit which looks like tears, hence 'tears gourd'. The fruit was named after the plant.

37. *àsrã́ + gòè → àsrã́'gúí*
snuff gourd
'paullinia'

'Asrãgoe' literally means snuff gourd. It is used for storing snuff. Similarly, 'asrãgui' also means snuff gourd. The change in spelling from 'goe' to 'gui'which means rounded is as a result of vowel coalescence. In this phonological process, 'o' the mid-back tense rounded vowel raises to 'u' the high tense rounded vowel and this affected, 'e' the mid- high front unrounded vowel raising to 'i' the high front unrounded vowel because àthe height of the sounds must be equal.

38. *àdè + àmá → àdèmà*
slime spinach
'juite marrow'

This is a slime spinach. The name came about as a result of the slime nature of the plant.

39. *àyè + dè → àyèdé*
cunning palm fruit
'wild date palm'
or

áyí + dí → áyídí
cunning palm tree
'wild date palm'

'Ayede' has changed to 'ayidi' in the second line because the Aŋlɔ sometimes raise /e/ the mid-high front unrounded vowel to /i/ the high front unrounded vowel in pronouncing certain words and this process has affected 'ayede' changing to 'ayidi'. This plant looks like a palm tree. The difference between them is that wild date palm does not bear palm fruit it bears some fruits which are not edible. The seeds are only used for propagation. The 'aye' in this name is that it is cunning and behaves like a real palm tree.

40. *àhà + àmá → àhàmá*
drink spinach
'spiny amarantus'

The deletion of 'a' in 'ahama' is as a result of syncope, a phonological process that deletes a segment from initial word position for speech convenience.

41. *nyì + mɔ́ → nyìmɔ́*
cow road
'nuclear'

42. *àvà + gòlò → àvàgòlò*
bulrush pouch
'myrianthus'

43. *kòkóó + àtíkè → kòkóótíkè*
pile medicine
'sesbania pea'

Syncope has taken place once again in the above discussion where 'kokooatike' became 'kokootike'. This plant is used to treat pile hence the name pile medicine. 'Kokoo' means 'pile' in Eʋe while 'atike' means 'medicine'.

44. *ŋɔ̂lì + sábálá → ŋɔ̂lìsábálá*
ghost onion
'welsh onion'

This plant 'ŋɔlisabala' 'welsh onion'is a replica of onion. The real onion is called 'anagosabala' or 'aʃesabala' 'shallot'. It is the real onion because it is not eaten. The name 'ŋɔli' 'ghost' is added to show that it not the real vegetable but rather a replica.

45. *kòklό* + *àtɔ́/̀tsú* → *kòklótɔ'tsú*
fowl comb
'crested elsholtzia'

The flowers of crested elsholtzia look like the comb of a cock. The plant was named after its flowers.

46. *dè* + *xɔ'lɔ̃́é* → *dèxɔ'lɔ̃́é*
palm fruit friend
'fortunes holy'

The 'e' added to xɔlɔ̃ is a pronoun. It is the contracted form of 'ye' which is the third person singular 'it'. The pronoun 'ye' changes to 'e' when it follows a noun in sentence (Amegashie, 2014). This plant is a parasite. It always grows on palm trees. That is why it was named friend of palm tree.

47. *dzàmà* + *tré* → *dzàmàtré*
German calabash
water melon'

The word 'dzamatre' is composed from 'Dzama' (German) and 'tre' (calabash). 'dzamatre' 'water melon' looks like calabash. It is believed that water melon was brought by the Germans hence the name German calabash. The word is a syllable structure process involving the deletion of a segment at the final position of the word. This process is common with loan words. Aŋlɔ dialect is an open syllable language. This means that words do not end with consonants in this language. Words borrowed from other languages that violate

this constrain will have to be taken through this process in order to correct the violation. Therefore, in 'German' the 'n' has been deleted to enable the word to have an open syllable hence, 'Dzama'. This phonological process is called **apocope.**

48. *tà* + *ʃé* + *àmá* → *tàmá*
head herb
'tobacco'

The etymology of 'tama', according to one of the respondents, known as Agbadi in the unstructured interview conducted for this research is a herb or vegetable which is carried on the head from the farm. According to the respondent, 'tama' is heavy and it cannot be carried on the arms except on the head. Thus, the name 'taʃe ama', head's herb/ vegetable. The deletion of 'ʃe' in the relation is for speech convenience, an instance where a whole morpheme is elided. The deletion of 'a' in 'ama' is also as a result of syncope. The full name becomes 'tama'.

4.2.9 Qualifier (Name) + Head Name (Name and Name)

In qualifier plus head name combination, the constituents are independent but function as Determinative compounds. According to Abadzivor (2007), this combination is known as 'tɔnyenyekadodo' possessive relation. The constituents are joined by 'ʃe' when they are being used as multiple noun phrases. The structure in this compound is 'afi + ʃe + ademe'. The deletion of 'ʃe' in the relation is necessary for speech convenience. Therefore, the structure would be 'afi + ademe' 'afideme'.

49. *àfi + àdè + àmé → àfidémé*
mouse slime spinach
'sweeping grass'

The deletion of 'a' in 'ade' and 'ama' in 'afiadeame' to become 'afideme' is a phonological process of syncope. In the combination, there are three constituents. These are 'afi', 'ade' and 'ama'. Two of them can only combine to serve as a qualifier. These two are 'ade' and 'ama', leaving 'afi' as the head name of the compound. The etymology of 'afideme' could be traced to the nature of the plant and how mice are close to it. 'Afi' is 'mouse' and 'ademe' is 'slime spinach'. Mice use this plant as a hiding place or their habitat. The name became 'afideme' because of the above narration.

4.2.1.0 Qualifier (Name & Name) + Head Name (Name)

50. *àkàgà + àyí + àmá → àkàgàyímá*
vulture bean spinach
'negro coffee'

This form of compound is quite different from the example in 4.2.9 (48). The compound has two nouns combining as the qualifier plus another noun serving as the head name.

The seed of this plant looks like beans. Some people roast it and use for medicinal purposes. It is a replica of beans. The use of 'akaga' vulture is to show that it is consumed by birds especially the vulture.

4.2.1.1 Qualifier (Name) +Head Name (Name-generic 'ati')

The qualifier plus head name (generic term ati) combination is also a Determinative compound where a qualifier comes together with a name to form a new name. In the relation, both names seem to be head words but one (which is the latter) is the head name which is the generic term 'ati' and the preceding

name is the qualifier. The qualifier should have been followed by a possession but as indicated earlier, a possessive maker does not join names to form a new name in Aŋlɔ dialect. In the discussion, it is realised that the generic term 'ati' is used with other names to form the compounds. The combination of the names are such that those names that end with a vowel, have 'a' which begins the proceeding word 'ati' deleted, leaving it to become 'ti'. This process as mentioned earlier is known as syncope and it affected all the names that are found in this category. In addition, the 'a' which begins the 'ati' is also deleted irrespective of the sound that precedes it.

The name 'adidɔ' takes its source from 'adɛ' meaning 'to dig' which became 'adi' by raising the 'e' to 'i' and 'dɔ' meaning 'hole'. The meaning of the name is that the taproot of a baobab tree is so big and deep that when the stumb got rotten it digs a big hole beneath and when one steps feet into the hole, the person will be swallowed by the hole. The name came up as a result of this act of diging hole, hence 'adi dɔ' 'to dig hole'

51. *àdídó* + *àtí* → *àdídótí*
baobab tree
'baobab tree'

52. *lógò* + *àtí* → *lógótí*
oak tree
'oak tree'

53. *àmù* + *àtí* → *àmútí*
logoon tree
'white mangrove'

'Amuti' 'lagoon tree' always grows along rivers. It is a mangrove tree. This name was given to it because of its dwelling place.

54. *tò* + *àtí* → *tòtí*
mortar tree
'camwood'

This tree is used to carve mortar and pestle hence the name 'toti'.

55. *àtsã'* + *àtí* → *àtsã'tí*
cashew tree
'cashew tree' or 'akee apple tree'

As indicated earlier, 'atsã' depicts 'beauty'. Therefore, the name describes how beautiful cashew is.

56. *àgɔ'* + *àtí* → *àgɔ'tí*
fanpalm tree
'fanpalm tree' or 'palmyra palm'

57. *yɔ'kú* + *àtí* → *yɔkútí*
shea tree
'sheabutter tree'

58. *kɔʃ̀lébú* + *àtí* → *kɔʃ̀lébútí*
neem tree
'neem tree'

This plant could be found in various parts of Ghana. Each community names the tree or the plant according the where it is found. For example, 'kɔlebu' is a suburb of Accra and this plant was named after that area.

also, *sàbálá* + *àtí* → *sàbálátí*
onion tree
'neem tree'

The scent of the plant is the same as the scent of onion hence 'sabalati'.

also *líli* + *àtí* → *lílìtí*
lilly tree
'neem tree'

This plant is called 'liliti' because it is believed that it was Captain Lily, a German soldier who planted it in Ghana during the Second World War in 1945. The name was therefore named after Captain Lily.

59. *ʋù* + *àtí* → *ʋùtí*
drum/canoe tree
'silk cotton tree'

This tree is used to construct canoes and also used for drums. Canoe and drum are called 'ʋu' in Eʋe. Hence, the name.

