

**A COMPARATIVE ANALYSIS OF WORD - FORMATION
PROCESSES IN ENGLISH AND HAUSA**

BY

HAUWA'U ABUBAKAR BUHARI

M.A. / ARTS/ 01318/ 2006-07

Being a thesis submitted to the postgraduate school, Ahmadu Bello University Zaria, in partial fulfillment of the requirements for the award of the degree of Master's of Arts in English Language, Department of English and Literary Studies, Faculty of Arts, Ahmadu Bello University, Zaria.

January, 2011.

DECLARATION

I hereby declare that this thesis has been written by me and that it is a record of my own research work, in the Department of English and Literary Studies under the supervision of Dr. Gbenga Ibileye. The information derived from the literature has been duly acknowledged in the text and a list of references has been provided. To the best of my knowledge, no part of this thesis was previously presented for another degree or diploma at any university.

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Hauwa'u Abubakar Buhari

M.A./Arts / 01318 /2006-07

January, 2011.

CERTIFICATION

This thesis entitled: “A COMPARATIVE ANALYSIS OF WORD-FORMATION PROCESSES IN ENGLISH AND HAUSA” by Hauwa’u Abubakar Buhari meets the regulations governing the award of the Master’s of Arts degree in English language of Ahmadu Bello University Zaria, and is approved for its contribution to knowledge, especially in the aspect of morphology of language.

.....
Chairman, Supervisory Committee
Dr. Gbenga Ibileye

.....
Date

.....
Member supervisory committee
Dr. S.A. Abaya

.....
Date

.....
Head of Department
Dr.Dili Ofuokwu

.....
Date

.....
Dean Postgraduate School
Professor Joshua Adebayo

.....
Date

DEDICATION

I dedicate this thesis to my parents: Alhaji Abubakar Buhari and Hajiya Maryam Buhari, for their humble love, endless affection, and blessed concern, which have been the light to the soul of my existence and all my achievements in life.

ACKNOWLEDGMENTS

Glory be to Almighty Allah, the most high, full of grace and mercy; the creator of all (including man). He who endured man with understanding, purified his affections and gave him spiritual insight, so that man can understand nature, understand himself and know Allah through his wondrous signs. May the peace and blessings of Allah be upon his apostle, Muhammad (S.A.W.), his companions and followers to the day of resurrection.

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ABSTRACT

This study is a research on the topic: “A Comparative Analysis of Word-formation Processes in English and Hausa”. This work aims to serve as a reference material to subsequent studies in English and Hausa languages in their various components of linguistic structures. It would also provide a framework for the study and analysis of the word-formation processes in English and Hausa. The study would also add to the research findings and meta-theory in linguistics thus, contributing to the current trend of intellectualism from the point of view of language. The work also attempts to enumerate and compare some of the word-formation processes in English and Hausa, such as acronyms, affixation, alternation, backformation, blending, borrowing, clipping, coinage, compounding, and reduplication. A sample descriptive approach was employed in the analysis of the data collected for this research. Thus, the procedure followed is a synthesis of the analytical comparative model of Nida (1949) and the stages of linguistic analysis of Carl (1996). Therefore, some of the research findings are that English and Hausa use some processes to create some words; that affixation is one of the processes found in both English and Hausa; that some of the processes discussed here could be found in one and not in the other language, etc. Finally, it contains brief conclusion.

CHAPTER ONE

INTRODUCTION

1:1 CONCEPTUAL PREMISE

The work is an attempt to compare the word – formation processes in two languages: English and Hausa. This chapter, therefore, attempts an introduction of the work. Thus, it contains the back ground of the study, the nature of morpheme, the historical perspective of the Hausa language, the statement of the research problem, the aims of the study, the justification of the study and the scope of the study.

The twentieth century is very important in the history of linguistics. This is because many linguistic theories came to the lime-light and many linguists initiated many theories in different fields of linguistics, which are morphology, syntax, semantics and phonology. For instance, it was at this period that in morphology the different approaches to identify morphemes and the relationship between morphemes and words were made manifest. The free encyclopedia (2008) is of the view that words are generally accepted as being the smallest units of syntax. It is clear that in most (if not all) languages, words can be related to other words by rules. For example, English speakers recognize that the words dog, dogs and dog-catcher are closely related. English speakers recognize these relations from their tacit knowledge of the rules of word-formation in English. They sense that dog is to dog-catcher as dish is to dishwasher. The rules understood by the speakers reflect specific patterns (or regularities) in the way words are formed from smaller units and how those smaller units interact in

speech. In this way, morphology is the branch of linguistics that studies patterns of word-formation within and across languages, and formulates rules that model the knowledge of the speakers of those languages. This work, therefore, is an attempt to compare the word-formation processes in two languages: English and Hausa.

1.2 BACKGROUND OF THE STUDY

The major task of a linguist is to describe the properties of a language. This kind of description is generally referred to as the grammar of the language. Although there are some considerable disagreements within linguistics concerning the precise form of a grammar, it is believed that each grammar of a language has the following properties:

- (a) Phonetic property
- (b) Phonological property
- (c) Syntactic property
- (d) Semantic property
- (e) Lexical or morphological property

The study of how languages are differently structured began out of the interest to classify language families across the world. This was initiated by historical or comparative linguists whose efforts were geared towards demonstrating similarities. However, comparative studies have shown that languages may share resemblances without being genetically related. According to Al-Hassan (1998: 11), comparative linguistics approaches languages through

the different hierarchies of linguistic analysis, i.e. phonology, morphology, syntax and semantics. Among these levels of analysis, morphology has been accorded rather secondary status in comparative linguistics. This research work sets out to study the similarities and/or differences of two genetically unrelated languages, namely (English and Hausa).

To compare two languages, for instance, phonologically, one could be expected to look at the phonemic inventories of the two languages, their phonotactics and/or the syllable structures, including their suprasegmentals. Languages can be compared morphologically by looking at their systems of affixation and the nature of the affixes themselves, that is, whether the languages employ prefixes and suffixes only or even infixes and circumfixes and to what extent.

Genetically, the English and Hausa languages belong to different phyla; English is a European language in the Indo-European sub-division, whereas Hausa is a language in the West African sub-region. Generally speaking, irrespective of the genetic unrelatedness between any two languages, the languages must have certain similarities. The morphological features these languages may share in common may not necessarily be indicative of their genetic/historical relationship but a relationship, of universal dimension. It is obvious that universal features among languages can only be discovered with exactitude through comparative/contrastive studies.

1.2.1 THE NATURE OF THE MORPHEME

The traditional term for the most elemental unit of grammatical form is the morpheme. The word, as Fromkin and Rodman (1998: 68) observe, is derived from the Greek word “morphe” meaning “form”. Morphemes, in the words of Crystal (1980: 223), are the “minimal distinctive units of grammar and the central concern of morphology”. Downing and Locke (1992: 13) consider the morpheme to be an abstract category, which has either lexical or grammatical meaning. For the free encyclopedia (2008), a “morpheme is the smallest meaningful unit of language (any part of a word) that cannot be broken down further into smaller meaningful parts, including the whole word itself”. In the English word “kicked”, for example, two bits of meaning are found, that is KICK and PAST TENSE. The word “items” can be broken down into two meaningful parts: ‘item’ and the plural suffix ‘s’; neither of these can be broken down into other smaller meaningful parts. Therefore ‘item’ and ‘s’ are both morphemes.

A morpheme, according to the free encyclopedia (2008), could be either free or bound. It could be a base, root or an affix. A morpheme could even be content morpheme or function morpheme. A morpheme is said to be free when it can stand alone as an independent word (e.g. item); while a bound morpheme must be attached to another morpheme or word (affixes, such as plural ‘__s’ are always bound; roots are sometimes bound, e.g. the ‘kep__’ of ‘kept’ or the ‘__ceive’ of ‘receive’).

The base, also called a stem, is an element (free or bound, a root morpheme or complex word) to which additional morphemes are added. A base can consist of a single root morpheme as with the ‘kind’ of ‘kindness’. But a base

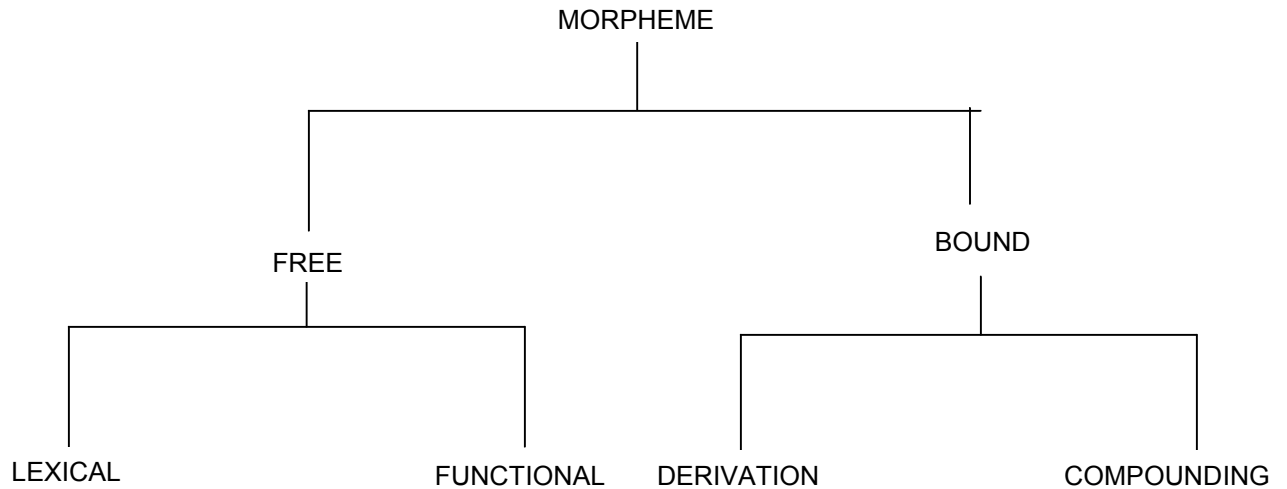
can also be a word that itself contains more than one morpheme. For example, the word 'kindness' can be used as a base to form the word 'kindnesses'. To form the word 'kindnesses', the plural morpheme, spelled '___es' in this case, is added to the base 'kindness'.

The root is usually a free morpheme around which words can be built through the addition of affixes. The root usually has a more specific meaning than the affixes that are attached to it. The root 'kind', for example, can have suffixes added to it to form words, such as 'kindly', 'kindness', 'kinder' or 'kindest'. The root is the item left when a complex word is stripped of all other morphemes. If the word 'dehumanizing', for example, is stripped of all the affixes ---- 'ing', '___ize', and 'de', 'human' is what is left. It cannot be divided further into meaningful parts. It is the root of the word. An affix, on the other hand, is a bound morpheme attached to a base (root or stem). Prefixes are attached to the front of a base; suffixes to the end of a base, infixes are inserted inside a base. An example of a prefix is the 're' of 'rewrite'; while that of a suffix is '___al' of 'critical'.

A morpheme is considered as a content morpheme when it has a relatively more specific meaning than a function morpheme; a morpheme that names a concept or idea in our record of experience of the world. Content morpheme, fall into the classes of noun, verb, adjective, and adverb. A function morpheme, on the other hand, is that morpheme that has a relatively less-specific meaning than a content morpheme; a morpheme whose primary meaning/function is to signal relationships between other morphemes. Function

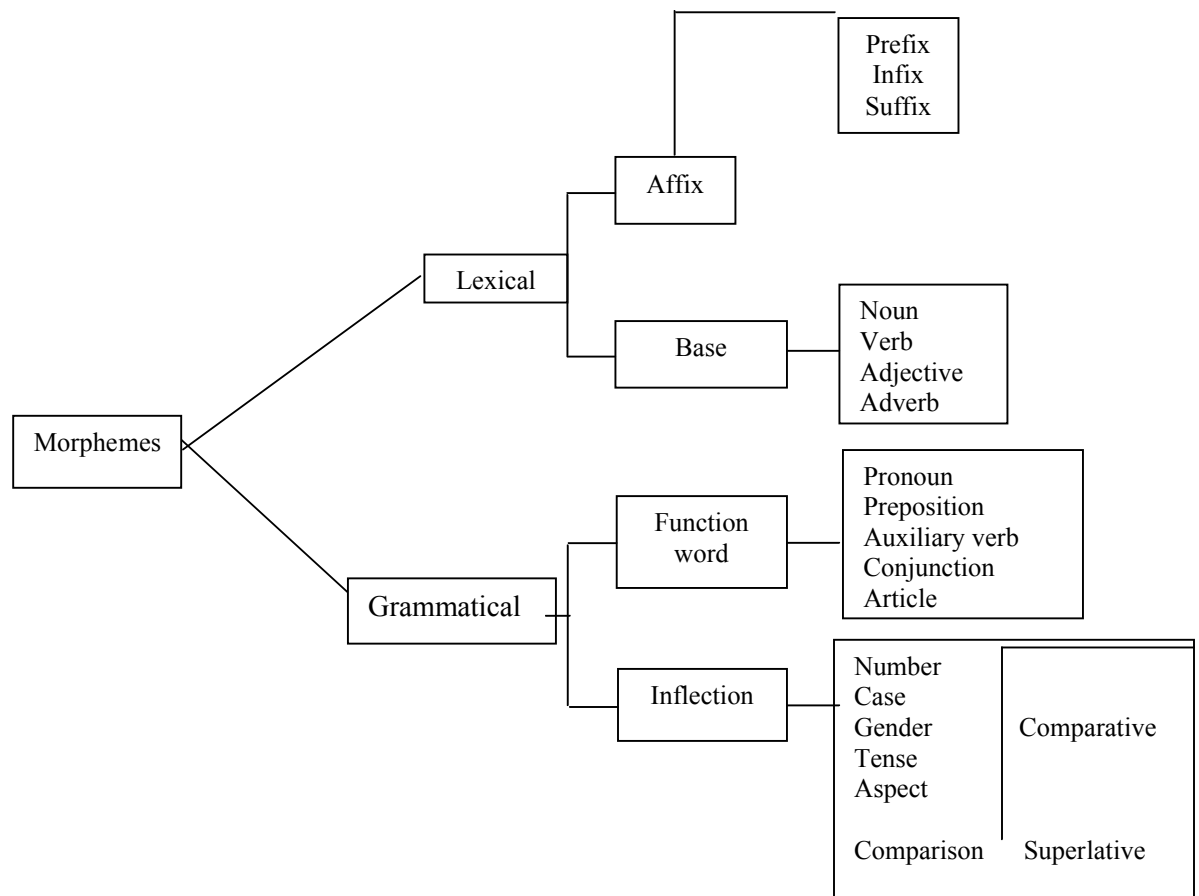
morphemes generally fall into classes, such as articles ('a', 'the'), prepositions ('of', 'at'), auxiliary verbs ('was eating', 'have slept'), etc.

Yule (1995: 62) provides a chart that categorizes the different types of morphemes under morphology,



Yule (1995:62).

According to Omotunde (2006: 8), all morphemes have meaning, but not all morphemes that can stand independently as words. A morpheme that can stand as a word is a free morpheme, while any that cannot is a bound morpheme. He provides, further, a chart of morphemes in English that looks more elaborate than Yule's. Thus:



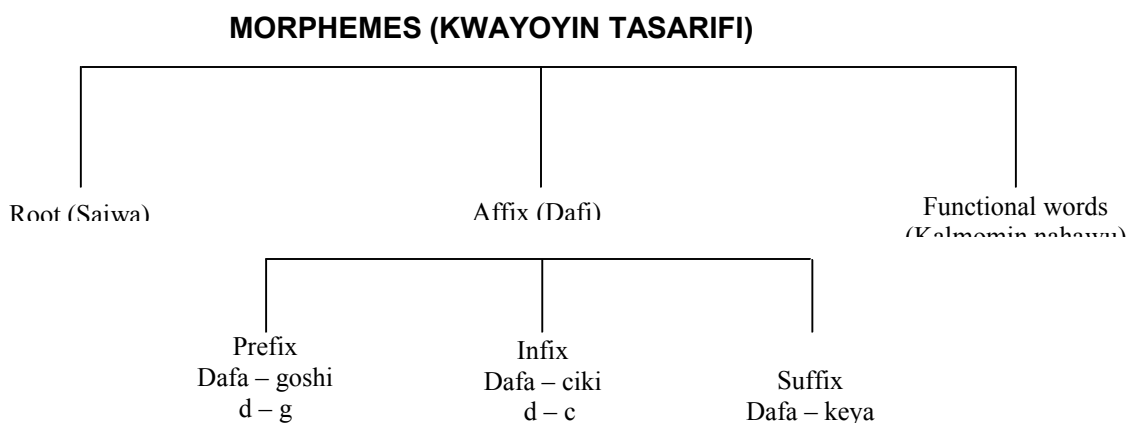
Omotunde (2006:8)

The free and bound morphemes can further be sub-grouped into lexical and grammatical morphemes. Grammatical morphemes express grammatical information (nothing more). Lexical morphemes, on the other hand, have constituted meaning beyond whatever grammatical information they carry. This is to say that their function is more than giving grammatical information. Lexical morphemes are categorized into “base” and “affixes”, as in ‘unacceptableable’, ‘un –’ serves as a prefix, ‘accept’ as a base, and ‘ – able’ as a suffix. A morpheme, according to Omotunde (2006: 10), is said to be a “base” morpheme if another morpheme can be structurally attached to it. The morpheme “need” is the base of

the word “needy”. A base can have attachments before, inside and after it – prefix, infix and suffix, respectively.