60. *òdúm* + *àtí* → *òdúmtí*
odum tree
'odum tree'

This plant is exotic and therefore, the source of its name would be difficult to trace.

61. *àtítɔ́̂lé* + *àtí* → *àtítɔ́̂létí*
velvet tamarind tree
'velvet tamarind'

62. *dè* + *àtí* → *dètí*
palmfruit tree
'oil palm'

'De' means complete. It is a general belief among the Eʋe that 'de' 'palm nut' can be used for so many things including soup, oil, soap and medicine. It has been named after the numerous things that it is used for, meaning 'ede blibo'. It is complete.

63. *àtsà* + *àtí* → *àtsàtí*
bitter tree
'sassy ban' or 'ordeal tree'

'Atsa' means 'bitter'. This tree is very bitter. The plant therefore has been named after its bitterness.

64. *xé* + *àtí* → *xétí*
camwood tree
'camwood'

'Xe' is a thorny tree that is used to punish/cane disorderly persons in society. The name was given to this tree because of the duty it performs. 'Xeti', 'cane' for the disorderly persons.

65. *àgbàflò* + *àtí* → *àgbàflòtí*
fig tree
'fig tree'

'Agbafloti' is a name given to this tree because of its shape and shade. 'Agbafloti' is a shady tree planted at community centres where people sit to relax after the day's hard work.

66. *kùsí* + *àtí* → *kùsítí*
basket tree
'Indian mallow'

67. *fètrí* + *àtí* → *fètrítí*
okro tree
'okro tree'

'Fetriti' is a name given to this plant due to the slime nature of the fruit. One can say that this place is as slippery as okro. 'Fetri' therefore, means something slippery.

68. *sókú* + *àtí* → *sókútí*
dumpalm tree
'ginger breed palm tree'

69. *kpɔ́* + *àtí* → *kpɔ́tí*
fence tree
'physic nut tree'

'Kpɔtiʾ is a plant that is used to make fence around houses. Its name came into existence due to the purpose it serves. It is planted on farm lands to show boundaries.

70. *bàbà* + *àtí* → *bàbàtí*
termite tree
'jatropha'

'Baba' means termite. This is a tree that is not easily attacked or destroyed by termites. It is also used to make fence around a house. It is also used on major boundaries on farm lands.

71. *ámá* + *àtí* → *ámátí*
spinach tree
'West African indigo'

72. *átsìtè* + *àtí* → *àtsìtètí*
milletia tree
'milletia' or 'iron wood'

This tree has the same usefulness as 'gbafloti' mentioned above. People sit under it to relax.

73. *nyà* + *àtí* → *nyàtí*
word tree
'mallotus'

It is a plant that is used as cane to punish people. This cane does not have thorns on it. It is not used for only disorderly people but can be used for everyone for correction. 'Egbea nya na ame', 'it is used as a corrective measure when one goes wrong'.

74. *máŋgɔ́* + *àtí* → *máŋgɔ̀tí*
mango tree
'mango tree'

75. *àgbèlì* + *àtí* → *àgbèlìtí*
cassava tree
'cassava plant'

Folk narration tells us that one day in the olden days a hunter found a tree in the forest and uprooted it. He saw some balls under the tree. He then decided to put them into fire. He did and saw that the balls under

the tree became soft and edible. He tasted it and realised that it was tasty. After eating it and drinking water on it, he said 'agbe li alea hafi...?' 'there is life before...?' There came the name 'agbeli'.

76. *yèvú* + *àtí* → *yévútí*
whiteman tree
'moringa'

Our forefathers did not know the use of 'yevuti' 'moringa' in the olden days. They thought it is something foreign therefore they named it after the whiteman. They were giving it to goats and sheep until recently that the usefulness has sprung up through our Moslem neighbours.

77. *wɔ́* + *àtí* → *wɔ́tí*
locust bean tree
'west african locust bean tree'

78. *péyà* + *àtí* → *péyátí*
pear tree
'pear tree'

This is exotic and a borrowed name.

79. *àyédé* + *àtí* → *àyédétí*
cunning palm tree
'wild date palm'

80. *àgúwà* + *àtí* → *àgúwàtí*
guava tree
'guava tree'

This plant is exotic and a borrowed name.

81. *àkùkɔ́* + *àtí* → *àkùkɔ́tí*
yellow monbin tree
'hog plum tree'

82. *gbɔ̃ǰ̂* + *àtí* → *gbɔ̃ǰ̂tí*
goat tree
'vernonia'

This plant takes its source from 'goat'. It is given to goats to eat when they have diarrhoea. It is therefore medicinal to goats. It is called bitter leaf among the Yorubas of Nigeria. The Yorubas in Nigeria call it 'king of trees' because of its medicinal purposes.

83. *kɔ'fé* + *àtí* → *kɔ'fétí*
coffee tree
'coffee tree'

This is a borrowed or loaned name.

84. *kòkó* + *àtí* → *kòkótí*
cocoa tree
'cocoa tree'

This is a borrowed or loaned name.

85. *àzì* + *àtí* → *àzìtí*
jack fruit tree
'terminalia'

86. à*ŋ́útí* + *àtí* → *àŋ́útítí*
orange tree
'sweet orange'

This plant is a thorny fruit tree. It has a lot of thorns on it that gave the name 'eŋuti' which changed over the years to be 'aŋuti'.

87. *gbò* + *àtí* → *gbòtí*
fig tree
'aubergine'

This plant bears fruits known as 'gbo' 'fig'. The source of its name came from the fruit it bears which is 'gbo'. Therefore, the plant is called 'gboti'.

88. *àtádí* + *àtí* → *àtádítí*
pepper tree
'hot pepper tree'

The full pronunciation of the name of this plant is 'Atae doe' which literally means 'it was planted by Ata'. Ata, a hunter in the olden days found this plant in the forest and decided to replant it. He did plant it and after some time, it germinated and later on started bearing fruits. Others in the community saw the plant and asked who planted it and were told it was Ata who planted it which became 'atadoe' and later on 'atadi' for speech convenience.

89. *màhógànì* + *àtí* → *màhógànìtí*
mahogany tree
'mahogany tree'

This plant is a borrowed or loaned name.

90. *àkésìà* + *àtí* → *àkésìàtí*
acassia tree
'acassia tree'

This plant is a borrowed or loaned name.

91. *pàmplò* + *àtí* → *pàmplòtí*
bamboo tree
'bamboo tree'

This is a borrowed or loaned name.

92. *fɔ̀ɲ̀yí* + *àtí* → *fɔ̀ɲ̀yítí*
vitex tree
'vitex tree'

93. *àgbàlɛ̃ɲ̀* + *àtí* → *àgbàlɛ̃ɲ̀tí*
book tree
'thorny olive tree'

94. *bɔ'lù* + *àtí* → *bɔ'lútí*
'ball tree
'velvet tree'

This plant has some fluid in it that is used to make a local ball. The tree is cut and left-over night or even two days for the fluid to be come sticky and can be put together as tennis ball. It is not as smooth as a tennis ball but it springs like a tennis ball.

95. *vò* + *àtí* → *vòtí*
soursop tree
'sour sop tree'

'Voti' derived its name from 'vo' which is the fruit. 'Vo' looks like a swelling scrotum. The size of the fruit can be compared to the size of hydrocele.

96. *vɛ̃́* + *àtí* → *vɛ̃́tí*
vin (French name) tree
'sea grape'
This plant is a borrowed or loaned name.

97. *àyé* + *àtí* → *àyétí*
cunning tree
'northern Catalpa'

'Ayeti' literally means 'cunning tree'. This name given to the plant was due to the hole in the stick which makes it unique from other trees hence referring to it as cunning.

98. *ègbló* + *àtí* → *ègblótí*
longon tree
'longon tree'

4.2.1.2 Qualifier (Name and Name) + Head Name (Name-generic 'ati')

In this combination of names to form a new name, the last one in the combination is the generic term 'ati' which is the head name. The first two are not generic terms. Unlike the previous (just ended) one, where there is one qualifier and one generic term, this one has two names combining to become

the qualifier of the compound. The qualifier precedes the head name in the structure. The addition of the generic term 'ati' in the combination is not obligatory but optional. One can choose to add 'ati' or leave it; the names will still be meaningful. For example, 'ayedeti' which becomes 'ayede'. This morphological strategy is discussed under clipping later in the discussion.

99. *yèvú* + *àtsã́* + *àtí* → *yèvútsã́tí*
whiteman cashew tree
'cashew tree'

100. *yèvú* + *àzì* + *àtí* → *yèvúzítí*
whiteman nut tree
'almond tree'

101. *yèvú* + *né* + *àtí* → *yèvúnétí*
whiteman coconut tree
'coconut tree'

102. *àtɔ́tɔ́* + *àŋútí* + *àtí* → *àtɔ́tɔ́ŋútítí*
pineapple orange tree
'sweet orange tree'

103. *àmèyíbɔ́* + *àtsã́* + *àtí* → *àmèyíbɔ́tsã́tí*
blackman cashew tree
'ackee' or 'cashew tree'

104. *àyè* + *dè* + *àtí* → *àyédétí*
cunning palm tree
'date palm tree'

In the above discussion, 'yevu' and 'atsã' could only combine as one word if the initial 'a' is deleted in 'atsã' and also, 'yevutsã' could also combine with 'ati' when the initial 'a' is deleted in 'ati'. This process occurred in (98 & 102) above to enable the compound to have a proper formation and also for speech convenience. This process of syncope affected 'azi' and 'ati' in 99 'aŋuti'plus 'ati' in 101.

4.2.1.3 Qualifier (Place and Name) + Head Name (Name –generic 'ati')

The structure, qualifier plus its head name has a place name 'dzogbe plus a name 'ayi' as its qualifier which combined with 'ati' which is a generic name and also the head name in the compound. The elements collectively serve as one entity. For instance,

105. *dzògbè* + *àyí* + *àtí* → *dzògbèyítí*
savanna bean tree
'black locust'

The deletion of the initial 'a' in 'ayi' and 'ati' is as a result of **syncope.**

This plant resembles the edible bean plant. The 'dzogbeyiti' took its name as a result of the resemblance it has with the edible beans. 'Dzogbeyiti' is not edible and it does not bear fruit. The resemblance is for the leaves.

4.2.1.4 Qualifier (Name) + Head Name (Name - generic 'gbe')

These compounds are not different from the previous ones in 4.2.1.1. In this combination, there is a qualifier plus a head name which is the generic term 'gbe' and not 'ati'. 'Gbe' which literally means grass/weed is a vegetation consisting of short plants with long narrow leaves growing wild or cultivated on lawns and pastures, and as a folder crop. However, 'ati' which also means 'tree' is woody, perennial, having a single stem or trunk growing to a considerable height and bearing lateral branches at some distance from the ground. The two (ati and gbe) are plants.

106. *yóé* + *gbè* → *yóégbé*
louse weed
'hogweed'

This plant, 'yoegbe' 'louse weed' repels louse when placed at where a hen hatched its eggs. The plant got its name from this act of repelling lice.

107. *fíé* + *gbè* → *fíégbé*
tiger nut grass
'nut grass'

This plant got its name from tiger nut. The nuts of both plants look alike hence the name.

108. *kú* + *gbè* → *kúgbé*
drought weed
'stone crop'

'Kugbe' is a weed that grows well in times of drought. It withstands drought and therefore does not dry up easily.

109. *sɔ́* + *gbè* → *sɔ́gbé*
horse weed
'bahamas grass'

This plant is eaten by horse hence the name.

110. *néfúí* + *gbè* → *néfúígbé*
palm kernel weed
'asthma plant'

This plant is a herb that is chewed with palm kernel for medicinal purposes. The act of chewing the herb with palm kernel gave birth to its name.

111. *ʋù* + *gbè* → *ʋùgbé*
blood weed
'spiny amaranth'

It is a herb that gives blood to those who lack enough healthy red blood cells to carry adequate oxygen to their body tissues. The herb is boiled and taken as tea. Hence blood weed.

112. *tsó* + *gbè* → *tsógbí*
pointed weed
'rat tail'

'Rat tail' 'tsogbi' is a pointed plant which is dangerous to the foot when one walks barefooted on it. It got its name from how pointed it is. 'Gbe' changed to 'gbi' due to vowel raising that occurred on 'e' to be come 'i'.

113. *fɔ̂mízí* + *gbè* → *fɔ̂mízígbé*
rabbit weed
'tridax'

'Fɔmizigbe' 'rabbit weed' is a plant that is eaten by rabbits. The name was given as a result of that.

114. *àɖi* + *gbè* → *àɖigbé*
poison weed
'aloe vera'

This plant, when grinded and added to fresh wound, it removes infections known in Eʋe as 'aɖi' from the wound hence the name.

115. *tí* + *gbè* → *tígbé*
tea weed
'dwarf lily turf'

'Tigbe' is a translation of the English word 'tea weed'. This word is a literal translation which has been adopted in Aŋlɔ dialect.

116. *hà* + *gbè* → *hàgbé*
pig weed
'red root pigweed'

This plant is eaten by pigs hence the name 'hagbe' 'pig weed'.

117. *mú* + *gbè* → *múgbé*
mosquito weed
'ground cherry'

'Mugbe' 'mosquito weed' is a plant that repels mosquitoes when it is set to fire. The plant deters mosquistoes from approaching or settling. It is a mosquito repellent.

118. *da* + *gbe* → *dàgbé*
snake weed
'sedum emarginatum'

This plant repels snakes when planted in and around houses.

119. *kòkló* + *gbè* → *kòklógbé*
fowl weed
'beefsteak plant'

'Koklogbe' 'fowl weed' is a plant that is used to steam meat especially, chicken

4.2.1.5 Head Name (Name and Place Name) +Qualifier (Adjective)

This category of plant names discusses the combination of head name plus adjective (qualifier). The location 'ŋu' of the name 'kpɔ' combined with 'kpɔ' to become 'kpɔŋu' serving as the head name of the compound. The adjective 'keki' functions as the qualifier of the compound. For instance,

120. *kpɔ'* + *ŋú* + *kékí* → *kpɔ'ŋúkékí*
fence LOC sprout
'Dutchman's pipe'

This plant is a climbing plant which grows around fence. Its name came about as a result of how it climbs fence as it grows. It is not a creeping plant and it does not grow as trees but as weeds.

4.3.0. Phrase compounds

Phrase compounds are generally derived from verbal constructions which bear social, cultural and biological information that is interpretable

depending on the individual constituents and their referents (Agbedor & Johnson, 2005). Lieber (2010) defines a phrase compounds as a word that is made up of a phrase as its first element and a noun as its second element. In her definition, she asserts two points which are worth considering. First, a phrasal compound is a left–branching construction, thus consists of two parts: a pre-modifier and its head noun. Second, phrasal compounds are syntactically limited. The second element being a noun, the pre-modifier must be an attributive phrase. Phrasal compounds consist of a sequence of free bases. They arise, however not by the normal morphological process of compounding but rather through the fusion of words within a syntactic structure into a single lexical base (Huddlestone & Pullum, 2002).

In considering the above definitions of phrasal compounds in this thesis, we shall consider phrasal compounds as part of a sentence or even a complete sentence which functions to form a new lexical unit, typically a noun. For instance, 'dɔaɖemakpɔwɔe' rauwolfia.

4.3.1. Head Name + Negation + Verb

This form of phrase compound comprises a head name plus a negative marker and a verb. For instance, 'adelamanyi'. In this compound, the structure shows that there is a main verb 'nyi' and a negative marker 'ma' preceding the verb 'nyi'. The head name in the construction is 'adela'.

121. *adela* + *ma* + *nyi* → *àdèlámányí*
hunter NEG. rear
'wild Sage'

4.3.2 Head Name+ Verb

In the combinations below, there are names and verbs coming together to form compounds. The head names are the nouns which are followed by verbs in the construction.

122. *àʋà* + *dzɔ́̂* → *àʋàdzɔ́̂*
war broke up
'sensitive plant'

This plant is a sensitive and an active plant. It opens and closes when touched. It is a plant that shows how man should be ready in times of war hence 'aʋadzɔ' 'war broke up'.

123. *kà* + *klẽ′* → *kàklẽ′*
rope spread
'mamordica'

This is a ropy plant which spreads across the ground and covers a wider place. The leaves sprout and spread hence the name 'kaklẽ' 'rope spreads'

124. *sò* + *nyá* → *sònyá*
god (so) knows
'zingiber zenumbet'

125. *dù* + *gbã́̂* → *dùgbã́̂*
town spread
'purple amaranth'

'Dugbã' is a plant that spreads heavily on the ground. The name was given to this plant because of spreading nature.

4.3.3. Head Name + Verb+ Pronoun

This combination talks about head name being followed by a verb and pronoun. The combination therefore, represents the SVO structure of sentence. The noun being the subject, the verb being the action of the subject and the pronoun being the object to the verb. For instance,

126. *sɔ́* + *bú* + *í* → *sɔ́búí*
horse lost it [PRON]
'arivela viscose'

'Sɔbui' is a vegetable plant which is eaten by both human beings and animals. In the olden days, horses were grazing on this plant and when women went to harvest it and they realised that horses came to cut it short, the women would complain that horses came to disappear it again hence the name 'sɔbui' 'horse disappeared it'

4.3.4. Head Name + Verb + 'tɔ' (POSS.)

The above combination, head name plus verb plus 'tɔ' (showing ownership) indicates that we can combine names and verbs plus 'tɔ' to show the doer/owner of something. Agyekum (2006) says, some names are achieved outside people's given names. Such names may be achieved through occupations. For instance,

127. *àɖɛ̀* + *fò* + *tɔ́* → *àɖɛ̀fòtɔ́*
tongue speak owner
'coromandel'

4.3.5. Adjective + Head Name

This category focuses on the combination of an adjective and its head name. The adjective precedes the head name.

128. *mègbé* + *àzɔ́ʃ̀lì* → *mègbézɔ́lí*
backward walking
'Mexican tea'

This plant is a creeping plant which spreads in front and backward directions. The backward direction is unusual about plant growth hence the name backward spreading.