Just as lexical morphemes have two categories, grammatical morphemes also have two: function words and inflections. While function words are free morphemes, inflections are bound. Function words do not welcome the attachment of other morphemes. For instance, the conjunction “and” cannot serve as a stem. A function word conveys specific grammatical information. The second group of grammatical morphemes is inflections. They are word endings. For instance, the number inflections “ – s” and “ – en” distinguish the singular forms “bag” and “child” from the plural forms “bags” and “children” in terms of number. On the other hand, the suffix “ – ful” in “grateful” and “joyful” does not only mark the words grammatically as adjectives, but also carries the meaning “full of”.

The division of Hausa morphemes, on the other hand, is also shown on the following chart:



In sum, we could simply say, as in the words of Tomori (1999), that morphemes are the smallest units of speech that have semantic or grammatical meaning. Morphemes, therefore, combine to form words and these words form

the internal dictionary of the language. Thus, the morpheme, in itself, could be seen as the hard - core of any morphological process.

1.2.2 THE HAUSA LANGUAGE: A HISTORICAL PERSPECTIVE

The Hausa language is probably the most widely spoken indigenous language in sub-Saharan Africa and used as a first language by over 50 million people in its “central” area covering most of the northern part of Nigeria and southern Niger. As Furniss (1996:2) observes: “the Hausa language is spoken by more than 50 million people in Nigeria, Niger, northern Ghana and in communities from Kaolack in Senegal to Khartoum in Sudan”. Furthermore, Green (1963 : 25 cited in Bello 1985) and Zima (1968 : 365 – 377) are of the opinion that Hausa enjoys wide-spread usage, as a minority language and/or lingua franca, in most West African countries and within certain settler clusters in parts of North and Central Africa.

According to Greenberg, 1960; Hiskett, 1965; Salami, 1969; and Hyman, 1970 cited in Bello 1985, apart from its receiver – donor relationship with other neighboring African languages, (e.g. Kanuri, Yoruba and Nupe), Hausa is also one of the few “African” (excluding Arabic) languages that have, like Somali and Swahili, come under the influence not only of Arabic, but also of two, instead of one, colonial languages – English and French. It is believed that there are seven Hausa States in Nigeria, which led to the existence of some dialects in Hausa, based on their different geographical locations (Daura, Gobir, Kano, Katsina, Rano, Sokoto and Zaria). According to Liman (1968, cited in Yahaya 2002), the first public reaction came in the Northern Regional House of Assembly where a demand for the establishment of an authoritative language board that would

wisely and gradually evolve a constituent Hausa orthography was made. The board, which was formed in 1957, two years after the motion, announced its functions to include the standardization of Hausa and scrutinizing new words coming into the language.

Standard Hausa is the dialect used in media houses and literary works and regarded as the formal variety. It is a combination of all the varieties or dialects that make up the language in Nigeria, examples: “Sakkwatanci”, “Katsinanci”, Dauranci”, “Kananci” and Zazzaganci”. The classification of the appearance of the various dialects that form standard Hausa shows that more than 60% of standard Hausa is derived from the “Kananci” dialect (the dialect spoken in Kano state and its environs). Hence, the Kano dialect is more closely related to the standard Hausa than the rest of the dialects. “Katsinanci” and “Zazzaganci” are regarded as the least in terms of manifestation in standard Hausa. Thus, Bello (1992:76) confirms that by saying:

We find the Kano dialect to be a convenient point of departure, the main reason being that the dialect seems to be very familiar to most of our readers and the public. This is obvious because of its close resemblance to the standard dialect, which, apart from being the variety used in most materials published in Hausa, is also used in formal and/or semi-formal situations, ranging from classroom teaching to public speeches and interactions with foreigners. It is also used in the mass media, including broadcasts in both radio and television stations. Furthermore, it is used in the publication of Hausa newspapers and other government bulletins, especially when these bulletins are supposed to enlighten the general public. Another equally significant justification for starting with the dialect of Kano is that many Hausa speakers are diaglossic. That is, they understand the Kano dialect plus one other variety.

The first Northern Nigerian Newspaper was first printed on Monday 31st October, 1932 and standard Hausa was used (the “Kananci”). Writing down a

language also established a particular dialectic or register among several in use, as the standard language. Thus, Kano Hausa recognizes all the features that identify a standard language, which include standardized spellings and vocabularies, a recognized grammar that records the form, rules and structures of the Hausa language and a standard pronunciation.

The Hausa language has grown to gain prestige not only in Nigeria or some African countries but also in the world recognized radio stations where Hausa services operate, as observes Abdulmumin (2008:112):

It (Hausa) is also one of the languages of international broadcasts in many radio stations of many countries of the world from Europe to Asia, such as the stations like BBC London, Voice of America (VOA), Deutsche Welle, Radio Moscow, Radio Beijing and Radio Tehran.....

Furthermore, Muhammad (2009) posits that there is no indigenous language in Nigeria that has gained the privilege to enter into the existing universities and colleges of education like Hausa. According to him, in Nigerian academic institutions where indigenous languages are taught, Hausa takes about 80% whereas the remaining 20% goes to the rest of the indigenous languages.

1.3 STATEMENT OF THE RESEARCH PROBLEM

It is assumed that English and Hausa languages share a lot in their morphologies. For instance, both are languages that demonstrate tremendous dependence on affixation to mark grammatical relationships, use a lot of borrowed words, otherwise known as loan words from different languages of the world, use a lot of compound words, etc. It is assumed that the two languages under study, irrespective of their genetic unrelatedness, can still have a lot of

word-formation processes in common to enable a comparative study on affixation, alternation, borrowing/calques, clipping, compounding and reduplication.

In order to carryout a fruitful comparative analysis of the word-formation processes in the two languages, the study must attempt to answer the following questions:

- (1) How and to what extent do English and Hausa languages form words?
- (2) What types of affixes are there in Hausa that have counterparts in English?
- (3) Does Hausa have morphemes in its structure like most languages, such as English?
- (4) Does Hausa have word-formation processes as there are in English? If yes, what are they and how does the language utilize them?
- (5) What similarities and/or differences are there in the way the two languages lend them to morphology? For example, what are the various word-formation processes that each of the languages lends itself to and how?

1.4 THE AIM OF THE STUDY

The divisions within the knowledge industry have, in spite of their diversity, become so interrelated that both the natural and social sciences and the liberal and fine arts have become so greatly interdependent for useful insights. This fact has made intellectualism a more reliable and rewarding venture. It has become more apparent that a linguistic study is of benefit to socio-linguists, anthropologists, psychologists and logopedists. As such, the relevance of any linguistic study as a potential reference material in the domain of intellectualism is almost self-evident. Since language is one of the most important carriers of a people's culture, it is one of the most resourceful areas of human activity that can demonstrate convergence in human mentality. For such a venture to succeed, comparative studies in all areas of human endeavor must be embarked upon.

The major aim of the study, therefore, is to contribute to the current trend of intellectualism from the point of view of language. The study, therefore, would serve as a reference material to subsequent studies in English and Hausa languages in their various components of linguistic structures. The study would also provide a framework for the study and analysis of word-formation processes in English and Hausa. It would contribute to the understanding of morphemes, word distinctions and meanings. Very important, also, the study would add to the research findings and meta-theory in linguistics, thus provoking further researches of similar or wider dimension in related fields in other Nigerian languages, all in comparison to English for both academic and pedagogic purposes.

1.5 THE JUSTIFICATION OF THE STUDY

Although the process of comparing two languages at any linguistic level could be very tedious, the result thereof could be quite beneficial. For instance, it can go a long way in supplementing existing materials which, more often than not, are inadequate for academic purposes. Thus, a comparative study of word-formation processes can contribute to the study of language as a mental facility or a communicatory tool. It is hoped that this exercise will affirm or disprove some assumptions in previous works on morphology, especially in its comparative dimension.

We feel that by presenting this work we are contributing to the existing literature on the study of comparative linguistics (English and Hausa). Again, it is hoped that this research work will serve as a guide for further investigation.

1.6 THE SCOPE OF THE STUDY

Quirk, Greenbaum, Leech and Svartvik (1973) categorize the major processes of English word-formation, by which the base may be modified, into affixation, conversion, compounding, reduplication, blending and acronyms (which are not so common). Some of these processes of word-formation in English do not feature in Hausa, while some do exist in Hausa but not in English. For ease of exposition and comparison, the study is limited to the major word-formation processes that are familiar in the two languages, which include: acronyms, affixation, alternation, backformation, blending, borrowing, clipping, coinage, compounding and reduplication.

CHAPTER TWO

REVIEW OF RELATED LITERATURE AND THEORETICAL FRAMEWORK

2.0 INTRODUCTION

This chapter contains the review of related literature and the theoretical framework of the study. Thus, it discusses the various definitions of the term morphology, its fields, and the word-formation processes chosen for the study: acronym, affixation, alternation, backformation, blending, borrowing, clipping, coinage, compounding and reduplication. In addition to that, the chapter discusses the theoretical framework chosen for the analysis of the study.

2.1 LITERATURE REVIEW

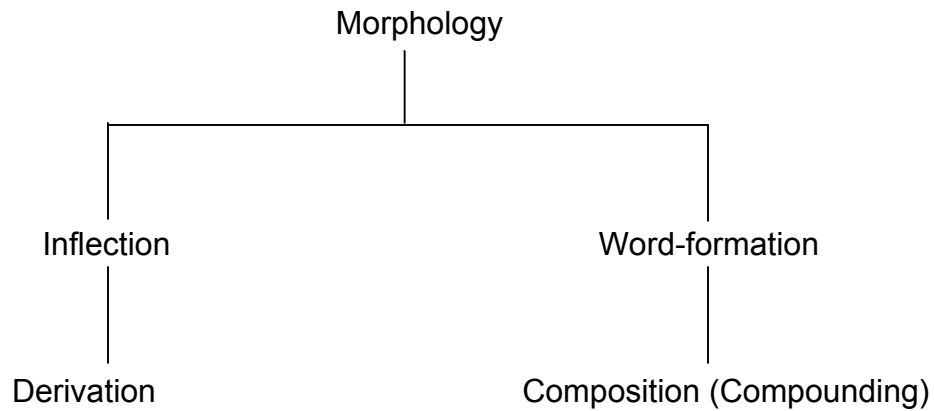
The term ‘morphology’, according to Aronoff and Fudeman (2005: 1), is generally attributed to the German poet, novelist, playwright and philosopher, Johann Wolfgang Von Goethe (1749 – 1832). According to the free encyclopedia (2008), the word ‘morphology’ was coined by August Schleicher in 1859. It was later introduced (as a linguistic field of study), by Bandolin de Courtenay in 1895. The history of morphological analysis dates back to the ancient Indian linguist, Palini, who formulated the 3,959 rules of Sanskrit morphology in the text ‘Alladhyayi’, by using Constituency Grammar. Its etymology is Greek: ‘morph’ means ‘shape’, ‘form’. Therefore, morphology is the study of form or forms (literarily).

Although morphology has been used by linguists for over a century, there has not been complete agreement as to what the precise definition and scope of

the subject area are. Most linguists, as Malkjaer (1991: 314), affirm that morphology is the study of the meaningful parts of words. Fromkin and Rodman (1998: 69) are of the view that “the study of the internal structure of words, and the rules by which words are formed is called morphology”. For Tomori (1999: 21), morphology is “the study of the structure of word, meaning – the study of the rules governing the formation of linguistic words in a language”. Aronoff and Fudeman (2005: 1) posit that morphology, in linguistics, “refers to the mental system involved in word formation or to the branch of linguistics that deals with words, their internal structure, and how they are formed”. Morphology to Crystal (1980: 225) “is the branch of grammar which studies the structure of words, primarily through the use of morpheme constructs”. Spencer (1991: 4) opines that morphology is the branch of linguistics that is concerned with the knowledge of word structure. It is further defined as that branch of linguistics concerned with the forms of words in different uses and constructions or a sub-discipline of linguistics that is concerned with the study of the internal structure of words and the relationship among them (Mathews 1991: 3, Akmajian et al 2000: 11, Haspelmath 2002: 1).

Concerning the above definitions, Tomari’s which appears more explicit, has been adopted for the purpose of this work, because it covers the structural frame work of the study: the structure of words, the formation of words and the rules governing such formation.

Bauer (1983: 34) summarizes the main areas and approaches covered under the study of morphology in the chart below:



Bauer (1983:34)

The above chart shows that morphology is directly concerned with morphemes through inflection and the word-formation processes of derivation and composition (compounding). According to Atkinson (1982: 19):

Morphology received an appraisal in the 1970s to re-evaluate the long held perception that morphology is just the study of the structure of words. This is because words operate both on a syntagmatic and paradigmatic relationship within and outside the conceptual words.

In the view of Asher (1994: 3972), no meaningful consideration of what the word is will be complete without a clear consideration of the morpheme. The morpheme, in itself, could be seen therefore as the hard-core of any morphological process.

Looking at its relevance, Matthews (1974: 47) argues that morphology is relevant to any language because it explicates the rules governing the transformational patterns of the words of that language. This view is supported by Tomori (1977: 21), who states how the words in a language should be modified to reflect changes in gender, number, case, aspect and tense. Linguists agree that such laws on morphological transformations vary from one language

to another, as Tomori (ibid) observes:

If these rules are not recognized and understood by the foreign learner of the language, he may make modifications that are not in accord with the rule of word-formation in that language and, in that particular instance, he may coin wrong forms by analogy.

Tomori (1977:21)

Morphology helps in providing another perspective to the study of the word by considering the word as a lexeme. A lexeme is an element with lexical meaning, in other words, lexemes are dictionary words, which would be further generated to provide other forms of words in substitution relationship. For example, looking up for a word like 'take' in a dictionary, information about its interpretation as well as its forms will be provided. The forms of the lexeme (take) include: 'takes', 'taking', 'took', 'taken'. Morphology explains the changes undergone by word-classes in morphological transformation, thereby bringing about new words. This sphere, referred to as the "morpho-syntactic relations", handles the extent to which affixes could bring about a change in the word to which they are introduced. For instance, the addition of '_ly' to the lexical item 'quiet' to 'quietly' changes the word-class from adjective to adverb.

As mentioned already, Bauer (1983: 34) posits that morphology is divided into two classes namely: inflection and word-formation (derivation and composition). Matthews (1991: 37) in his own analysis opines that compounding (composition) and word-formation are sub-fields of lexical morphology. According to him, lexical morphology is the study of the morphological relations among lexemes. Akinpelu (2001:136) states that lexical morphology deals with the morphological process involved in vocabulary formation. Thus, lexical

morphology is made up of sub-fields and each sub-field is dealing with the formation of lexemes or words.

2.2 WORD – FORMATION

Word – formation, as Marchand (1969) says, is “that branch of the sciences of language which studies the pattern on which a language forms new lexical units”. Rufa’i (1979:1) adds that “it thus deals with formally and semantically analyzable composite forms”. According to Matthews (1991: 37), “word – formation is that branch of morphology which deals with relations between a complex lexeme and a simple (r) lexeme”. For Rubba (2004), “word – formation processes deal with the ways of creating new words in English”. The free encyclopedia of linguistics (2008) maintains that word – formation rules form “new words” (that is, lexemes).