4.3.6. Verb + Name +Place name (Adverb)

In this instance, verb and place name are combined to form a new name, where the verb comes first and it is followed by a name before the place name followed.

For example,

129. *ɖe + vò + lè nyì gɔ̀mè → ɖevòlènyìgɔ̀mè*
remove scrotum under cow
'southern sandbur'

In the above presentation, 'ɖe' is the verb of the construction, 'vo' is the noun and 'le nyi gɔme' is the adverb of place. This plant is a thorny plant which has been hooking the scrotum of cows when they are grazing in the bush.

4.3.7. Verb + Verb

In this combination, two different verbs come together to form a new name. Unlike reduplication where one form of a verb is copied to form a gerund this one has two different verbs. It is the conglomeration of two different verbs in a name. This combination is a serial verb construction because there is more than one verb in the construction. According to Ameka (1991), an SVC in Ewe is a sequence of two or more verb phrases. For instance,

130. *wɔ̀ + ká → wɔ̀kɛ́*
develop tear off
'air plant'

"wɔkɛ" can connotatively be interpreted as 'develop and tear off'. The original name should sound 'wɔka' which translates as 'develop and tear off'. Reduplicated adjectives that are suffixed with '-a' denote larger sizes than

those suffixed with '-ɛ', a diminutive. The above noun formation 'wɔkaʾ shows the items are big but the diminutive one is 'wɔkɛ'. 'wɔkaʾ means develop and tear off. This plant is a type of plant in the bryophyllum family that has its hedges in a ziz-zag form. It does not have smooth edges hence develop and tear off.

4.3.8. Head Name + Verb + Adverb

This combination, head name plus verb plus adverb is one of the nominalisation strategies that exist in Aŋlɔ dialect. For instance,

131. *dà + ɖìà + gló → dàɖìàgló*
snake descends but could not
'ficus panduras'

The above name 'daɖiago' came about as a coinage where 'glo' became 'go'. This change in a word is not unusual because deleting a segment from a non – final position is possible in word formation in Aŋlɔ dialect for speech convenience. The real word and the meaning of the word is "daɖiaglo" which means snake finds it difficult to descend. The plant is thorny therefore; it is difficult for snakes to descend after climbing.

4.4 Reduplication

As indicated earlier under chapter two, reduplication is a morphological process that refers to the repetition or combining of two or more base words that are identified or only slightly different. Reduplication of forms is a common phenomenon, for example, in Kwa and Chadic languages. According to Dolphyne and Kropp Dakubu (1988), reduplication is a type of compound formation which consists of a repetition of a whole stem or part of a stem. In

the view of Fabb (1998), reduplicated words where the whole stem is repeated are known as "repetition compound" because the constituent of these reduplicated words correspond to independent attested words.

The analysis of reduplication of plant names in Aŋlɔ covers nominal reduplication, reduplication with names, reduplication with verb and names. Reduplication with adverb and noun phrase, reduplication of onomatopoeic or ideophone words. Below are the examples.

4.4.1 Nominal Reduplication

Nominalisation is the process of forming a noun or nouns from other words including nouns (Crystal, 2002). According to Ofori (2002), nominalisation processes are pervasive in Ewe and they involve the processes of reduplication. For example,

132. *mítsì* + *mítsí* → *mítsìmítsí*
mucus mucus
'khaki weed'

4.4.2 Reduplicated word + Name

Reduplicated word as indicated earlier means that portion of the simple form, smaller than the whole is copied or, in the case of lexical reduplication, that the lexeme contains a certain segmental string twice or more. Under reduplication with noun, part of the stem is repeated with the deletion of a liquid in thefirst syllable also, the deletion of 'a' in 'ati'. This phenomenon is described as syncope in phonological cycles as mentioned earlier in this chapter.

For instance,

133. *kplɔ́́kplɔ́́* + *àtí* → *kpɔ́́kplɔ́́tí*
sweeping tree
'fig tree
'

4.4.3. Reduplication + Verb Phrase

In this form of reduplication, the verb 'dza' (to cut) has been reduplicated to form 'dzadza' (cutting), a gerund in English. The plant is very soft, therefore, when cut for few times it falls. For example,

134. *dzàdzá* + *klɛ̃́nú* → *dzàdzáklɛ̃́nú*
cutting open mouth
'morinda'

4.4.4. Name+ Reduplicated Verb

This form of reduplication occurs when a noun is joined to a reduplicated verb. This form is a direct opposite of 4.4.5 below where the reduplicated name is followed by a verb phrase. Here, the reduplicated word is preceded by the name. For example,

135. *gòdúí* + *vúvú* → *gòdúívúvú*
loincloth torn
'juice grass'

This plant is very soft and a little pressure on it makes it to break easily. This act of breaking easily has been compared with torn cloth which also breaks easily. The name was therefore derived from the torn loincloth.

4.4.5. Reduplication + Adverb

Reduplicated name can collocate with adverb to form new name. The verb 'vù' (spread) has been reduplicated to form vùvù (spreading), a gerund in English. The reduplicated word joined the adverb 'dranyi' to form compound. This combination is a direct opposite of 4.4.4 above. For example,

136. *vùvù* + *dràny*ì → *vùvùdràny*ì
spreading heavily
'dodder'

This plant as the name suggests is a plant which spreads heavily on the ground. Wherever it grows no other plant grows amid it. It is a creeping plant.

4.4.6. Reduplication + Qualifier (Name & Adjective)

In this form of reduplication, onomatopoeic or ideophonic names are reduplicated. The names sound like the things that they are describing. In a word in Eʋe 'toto' sound like the sound made by a bird. According to Aziaku (2016), onomatopoeic or ideophonic reduplicated names may have some collocational restriction depending on their semantic value. They can, however, function syntactically as a subject or object of a sentence and also a complement.

137. *tòtò* + *ŋkúdz* → *tòtòŋkúdz*
sound of a bird eye. red
'balloon vine' or 'heart seed'

'Toto' could be the sound of a bird. It could also be a name of a bird. This bird's name was given to the plant because the seed of the plant looks like the eyeball of the bird. The eye of the bird is reddish with black spot on it and the seed of the plant also looks the same hence the name.

4.5 Borrowing

As indicated earlier, Green (2009) states that borrowing is a natural process among the world's languages and occurs quite frequently when speakers of different languages come into extended contact with each other. Yule (1996) says that borrowing is taking over of words from other languages. Aziaku (2016) provides evidence of the existence of loan names in Eʋe and

some of the names are altered to conform to the phonotatics of Ɛvɛ. He mentions languages like English, Ga, and Akan as the languages Ɛvɛ borrowed from. In the view of Yule (1996), borrowing is the commonest type of word formation process. This present study has indeed identified borrowed plant names and one factor that accounts for this is the fact that some of the plants are exotic species. Green (2009) explains that these exotic plant names were introduced into Ɛvɛ due to agriculture. Plants which have been introduced into a community may simply be referred to by the same name it was referred to by the community who introduced it or a new name may be given to it based on certain similarities it shows with other, more familiar plants. More often than not, the names used by a more dominant linguistic group gradually replace the names which were already used by a smaller linguistic group.

Below are some examples of borrowed plant names in Aŋlɔ dialect

Aŋlɔ Name	**Borrowed Name**	**Botanical/Scientific Name**
1. liliti	Neem tree	*Azadirachta indica*
2. odumti	odum tree (English)	*Chlorophora excelsa*
3. maŋgɔti	mango tree (English)	*Mangifera indica*
4. pamploti	pampro (Akan) bamboo (English)	*Oxytenan abyssinia*
5. peyati	pear tree (English)	*Persia gratissina*
6. aguwɔti	guava tree (English)	*Psiduim guajava*
7. wawati	wawa (Akan) triplochiton (Eng)	*Triplochiton sclerocylon*
8. nyamidua	nyamedua (Akan) apocynaceae (Eng.)	*Alstonia boone*
9. nɔtimegi `	nutmeg (English)	*Myristic fragrans*

10. vɛti vin (french), sea grape (Eng) *Coccoloba uvifera*

11. tigbe tea weed (Eng) dwarf lily turf *Ophopegonjaponicas*

Some of the changes that occurred in the internal structure of the above words is as a result of **epithesi**s. This is a syllable structure process involving the addition of a segment at the final position of a word. This process is common in loaned or borrowed words. Ɛʋe is an open syllable language. This means that words do not end with consonants in Ɛʋe except /m/ and /ŋ/ in some cases (Kpodo, 2015). According to Kpodo (2015), words borrowed from other languages that violate this constrain will have to be taken through this process in order to correct the violation. Vowel segments are therefore added to the final positions of such words. For example, 'vin' French name is 'vɛ' in Ɛʋe, 'pear'in English is 'peya' in Ɛʋe.

4.6 Summary of the discussions

The chapter mainly focused on the morphological analysis of plant names in Aŋlɔ. Various compositional features of compounds were identified and analysed. Notably among the compound names were Determinative compounds and Phrase compounds. These compounds were variously discussed to bring to the fore how the plant names in Aŋlɔ are composed. The discussion began with Determinative compounds followed by Phrase compounds.

Under Determinative compounds, discussions were made concerning the various internal morphological structures of plant names in Aŋlɔ dialect which included head name plus qualifier, head name plus quantifier and

qualifier plus head name. Discussions were made under Phrasal compounds where various identifiable compositional strategies were employed. For instance, head name plus verb, verb plus head name and verb plus verb.

The section continued with other forms of morphological analysis. These include reduplication and borrowing. Reduplication as an aspect of compounding was extensively discussed. There exist two types of reduplication, complete and partial reduplications. Borrowing, as another form of morphological analysis, was also discussed. Under borrowing, the source of the names were duly identified and documented.

4.7 Conclusion

The discussion points to the fact that the structure of the compounds can be analysed from the perspective of the Item-and-Arrangement and Item-and-Process approach. The independent status allotted to items makes it possible for their function in the various structures to be recognised. Štekauer (2005) observes that a compound word may be marked "left-headed" or "right headed". Similarly, Ameka (1991) also opines that the position of Eʋe compound determiners is not restricted to the right only. The head of a compound, as indicated earlier, may be rightmost depending on the word class of the constituents. Ameka (1991) says, reduplication is a productive word formation process in Eʋe. This research has corroborated this assertion of Ameka (1991) that reduplicated words are common in the language. However, most of the reduplicated words in this study are limited to verbs except for nominal reduplication indicated earlier in this work. The study realised both partial and total or complete reduplications.

CHAPTER FIVE

SUMMARY, FINDINGS, CONCLUSION, RECOMMENDATIONS, AND SUGGESTIONS

5.0 Introduction

This chapter aims at providing the summary, findings, conclusions, recommendations and suggestions. The study has so far carried out the morphology of plant names in Aŋlɔ. The types of names (plant names) that the study focused on and analysed have provided the basis for the researcher to arrive at some findings and conclusion. Furthermore, the researcher has been able to make suggestions for further research on plant names in Aŋlɔ. Section 5.1 presents the summary of the thesis; section 5.2 presents the research findings, while section 5.3 provides conclusion whilst 5.4 provides the recommendations and suggestions.

5.1 Thesis summary

The previous chapters have clearly established the reasons that informed the study. The study began with a brief introduction to chapter one. The introduction was followed by background to the study. The background to the study outlined key issues relating to the study, focusing on the statement of the problem, that there has been a lack of study on plant names in Aŋlɔ. Chapter one also contains the research questions and the significance of the study. Delimitation and limitations of the study were also looked at in this chapter.

Chapter two of the study discusses works that are related to the research. The study has carried out an extensive and critical review of the

related literature. The literature review covered morphology in general and specifically to plant names in Aŋlɔ dialect. The chapter also looked at various morphological processes in analysing plant names. Ɛvɛ naming system was also reviewed. The review culminated in identifying the theoretical model suitable for morphological analysis of plant names in Aŋlɔ. To this end, the study used Hockett's (1954) IA (Item-and-Arrangement) and IP (Item-and-Process) as models for analysing plant names in Aŋlɔ dialect.

Chapter three presented the methodology of the research. The chapter began with research design which was descriptive analysis in analysing the data collected. The discussion covered the source of data which was clearly stated as a secondary source. Method of data collection was also discussed. The method of data collection was elicitation through unstructured interview. But the elicitation was not done in isolation. The researcher relied on books on plant names for the confirmation of the names. The respondents of the unstructured interview were selected form Aŋlɔ speaking communities (Abor, Asaḍame and Aŋlɔgã). The respondents were teachers (Agricultural Scince teachers), herbalists, and farmers. As indicated earlier, during the interview, pictures of plants were shown to the respondents to identify. In some cases, the researcher mentioned the names of the plants that he gathered from the books and asked the respondents to pronounce them correctly in Aŋlɔ. The people were purposively selected while the plant names were randomly selected. In another instance, some of the respondents took the researcher around for identification

and documentation of plants and their names. These plants were duly recorded by the researcher for any further work to be carried out on them.

Chapter four began the analysis of the data. The researcher restated and explained the theoretical models (Hockett's, 1954 Item-and-Arrangement and Item-and-Process models) which form the basis of the discussion. The discussion was centred on the various forms of word formation strategies that exist in Aŋlɔ dialect. The word formation strategies include compounding, comprising, Determinative Compounds and Phrase Compounds. Other forms of word formation processes were also discussed. These are reduplication and borrowing. Under Determinative Compounds, forms of word combination were discussed, where the adjectives were preceded by names and determined the quality of the names. On the other hand, the adjectives (qualifiers) preceded the head names. There are other forms like head names plus quantifiers where the quantifiers perform the role of an adjective because quantifiers can also be numerals. Ameka (1991) indicates that modifiers can occur in a quantifier form including numerals. Also, head name with a post position and another head name were discussed. Place name as head name was also discussed.

A section of the discussion was based on two or more names being put together to form another name. One other form which was discussed is head name with a qualifier which also followed a possessive marker in the process. For instance, 'to ati'. The name should have been 'to ʃe ati' (buffalo's tree), but for speech convenience, it has been truncated as 'toti' (buffalo tree). Another form which is the same as the just discussed one has the head name,

but the latter is a generic term which is ‘gbe’. For instance, ‘sɔgbe’ (horse weed).

Phrase compounds were also discussed. They are generally derived from verbal constructions. Phrase compounds are composed of sentences (nominal phrase/clause) used in a different environment and such a sequence changes its syntactic function to form a new lexical unit, typically a noun or name. For example, ‘Ðevolenyigɔme’. The above form comprises a verb ‘ɖe’ with an object ‘vo’ and an adverb or place name ‘le nyi gɔme’ others include; head name with verb. Another internal morphological structure that was considered was head name plus negative marker plus a verb. For instance, ‘adelamanyi’, where ‘adela’ is the head name, ‘ma’ is the negative marker and ‘nyi’ is the verb. Head name with verb and pronoun is another form of internal morphological structure identified in this thesis.

The other forms of morphological formation strategies or processes that were mentioned earlier in this chapter were also discussed, and they included borrowing as a noun formation process or strategy was discussed under the circumstances that lead to borrowing of a word into a language. Green (2009) says some plant names in Eʋe came into being because some of the plants are exotic species often introduced in the area due to agriculture. Reduplicated names were also discussed. Types of reduplication were also discussed as partial and complete reduplication. Nominal reduplication where a name reduplicates itself to become a new name was also discussed.

5.2 Findings

This section deals with the key findings of the research. Based on the analysis of the data of the study and its discussions in chapter four, the study arrives at the following findings:

1. Compound formation strategies or processes in plant names in Aŋlɔ dialect come in different ways as indicated earlier in chapter four. Although compound formation strategies and processes are in different forms, two major processes have been identified in this thesis. These strategies are Determinative compounds and Phrase compounds. The other morphological processes identified in the research are reduplication and borrowing.

2. Internal morphological structures in plant names in Aŋlɔ shows that head names in Aŋlɔ are followed by qualifiers (adjectives). Adjectives follow nouns immediately and provide the quality of the nouns. But in this research some adjectives (qualifiers) preceded the head names. This shows that adjectives or qualifiers may precede names in plant names in Aŋlɔ dialect.

3. Possessions are major contributors to and reflection of identity. A variety of evidence is presented supporting this simple and compelling premise in this research. In the usage of possessions to show identity, they become 'joiners' of words. This research has identified this form of name formation processes but this research has identified that possessive marker cannot join names to become one name. This assertion of joining two or more names by possessive marker 'ƒe' to become one name in pronunciation does not apply to generic terms 'ati'and 'gbe'. No concrete evidence has shown that generic name plus possessive marker plus name can give a new name in this research.

4. Morphological elision (omission of either sounds or letters of words) deliberately is a prominent feature of the morphology of Aŋlɔ names because, from the study, it occurs in individual plant names in Aŋlɔ dialect, compound words and sentences. The morphological phenomenon could be attributed to the phonological process *syncope*.

5.3. Conclusion

This study is specifically about the morphology of plant names in Aŋlɔ as stated earlier. Firstly, the study treats the morphology of plant names in Aŋlɔ. Secondly, the use of IA (Item-and-Arrangement) and IP (Item-and-Process) as a theoretical models of morphological analysis to analyse plant names in Aŋlɔ have proven successful to the study because (IA) and (IP) have been used to analyse and describe the data on the plant names. In view of the morphology of plant names in Aŋlɔ, the researcher establishes the internal morphological structures and ascertains the identifiable word formation strategies. The researcher also ascertained the identifiable word formation strategies of plant names in Aŋlɔ. The evidence of these lies in the fact that the constituent morphemes of the Aŋlɔ complex words, especially within the classes of nouns can be easily identified and segmented. This reveals that Aŋlɔ language is agglutinating.

5.4 Recommendations and Suggestions for further research.

There is the need for further linguistic research on the morphology of plant names in Aŋlɔ. Further research should be directed to especially syntax and semantics in order to gain more insight and views about plant names in

Aŋlɔ. The various plant names in Aŋlɔ dialect identified in this research could be used either formally in schools as a source of information or informally for a matter of individual or group. This means that the names can be used to teach in schools or students can rely on them as forms of plant names in Aŋlɔ.

Most plants have more than one name. Research could be conducted to unravel reasons of multiple names for some plants.