Based on what has been said so far, it is pertinent to mention that word – formation is concerned not only with the issues of creating new words and their rules, but also the relationship that exists between the words (simple and complex), as posits Matthews (1991). Thus, word – formation deals with the processes in which languages tend to involve themselves in forming new words. Word-formation, therefore, is a natural linguistic phenomenon that exists not only in English or Hausa but in all the living languages of the world. This study, therefore, is limited to English and Hausa in order to do justice to the topic.

2.3 THE FIELDS OF WORD – FORMATION

Many linguists have shown interest in classifying the different fields of word-formation. These include Marchand (1969); Adams (1973); Quirk, Greenbaum, Leech and Svartvick (1973); Mathews (1974), Malmkjaer (1991) and host of others. Marchand (1969:2), for instance, distinguishes two fields of word-formation, as:

- (1) Formation involving full linguistic signs, i.e. compounding, affixation, derivation by the zero morph, and
- (2) Formation not involving full linguistic signs, which include expressing symbolism, i.e. blending, clipping, and word-manufacturing.

The work of Marchand has become helpful to the study of word-formation because it was able to put a distinctive line across the terrain of word-formation, such that we are able to identify a formation involving full linguistic signs and a formation not involving full linguistic signs. Yet, the work identifies only six processes of forming words, leaving a lot of others that are of equal value if not more than those mentioned. Thus, it gives an insight to morphologists to work on the same topic. Thus, Adams (1973:10) adds another process to those mentioned by Marchand (1969), which is referred to as ‘acronym’.

Quirk et al (1973) is another work that discusses word-formation processes in English that divides the major processes of English word-formation by which the base can be modified into: affixation, conversion and compounding, as well as the minor processes which include reduplication, clipping, blending and acronyms. Quirk et al’s (ibid) work is of good value to morphology and the current

study because it is able to identify other processes not mentioned in the works of Marchand (1969) and Adams (1973).

According to Matthews (1974: 16), morphological processes are divided into affixation: prefixation, suffixation and infixation; reduplication; modification, vowel change; suppletion; discontinuous morphs; suprafixes; sub-phonetics affixes; and subtraction. Matthews' division of morphological processes is different from Marchand's (ibid) and Quirk et al's (ibid), who independently divide the processes into two: full and non-full, as well as major and minor processes, respectively.

Matthews' division seems to be broader in the sense that it covers most morphological features, which others have not covered. It is on Matthew's division of the processes that the study bases its review because the work is descriptive and comparative in nature. This is so observed because the work discusses the morphological features of English, citing several examples not only from the language but also from other languages, which are a morphologically potential source of comparism. Since this work uses a comparative approach, therefore, Matthews' work (1974) appears to be more relevant to us than the others mentioned.

2.4 WORD - FORMATION PROCESSES

In English, there exist several processes of word-formation, but this work focuses on acronyms/initialism, affixation, alternation, back-formation, blending, borrowing, clipping, coinage, compounding and reduplication.

2.5 ACRONYMS IN ENGLISH

In the study of human language, speech must always be considered primary and writing secondary. There is a fact that acronym formation depends on orthography and not pronunciation, which means that it is, in a sense, an artificial process, external to the general phenomenon of lexeme formation. That notwithstanding, the acronym has been recognized by many linguists as one of the processes of word-formation in English; for instance: according to Quirk and Greenbaum (1975: 449), “acronyms are words formed from the initial letters (or larger parts) of words”. They added that “new acronyms are freely produced, particularly for the names of organizations”. Aronoff and Fudeman (2005: 114), posit that “acronyms are formed by taking the initial letters of a string of words and combining them to form a new one”. Thus, acronym formation is orthographically based. From the view of Fromkin and Rodman (1998: 87), “acronyms are words derived from the initials of several words. Such words are pronounced as the spelling indicates”.

From the view of Yule (1996: 68), “some new words, known as acronyms, are formed from the initial letters of a set of other words”. The morphologist, Wisniewski (2007), is of the view that ‘acronym is a word-formed from initial letters of a few words into a name’. In addition to that, the free encyclopedia (2008) states that: ‘acronym is a word-formed from initial letters of a set of other words’. Acronym formation is, therefore, a process of forming words from the initials of a group of words. According to Quirk and Greenbaum (1975), acronyms could be divided, broadly into two parts:

(1) Acronyms pronounced as sequences of letters which could be called “alphabetism”:

(a) The letters represent full words e.g. C.O.D. (Cash on Delivery),

UN (the United Nations).

(b) The letters represent elements in a compound or just parts of a word, e.g. TV (Television), GHQ (General Headquarters).

(2) Many acronyms are pronounced as words, e.g. radar (radio detecting and ranging).

Wisniewski (2007) posits that:

Some acronyms are pronounced by saying each letter separately, as in CD, DVD, VCR, IBM, FBI; some are pronounced as words like NATO, AIDS, laser, scuba, etc.

Yule (1996:68) explains the status of acronyms as follows:

Some acronyms remain essentially alphabetisms such as CD ('Compact Disk') or VCR ('Video Cassette Recorder') where the pronunciation consists of the set of letters. More typically, acronyms are pronounced as single words, as in NATO, NASA or UNESCO. These examples have kept their capital letters, but many acronyms lose their capitals to become everyday terms such as laser ('light amplification by stimulated emission of radiation'), radar ('radio detecting and ranging'), scuba ('self contained underwater breathing apparatus'), and zip ('zone improvement plan').

He adds that the names of organizations are often designed to have their acronyms represent some appropriate terms, as in 'Mothers against drunk driving' (MADD) and 'women against rape' (WAR).

Acronyms, as Fromkin and Rodman (1998) observe, are the creative efforts of word coiners. For instance, a new acronym that has recently been

added to the English language is AIDS. Furthermore, another source of acronyms such as MORF (male or female) and FAQ (frequently asked questions) is in the widespread use of computer and internet.

The review has, therefore, helped not only to identify the acronym as a process of word-formation in English but also to have an insight into the categories and sources of such words (the categories should be discussed on page 66). So, the Yule's division appears more elaborate because he categories them into five groups:

2.6 AFFIXATION IN ENGLISH

“Affixation” is a term derived from affix. It is a word formed in an inflectional paradigm, which generally shares (at least) one longer morpheme with a concrete meaning and is distinguished from shorter morphemes with an abstract meaning. Such shorter morphemes with an abstract meaning are called affixes. According to Elson and Pickett (1976: 12), “affixes are bound morphemes which occur with roots and, in general, modify the basic meaning of the root in some way”. For the free encyclopedia, (2008), ‘an affix is a morpheme that is attached to a stem to form a word’. Rubba (2004) posits that ‘an affix is a bound morpheme which attaches to a base (root or stem)’. Cornelius (2008) is of the view that linguists use the term “affix” to describe where exactly a bound morpheme is attached to a word.

Affixation as a process of word-formation has attracted the interest of some structural and comparative linguists, such as: Robins (1970), Matthews

(1974), Elson and Pickett (1976), Crystal (1980), Rubba (2004), Cornelius (2008) and a host of others. According to Crystal (1980:12), for instance, affixation could be defined as: “a morphological process whereby grammatical or lexical information is added to a stem”. Affixation, as Matthews (1991: 131) posits, is defined by two characteristics: firstly, the form which results from the operation (we may call the derived form), which will consist of the base, the form that the operations apply to – plus an additional morpheme. So, for instance, ‘caught’ consists of the base caugh – plus the inflectional morpheme – t. Secondly, the form added (the affix) will be constant; it will be the same whatever particular base the operation applies to. So, once more, the affixation of – t in caught or brought may be represented as follows:

$$x \longrightarrow x + t$$

Where x stands for any of the possible bases “caugh” --, ‘brough –’, ‘taugh –’, ‘burn –’, ‘fel –’ (in felt), etc, and regardless of their specific phonetic form, the same constant [t] is added to them all.

According to Agezi (2004: 40), affixation is a collective term for the types of formatives that can be used only when added to another morpheme (the root or stem). The root is that part of the word left when all affixes are removed. For example: “faith” in “faithful”. The stem, on the other hand, is the minimal unit on which affixes apply. It may consist solely of a single root morpheme, e.g. ‘faith’ or of two root morphemes, e.g. “blackbird”. Rubba (2004) simply defines affixation as “adding a derivational affix to a word”. The free encyclopedia (2008) maintains that affixation is “the process of forming words by adding affixes to

morphemes”.

The definitions of an affix given above appear vital to this study even though the researcher prefers Elson and Pickett's (1978), because it appears more elaborate since it covers not only the morphological but also the semantic position of an affix. That notwithstanding, it does not indicate the syntactic position of an affix; thus, the definition appears handicap, since the three linguistic positions (morphological, semantic and syntactic) are all vital. For the definitions of affixation, this work considers Crystal's more explicit than Rubba's, since it covers a wider linguistic range. Affixation, therefore, is a process in which a new additive is added to an operand (root) to create a derivand (new form). Affixes are, thus, identified by an operand plus a new formative, which has been added to it. For example; 'work' – 'worked'. The operand is 'work', while the new formative ("ed") is added to it, gives rise to the derivand 'worked'. In a simple term, affixation means a bound morpheme attached to a free morpheme, or stem.

2.6.1 THE PROCESSES OF AFFIXATION IN ENGLISH

Processes of affixation in English, as Matthews (1991: 131) and Agezi (2004: 40) posit, may be divided into prefixation, suffixation and infixation, depending on whether the affix is added before the base, after it or at some determined point within it.

2.6.1.1 PREFIXATION

Prefixation comes from the word "prefix". A prefix is a bound morpheme that comes before the root, stem or base. In other words, it appears at the front of a stem. A prefix adds meaning to a root without altering its class. Elson and Pickett

(1976: 12) define prefixes as “the affixes which occur preceding roots”. Agezi (2004: 40) sees a prefix as ‘an affix which is added initially to a stem.’ Thus, prefixation refers to a process whereby an affix is added initially to a stem. In other words, prefixation is a sub-process of affixation in which morphemes known as prefixes are added before the “operands” (bases, roots, stems). Quirk et al (1973: 442) divide the prefixes in English into:

- (a) Reversative prefixes
- (b) Pejorative prefixes
- (c) Prefixes of degree or size
- (d) Prefixes of attitude
- (e) Locative prefixes
- (f) Prefixes of time and order
- (g) Number prefixes
- (h) Conversion prefixes Quirk et al (1973:442)

(a) REVERSATIVE PREFIXES

This group of prefixes reverses the action or the meaning of the stems to which they are attached. Reversative prefixes in English include:

- (a) Un – as in unfair, unexpected, undo, unreasonable.
- (b) Non – as in nonalcoholic, nonsense, nonstandard, nonentities.
- (c) Dis – as in disfavor, disappear, dislike, disunity.
- (d) Il – as in illegal, illegitimate, illiterate, illogical

(b) PEJORATIVE PREFIXES

These prefixes express contempt. Examples include:

- (a) Mis – as in misguided, misconduct, miscount, mismanagement.

(b) Mal – as in malformation, maltreat, malcontent, malfunction.

(c) PREFIXES OF DEGREE OR SIZE

Prefixes of degree, in English, show the grade or extent of something.

Examples:

(a) Super – as in supermarket, superstar, superpower, superstore.

(b) Under – as in undersize, understatement, underground, underpay.

(c) Out – as in outvote, outspread, outrun, outdistance.

(d) PREFIXES OF ATTITUDE

This group of prefixes indicates the behavior of something or somebody towards another. Examples include:

(a) Anti – as in anti – aircraft, antibody, antisocial, anticlockwise

(b) Counter – as in counterclaim, countermand, counterpart, counterproductive.

(c) Co – as in coincidence, cooperate, coeducation, coefficient.

(e) LOCATIVE PREFIXES

As the name implies, locative prefixes indicate the actual setting, or position, or mixture of something in English. Examples:

(a) Trans – as in transplant, transcontinental, transatlantic, transmigration.

(b) Inter – as in international, interbreed, intercontinental, interdepartmental.

(f) PREFIXES OF TIME AND ORDER

These indicate the time of something, examples:

(a) Pre – as in prenatal, premarital, preconceived, prehistoric.

(b) Post – as in postgraduate, posthumous, postmortem, postindustrial.

(c) Re – as in retakes, rethinks, rewrites, reclaims.

(g) NUMBER PREFIXES

In English, number prefixes indicate quantity. Examples:

(a) Di – as in disyllabic, dialogue, dissect

(b) Bi – as in bilingual, biplane, bipartisan, bicentenary

(c) Mono – as in monolingual, monologue, monosyllable, monotone

(d) Uni – as in Unitarian, unilateral, unisex, unison

(e) Tri – as in tricolor, tripartite, triplet, triplicate

(h) CONVERSION PREFIXES

(a) Be – as in becalm, befriend, beget, begrudged

(b) En – as in enthrones, enslaves, encodes, encloses

This division by Quirk et al (1973) appears explicit because it divides the prefixes according to their functions. Thus, this research work finds it important because it gives the sources of some forms of words, which are created with the help of prefixes that exist in English. Not only that, it gives the rules of their formation because it is not every prefix that goes with any given word. For instance, be (as a prefix) could neither go with code nor with national, or mal (another prefix) with management, count or conduct but with words like – adjusted, nutrition, administration, etc: to form words like maladjusted, malnutrition, maladministration , respectively.

It should be observed here that though derivational affixes do not necessarily modify the syntactic category, they modify the meaning of the base. Meanwhile, in many cases, derivational affixes change both the syntactic category and the meaning: modern – modernize (“to make modern”).The

modification of meaning is sometimes predictable: Adjective + ness -- the state of being (Adjective); (stupid – stupidity).

A prefix, therefore, will rarely change syntactic category in English (e.g. write - rewrite, lord - overlord). The derivational prefix un- applies to adjectives (healthy - unhealthy), some verbs (do - undo), but rarely nouns. A few exceptions are the prefixes en – and be (conversion prefixes, as Quirk et al (1973) call them). En – (em before labials) is usually used as a transitive marker on verbs, but can also be applied to adjectives and nouns to form transitive verbs: circle (verb) - encircle (verb); but rich (adjective) - enrich (verb), large (adjective) - enlarge (verb), rapture (noun) - enrapture (verb), slave (noun) - enslave (verb).

2.6.1.2 SUFFIXATION

Suffixes are attached to the end of free morphemes; thus, they are bound morphemes attached to the end of bases. Suffixes, as Agezi (2004: 44) posits, are “affixes added following roots”. In English, suffixes frequently alter the word-class of the base. Hence, suffixation, as Matthews (1991: 131) observes, is the commonest process because it is involved in most lexical derivations (generate - generate + ion = generation, happy - happy + ness = happiness, etc) and in most inflectional formations (sail - sail + ed, = sailed, sea - sea + s = seas, etc). Thus, suffixation in English could be either for the derivational formation of new lexical items or for expressing grammatical relationships. Haspelmath (2002) practically demonstrates the idea that the suffixes are of two types: derivational and inflectional suffixes. He opines that suffixes could be divided into: derivational/inflectional suffixes (more of it should be discussed on page 79 &84).

2.6.1.3 INFIXATION

The last form of common affixation is infixation, which has to do with the internal structure of the root (word) or operand. Usually, a morpheme is inserted in between the word forms for infixation. Thus, it is a process whereby an affix interrupts the root. The process of infixation, according to Crystal (1980), does not occur in European languages, English being one of them; but it is commonly found in Asian, American, Indian and African languages (e.g. Arabic and Hausa).

Infixation, according to the free encyclopedia (2008), is the “insertion of an affix within the root morpheme”. Fromkin and Rodman (1998: 72) posit that ‘infixation is the process whereby morphemes are inserted into other morphemes’. They are of the view that English has a very limited set of infixes. They observe that English infixation has become a subject of discussion among some interested linguists since November, 1993. The interest in English infixes may be because one can only infix obscenities usually into adjectives and adverbs. The most common infix in America, for instance, is the word “fuckin” and all the euphemisms for it, such as friggin, flippin, freakin and fuggin as in abso – fuggin – lutely or kalama – flippin – zoo. In Britain, a common infix is “bloody”, an obscene term in British English, and its euphemisms, such as b/oomin. For instance, in the movie and stage musical ‘My Fair Lady’, “abso + bloomin + lutely” occurs in one of the songs by Eliza Doolittle.