This research, as indicated earlier, is on morphology of plant names but it can be broken down into smaller groups like morphology of tree names where only trees will be studied or weeds or herbs. This research will enable the researcher to gather or record more trees or weeds or herbs than what this research has done. There are a lot of trees, weeds and herbs unattended to in this research.

Finally, this research was limited to only Aŋlɔ dialect where other dialects like Tɔŋu and Eʋeme were not investigated. A more comprehensive study of plant names in these areas should be covered.

REFERENCES

Abadzivor, P. K. (2007). *Evegbeŋŋlɔ Fe Tutudo kple Eŋuti Ðaŋuwo.* Accra: Media Graphics and Press Ltd.

Abadzivor, P. K. & Dzamesi, E. (2008). *Evegbe Gbedidi Ŋuti Nunya.* Accra: Media Graphics & Press Ltd.

Abdul, R. E. (2014). *A Synchronic Sociolinguistic Analysis of Personal Names among Ewes*. M.Phil thesis. University of Ghana. Ghana.

Abdullahi, A. (1999). *A comparative Linguistic Study of Some Aspects of Nupe and English Morphologies*. Unpublished M. A. thesis. Ahmadu Bello University. Nigeria.

Agbedor, P. & Johnson, A. (2005). Naming practices. In B. N. Lawrence (ed.*), The Ewe of Togo and Benin* (pp. 161- 182). Accra: Woeli.

Agyekum, K. (2006). The sociolinguistics of Akan personal names. *Nordic Journal of African Studies*, 15(1), 206-235.

Agozie, E. K. (2000). *Cult Names and Appellations in the Socio-Cultural Milieu of the People of Weta Traditional Area*. M.Phil thesis, University of Ghana. Ghana.

Ahiagbenu, R. K. (2014). *Gbesela Yeye*. Accra. Knowledge Innovations.

Akmajian, A., Damers, S. R., Farmer, A. & Harnish, R. (2001*). Linguistics.* New Delhi: Prentice Hall of India.

Akyea, G. M. F. (2009). Nyadodo among the Ewe. *Drumspeak International Journal of Research in the humanities*, 2 (1), 91-107.

Al-Hassan, B.S.Y. (1998). *Reduplication in the Chadic Languages. A Study of Form and Function*. Frunkfurt/main: Peter Lang.

Amegashie, S. K. (2004). *Eʋegbe Ŋɔŋlɔa*. Aflao: Victus Printing Services.

Amegashie, S. K. (2008*). Evegbe Fe Tutudo.* Dansoman, Accra: Salt 'N' Light Publications.

Amegashie, S. K. (2011). *Eʋegbe Fe Gbedidiwo*. Aflao: Victus Printing Services.

Ameka, F. K. (1991). *Ewe. Its Grammatical Constructions and Illocutionary Devices*. Ph. D thesis. Australian National University. Canberra.

Ameka, F. K. (2001). Ideophones and the nature of the adjectives word class in Ewe. In F. K. E. Voelz, & C. Kilian-Hatz (eds.), *Ideophones* (pp. 25-48). Amsterdam: John Benjamins.

Ansre, G. (2000). The Ewe language. In K. A. Gavua (ed.*), A handbook of Eweland. The Northern Ewes in Ghana (*pp. *88-91).* Accra: Woeli.

Aronoff, M. (1994). *Morphology by itself. Stem and Inflectional Classes*. Cambridge, MA: MIT Press.

Aronoff, M. & Fudeman, K. (2005). *What is morphology*? Oxford: Blackwell Publishing Ltd.

Aronoff, M. & Fudeman, K. (2011). *What is morphology*? Oxford: Blackswell Publishing Ltd.

Atakpa, F. K. (1997). The Naming System of the Ewe. In F. Agbodeka (ed.), *A handbook of Eweland. Vol. I: The Ewes of South Eastern Ghana* (pp.177 – 192). Accra: Woeli.

Awuku, K. A., Brese, G. K., Ofosu, G. K. & Baiden, S. O. (1991). *Agriculture and Environmental Studies for Senior Secondary Schools*. London: Evans Brothers Ltd, 2A, Portman Mansions.

Aziaku, V. E. (2014). Sociolinguistic Analysis of Ewe animal names. In Rainer Vossen (ed.), *African Sociolinguistic and Sociocultural Studies* (pp. 25-40). Frankfurter Afrikanistische Blätter. Kölin: Rüdiger Köppe,

Aziaku, V. E. (2016). *A Linguistic Analysis of Ewe Animal Names among the Ewe of Ghana*. Köln: Rüdiger Köppe Verlag.

Bauer, L. (1978). *The Grammar of National Compounding*. Odense: Odense University Press.

Bloomfield, L. (1933*). Language*. New York: Henry Holt and Co.

Booij, G. (2000). The phonology-morphology interface. In Lisa Cheng & Rint Sybesma (eds.), *The First Glot International state-of-the-article book* (pp.66-88). Belin: De Gruyter,

Booij, G. (2010). *Construction Morphology*. Oxford: Oxford University Press.

Booij, G. (2012). *Construction Morphology*. Oxford: Oxford University Press.

Carpenter, A. J. (1944). *A West African Nature Study*. Edinburg: Longman, Green & Co.

Collins, C. (1997). Argument Sharing in Serial Verb Constructions. *Linguistic Inquiry*, 28 (3), 461-497.

Crystal, D. (2002). *Language Death*. Cambridge: Cambridge University Press.

Denzin, N. K. & Lincoln, Y. S. (1994). *Handbook of qualitative research*. Thousand Oaks, CA: Sage Publications.

Dolphyne, F. A. & Kropp Dakubu, M.E. (1988). The Volta-Comoe language. In Kropp M.E. Dakubu (ed.), *The Language of Ghana* (pp.188-194). London: Kegan Paul.

Durrheim, K. (2005). Research Design. In M. Terre Blanche, & K. Durrheim (eds.), *Research in practice: Applied methods for the social sciences* (pp.214-228). Cape Town: University of Cape Town.

Duthie, A. S. (1996). *Introducing Ewe Linguistic Patterns*. Accra: Ghana Universities Press.

Dzobo, M. A. (2015). *Eʋægbefiala*. Accra : Bubu Publications.

Egblewogbe, E.Y. (1977). *Ewe Personal Names*. Ph. D thesis, University of Ghana.Legon.

Erlandson, D. A., Harris, E. L., Skipper, B. L., Allen, S. D. (1993). *Doing Naturalistic Inquiry*. *A Guide to methods*. Newberry Park, C. A: Sage.

Fabb, P. (1998). Compounding. In A. Spencer, & A. M. Zwicky (eds.), *The handbook of morphology* (pp. 66-83). Oxford: Blackwell.

Garba, A. B. U. (1998). *A morphological Analysis of Nouns and Adjectives in the Nupe Language*. M. A. Thesis, Ahmadu Bello University. Zaria-Nigeria.

Girei, A. U. (2009). Hausa loan words in Adamawa Fulfulde. A question of prestige or sociolinguistics necessity. In N. Cyffer, & G. Ziegelmeyer (eds.), *When Languages Meet. Language Contact and Change in West Africas* (pp.133-148). Colgne: Rüdiger Köppe.

Green, L. J. (2009). *A Preliminary Linguistic Analysis of Plant Names in Ikpana (Logba), an Endangered Ghana Togo Mountains Language*. Accra: ISP.

Greenberg, J. H. (1966). Some universal of grammar with particular reference to the order of meaningful elements. In J. H. Greenberg (ed.) *Universal of Language* (pp.66-83). Cambridge: MIT Press,

Hartmann, R. & Stork, F. (1972). *Dictionary of Language and Linguistics*. Essex: Applied Science Publishers Ltd.

Haspelmath, M. (2002). *Morphology*. London: Anold.

Hockett, C. F. (1954). *Two models of grammatical description.* Word 10:210-231.

Huddlestone, R. & Pullum, G. K. (2002). *The Cambridge Grammar of English Language*. Cambridge: Cambridge University Press.

Irvine, F. R. (1933). *West African Botany*, Oxford: Oxford University Press.

Irvine, F. R. (1969). *West African Crops*, Oxford: Oxford University Press.

Jackendoff, R. (1990). Semantic Structures Cambridge: The MIT Press.

Janda, R. D. & Joseph, B. D. (2005). On language, change, and language change. Or, of history, linguistics, and historical linguistics. In B. Joseph & R. Janta (eds.), *The handbook of Historical Linguistics* (pp.3 – 180). Oxford: Blackwell.

Kpodo , P. (2014). *Eʋe Fe Gbedidiwo kple Wo Ŋuti Sewo*. Tema: Teamworks Graphix.

Kpodo, P. (2015). *Phonetics and Phonology: The Basics*. Accra: Wyse Print Supplies Ltd.

Kumekpor, T. K. B. (2002). *Research Methods and Techniques of Social Research.* Adenta Accra: Sonlife Press & Services.

Lieber, R. (2010). *Introducing Morphology*. Cambridge: Cambridge University Press.

Lieber, R. & Štekauer, P. (2009). *The Oxford handbook of Compounding*. Oxford: Oxford University Press.

Leedy, D. L. & Ornarod, J. E. (2005). *Practical Research: Planning and Desire*. Upper Saddle River, NJ: Merrill Prentice Hall.