That notwithstanding, it is pertinent to mention that many linguists do believe that infixation does not exist in English. For instance, the free encyclopedia (2008), states that: “English doesn’t have true infixation. English does have something similar in a limited sphere”. It further explains that this

should be termed “pseudo-infixation”. This is because “expletives” can be inserted inside a word for emphasis. Examples of pseudo-infixation include:

- Un - fucking - believable.
- Abso - bloody - lutely
- Helle - fucking - lullah

In the same vein, Cornelius (2008) adds that: “Infixes are affixes that occur in the middle of a word – and are very rare in English”.

2.6.1.4 CIRCUMFIXATION

Some languages have circumfixes, morphemes that are attached to a root or stem both initially and finally. According to Fromkin and Rodman (1998: 73), these are sometimes called discontinuous morphemes. In Chickasaw, a Muskogean language spoken in Oklahoma, the negative is formed by using both a prefix ‘ik’ and the suffix ‘-o’. The final vowel of the affirmation is deleted before the negative suffix is added, example: ‘Chokma’ (he is good) – ‘ik + chokm + o’ (he isn’t good). An example of a more familiar circumfixing language is German. The past participle of regular verbs is formed by adding the prefix *ge* – and the suffix – *t* to the root verb. This circumfix added to the root (which is a verb) ‘*lieb*’ “love” produces ‘*geliebt*’, “loved” (or “believed”, when used as an adjective).

Based on the review, it is possible to see the classical division of English prefixes. Furthermore, it is noticed that suffixes could be inflectional or derivational and the differences that exist are in their syntactic and semantic functions. Concerning infixes (in English), it is observed that they are rare, but actually do exist (informally), mostly in swear, words e.g. damn as in fan-damn-tastic and fucking as in abso-fucking-lutely. Other examples given by Yule

(1996:69) include ‘Hallebloodylujah!’ ‘Absogoddamlutely!’ and ‘Unfuckingbelievable!’ Circumfixation could also be realized as another sub-process of affixation, which occurs when prefixation and suffixation surface in a single root word.

2.7 AFFIXATION IN THE HAUSA LANGUAGE

Affixation, in Hausa is called “dafi” that is, a process whereby a morpheme is added to the root to add meaning to it or give it another meaning. Affixation in Hausa involves prefixation (dafa – goshi), suffixation (dafa – keya) and infixation (dafa – ciki).

2.7.1 PREFIXATION (DAFA-GOSHI)

This is one of the processes of affixation where a morpheme (known as ‘kwayar tasarifi’ in Hausa) comes before the root word. Thus, when the affix precedes the root it is called prefixation.

THE CATEGORIES OF PREFIXES IN HAUSA

There are four prefixes in Hausa that are illustrated here; they are / – ba, – ma, – mai, and – maras/. Examples:

1. **ba** (it has the idea of ‘man of’):

Bahago (ba + hagu = left) = lefty

Batuuree (ba + turai = Europe) = European

Balarabe (ba + l’arab) = Arab

2. (i) **Ma** – (it has the idea of ‘doer of’):

Maharbii (ma + harbii = shoot) = hunter

Mataimaki (ma + taimako = help) = an aid

Makadii (ma + kida = to beat drum) = drum beater

- (ii) **Ma** – (it has the idea of 'place'):

Masaakaa (ma + saaka = weave) = textile factory

Majeema (ma + jeema = tan) = place for tanning skins

Ma'aunaa (ma + auna = weigh) = place for selling grains

- (iii) **Ma** – (it has the idea of 'instrument' in the following):

Maduubii (ma + duuba = look) = mirror

Magashi (ma + gasa = roast) = roaster

Masaarii (ma + saara = cut) = grass cutting instrument

3. **Mai** (it has the idea of 'owner of'):

Mai – hankalii (mai + hankalii = sense) = a sensible person

Mai – kunyaa (mai + kunyaa = shyness) = a well-mannered person

Mai – sayee (mai + sayee = buying) = buyer

4. **Maras** (it has the idea of 'lack of')

Maras – goodiyaa (maras + goodiyaa = grateful) = ungrateful person

Maras – kunyaa (maras + kunyaa = shyness) = one having no shame

Maras – hankalii (maras + hankalii = sense) = a senseless person

2.7.2 SUFFIXATION (DAFA – KEYA)

This kind of morpheme (kwayar tasarifi) allows the root to appear first before it. Thus, it comes after the root word. Rufa'i (1979:6) posits that "a suffix is a derivative final element. It has semantic value, but does not stand or occur alone". He is of the opinion that suffixes are of two types: the derivative which is lexical, and the functional, which is inflectional and grammatical. A functional suffix is used for things like tense, number or case. It is, thus, not part of word-

formation. It is the derivational that belongs to word-formation (more of it and some examples are discussed on page 78).

2.7.3 INFIXATION (DAFA – CIKI)

The morpheme that is inserted within the root is referred to as an infix. Fagge (2004:7) posits that “when a morpheme comes between elements of the root it is called an infix”. According to Rufa’i (1979:6), “infixation may be the insertion of a new element within the stem of a word or may simply be the result of the duplication of part of the stem”, such as the following:

1. Bir – a – ne (bir – = saiwa, – a = d. – c.)
Birane (cities) birn (root), – a – (infix)
2. Gur – a – gu (gurg – = saiwa, – a – = d. – c.)
Guragu (cripples) gurg – (root) – a – (infix)
3. Tur – a – me (turm – = saiwa, – a – = d. – c.)
Turame (mortars) turm – (root), – a – (infix)

2.7.4 FUNCTIONAL WORDS (KALMOMIN NAHAWU)

This is the last group of morphemes in Hausa. These morphemes are neither roots nor affixes. They are not considered as roots because they can not stand and be meaningful in isolation; they are not considered as affixes because they are not attached with those words that appear near them. These morphemes, instead, show the relationship that exists between words in sentences. For instance; da (and), daga (from), a (at/in/on - referring to place), sun (they – past tense subject), suka (they – relative past tense subject), sai (except, other than), har (as far as, up to) and ba (alternative form of “babu”- meaning there isn’t any/ there aren’t any). Note that the functional words are included here just for completeness, but they are not part of word-formation.

Affixation has been recognized as one of the processes of forming Hausa lexicon. It happens when morphemes are added to the root word to produce new words. Affixation in Hausa could be in any of the three forms: prefixation, infixation or suffixation, i.e. adding bound morpheme to the beginning, middle, or end of the root, respectively.

2.8 ALTERNATION IN ENGLISH

Alternation is otherwise known as modification. It is a morphological process in which changes occur in words as a result of changes in the vowels or the entire form of a word. In other words, alternation is another category of the morphological process, which involves a modification of the base itself. Modification, in English, as Matthews (1991: 136) observes, could be either total or partial (more of its division could be seen on page 96).

2.9 ALTERNATION IN HAUSA

Vowel alternation or what Rufa'i (1979:9) calls "vowel change" is another process of creating words in Hausa. According to him, this process takes place when the original vowel of the base is dropped or alternated with another suffixal and derivational vowel. Fagge (2004:26) also calls it vowel alternation. In respect to Hausa morphology, Fagge defines vowel alternation as: "a process whereby some nouns are formed through the process of altering the root, suffix or prefix". According to the free encyclopedia (2008), 'this process should be called alternation; therefore, it is the process of forming a word using morpheme-internal modification'. Thus, it is otherwise known as modification (see more of it on page 104).

Based on the review, the free encyclopedia's definition appears more explanatory because it states the kind of modification that takes place and the outcome of such modification.

2.10 BACKFORMATION IN ENGLISH

A very specialized type of reduction process is known as backformation, which is recognized as one of the processes of forming words in English. According to Yule (1997: 67), it is “typically a process in which a word of one type (usually a noun) is reduced to form another word of a different type (usually a verb)”. Aronoff and Fudeman (2005: 116) posit that “backformation is the creation of a word by removing what appears to be an affix”. Wisniewski (2007), on his part, sees it as “a process in which a word changes its function. A word of one type, which is usually a noun, is reduced as a verb”. Furthermore, the free encyclopedia (2008) states that:

In backformation, a suffix identifiable from other words is cut off a base which has previously not been a word; that base then is used as a root, and becomes a word through widespread use.

Encyclopedia (2008)

Examples of words formed via backformation include the following: televise (from “television”), donate (from “donation”), opt (from “option”), emote (from “emotion”), enthuse (from “enthusiasm”), liaise (from “liaison”), baby-sit (from “babysitter”), surveil (from “surveillance”), liposuct (from “liposuction”), peddle (from “peddler”), edit (from “editor”), etc.

2.11 BLENDING IN ENGLISH

One type of derivational process that is common in English is blending. Quirk and Greenbaum (1975: 448) say that “in a blend at least one of the elements is fragmentary when compared with its corresponding uncompounded word form”. According to Aronoff and Fudeman (2005: 113), “blends are also called portmanteau words, and they are found by combining parts of more than one word.” In addition to that, Fromkin and Rodman (1998: 89) posit that:

Two words may be combined to produce blends. Blends are similar to compounds but parts of the words combined are deleted and so they are ‘less than’ compounds.

Fromkin and Rodman (1998:89)

It is from blends that we get blending. According to Yule (1997: 66), “the combination of two separate forms to produce a single new term is the process called blending”. For Rubba (2004), blends are parts (which are not morphemes) of two already-existing words when put together to form a new word. Wisniewski (2007) is of the view that “blending is very similar to compounding, but it is characterized by combining only parts of words and joining them”. Furthermore, blending as Cornelius (2008) sees it, as “the combination of two or more words in which the sound patterns overlap”. For the free encyclopedia of linguistics (2008), “blending is the process of combining two separate forms to produce a single new term.”

2.12 BORROWING IN ENGLISH

According to Yule (1997: 65):

One of the most common sources of new words in English is the process simply labeled borrowing, that is, the taking over of words from other languages.

Yule (1997:65)

Wisniewski (2007) is of the view that “borrowing is taking a word from one language and incorporating it into another”. For Cornelius (2008), “when a word is imported from another language, we describe this process as borrowing”. According to the free encyclopedia (2008),

When a word is taken from one language into another and adopted it into its vocabulary it is termed as “borrowing”. Thus, borrowing is the process of taking over words from other languages.

The free encyclopedia (2008).

Borrowing, therefore, is considered as a linguistic phenomenon that appears universal in all living languages. This is to say that all living languages borrow words from other languages and as such borrowing increases the vocabularies of languages. For instance, German has increasingly a large number of borrowed or loan words, especially from English.

Throughout its history, the English language has adopted a vast number of loan-words from other languages, which makes it well-known for its mixed vocabulary and flexibility to foreign words, as Yule (1997) and Cornelius (2008) observe. In addition to that, Wisniewski (2007) observes that “English has been absorbent of words from all over the world”.

Some words that English borrowed include: alcohol (Arabic), boss (Dutch), croissant (French), lilac (Persian), piano (Italian), biology, ozone, prezzie (German), pistol, robot (Czech), tycoon (Japanese), kiosk, yoghurt (Turkish), zebra (Bantu), strata, episcopos (Latin), street, bishop (Greek), psychology, telephone, physician (European languages), yam, totem, banana (African

languages), among others (see more of it on page 112).

2.12.1 CALQUE OR LOAN TRANSLATION

There exists a special type of borrowing called calque, which has been identified by many linguists, such as Yule (1997), Wisniewski (2007) and the free encyclopedia (2008), etc. According to Yule (1997):

A special type of borrowing is described as loan-translation, or calque. In this process, there is a direct translation of the elements of a word into the borrowing language.

Yule (1997:65).

Wisniewski (2007) posits that:

There is also a special type of borrowing called calque or loan translation. Here, there is a direct translation of the elements that a term consists of in the borrowed language into the target language.

Wisniewski (2007).

For the free encyclopedia of linguistics (2008), “calque is a loan translation. It is a direct translation of the elements of a word into the borrowing language”. Examples of loan translation given by Yule (1997) include the following:

- (1) The term “loan-word” itself is believed to have come from German Lenhert.
- (2) The English word “superman” is thought to be a loan translation of the German Übermensch.
- (3) The English word “skyscraper” is a loan translation of the French term ungratteciel, which literally translates as ‘a scrape-sky’, or the German wolkenkratzer (which means ‘cloud scraper’).

- (4) The American concept of 'boy friend' was borrowing, with sound modification into Japanese as boyifurendo, but as a calque into Chinese as 'male friend' or nanpengu.

Other examples of a calque given by Wisniewski (2007) and the free encyclopedia (2008) include: "antibody" from German Antikörper.

So far, we have seen how English takes words either by the process of borrowing or by using loan translation. In borrowing, words are imported from another language, which can take on different meanings due to competition with indigenous terms, as Cornelius (2008) observes, while calque, which is otherwise known as loan translation, is a kind of borrowing of a special type where there is direct translation of the elements of words into the borrowing language. Thus, in borrowing, there is no translation whereas the backbone of calque is translation of the elements that constitute the words.

It is pertinent at this juncture to mention that it is not only English that borrows from other languages, many languages, too, borrow words from English. For instance, Yule (1997: 65) confirms that by saying:

Other languages, of course, borrow terms from English, as can be observed in the Japanese use of suupaamaaketto ('supermarket') and rajio ('radio') or Hungarians talking about sport, klub and futbal, or the French discussing problems of "le stress, over a glass of le whisky, during le weekend".

Yule (1997:67).

2.13 BORROWING IN THE HAUSA LANGUAGE

Every language is the product of change, and continues to change as long as it is spoken. This is based on the contention that living languages never hold

still. But, for the most part, these changes escape our attention as they occur. They are minor or gradual enough to be imperceptible. However, over a long period their cumulative effect becomes appreciable.

A one-way language change is through the influence of other languages. At one time, for example, the Hausa word mota (mo:ta:) “a motor car” was not part of Hausa vocabulary. Now it is. The addition of this word to the Hausa lexicon, thus, constitutes a change in its linguistic system, albeit a minor one. Moreover, Hausa speakers did not create the word out of thin air. Prior to its use, as a Hausa word, it was an English word with a comparable meaning. The addition of the word to Hausa vocabulary clearly results from the influence of the speakers of English who were familiar with the word, who started using it in Hausa. Its use spread, and now it is a well-established word of Hausa.

According to Rufa’i (1979:4), “borrowing is a process whereby a language adopts the words of another language”. In the words of Haugen cited in Bello (1985:2), “borrowing is simply the attempted reproduction in one language of patterns previously learned in another”. That is, if the speaker reproduces the new linguistic patterns, not in the context of the language he learns them, he may be said to have borrowed them from one language into another.

The borrowing of words entails their phonetic modification. There are definitely sounds that could not fit the native phonetic habits. Such kinds of sounds are found to be undergoing some form of phonetic changes into the borrowing language. This is usually in line with the inherited pronunciation habits of the borrowers. The feature that is limited is the model. That is, the language

where the model stemmed from is the donor, and the language, which requires the new feature, is the borrowing language. Rufa'i (1979:14) observes that:

In case of western ideas, Hausa does one of two things. It either turns to classical Arabic or borrows from that source (just as European languages turn to Latin and Greek) or it adopts and adapts and even assimilates the foreign terminologies.

Rufa'i (1979:14)

Rufa'i contributes the following examples:

(a) Resort to classical Arabic:

English	Hausa	Language borrowed from (donor language)
vote	kuriaa	from Arabic -- quri'a
politics	siyaasaa	from Arabic – siyaasaa
science	ilmin kimiyyaa	from Arabic – alkiima
council	ma'jalisaa	from Arabic – majlis
republic	jamhuriyaa	from Arabic - jamhuuriyaa
salary	albaashi	from Arabic - alma'aash

Rufa'i (1979:14)

(b) Adoption and adaptation of the foreign words:

English	Hausa
bucket	bookiti
motor	moota
office	oofis
change	canjii
doctor	likita
carpenter	kaafinta

interpreter	taafinta
table	teebur
bicycle	bassukur
lecture	lakca
telephone	tarfoo, etc. Rufa'i (1979).

According to him, it appears as though Hausa resorts to Arabic when the western terminology refers to an abstract concept or idea. But where the term refers to a material object it tries to adopt the term directly.

Bello (1985) is of the view that borrowing differs radically on two grounds. The first is the level of contact between the two languages concerned. This is with respect to the proportion of logical items in the vocabulary of the borrowing language that can be attributed to borrowing. In this respect, borrowing is only made under special circumstances: a particular area of thought where concepts are lacking necessitates the borrowing. In the second ground, the proportion of borrowed items is relatively higher. This results because of a higher degree of dependency on the donor language by the borrowing language. In this respect, the circumstances conditioning the borrowing are thorough, with complete sphere of influence in all manner of thoughts.