Lyons, J. (1968). *Theoretical Linguistics*. London and New York: Cambridge University Press.

Lyons, J. (1969). *Introduction to theoretical linguistics*. Cambridge: Cambridge University Press.

Malmkjaer, K. (1995). *The linguistics encyclopaedia*. London. Routledge.

Matthews, P. H. (1970). Recent development in Morphology. In L. John (ed.) *New horizon in linguistics* (pp.181-190). Harmondsworth, Middlesex: Penguin Books Ltd.

Matthews, P. H. (1974). *Morphology: An introduction to the theory of word structure*. Cambridge: Cambridge University.

Matthews, P. H. (1977). *Oxford Concise Dictionary of Linguistics.* Oxford: Oxford University Press.

Matthews, P. H. (1997). *Oxford concise dictionary of linguistics*. Oxford: Oxford University Press.

Mustafa, A. (2010). *Research Methodology*. India: A. I. T. B. S. Publishers.

Nida, E. (1949). *Morphology: The description analysis of words*. Ann Arbor: The University of Michigan Press.

Nukunya, G. K. (1997). Kinship and Marriage among the Anlo–Ewe. In F. Agbodeka (ed.), *A handbook of Eweland. The Ewes of South-eastern Ghana.Vol. I*. (pp.77-83). Accra. Woeli Publishing Services.

Nuseibeh, B. & Easterbrook, S. (2000*)*. Requirements engineering: A roadmap. Proc. of the IEEE int. Conf. on soft. Eng. *ICSE, 8 (*1*),* 173-184.

Obeng, G. S. (2001). *African Anthroponymy: An Ethnopragmatic and Morphophonological Study of Personal Names in Akan and Some African Societies*. Muenchen: Lincom Europa.

Ofori, K. A. G. (2002). Nominalisation in Ewe. In F. K. Ameka, & K. Osam (eds.), *New Direction in Ghanaian Linguistics* (pp.173-194). Accra: Black Mask.

Oku, A. (1983). *Aid in First Plant Medicine*. Accra: Waterville Publishing House.

Olsen, S. (2001). Copulative Compounds. A closer look at the interface between Syntax and Morphology. In G. J. Booig, & Van Marle (eds), *Yearbook of Morphology* (pp.279-320). Dordrecht: Springer,

Opoku –Asiamah, Y., Armah, D. A., Fiadjoe, F. Y. M., Mensah, P. K. & Saah, M. K. (1993). *Horticulture for Senior Secondary Schools*. Bombay H. Gangaram & sons.

Osuala, E. C. (2005). *Introduction to Research Methodology*. Onitsha: African First.

Owu-Ewie, C. (2014). A morpho–syntactic Analysis of Fante Habitation Names. *International Journal of Humanities and Social Studies*, *2*(5) 232-243.

Palmer, F. (1971). *Grammar.* Harmondsworth, Middlesex: Penguim Books Ltd.

Quirk, R. & Greenbaum, S. (1973). *A university grammar of English*. London: Longman.

Radford, A., Atkinson, M., Britain, D., Clahsen, H. & Spencer, A. (2005). *Linguistics*. Cambridge. Cambridge University Press.

Smith, N. V. (1967). An *outline grammar of Nupe*. London: School of Oriental and African Studies University of London.

Spencer, A. & Zwicky, A. M. (1998). Introduction. In A. Spencer, & A. M. Zwicky (eds.), *The handbook of Morphology* (pp.1-11). Oxford: Blackwell,

Stašková, N. (2011). *English Back-Formation in the early 21st century*, Doctoral dissertation. Praha Univerzita Karlova v Praze. Filozofická Fakulta.

Štekauer, P. (1998). *An Onomasiological Theory of English word formation.* Amsterdam; John Benjamin.

Štekauer, P. (2005). Onomasiological Approach to Word Formation. In P. Štekauer & R. Lieber (eds.), *Handbook of Word Formation Studies in Natural Language and Linguistics Theory* (pp.261-274). Dordrecht: Springer.

Thakur, D. (2010). *Linguistic Simplified: Morphology*. New Delhi: Bharati Bhawan Publishers.

Tomori, S. H. (1977). *The Morphology and Syntax of Present-day English* Ibadan: Heinemann Education Books Ltd.

Tweneboa, C. K. (1998). *Vegetables and Species in West Africa*. Accra: Co-Wood Publishers.

Vliet, H. & Brinkkemper. (2002). Requirements Engineering, 19-29.

Westermann, D. (1930). *A Study of the Ewe Language*. Oxford: Oxford University Press.

William, R. (1983). *Culture and Society, 1780-1950*. New York: Columbia University Press.

Yule, G. (1985). *The Study of language. An introduction.* Cambridge: Cambridge University Press.

Yule, G. (1996). *The study of Language.* Cambridge: Cambridge University Press.

APPENDIX I

LIST OF PLANT NAMES IN AƝLƆ (LOCAL NAMES) AND THEIR ENGLISH (COMMON NAMES) AND BOTANICAL/SCIENTIFIC NAMES IN AN ALPHABETICAL ORDER

LOCAL NAME	ENGLISH/COMMON NAME	SCIENTIFIC/ BOTANICAL NAME
1. Abɔka	Vine rubber	*Landolphia owariensis*
2. Adelamanyi	Wild sage	*Lantana camara*
3. Ademee	Jute marrow	*Corchorus olitorius*
4. Aɖatsigo	Tulip tree	*Spathodea campanulata*
5. Aɖeƒotɔ	Coromendel	*Asystasia gangetice*
6. Aɖidokpui	Mountain fig	*Ficus altissima*
7. Aɖigbe	Aloe vera	*Aloe vera*
8. Afideme `	Sweeping grass	*Sida acuta*

9. Agbeliti	Cassava plant	*Manihot utilissima*
10. Agbitsasue/ Konkokpe	Sunberry	*Solanumnigrum guineensis*
11. Agɔti	Fan palm/ Palmyra palm	*Borassusa ethiopium*
12. Aguwati	Guava	*Psidium guajava*
13. Ahame	Spiny Amaranth	*Amaranthus spinosus*
14. Akagayima	Negro coffee	*Senna accidentalis*
15. Akesiati/Zangara	Siamese cassia	*Cassia Siamese*
16. Akpɔkplɔti/Gbafluti	Fig tree	*Ficus spp.*
17. Akukɔti	Hog plum /yellow monbin tree	*Spondias monbin*
18. Alagba /Adɻido	Baobab/ Monkey bread tree/ Cream of Tartar tree	*Adansonia digitata*
19. Amati/ Adzudzu	West African indigo/ Yeruba indigo	*Lonchocarpus cyanescens*
20. Amegataɣi	Baxhelors button	*Gomphrena celosioides*

21. Ameyibɔtsãti	Ackee	*Blighia saphida*
22. Amuti	White Mangrove	*Avicenni anitida*
23. Anagote	Sweet potato	*Ipomea batatas*
24. Anyiklẽ	Custard apple / Bullock's heart	*Anona reticulate*
25. Asrãgui	Paullinia	*Paullinian pinnata*
26. Atadi	Hot pepper	*Capsicum annum*
27. Atitɔeti	Velvet tamarind	*Dialium guineense*
28. Atiyi	Pigeon pea	*Cajanus cajan*
29. Atɔtɔŋuti/Aŋuti	Sweet orange	*Citrus sinensis*
30. Atsati	Red water tree/ Sassy ban, / Ordeal tree	*Erythrophloeum guineense*
31. Atsã	Akee apple	*Blighia sapida*
32. Atsiãti	Cashew tree	*Anocardium occidentale*

33. Atsiteti	Milletia	*Milletia thonnigii*
34. Aviati	Newbouldia	*Newbouldia laevis*
35. Aʋadzɔ/ Srɔ̃wogbɔnamiata	Sensitive plant	*Mimosa apudica*
36. Awusaŋui/Duba	Hawusa weed/ Hyena's thorns	*Acanthospermum hispidum*
37. Ayedeti	Date palm	*Phoenix rechinata*
38. Ayedi	Wild date palm	*Phoenix reclinata*
39. Ayeti	Northern cectalpa	*Celtapa specisao*
40. Aziti	Terminalia	*Terminalia catappa*
41. Azitoroe/Azinogoe/Azikpui	Bambara groundnut	*Voandzeia subterranean*
42. Babati /Gbomagboti	Jatropha	*Jatropha gossypifolia*
43. Bebesu	Ocimum	*Ocimum vera*

44. Bedzã	Spear grass	*Imperata cylindrical*
45. Bosamkuku	Stag's horn fern	*Platycerium spp.*
46. Bɔluti	Velvet leave	*Abutilon theophrasti*
47. Dadɟiaŋgo	Ficuspandurata	*Ficus pandurata*
48. Dagbe	Sedum emarginatum	*Sedum crassuleae*
49. Dexɔlɔ̃e	fortum holy-fern	*Cyrtomium fortune*
50. Deti	Oil palm	*Elaeis guineensis*
51. Dɔdɟemakpɔwɔe	Rauwolfia	*Rauwolfia vomitoria*
52. Dɔŋutiglɔŋ	lemon	*Citrus lemon*
53. Dɔŋuti/Mumɔe	Lime	*Citrus aurantifolia*
54. Dugbã	Purple amaranth	*Amarantus blitum*
55. Dzadzaklẽnu	Morinda	*Morinda lucida*