Now, it is pertinent to mention that Hausa came in contact with, basically, two international languages, namely English and Arabic; thus, it borrows a great number of words from each. But for any borrowing to take place, two basic conditions, according to Hackett (1958:403 cited in Bello 1985:4) must be met: "prestige and need filling motives". The prestige motive usually takes place when

two different languages live in a simple region. He is of the opinion that if one of them is the dominant language prestige leads the other to an extensive borrowing. However, the need filling motive prevails whereby the borrowing is made to fill a gap in the borrowing language because new experiences, new objects and practices, bring new words into a language. Whichever motive prevails however, there has to be a reason for it because as Sapir (1971:192, cited in Bello 1985:5) points out, languages like culture are rarely sufficient unto themselves.

2.13.1 ARABIC LOANWORDS IN HAUSA

The coming of Islam into Hausa land has introduced significant changes. The most important that relates to Hausa is the one brought by Arabic. The language came with new terms relating to religious, administrative and legal matters, as well as education and commerce. Hausa readily responded to the changes and adopted many of the new terms from Arabic words, such as alkali (judge), karatu (reading), makaranta (school), riba (profit), hakimi (village head) to mention but a some, have now been adopted as Hausa words.

According to Ahmed and Daura (1970), two devices have commonly been used for borrowing words from Arabic to Hausa. The first device is by changing the form of the source words to reflect the structural form of the Hausa language. There are, by this device, words such as annabi from annabiyyu (prophet), allo from allauh (slate), littafi from kitabun (book) and others. The second device is by adopting the source words as they are in their Arabic form. Words such as addu'a (prayer), Qur'ani (Qur'an), jarida (newspaper) and others are just some of them.

Although Arabic has tremendously contributed to the development of Hausa vocabulary, it has in the same way aided the extinction of some indigenous words of the language. Before Hausa came into contact with Arabic, the language has had words related to counting from 1-10.000 and upwards. Some of these words have been gradually disused and replaced by words of Arabic origin. For example; the language has a counting system of 1-10 as daya (one), biyu (two), uku (three), up to goma (ten). It has had 20-100 as gomiya daya (ten), gomiya biyu (twenty), gomiya uku (thirty), gomiya hudu (forty) up to dari (hundred) that are no longer being used. They have been replaced with Arabic adopted terms ashirin (twenty), talatin (thirty), arbain (forty) and so on (ibid); (more of the Arabic borrowed words are discussed on page 110).

The researcher, therefore, considers the works cited in this section important to the present study because they revealed the interwoven nature of living languages, such as Arabic and Hausa (although the traffic is one way), which is an important finding in the Arabic – Hausa contact.

2.13.2 HAUSA – ENGLISH CONTACT

From 1900 upwards, Hausa came into direct contact with English when the colonialists conquered Hausa land and established their colonial administration. Like Arabic, as Muhammad (1968, cited in Ahmed and Daura 1970) observes, English too, has contributed to the extension of some Hausa words. For example, Hausa before colonialism had words such as bante (pants), buje (bag trousers), and others, which are now being replaced with English adopted words of fant (pants), and bagi (bag trousers), respectively. In the sound system (phonology), Skinner, (1977) posits that some English sounds are now

being used in Hausa. Thus, phonemes such as /f/ and /q/ are commonly used by Hausa educated elites. The phoneme /f/ is a fricative produced by narrowing the passage of the air at the point of lower lip and upper teeth so as to force a small amount of the air to go through. Hausa lacks this kind of phoneme. It has, instead, an English /p/, which is a stop rather than a fricative. One, however, hears the native speakers, especially the educated elites, using the /f/ in their speech, like the phoneme (q).

The two most important contacts the Hausa people and language had with the British (and of course, the English language) were political and literary. The political (even though it was initially based on trade relations, later taking the form of missionary activities, which in turn culminated in a political interference) came much later than the literary. But it was after the proclamation for colonial rule that the literary aspect became almost predominant. It dominates many aspects of life. The colonization has brought many new concepts in the area of skills and occupations. In that period, western education was introduced, English being the medium of instruction, which gave rise to bilingualism, became influential in terms of skills and improved occupational and social status.

According to Bello (1985:8), both contacts have an overwhelming effect on Hausa language. This was in the form of an extensive borrowing of words from English. An enormous vocabulary of Hausa can bear witness to this fact. Hausa has not developed any resistance of any nature towards the borrowing of English words. This is due to the fact that the words were and still are borrowed on the basis of the 'need-filling condition'. However Hausa creates new words out of its

own resources as the need arises.

2.14 CLIPPING IN ENGLISH

One of the processes of word-formation in English is termed clipping. According to Quirk and Greenbaum (1975: 448): “the term ‘clipping’ denotes the subtraction of one or more syllables from a word”. Aronoff and Fudeman (2005: 115) assert that: “clipping is the creation of a new word by the truncation of an existing one”. Furthermore, Yule (1997: 66) observes that:

The element of reduction which is noticeable in blending is even more apparent in the process described as clipping. This occurs when a word of more than one syllable is reduced to a shorter form, often in casual speech.
Yule (1997:66).

For Wisniewski (2007), clipping is “shortening or reducing long word”. Cornelius (2008) adds:

Shortening of longer words is a popular strategy for conserving breath when speaking and space when writing or typing. Clipping or trimming words in the front or back (and sometimes both) is thus another word-formation process in English.

Cornelius (2008).

According to the free encyclopedia (2008) “clipping is shortening of a polysyllabic word.”

The review on this part has helped us to have an insight on the issue of clipping being one of the processes of word-formation. Though all the works that are reviewed here are important, this work prefers Cornelius’ (2008) because it

appears more elaborate; it incorporates all the points mentioned in the other works.

2.15 CLIPPING IN HAUSA

Hausa linguists like Baner (1991: 233), Abdulhamid (2001:15), and Sani (2002:154) mention that clipping is another way of word coining by shortening the base, while still retaining the same meaning and membership of the form class (more of it is discussed on page117).

2.16 COINAGE IN ENGLISH

New words may also enter a language in a variety of other ways (apart from those mentioned). Some words are created outright to fit some purposes. Coinage has been recognized as one of the processes of creating new words in English. According to Yule (1997: 64), “Coinage is one of the least common processes of word-formation in English, that is, the invention of totally new terms”. For Rubba (2004), Coinage as a process of word-formation is otherwise known as “Adoption of brand names as common words”. He adds that a brand name becomes the name for the items or process that is associated with the brand name. Furthermore, Wisniewski (2007) is of the view that “coinage is creating of totally new words”. He adds that coinage, as a word-formation, is not frequent (in English); however, large corporations attempt to outdo one and invent short eye-catching names for their products. According to the free encyclopedia (2008), “coinage is the invention of totally new terms”.

This review has helped us to identify coinage as one of the processes of forming words in English. Even though all works cited here are important, Wisniewski's (ibid) definition appears more explicit because apart from defining the concept, he explains the manner of its occurrence, as well as its frequency. Furthermore, the review revealed the possible sources of coined words (more of the sources of coined words are discussed on page 119).

2.17 COMPOUNDING IN ENGLISH

Compounding is another common word-formation process. It is probably the most common one in today's English because it is so productively used in technical languages. Several scholars have defined compound differently according to their different points of view. For instance, Marchand (1969: 11) sees compounds as occurring when two or more words combine into a morphological unit. Adams (1979: 30) talks of it as "the combination of two free forms or words that have an otherwise independent existence". According to Rufa'i (1979: 2), "a compound is a word wholly made up of smaller words or syntagmas expressing one idea". He adds that a compound has two elements: determinant and determinatum. The determinant is said to precede the determinatum because it is the determining element.

Rubba (2004) posits that 'a compound word is a word that is formed from two or more simple or complex words (e.g. landlord, red-hot, window cleaner)'. For Cornelius (2008):

Compounds are possibly those multimorphemic words that we most readily identify as consisting of several

parts. In a compound, several free morphemes are combined; resulting in a word that often derives its meaning from the combination of its components.

Cornelius (2008).

This work has found the review of these definitions important because they have given an insight on what make-up a compound in its morphological sense. Yet, Cornelius' definition appears the best because it includes both the morphological sense (where he mentions that compounds consist of "multimorphemic words" – meaning several morphemes or words identified by other linguists), and semantic sense (where he mentions that the combination of such words consequently leads to the creation of a word which "derives its meaning from the combination of its components"). This shows that one cannot get the semantic stand of a compound word unless one combines its components. With this, one can say that a compound is a word which consists of two or more smaller words whose meaning cannot be portrayed by taking each word in isolation.

Compounding, therefore, is joining two or more words into one new word. In other words, compounding is a process whereby two or more individual words are combined as one word. Matthews (1991: 37) sees compounding as:

The branch of morphology, which deals with the relations between a compound lexeme and two or more simple(r) lexemes.

Matthews (1991:37).

Malmjaer (1995:319) posits that "compounding is the combination of two free forms, or words that have otherwise an independent existence". According to Yule (1996: 65), when there is joining of two separate words to produce a

single form, the combining process is technically known as compounding. He adds that it is very common in languages like German and English, but much less common in languages like French and Spanish. For Fromkin and Rodman (1998:84), compounding occurs ‘when new words are formed by combining words together to form compound words’.

With the contributions of the above linguists, it could be said that compounding is a process of word-formation that involves combining complete word-forms into a single compound form. Furthermore, Asher (1994) asserts that all living languages contain compounds in their lexicon. The formal shape of the use of different types of compounds, as he also notes, differs from language to language. English, for instance, makes regular use of compounding as a method of coining new words (more about its elements and divisions are discussed on page 120).

2.18 COMPOUNDING IN HAUSA

Compounding, according to Wurma (1998: 47), is “a process of combining two or more words to produce a single meaning and one sense word”. Fagge (2004:30) posits that compounding is the second major morphological component (affixation, being the first), which uses words as raw materials for the formation of compound words or expressing new situations in Hausa.

Many Hausa linguists have classified Hausa compound nouns into sub-types based on the combinations of elements that make up such compounds. For instance, Galadanchi (1976) categorizes compound nouns into three main types based as follows:

- i. Noun-based compound nouns – they have nouns or adjectives as their core. Examples: taarin-kasaa (heap of sand), taurin-kai (stubbornness).
- ii. Verb-based compound nouns: These have verbs as their core; Example: tumaa-kasa (a woolen shawl).
- iii. Idiophone-based compound nouns: these are nouns that have idiophones as their core. Example: Kyal-kyal-banza (useless thing or good for nothing).

Galadanci (1976).

Furthermore, Fagge (2004: 30) observes that compounding is a process of combining two or more words to give one single meaning. For example, the two words, azumi (fasting) and jemage (bat) in Hausa have meanings when used in isolation. But when combined together (as an independent compounding word) as azumin jemage, they give single specialized meaning – a useless venture.

2.19 REDUPLICATION IN ENGLISH

This is a morphological process that has to do with morphemic repetition. So, reduplication may be defined as repeating the whole or part of a word, the repeated portion is affixed to the stem. Matthews (1991:134) asserts that the process of “repetition” is generally referred to under the heading of reduplication. According to Marantz (1982: 437), reduplication is a morphological process relating a base form of a morpheme or stem to a derived form that may be analyzed as being constructed from the base form via the affixation (or infixation)

of phonemic material, which is necessarily identical in whole or in part to the phonemic content of the base.

Reduplication, according to Al-Hassan (1983:22), may be defined as repeating a part of a word affixed to the stem. To Al-Hassan (1978: 21), reduplication is “a morphological process of copying with resultant identity of the added material to its lexical base”. Aronoff and Fudeman (2005: 770) posit that “in reduplication, a continuous substring from either the beginning or the end of a word is copied”. According to the free encyclopedia (2008), “reduplication is the process of forming new words by doubling all or part of a morpheme”.

Matthews’ and Al-Hassan’s (1978) definitions are not explicit enough because they do not indicate the nature of such repetition. Furthermore; Al-Hassan’s (1983) definition is incomplete because he mentions only one part, leaving the other part, which is of equal importance. Again, Aronoff and Fudeman’s definition is handicapped because it recognizes only one aspect (i.e. reduplicating parts of words), whereas the whole words could be reduplicated. This research work, therefore, considers the free encyclopedia’s definition more appropriate because it appears more complete since it includes both partial as well as complete reduplication (types of reduplication is discussed on page 139).

2.20 REDUPLICATION IN HAUSA

One of the processes involved in forming Hausa words is called reduplication. Reduplication means nannage in Hausa. While some Hausa linguists prefer to call it reduplication, e.g., Fagge (2004: 36) and Al-Hassan

(1983:22), others like Rufa'i (1979: 10), call it just 'duplication' (more about its types is discussed on page 141).

In conclusion, we should say that languages form their vocabulary by the help of many processes. For instance, English and Hausa employ many processes, such as affixation, alternation, borrowing, clipping, compounding, reduplication etc. to form many of their words. It should be observed that while some processes do exist in both the two languages of the study (English and Hausa), others could only be employed in one. For example, processes like reduplication, compounding, clipping, borrowing, affixation, etc. could be employed both in English and in Hausa, while processes like blending and coinage could hardly be employed in Hausa though they are greatly employed in forming some English words.

Thus, even though there are many processes of forming words in both English and Hausa, which are not mentioned in this research, the work can still serve as a stepping stone to linguists who are interested in comparative linguistics. The review so far is quite extensive but it is by no means exhaustive. So, the review has indicated that word-formation processes are complex, unique and dynamic linguistic phenomena.

2.21 THEORETICAL FRAMEWORK

Linguistics generally formulated new theories of grammar involving morphology. This study considers some linguistic theories and processes in the identification of morphemes in human languages. The study assesses the

relevance and techniques of these theories to the processes of word-formation in English and Hausa languages. Most popular approaches to the study of language could be categorized into two approaches: the descriptive approach and the generative approach. The current study adopts the descriptive approach to language study. It is on this basis that a theoretical model is fashioned out for the identification, presentation, discussion and analysis of the data collected for the purpose of this study.

2.21.1 DESCRIPTIVE LINGUISTICS

Linguistics has always required a process called description, which involves observing language and creating conceptual categories for it without establishing rules of language. The 16th and 17th centuries, in which the modern linguistics began to project, provided the basis for the 18th and 19th centuries comparative works – mainly on classical languages. By the early 20th century, this focus shifted to modern language as the descriptive approach of analyzing speech and writing became more formal. The reason for this prior hood is that linguistics, as any other branch of science requires observation and analysis of a natural phenomenon, such as the order of words in communication, which may be done without prescriptive rules. In descriptive linguistics, nonstandard varieties of language are held to be no more or less correct than standard varieties. Whether observational methods are seen to be more objective than prescriptive methods, the outcomes of using prescriptive methods are also subject to description.

The descriptive approach, therefore, simply recognizes that the forms exist, observes the differences and similarities between them, and describes the uniformity of linguistic phenomena in human languages. The descriptive approach is still applied in analyzing many of the world recognized languages. This research applies the descriptive approach of Nida's (1946) six principles of descriptive statements. In addition, Carl's (1996) model of descriptive linguistic analysis has also been used in this research work.

CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

This chapter discusses the research procedures: types of data and sources of data collection used; data collection techniques as well as analytical models. In view of the fact that much has been done in the area of morphology in general and English morphology in particular, this work takes a data oriented approach. In addition to this mainstream approach, the researcher would have a chance to test some personal assumptions with other native speakers in the case of Hausa language (i.e. informants).

The study of a living language could be approached while employing different methods based on different aims. A language may be studied as a whole or a segment: it may be studied theoretically or practically; it may be studied comparatively, synchronically or diachronically. Whatever the aim of a linguistic study is, however, the empirical basis for any field linguistic investigation of a language is to study and discover the system of the language. Therefore, field linguistics by the subject of its investigation and often by the aims of its study, can be related to descriptive or synchronic linguistics, which is directed towards the study and description of concrete languages, the kind of linguistics which establishes correspondence between real language (or its 'segment') and the grammar (model of the language).

The aspect of this study is word – formation processes in English and Hausa. Therefore, the target of investigation is the comparative features of

English and Hausa word-formation processes. Forming words is the object concern of this study. Furthermore, the researcher is familiar with the two languages under study: a second language speaker of English and a native speaker of Hausa.

The word-formation processes are described first in English then in Hausa with examples. Where a process exists exclusively in one of the languages, examples are drawn in that language. Where a process is found in both languages, examples are drawn from each. Examples are also drawn from other languages where necessary.

3.1 RESEARCH PROCEDURE

3.1.1 TYPES OF DATA

The variety of Hausa chosen for this work is the standard form, which is mostly associated with the Kano dialect (the variety spoken in Kano and its environs). It is the form taught in schools and used in both national and international media. The form of English chosen is also the standard form which is the one taught in schools as well as the medium of instruction.

The data is mainly text – oriented. Both written sources and informants were mainly used as reference materials. With regard to items of Hausa data, some are texts oriented, while some were collected by listening to the speeches and utterances of some native speakers of Hausa while they were engaged in different dialogues and discussions. The ‘introspective’ method is also employed in gathering Hausa data. The introspective method is exclusively based on self-observation. Since the language (Hausa) is familiar to the researcher, as a native

speaker, it relates to her competence and intuition. Furthermore; the native informants (at Kano) were consulted in order to affirm or discard a point of argument on this study.

3.1.2 SOURCES OF DATA COLLECTION

The study uses two main sources of data collection for the purpose of this research work: primary and secondary.

3.1.2.1 THE PRIMARY SOURCES OF DATA

The primary sources of data for this research work were through the “introspective” method, that is, the researcher’s knowledge and personal acquaintance with both languages under study (a native speaker of Hausa and a second speaker of English). To avoid ‘artificiality’ and shortcomings of this source, however, informants who are specialists and native speakers of Hausa, who are currently living in Hausa land, were used to supplement and authenticate the Hausa data generated.

3.1.2.2 THE SECONDARY SOURCES OF DATA

The secondary sources of data complemented the primary sources. The secondary sources comprise written literature, textbooks, journals, unpublished thesis works and pamphlets. Some of the materials consulted were historical documentation, tape recorders, music, sermons, conversations and discussions in the Hausa language.

3.2 DATA COLLECTION TECHNIQUES

A combination of techniques was employed in the collection of data gathered for the purpose of this research work. As mentioned earlier, the ‘introspective’ technique was employed. In addition to that, observation was also

used as a means of generating data, since the researcher is a native speaker of Hausa community.

Furthermore, an unstructured interview was used to elicit relevant data from informants. The researcher initiated discussion with the informants in an informal and relaxed atmosphere. This method of data collection has helped the researcher to obtain significant, reliable and valid data on the pattern and structures of processes of Hausa word-formation, especially as they occur in real life situations.

3.2.1 UNSTRUCTURED INTERVIEW

The researcher used an unstructured interview as one of the techniques for eliciting relevant linguistic data from informants. Discussions were employed and questions were presented to the informants in an informal and relaxed atmosphere where certain significant, reliable and valid information and fact about the Hausa language and its structures (data) could be elicited and gathered; which could, however, be difficult in a formal situation.

Face-to-face interviews and questions had no predetermined alternative responses from the informants. However, the responses were further validated and complemented by non-participant observation technique.

3.2.2 NON – PARTICIPANT OBSERVATION

Non-participant observation is one of the most commonly and widely used descriptive linguistic methods in the gathering and collection of data in field linguistic research. The researcher employed this technique because it is expedient in obtaining first hand information, that is, the natural primary data and

the knowledge of the workings and structures of the languages under investigation. In addition, however, this instrument has provided the researcher with the opportunity to practically observe some of the Hausa words being formed.

3.3 ANALYTICAL MODELS

A simple descriptive approach was employed in the analysis of the data collected for this research. Thus, the procedure followed is a synthesis of the analytic comparative model of Nida and Carl.

3.3.1 NIDA'S MODEL

Nida (1949) contains a descriptive statement of morphology which is paraphrased below:

- (a) The formal description of morphology should reflect, as accurately as possible, the structure of the language under consideration. In other words, the morphemes and combinations of morphemes should be described according to their pertinent environments.
- (b) The system of outlining must be clear and formal.
- (c) The use of linguistic terminology should reflect the intended reader although it must conform to terms used by other linguistics. New terms are to be clearly defined and consistently used.
- (d) The use of mentalist, historical, subjective and imperative statements should be avoided.

Nida's work deals with writing out the description of a particular sub-field of language, which is morphology. Since this research work is morphological in nature, Nida's principles are adopted.

3.3.2 CARL'S MODEL

Carl (1996, cited in Rubba 2004) holds that any linguistic analysis involves two stages:

1. First, there is the stage of description when each of the two languages is described on the appropriate level.
2. The second stage is the stage of juxtaposition for comparison.

Being descriptive and comparative in nature, Carl's model is also adopted.

The research is therefore based on a description of English word-formation processes based on scientific, descriptive and taxonomic approaches and finally a comparison of those processes that are present in English with those in Hausa with a view to clarifying areas of differences and similarities. The results will then be used to make some conclusions about the linguistic relationship that exist between the two languages, morphologically.

CHAPTER FOUR

DATA ANALYSIS

4.0 INTRODUCTION

This chapter contains the presentations of data and the analysis of the data gathered for the purpose of this study. The Word-formation processes of both English and Hausa languages were highlighted and described in the previous chapters. The second stage after description in comparative linguistic analysis, as Carl (1996, cited in Rubba 2004) observes, is comparison. Therefore, an attempt is made to compare the principal word-formation processes of the languages, bringing out their inherent similarities and differences. It is assumed that establishing the differences and similarities will aid in the examination of the linguistic relationship that exists between the two languages of the study, so also the degree at which English interferes with Hausa at the morphological level.

Rather than adopt the pedagogic or prescriptive approach in our analysis, the researcher has adopted the descriptive with the help of Nida (1969) and Carl's (1996) models in line with the inference of Oyetunde (1983:27) when he asserts that:

Teaching needs to be based on the best possible description of the language being taught. And the better, the fuller, the more accurate description is the more the chance the teacher will have to assist the learner in his growing mastery of the structure of the new language. Without such knowledge, there will be little possibility of satisfactory sequencing of materials, no chance of distinguishing mistakes from systematic errors which are the best evidence that language learning is taking place.

Thus, the analysis carried out in this chapter is predicted on the following:

- 1- Acronyms
- 2 -Affixation
- 3 - Alternation
- 4 – Backformation

- 5 – Blending
- 6 – Borrowing
- 7 – Clipping
- 8 – Coinage
- 9 – Compounding
- 10 - Reduplication

Therefore, a sample of the comparative analysis is given, taken each process one after the other.

4.1 THE COMPARATIVE ANALYSIS OF THE PROCESSES IN ENGLISH AND HAUSA

4.1.1 ACRONYMS

English exhibits this feature as one of its word – formation processes, thus a lot of its words are formed via acronyms. These are pronounced either alphabetically or as words (retaining or losing their capital letters) as can be see below:

4.1.1.1 THE DIVISION OF ACRONYMS

(a) Those pronounced alphabetically which are called ‘alphabetisms’, e.g. CD (‘Computer Disk’), VCR (‘Video Cassette Recorder’), NFL (‘National Football League’) etc.

(b) Those pronounced as single words (with capital letters) e.g. NATO (North Atlantic Treaty Organization), NASA (National Aeronautics and Space Agency), UNESCO (United Nation Educational, Science and Cultural Organization), UNICEF (United Nations International Children’s Emergency Fund), AIDS (Acquire Immune Deficiency Syndrome), etc.

(c) Those pronounced as single words but lost their capitals e.g. laser (light

amplification by stimulated emission of radiation), radar (radio detecting and ranging), scuba (self-contained underwater breathing apparatus), zip (zone improvement plan), etc.

It is observed that this is the only group of acronyms that is written without capital letters, the rest appear in capitals.

(d) Those formed as names of organizations, e.g. MADD (mothers against drunk driving), WAR (woman against rape), etc.

(e) Those, recently, used in banking sector, e.g. ATM (Automated Teller Machine), PIN (Personal Identification Number), etc.

It should be noticed that Hausa lacks it; thus, it does not form any word via acronyms.

4.1.2 AFFIXATION

Abubakar, (2001:1) considers affixation as ‘a morphological process which involves attaching a formative to an existing word: complex words which can be neatly segmented into roots and affixes are realized by means of affixation’. In English, there are several categories of affixes depending on their position with reference to the stem or simply according to their physical position relative to roots. It has been observed, therefore, that English exhibit categories of affixes which are far more than that of Hausa. English uses affixes like prefixes, suffixes or postfixes, infixes, circumfixes, interfixes, duplifixes, transfixes, simulfixes, suprafixes and difixes; while Hausa uses only prefixes suffixes and infixes. Perhaps this may be the reason that made Quirk et al (1973) pointed out

‘affixation’ as one of the chief processes of English word-formation. Let us look at some examples of the common affixes in the two languages:

Affixes	Example	Schemes	Description
Prefix	English – <u>dis</u> agree Hausa – <u>ba</u> haushe (Hausa man)	Prefix-stem	Appears at the front of a stem
Suffix/postfix	English – beaut <u>ify</u> Hausa – gafar <u>ta</u> (forgiveness)	Stem-suffix	Appears at the back of a stem
Infix	English – abso-bloom <u>in</u> -lutely Hausa – gur <u>u</u> gu (cripples)	St(infix)em	Appears within a stem
Circumfix	English – <u>un</u> count <u>able</u>	Circumfix - Stem-circumfix	One portion appears at the front of a stem and the other at the rear.

4.1.2.1 THE POSITIONAL CATEGORIES OF AFFIXES

Affixes are divided into several categories, depending on their position with reference to the stem, as Elson and Pickett (1976: 12) who observe that “several kinds of affixes can be recognized depending on the way they occur with roots”. Based on that, Robins (1970), Matthews (1974) and Crystal (1980) divide affixes in English into prefixes, suffixes and infixes. Elson and Pickett (1976: 12) classify affix morphemes based on their physical position relative to roots as prefixes, suffixes, infixes, suprafixes and simulfixes.

According to Elson and Pickett (ibid), *prefixes* occur preceding roots; *suffixes* occur following roots, *infixes* occur inside the roots themselves (that is inside the words). They go further to explain that “in some languages, morphemes are composed of (or include) suprasegmental phonemes such as tone or stress. Frequently, segmental phonemes (vowels and consonants) and suprasegmental phonemes combine to form morphemes, but in some cases the suprasegmental phonemes alone indicate the meaning. Such morphemes may

be called “suprafixes”. Suprafix morphemes are usually described in statement form, but also may be symbolized by using a neutral symbol for the segmental phonemes with which they occur. In contrast to prefixes, suffixes and infixes which are pronounced before, after, or in the middle of the root, suprafixes are pronounced simultaneously with the root.

In addition to that, another kind of simultaneous affix has been called a simulfix. This term, for Elson and Pickett, could be applied to any simultaneous morphemic features other than those considered to be composed of suprasegmental phonemes (that is, pitch, stress, length). Wallis (1956) uses this term in describing the aspect system of Mezquital Otimi, which includes a simultaneous addition of certain phonemic features to the initial consonant of the stem. The addition may be a single phoneme, sometimes pronounced before the initial consonant, sometimes after it; or it may be less than a phoneme (e.g. voicing), and pronounced simultaneously with the initial root consonant as one phonetic segment. For example, completive aspect is signaled by a feature of palatization simulfixed to roots beginning with /ʔ / or /h/, and by a component of voicing simulfixed to roots beginning with a voiceless consonant and other than /ʔ / or /h/.

According to the free encyclopedia (2008), prefix and suffix are extremely common terms. Infix and circumfix are less so, as they are not important in European languages. The other terms are uncommon, as listed below:

Affixes	Examples	Schema	Description
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Prefix	<u>U</u> ndo	Prefix-stem	Appears at the front of a stem
Suffix/post fix	Look <u>ing</u>	Stem-suffix	Appears to the back of a stem
Infix	Saxo <u>m</u> aphone	St(infix)em	Appears within a stem
Circumfix	<u>A</u> scattered <u>d</u>	Circumfix>stem <Circumfix	One portion appears at the front of a stem, and the other at the rear
Interfix	Speedo <u>m</u> eter	Stem _a -interfix-stem _b	Links two stems together in a compound
Duplifix	Teeny-weeny	Stem-duplifix	Incorporates a reduplicated portion of a stem (may occur in front, at the rear, or within the stem)
Transfix	Maltese: 'kite <u>b</u> ' (he wrote) compare root k <u>t</u> b (write)	S<transfix>te <transfix>m	A discontinuous affix that interleaves within a discontinuous stem
Simulfix	Mouse - mice		Changes a segment of a stem
Suprafix	<u>Pro</u> duce (noun) <u>Produce</u> (verb)		A stem
Disfix	Alabama: "ti <u>p</u> li" (breakup) Compare root "ti <u>p</u> asl;" stm (break)		The elision of a portion of a stem

The free encyclopedia (2008)

Furthermore, prefix and suffix may be combined as "adfix", a term that is rarely used except in contrast with infix. In transcription, for example, in the third column in the chart above, simple affixes such as prefixes and suffixes are shown connected to the stem with hyphens. Affixes which disrupt the stem, or which themselves are discontinuous, are often marked off with angle brackets. Reduplication is often shown with a tilde.

At this juncture let us have a comparative analysis of affixation on the two languages:

(1) PREFIXATION

Both English and Hausa exhibit this feature in their morphological process of forming words. In the two languages, prefixes are used for derivational and inflectional purposes, for example:

English – pre (prefix) + school (stem) = preschool

Post (prefix) + war (stem) = postwar

Inter (prefix) + national (stem) = international

Hausa – ba (prefix) + kauyee (village) = bakauyee (resident of side)

ma (prefix) + kiira (blacksmithing) = makeerii (blacksmith)

mai (prefix) + barnaa (destroying) = maibarnaa (destroyer)

It can be seen from the examples that English uses many prefixes which Quick et al (1973: 442) mentioned them as:

(i) Reversative prefixes which reverse the action or the meaning of the stems to which they are attached. English, therefore, uses four prefixes such as un, non, dis and il, to reverse the action to their attachments, such as:

un + believable = unbelievable

non + standard = nonstandard

dis + respect = disrespect

il + legitimate = illegitimate

Hausa which is used to indicate negation exhibits only one that shows this linguistic phenomenon – maras; as it appears in such words as:

maras + kookarii (intelligent) = maras – kookarii (dull)

maras + goodiya (grateful) = maras – goodiyaa (ungrateful person)

- (ii) Pejorative prefixes express contempt. In English, there are two prefixes of this kind – mis and mal as in:

mis + calculate = miscalculate

mis + adventure = misadventure

mal + administration = maladministration

mal + nutrition = malnutrition

In Hausa, you could not find pejorative prefixes.

- (iii) Prefixes of degree or size – This kind of prefixes, in English, shares grade or size or extent of something: such as super, under and out as in:

super + structure = superstructure

super + impose = superimpose

under + weight = underweight

under + state = understate

out + building = outbuilding

out + class = outclass

This group of prefixes is not found in Hausa.

- (iv) Prefixes of attitude – These indicate the behaviour of something or somebody towards another; such as anti, counter and co as in:

anti + climax anticlimax

anti + personnel = anti-personnel

counter + balance = counterbalance

counter + blast + counterblast

co + produced = co-produced

co + exist = coexist

Prefixes of attitude do not exist in Hausa, too.

- (v) Locative prefixes – English uses this kind of prefixes but Hausa does not use them. Locative prefixes indicate the actual setting, or position, or mixture of something; such as trans and inter as in:

trans + form = transform

trans + figure = transfigure

inter + link = interlink

inter + connect = interconnect

- (vi) Prefixes of time and order are such prefixes that could be found in English but not Hausa. They are used to indicate time, such prefixes include, pre, post, and re as in:

pre + caution = precaution

pre + date = predate

post + impressionist = post-impressionist

post + date = postdate

re + decoration = redecoration

re + entered = re-entered

- (vii) Number prefixes are used in English to indicate quantity such as di,

bi, mono, uni and tri as in:

di + syllabic = disyllabic

di + plane = biplane

bi + annual = biannual

mono + plane = monoplane

mono + rail = monorail

uni + corn = unicorn

uni + lateral = unilateral

tri + lingual = trilingual

tri + colour = tricolour

These prefixes, also, could not be found in Hausa.