56. Dzamatre	Water melon	*Citrullus vulgaris*
57. Dzogbekɔe	Gladiolus/ Elephant's ear	*Gladiolus spp.*
58. Dzogbesoli	Seaside purselane	*Sesuvium pottulastrum*
59. Dzogbeyiti	Black locust	*Robina pseudoacacia*
60. Đevolenyigɔme	Southern sandbur	*Cenchrus achinatus*
61. Egbloti	Longon	*Dimocarpus longan*
62. Flatogã	Life plant	*Bryophyllum pinnatum*
63. Flatovia	Kalanchoe	*Kalanchoe crenata*
64. Fetriti	Okro	*Hibiscus esculentus*
65. Fiegbe	Nut grass	*Cyperus rotundus*
66. Fɔyiti	vitex	*Vitex domiana*

67. Gbagblayi	Sword bean	*Canavalia ensiformis*
68. Gbalɛ̃ti	Thorny olive	*Elaeagnus pungens*
69. Gbemakumaku	Day flower	*Comme lina*
70. Gbeʋeʋi	Pagoda tree	*Saphora japonica*
71. Gboloba	Sodom apple	*Calotropis procera*
72. Gbɔ̃ti	Vernonia	*Vernonia amygdalina*
73. Goduivuvu/ Notsigbe	Juice grass	*Euphobia hetorophila*
74. Hagbe	Redroot pigweed	Amaranthus retroflexus
75. Xeti	Camwood	*Fagara xanthoxyloides*
76. Kaklɛ̃	Mamordica	*Momordica foetida*
77. Kali/Atiŋukali	Climbing black pepper	*Piper guineense*

78. Kesebisi /Kesegoro	Crab wood/ Monkey cola	*Carapa procera*
79. Keti	Papyrus	*Cyperus papyrus*
80. Kɛgbalẽ	Shingle tree	*Terminalia superb*
81. Klikagbe	White leadtree	*leucaenaleuco cephala*
82. Koklogbe	Basil US	*Ocimum lamiaceae*
83. Koklotɔtu	crested elsholtzia	*Elsholtzia ciliate*
84. Kokootike	sesbania pea	*sesbania canabina*
85. Kokoti	Cocoa	*Theobroma cacao*
86. Kɔfiti	Coffee	*Coffea spp*.
87. Kpokpoyi	lima bean	*Phaseolus lunatus*
88. Kpɔŋukeki	Dutchman's pipe	*Aristolachia spp.*

89. Kpɔti	Physic nut	*Jatropha curcas*
90. Kugbe	Stone crop	*Portulacaqua drifida*
91. Kusiti	Indian mallow	*Abutilon asiaticum*
92. Liliti/ Sabalati /Kɔlebuti	Neem/ Nim	*Azadirachta indica*
93. Logoti	Bark cloth tree/ Oak tree	*Antiaris africana*
94. Mahoganiti	Mahogany	*Khaya senegalensis*
95. Megbezɔli	Mexican tea	*Dysphania ambrosioides*
96. Maŋgɔ	Mango	*Mangifera indica*
97. Mimã	Goat weed	*Ageratum conyzoides*
98. Mitsimitsi	Prickly burr grass	*Cenchrus cathartricus*
99. Mugbe/Halidzo	Ground cherry	*Physalise laeagnu*
100. Nagosabala	Onion	*Allium cepa*

101.	Nefuigbe	Asthma plant	*Euphobia hirta*
102.	Neti	Coconut tree	*Cocos nusifera*
103.	Notsigbe	Australian asthma herb	*Euphorbia hirta*
104.	Nyakpe	Kigelia/Sausage	*Kigelia africana*
105.	Nyamidua	Apocynaceae	*Altonia boonei*
106.	Nyati/Sroti	Mallotus	*Mallotus oppositifolius*
107.	Nyimɔ	Nauclea	*Nauclea latifolia*
108.	Ŋkrama/Agumetakui	Ginger	*Zingiber officinale*
109.	Ŋɔlisabala	Welsh onion	*Allium fistulosum*
110.	Odum	Odum	*Chlorophora excelsa*
111.	Pamploti	Bamboo	*Bambusa striata*

112.	Peyati/ Pea	Pear	*Persea gratissina*
113.	Sokuti	Dum palm/ Ginger bread palm	*Hephaene thebaica*
114.	Sonya	Zingiberzerumbet	*Zingiber zerumbet*
115.	Sɔbui	Arivela viscose	*Arivela viscose*
116.	Sɔgbe	Bahamas grass	*Cynodon dactylons*
117.	Tama	Tobacco	*Nicotina tabacum*
118.	Tigbe	Dwarf lily-turf	*Ophiopogon japonicus*
119.	Totoŋkudzĩ	Baloon vine/ Heart seed	*Cardiospemum grandiflorum*
120.	Toti	Camwood	*Baphia nitida*
121.	Tsogbe (tsogbi)	Rat tail	*Sporobolus piramidalis*
122.	Veti	Mucuna	*Macuna urens*

123.	Vɛti	Sea grape	*Coccoloba uvifera*
124.	Voti	Soursop	Anona muricata
125.	Vuvudranyi/ Tsaxedeke	Dodder	*Cuscuta chinensis*
126.	Uuti	Silk cotton tree	*Ceiba pentandra*
127.	Uletsu	Goose grass	*Eleusine indica*
128.	Wawa	Triplochiton	*Triplochiton scleroxylon*
129.	Wɔti	West African Locust bean/ Daudawa	*Parkia clappertoniana*
130.	Wɔke	Air plant	*Bryophyllum succulent*
131.	Yevugboma	Water leaf	*Talinum trangulare*
132.	Yevutsã	Cashew	*Anacardium occidentale*
133.	Yevune	Coconut	*Cocos nucifera*

134.	Yevunyiklẽ	Sweet sop/ Custard apple	*Anonas quamosa*
135.	Yevute	Chinese yam	*Discoreae sculenta*
136.	Yevuti	Horse –radish tree/ oil of Ben tree	*Moringa pterygosperma*
137.	Yevutitoe	Indian tamarind	*Tamarindus indica*
138.	Yevuzi	Breadfruit/ Breadnut	*Artocarpus incises*
139.	Yevuziti	jack fruit tree	*Artocarpus incises*
140.	Yoegbe	Hogweed	*Boerhaavia difusa*
141.	Yɔ/ Yɔkuti	Shea-butter tree	*Butyrospermum parkii*

APPENDIX II

akesiati
siamese cassia
cassia Siamese

sɔgbe
bahamas grass
Cynodom dactylons

deti
palm tree
Eleais guineenses

pamploti
bamboo tree
Bambus astriata

tsogbi
rattail
Sporobolus piramydalis

atitɔeti
velvet tamarind
Dialium guineenses

liliti
neem tree
Azadirachta indica

tigbe
dwarf lily turf
Ophiopogon japomicus

dzogbalẽ
negro coffee
Cassia accidentalis

koklogbe
basil US
Ocimum lamiaceae

dexɔlɔ̃e
fortune holy fern
Cyrtomium fortune

Babatidzẽ
Jatropha
Jatropha gossypifolia

dagbe
sedum emarginatum
Sedum crassulaea

adɖigbe
aloe vera
Aloe vera

akagayima
negro coffee
Senna accidentalis

koklotɔtsu
crested elsholtzia
Elsholtzia Ciliate

mugbe
ground cherry
Physalise laeagnu

neʃuigbe
asthma plant
Euphobia hirta

kpɔti
physic nut
Jatropha curcas

vɛti
sea grape
Coccoloba uvirfera

wɔkɛ
air plant
Bryophyllum Succulent

sɔbui
arivela viscose
Arivela viscose

ʋlẽtsu
goose grass
Eleusine indica

ŋɔlisabala
welsh onion
Allium fistulosum

maŋgɔti
mango tree
Mangifera indica

aŋutiti
orange tree
Citrus sinensis

neti
coconut tree
Cocos nusifera

adɩ̨bati
pawpaw tree
Carica papaya

kaklẽ
momordica
Momordica foesida

aziti
terminalia
Terminalia catapa

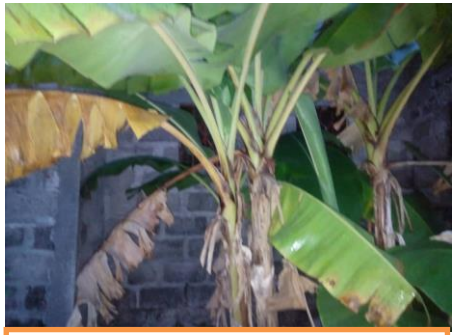
Mitsimitsi
Prickly burr grass
Cenchrus cathatricus

afideme
sweeping grass
Seda acuta

kokootike
sesbania pea
Sesbania canabina

fetriti
okro tree
Hibiscus escalentus

dɔŋuti
lime
Citrus aurantifolia



akɔɖuti
banana tree
Musa sapientum

peyati
pear tree
Persea gratissina

aguwati
guava tree
Psidium guajava

agbeliti
cassava tree
Manihot utilisimma