- (viii) Conversion prefixes are those prefixes that English uses to create some words that indicate state of conversion, but Hausa lacks such prefixes; for example be and en as in:

be + little = belittle

be + friend = befriend

en + danger = endanger

en + case = encase

Hausa, on the other hand, exhibits only four prefixes: ba, ma, mai and maras. The ba prefix, in Hausa, has the idea of “man of” as in:

ba + Turai (Europe) = batuuree (European)

ba + kudu (south) = bakudee (southerner)

Another Hausa prefix is ma which has the idea of “doer of” as in:

ma + rubuutu (writing) + marubuucii (writer)

ma + gini (building) maginiii (builder)

The prefixes ma, in Hausa, also indicates the idea of ‘places’ as in:

ma + rini (dying) = marinaa (place for dying)

ma + auna (weigh) = ma'aunaa (place for selling grain)

Furthermore, ma prefix indicates the idea of 'instrument' as in:

ma + buudi (open) = mabuudii (key)

ma + kulli (lock) = makulli (locker)

Another prefix that Hausa uses to create words is mai which indicates "owner of", literally; as in:

mai + tsafta (cleaniness) = mai – tsafta (tidy man/woman)

mai + tafiyya (traveling) = mai – tafiyya (traveler)

The last Hausa prefix is maras which is a contraction of mai-rasa (loser of), which becomes maras (lacking) as in:

maras + waayoo (wisdom) = maras – waayoo (foolish)

maras + hankalii (sense) = maras – hankalii (senseless)

(2) SUFFIXATION

Suffixational morphemes exist in the morphology of the two languages. In English, suffixation is considered as the commonest process that is involve in most lexical derivations and in most inflectional formations. A derivational suffix, therefore, changes the syntactic category of one word into another; for instance, in English, an adjective changes to noun (happy – happiness), an adjective changes to verb (modern – modernize), a noun changes to adjective (nation – national), a noun changes to verb (beauty – beautify), a verb changes to adjective (pay – payable) or a verb changes to nominal (forming nouns from

verbs), or adjectival (forming adjectives from nouns, verbs and other adjectives) and adverbial (forming adverbs from adjectives). Let us look at some examples:

(i) Verbs to nouns: bombard + ment = bombardment

(ii) Adjective to nouns: blind + ness = blindness

(iii) Verbs to noun: signify + ant = significant

deter + ent = deterrent

confess + or = confessor

compose + er = composer

(iv) Adjectives to verbs: conceptual + ize = conceptualize

black + en = blacken

Note – it should be noted that en could also be used with nouns to form adjectives which indicates the idea of ‘made of’ as in:

gold + en = golden } verbal suffixes
wood + en = wooden }

(iii) Nouns to verb: code + ify = codify, solid + ify + solidify

(iv) Noun to adjectives: dust + – y = dusty, ice + – y = icy

Note that – y could also be used with verbs to form adjectives (which indicates the idea of “tending to”) or nouns (which indicates the idea of “the action or process of”) as in:

run + – y = runny } Adjectives
stick + – y = sticky }

inquire + – y = inquiry } Nouns

expire + – y = expiry

It should also be noted that – y (also – ie) appears with noun indicating small size or as a form of a name, indicating affection as in: piggy, doggie, daddy, Suzie, etc

(v) Nouns or verbs to form adjectives

plenty + – ful = plentiful

beauty + – ful = beautiful

master + – ful = masterful

forget + – ful = forgetful

care + – ful = careful

(vi) Nouns to form adjectives:

tree + less = treeless

meaning + less = meaningless

hope + less = hopeless

(vii) Verbs to form adjectives:

pay + – able = payable

perish + – able = perishable

reverse + – ible = reversible

Note that ‘– able’ could be used with nouns to form adjectives (having or showing the quality of) as in: fashion + able = fashionable

(viii) Adjectives to adverbs:

stupid + – ly = stupidly

accurate + – ly = accurately

Note that – ly could also be used with nouns to form adjectives

(which indicate ‘having the quality of’) as in:

coward + – ly = cowardly

scholar + – ly = scholarly

(ix) Nouns to adjectives and adverbs:

quarter + – ly = quarterly (adjective)

quick + – ly = quickly (adverb)

Suffixation in Hausa, on the other hand, occurs with the help of what Rufa’i (1979:6) calls ‘derivational suffixes’ to form some Hausa words. The Hausa derivative suffixes, therefore, include: – ta, –nta, – taka, – ntaka, – ci, – nci, – wa, – au, – ayya and – eriya. These suffixes are generally identified in deriving abstract ideas (or abstract nouns) or verbs as in the following table:

	BASE	CLASS	MEANING	DERIVED WORD	CLASS	MEANING
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(i) – <u>ta</u>	gajeeree baawaa kuturuu	adj n n	short slave leper	gajartaa bawtaa kuturtaa	n (abst) n (abst) n (abst)	shortness slavery leprosy
(ii) – <u>nta</u>	saaboo baakoo muuguu	adj n adj	new guest wicked	saabuntaa baakuntaa muguntaa	n(abst) n (abst) n (abst)	newness being guest wickedness
(iii) – <u>taka</u>	kadai jaarimii samaari	adi n n	alone brave man youth	kadaitakaa jaarintakaa samartakaa	n(abst) n(abst) n(abst)	loneliness bravery youth hood
(iv) – <u>ntaka</u>	gwauroo bara abookii	n n n	unmarried servant friend	gwaurantakaa barantakaa abookantakaa	n (abst) n(abst) n(abst)	being unmarried being servant friendship
(v) – <u>ci</u>	aadalii albarkaa kusa	n n adj	just man blessing near	aadalcii albarkacii kusaaci	n(abst) n(abst) n(abst)	justice sake nearness
(vi) – <u>nci</u>	jaamus faransi tuurai	n n n	Germany France Europe	jaamusancii faransancii turancii	n(abst) n(abst) n(abst)	German French English
(vii) – <u>ayya</u>	aikata so saaka	v v v	work love revenge	aikatayyaa soyayyaa saakayyaa	n(abst) n (abst) n(abst)	mutual work mutual love vengeance
(viii) – <u>eniya</u>	yarda tuura maari	v v v	agree push slap	yarjeejeeniya tureereeniya mareereeniya	n(abst) n(abst) n(abst)	mutual agreement pushing one another slapping one another
(ix) – <u>wa</u>	faara gama jika	v v v	begin finish to wet	faarawaa gamawaa jikawaa	n(abst) n(abst) n(abst)	beginning finishing soaking / wetting
(iv) - <u>au</u>	manta makara gaagaraa	v v v	forget be late playfulness	mantau makarau gaagarau	n(abst) n(abst) n(abst)	very forgetful be very late very playful

Rufa'i (1979)

DERIVATIONAL SUFFIXES

A derivational suffix is that morpheme that changes the class of a word to which it is added: for example, “ly” changes the word ‘slow’ to ‘slowly’, and the word class changes from adjective to adverb. According to the free encyclopedia (2008), in linguistics derivation is used to form new words, as with ‘happi-ness’

and 'un-happy' from 'happy', or 'determination' from 'determine'. A derivational suffix usually applies to words of one syntactic category and changes them into words of another syntactic category.

Some examples of English derivational suffixes:

- (a) Adjective – to – noun: ness (slow - slowness).
- (b) Adjective – to – verb: ize (modern - modernize)
- (c) Noun – to – adjective: al (recreation - recreational).
- (d) Noun – to – verb: fy (glory - glorify)
- (e) Verb – to – adjective: able (drink - drinkable).
- (f) Verb – to – noun: ance (deliver - deliverance).

According to Agezi (2004: 98), derivational suffixes are used to derive a form class from another. For instance, the noun (derivational) suffixes include:

- <u>ment</u>	as in	govern	-	government
		establish	-	establishment
- <u>er</u>	as in	teach	-	teacher
		dance	-	dancer
- <u>al</u>	as in	refuse	-	refusal
		revive	-	revival

A derivational suffix can change a word from indicating a state of being into a process, for example: (a) She is good to everyone.

(b) The goodness of the situation excites everyone.

Furthermore, with the adverbial suffix (-ly), there is a change from state to manner plus the deletion of some words. For example:

(a) She is slow in her work.

(b) She works slowly.

The verb “is”, the preposition “in” and the possessive “her” in sentence (a) are deleted.

The free encyclopedia (2008) gives a sample of derivational suffixes in the following table:

Suffix	Class(es) of word to which suffix applies	Nature of change in meaning	Examples
Suffix ‘-ity’	Adjective	Changes to noun	Electric/electricity obese/obesity
Suffix ‘-ous’	Noun	Changes to adjective	Fame/famous Glamour/glamorous
Suffix ‘-able’	Verb	Changes to adjective means ‘can undergo action of verb’	Print/printable Drink/drinkable

The free encyclopedia (2008)

Derivational suffixes could also be grouped according to the words they form, as Agezi (2004: 44) observes. These include:

(1) NOMINAL SUFFIXES

This group of suffixes is used to form nouns from verbs and adjectives, e.g.:

SUFFIXES	ADDED TO VERBS	DERIVED WORDS
(a) – ment	amaze	amazement
	establish	establishment
	develop	development
ADDED TO ADJECTIVES		
(b) – ness	happy	happiness
	careless	carelessness
	lazy	laziness

ADDED TO VERBS

(c) – ant	inhabit	inhabitant
	disinfect	disinfectant
(d) – or	act	actor
	dictate	dictator
	conduct	conductor
(e) – er	drive	driver
	teach	teacher
	play	player

(2) VERBAL SUFFIXES

These are suffixes used in forming verbs from mostly adjectives and nouns.

Examples:

SUFFIXES	ADDED TO ADJECTIVES	DERIVED WORDS
(a) – ize	popular	popularize
	natural	naturalize
	civil	civilize
(b) – en	deaf	deafen
	weak	weaken
	soft	soften

ADDED TO NOUNS

(c) – ify	person	personify
	glory	glorify
	beauty	beautify

(3) ADJECTIVAL SUFFIXES

These are suffixes used in forming adjectives from nouns, verbs and other

adjectives, as the case may be. Examples:

SUFFIXES	ADDED TO NOUNS	DERIVED FORM
(a) – y	hair	hairy
	dream	dreamy
	gum	gummy
(b) – ful	faith	faithful
	help	helpful
	care	careful
(c) – less	mother	motherless
	mercy	merciless
	child	childless
ADDED TO VERBS		
(d) – able	read	readable
	teach	teachable
	count	countable
	force	forcible
	eat	eatable

It should be noted that “able” is one of the exceptional morphemes that can stand both as a bound morpheme (as seen in the given examples) or a free one, which can stand alone without being attached to any root or base, as shown in the sentences below:

- She should be able to read simple sentences in Arabic.
- They seemed able to work together efficiently.
- You will be able to relax for some hours.

(4) ADVERBIAL SUFFIXES

Some adverbs are formed from adjectives with the suffix below:

ADDED TO ADJECTIVES

- ly	slow	slowly
	deliberate	deliberately
	decisive	decisively

To sum up this unit, it is found that derivational suffixes change the grammatical class of the morphemes to which they are attached. Furthermore, in many cases, derivational affixes change both the syntactic category and the meaning: modern - modernize (“to make modern”). Thus, the modification of meaning is sometimes predictable: Adjective + ness the state of being (Adjective) e. g. stupid - stupidity.

INFLECTIONAL SUFFIXES

An inflectional suffix performs a grammatical function in a word without changing the word class of that particular word, as Agezi (2004: 47) observes: “Inflectional suffixes perform a grammatical function without changing the word class of the morphemes they are attached to”. In English, inflectional suffixes come at the end of a morpheme and no other affix can come behind them. According to Agezi (2004: 48), English has eight inflectional suffixes, which are:

- (1) The plural suffix “-s” as in cats, dogs.
- (2) The possessive suffix “s” as in hers, yours.
- (3) The present (inflectional) suffix “-s” as in works, kicks.
- (4) The past (inflectional) suffix “- ed” as in killed, slapped.
- (5) The participle (inflectional) suffix “-en/-ed” as in eaten, chosen.

(6) The – ing (progressive) inflectional suffix as in teaching, cooking.

(7) The comparative (inflectional) suffix “-er” as in finer, taller.

(8) The superlative (inflectional) suffix “-est.” as in finest, tallest.

According to Rubba (2004), English has only three categories of meaning, which are expressed inflectionally, known as inflectional categories. They are numbers in nouns, tense/ aspect in verbs, and comparison in adjectives.

NUMBER

The English nouns could be either in singular or plural form. The plural suffix “- s”, which is phonetically realized as /s/, /z/ and /ɪz/ (as in ‘cats’ and ‘rats’ /kæts/, /ræts/; ‘bags’ and ‘dogs’ /bægz/, /dogz/; ‘churches’ and ‘houses’ /tsʃ:tsɪz/, /haʊzɪz/, respectively), is syntactically important in relation to number. Number is associated with the English nouns: therefore, a noun phrase must agree with the verb it precedes in any construction. Examples are drawn below:

(a) The cats are licking the milk.

(b) *The cats is licking the milk.

(c) The men are working on the farm.

(d) *The men is working on the farm.

Sentences (b) and (d) violate the rule that a singular NP or a singular subject takes a singular verb, while a plural NP or a plural subject takes a plural verb (concord agreement). Subject could be a noun, pronoun or their equivalent. Morphologically, the pronouns of English can be divided into three groups, which are personal, relative and demonstrative pronouns. The personal and demonstrative pronouns are inflected for number. Examples:

Singular

Plural

} xciii

I	We	
You	You	Personal
He/She/It	They	
This	These	} Demonstrative
That	Those	

Based on the above examples, it is only the second person, personal pronoun “you” that shows no change in the plural form. However, it has a plural in the reflexive (yourself – yourselves).

Pronouns are also inflected in relation to case, that is, there are nominative, objective and genitive cases. Examples:

Nominative	Genitive	Objective
I	Mine	Me
He	His	Him
She	Her(s)	Her
Who	Whose	Whom
You	Your(s)	Your

As can be seen above, the first person singular “I” and the third person singular “she” have irregular possessive formation.

TENSE/ASPECT

Tense inflection in English affects the verb category. English verbs demonstrate inflection in the following ways:

- i. The infinitive “to” as in ‘to walk’, ‘to teach’.
- ii. The (- s) agreement morpheme or 3rd person singular form as in

‘walks’, ‘teaches’, etc.

iii. The (- ed) form (past tense) as in ‘walked’, ‘washed’

iv. The (-en) form (past participle) as in “writen”, “driven”.

The (-ing) form (progressive or gerundive) as in” writing”, “driving”.

The various verb forms are exemplified below:

Infinitive	3rd person singular form	Progressive/ gerundive form	Past Tense	Past participle
to teach	teaches	teaching	taught	taught
to sink	sinks	sinking	sank	sunk
to sing	sings	singing	sang	sung
to forget	forgets	forgetting	forgot	forgotten
to dance	dances	dancing	danced	danced
to praise	praises	praising	praised	praised
to kill	kills	killing	killed	killed
to talk	talks	talking	talked	talked
to go	goes	going	went	one
to have	has	having	had	had

The free encyclopedia (2008).

The infinitive is the base form of a word and is regular, while verb inflection is not regular in all cases. While the 3rd person singular and the progressive/gerundive remain unchanged, the past participle shows variations in its inflectional forms from verb to verb, although its regular forms are (-ed) and (-en), respectively. English verbs can be roughly grouped into two categories: regular and irregular verbs. Concord is also another important feature in the English verb system. There is the third person singular (inflectional) morpheme ‘-s’, which must always be suffixed to verbs in the present tense form. It demonstrates a peculiar case in concord.

Examples: - Sule appears neat always.

- Hauwa'u cooks deliciously.

It is also germane to say that the tense used in a sentence should agree with the time of the action, and this agreement is morphologically indicated in the main verb of the sentence. Here, the present and past perfect forms demonstrate special features while relating action to time. In English, the morphemes of the present and past perfect are 'have + en' and 'had + en', respectively. The perfect, whether present or past takes the form have (had) + past participle of the main verb. The (-en) is suffixed to the main verb of the sentence to form the past participle of the verb. Examples:

Present perfect form

Main verb	singular	plural
Go	I have gone	We have gone
	You have gone	You have gone
	He/she has gone	They have gone

Past perfect form

Main verb	Singular	Plural
Go	I had gone	We had gone
	You had gone	You had gone
	He/She/ It had gone	They had gone

In the progressive (present or past), the progressive morpheme (-ing) is suffixed to the main verb of the sentence. Examples:

Present progressive

	Singular	Plural
1 st person	I am going	We are going
2 nd person	You are going	You are going
3 rd person	He/She/ It is going	They are going

Past progressive

	Singular	Plural
1 st person	I was going	We were going
2 nd person	You were going	You were going
3 rd person	He/She/It was going	They were going

COMPARISON

The comparative and superlative inflectional suffixes /-er/ and /-est/ operate in the adjectival and adverbial categories. The /-er/ and /-est/ show the importance of morphemes and generally inflections in syntax. /-er/ morpheme in adjectives is used when two things are compared, while the /-est/ morpheme is used when more than two things are compared. For example: big bigger biggest as in:

Sule has a big kettle

Bala's kettle is bigger than Sule's.

Musa's kettle is the biggest of all.

/-er/ and /-est/ are used to show degree in adjectives. Longer adjectives, however, are not inflected, rather lexical items 'more' and 'most' are added to the base. For example:

Positive

Comparative

Superlative

Beautiful	more beautiful	most beautiful
Handsome	more handsome	most handsome
Wicked	more wicked	most wicked

The process of suppletion also occurs with the English adjectives, for example:

bad worse worst

Morphologically, English adverbs are at times inflected with the morphemes (-er) and (-est) for degree just like the adjectives. For example:

Positive	Comparative	Superlative
Soon	sooner	soonest
Often	oftener	oftenest

Concerning the inflectional categories of English affixes, Rubba (2004) divides them into two and summarizes them in a tabular form: Regular and irregular, thus:

INFLECTIONAL CATEGORIES AND AFFIXES OF ENGLISH

1. The regular

Word class to which inflection applies	Inflectional category	Regular affix used to express category
Nouns	Number	-s, -es; book/books <u>es</u> , bush/bushes <u>es</u>
	Possessive	-s, -': the cat's tail, Charles' toe
Verbs	3 rd Person singular present	-s, -es: it rains <u>s</u> , Hafsa <u>s</u> writes <u>s</u> , the water slashes <u>s</u>
	Past tense	-ed: paint/painted <u>d</u>
	Perfect aspect	-ed: paint/painted <u>d</u> (has painted)

		(past participle)
	Progressive aspect	-ing : fall/falling, write/writing (present participle)
Adjectives	Comparative (comparing two items)	-er: tall/taller Fine/finer
	Superlative (comparing + 2 items)	

Rubba (2004).

2. The irregular

Here are some ways English inflectional morphology is irregular:

Type of irregularity	Noun plurals	Verbs: past tense	Verbs: past participle
Unusual suffix	Ox <u>en</u> , syllab <u>i</u> antenn <u>ae</u>		taken, seen, fallen, eaten
Change of stem vowel	Foot/feet Mouse/mice	Run/r <u>a</u> n, come/c <u>a</u> me, flee/f <u>e</u> d, meet/m <u>e</u> t, fly/f <u>e</u> w, stick/st <u>u</u> ck, get/g <u>o</u> t, break/bro <u>k</u> e	Swim/swum Sing/sung
Change of stem vowel with unusual suffix	Brother/breth <u>re</u> n	Feel/fel <u>t</u> , kneel/knel <u>t</u>	Write/writt <u>e</u> n, do/don <u>e</u> , break/brok <u>e</u> n, fly/flown <u>e</u>
Change in base form (sometimes with unusual suffix)		Send/sent <u>t</u> , bend/bent <u>t</u> , think/thought <u>t</u> , teach/taught <u>t</u> , buy/bought <u>t</u>	Send/sent <u>t</u> , bend/bent <u>t</u> , think/thought <u>t</u> , buy/bought <u>t</u>
Zero-marking (no suffix, no stem change)	Deer, sheep, fish	Hit, beat	Hit, beat, come

Rubba (2004).

More ways in which inflection can be irregular:

Sometimes instead of a suffix to change, the whole word changes – this

could be a verb to be (be – am – are – is – was, - were, been); a main verb (go – went – gone); adjective (good – better – best), etc. This process is termed as “suppletion”, a form of modification or alternation, as observes in the free encyclopedia (2008) – which will be discussed fully in the next process of word-formation.

INFIXATION

This process, as Crystal (1980) observes, is not commonly found in European languages, English inclusive; but it is commonly found in Asian, American, Indian and African languages, Hausa inclusive. Fromkin and Rodman (1998:72) note that English has a very limited set of infixes, normally found in adjectives and adverbs. The common infix use in America is the word ‘fuckin’ and all its euphemisms (e.g. friggin, freakin, fuggin); while in Britain, a common infix is ‘bloody’ and its euphemisms too (e.g. bloomin). However, in Hausa, infixation occurs in form of pluralization as in: kurame (deaf people) – kurma (root) + -a (infix).

It should be noted that whereas the availableness of prefixes and suffixes in the Hausa language is not in doubt, that of infixes is believed to have resulted from an erroneous perspective. Thus, there is a great controversy on the existence of infixes in Hausa. For instance, Al-Hassan (2006) says:

The so-called infixes in Hausa are, in truth, either transfixes or a relay of suffixes that became obscured by phonology or deletion envisaged parallactically as infixation. In two other instances, infixation either arose as a simple case of unscrupulous use of terminology or was established on a seemingly desperate premise, namely the non-occurrence of a tonal phenomenon.

Al-Hassan (2006).

According to him, most of the instances that seem to be infixation are not

really infixation, but probably a process called “transfixation”. Furthermore, Al-Hassan (2006:6) states that samples of the best enterprise in Hausa grammar discuss infixation with intersecting examples. For instance the -aa- infixation is found in such cases as ‘kurtu’(recruit) > ‘kuraataa’ (recruits), and ‘kwalba’(bottle) > ‘kwalaabee’(bottles). Those with –ee- infixation include ‘garmaa’(plough) > ‘gareemanii’ (ploughs), and ‘salka’(skin bottle) > ‘saleekanii’ (skin bottles). There is –oo- infixation in ‘dabba’ (animal) > ‘dabbobii’ (animals) and ‘mootaa’ (automobile) > ‘mootoocii’ (automobiles). Most of these and numerous other examples can be seen in Abubakar (2000:4), Wolff (1993:143-187), Schuh (1983:12), and Leben (1976:424-430 and 1977:92-100).

Furthermore, Newman (1972, cited in Al-Hassan 2006:7) explains the formation of certain plurals in Hausa as the result of the interaction of a tri-radical root and a composite affix. A word like *‘jirgi’* (boat) forms its plural by allowing the interlacing of the composite affix aa.....ee with the tri-radical root jirg- where the first part of the composite affix (i.e. aa) enters the root before the third consonant while the second part of the composite affix (i.e. ee) enters after the third consonant, to give rise to *‘jiraagee’* (boats), the plural form. However, a word like *‘damoo’* (monitor lizard) with its bi-radical root (like the above examples), *dam-* requires a third consonant, which the language supplies by reduplicating the last consonant of the root (i.e. /m/) to give rise to the required form *damm-*, thus fulfilling the condition of tri-radicality. The interaction of the resultant root *damm* with the compound affix aa.....ee now follows to give rise to the plural *damaaaee* (monitor lizards). This kind of morphology where a discontinuous affix

combines with a discontinuous root is known as transfixation. Specifically, that affix is a transfix and not an infix. Transfixes lack the homogeneity and the completely intra-root location of infixes, as seen in the examples above. Therefore, the claims for the existence of infixation in Hausa, though justified, have failed to stand scrutiny.

CIRCUMFIXATION

English exhibits this linguistic feature while forming some words; Hausa, on the other hand, lacks it. For instance, in English words like: understatement – under (prefix) + state (root) + ment (suffix); transformation – trans (prefix) + form (root) + ation (suffix); disappointment – dis (prefix) + appoint (root) + ment (suffix), are formed via circumfixation.

Furthermore, in English circumfixation could be noticed in several words such as: unfriendly, ascattered, dislikeness, illegally, transplantation, monolingualism, bilingualism, multilingualism, disestablishment, uncountable, etc which could be divided into parts thus:

Prefixes	root words	suffixes	words realized
un –	friend	-ly	unfriendly
a –	scatter	-ed	ascattered
dis –	like	-ness	dislikeness
il –	legal	-ly	illegally
trans –	plant	-ation	transplantation
mono –	lingual	-ism	monolingualism
bi –	lingual	-ism	bilingualism
dis –	establish	-ment	disestablishment

un - count -able uncountable

Fromkin and Rodman (1998:73)

In the above examples, it should be observed that all the circumfixed words are formed with a formula: prefix + root word + suffix e.g. un (prefix) + friend (root word) + -ly (suffix) will give the word “unfriendly”; the same process applies to other words given. This, evidently, shows that more than one process of affixation could be applied to a single word to create some English words.

To sum up this unit, affixation has been identified as one of the processes of word-formation. Affixation is an important process of morphology through which both derivational and inflectional processes of morphology are realized. Affixation could be broadly divided into two sub-processes: prefixation, and suffixation. There exist other minor processes of affixation, too, such as infixation and circumfixation. Prefixation is a sub-process of affixation in which morphemes known as prefixes are added before the “operand” (bases, roots, stems). Suffixation, on the other hand, occurs when an affix or morpheme known as a suffix is added after the operand. Infixation is another way of forming words when an affix known as an infix breaks the root of the word and inserts itself in the middle. Circumfixation, as reviewed, is realized when both prefix and suffix come before and after a single root word.

4.3 ALTERNATION

Both languages exhibit this feature even though total modification or suppletion could be exclusively seen in English irregular verbs while changing from present to past tense (as in go – went or be – was) or in comparative form

of some adjectives (as in good – better or bad – worse) or even in using the bound plural form (morpheme) /-en/ added to the underlying form ‘ox’ (to form ‘oxen’) as a suppletive alternate of /-s, -z, -iz/ (which are the normal plural morpheme); but none could be found in Hausa.

4.3.1 TOTAL MODIFICATION IN ENGLISH

In English, total modification occurs when the whole word changes. According to Matthews (1991: 139), total modification is usually called suppletion. Rubba (2004) is of the view that suppletion occurs when the whole word changes rather than having a suffix. Suppletion is a bit tricky but is also rare in English. It is the result of a historical process frozen in time. Briefly, historically there were two words with similar meanings in the language (English), typically used in different dialects. Over time, the two words merged into one paradigm. For instance, in an earlier stage of English there were two words for ‘to be’, ‘wesan’ and ‘eom’. These two were combined into one, and forms of both formed the paradigm for ‘to be’ e.g. ‘be’ – ‘am’ – ‘are’ – ‘is’ – ‘was’ – ‘were’ – ‘been’. Other examples include: mouse/mice, louse/lice, catch/caught, go/went, etc.

Matthews (1974) and Schane (1972) are of the view that suppletion is any alternation which cannot be explained by any rule. For instance, the English bound plural form (morpheme) /-en/ added to the underlying form ‘ox’ is a suppletive alternative of /- s; – z’; – iz/ because English grammar has no rule for the occurrence of the alternant. Furthermore, Asher (1994) extends the term ‘suppletion’ to a much commoner phenomenon whereby different affixes fulfill the same inflectional function, e.g. the different plural suffixes ‘books’, ‘children’, ‘formulae’, etc. According to Aronoff and Fudeman (2005: 168), suppletion takes

place when the syntax requires a form of a lexeme that is not morphologically predictable. They cite the example of the paradigm for the verb is which is characterized by suppletion. Thus, am, are, is, was, were and be have completely different phonological shapes, which are not predictable on the basis of the paradigms of other English verbs.

In addition to that, suppletion could be found with pronouns; compare *I* and me or she and her. Other examples of complete suppletion could be found in verbs (e.g. go – went, is – was); nouns (e.g. louse – lice); adjectives (e.g. some – much – most), etc. Examples of suppletion given by Rubba (2004) include:

- (a) be – am – are – is – was – were – been
- (b) go – went – gone
- (c) good – better – best
- (d) bad – worse – worst
- (e) some – more – most

Fromkin and Rodman (1998: 92) posit that some English words tend to violate the regular rules of inflectional morphology in forming their plurals (nouns) or past form (verbs). These irregular forms must be listed separately in our mental lexicons as suppletive forms. That is, one cannot use the regular rules of inflectional morphology to add affixes to words that are exceptions like 'bring/brought', but must replace the non-inflected form with another word.

4.3.2 PARTIAL MODIFICATION IN ENGLISH

Different linguists will inexorably view and describe things differently. Based on Matthews' (1991:136) division, partial suppletion is otherwise known as vowel change because it involves a process whereby changes occur in words as

a result of changes in vowels. According to Aronoff and Fudeman (2005 : 168), in certain cases, such as with catch – caught or think – thought and other similar verbs like them in English, it is most convenient to speak of partial suppletion. In these cases, the initial phoneme or phonemes of the word remain the same, but there is both internal change and change to the end of the word (loss of segments) and addition of a past tense indicator [t] as in: think – thought, sleep – slept etc.

Matthews (1991: 136) posits that in English the partial modification of man to men is an obvious example; another is the more extensive change in ‘catch’ - ‘caught’ or ‘teach’ - ‘taught’, vowel change – [æ] - [e] (as in man – men), [i] - [æ] (as in sing - sang and [ʌ] in sung), [u:] - [o] (as in shoot - shot), [au] - [ai] (as in mouse - mice), conversely [ai] - [au] (as in find - found). In postulating vowel change or any other sort of ‘change’, one has to check that the direction of the process can be justified as seen in the examples below:

(a) Examples of vowel change in the formation of plurals:

woman – women

foot – feet

tooth – teeth

goose – geese

(b) Examples of vowel change in the formation of past tense:

come – came

blow – blew

grow – grew

Another type of modification involves accent or tonal pattern, which, Matthews (1991: 139) observes, is in close association with a process of affixation. Thus, when the shift accompanies the suffix, the suffixes always require the stress in that position; in such cases, the accentual modification can be seen as a direct repercussion of the process of suffixation. These instances occur in English word – formation. Examples in ‘generation’ or ‘automation’ the stress changes from its position in the bases ‘generate’ and ‘automate’ to the syllable before the suffix – ion.

There is a pattern in English, for example, in which a noun is accented on the first syllable (*‘conflict*, *‘insult*, *‘export*) and a corresponding verb on the second (*conf’lict*, *in’sult*, *ex’port*). In most grammars, the noun is said to be derived from the verb. But an alternative view is that the two stress patterns (for nouns and verbs) are added equally to roots that, in themselves, are unaccented. In this analysis, both *‘conflict* and *conf’lict* consist of the root *conflict* (unstressed) plus what has sometimes been called a ‘superfix’ – an accentual affix superimposed on it.

Other examples of the stress change in English include:

Nouns	Verbs
<i>‘refuse</i>	<i>re’fuse</i>
<i>‘import</i>	<i>im’port</i>
<i>‘export</i>	<i>ex’port</i>
<i>‘combine</i>	<i>com’bine</i>
<i>‘implant</i>	<i>im’plant</i>
<i>‘transport</i>	<i>trans’port</i>

According to the free encyclopedia (2008), this process is called stress shift. Here, stress shift is considered as another process of word-formation where no affix is added to the base, but the stress is shifted from one syllable to the other. With the stress shift comes a change in category. For Yule (1996:67) and Cornelius (2008), stress shift is termed “conversion”. Yule posits that “a change in the function of a word, for example, when a noun comes to be used as a verb (without any reduction), is generally known as ‘conversion’”. He (Yule) is of the view that conversion can be subdivided into: ‘category change’ and ‘functional shift’. He cites examples of nouns, such as ‘paper’, ‘butter’, ‘bottle’, and ‘vacation’, which can, via the process of conversion, come to be used as verbs, as in the following sentences:

- He’s papering the bedroom walls.
- Have you buttered the toast?
- We bottled the home-brew last night.
- They’re vacationing in France.

Yule (1996:67)

Furthermore, the conversion process is particularly productive in modern English, with new uses occurring frequently. The conversion can involve verbs becoming nouns, with *guess*, *must* and *spy* as the sources of a *guess*, a *must* and a *spy*. More so, phrasal verbs (*to print out*, *to take over*) also become nouns (*a printout*, *a takeover*); one complex verb combination (*want to be*) has become a very useful noun as in:

- He isn’t in the group, he’s *just* a wannabe.

Verbs (*see through*, *stand up*) also become adjectives, as in *see – through material* or *a stand-up comedian*. Or adjectives, such as ‘dirty’, ‘empty’, ‘total’, ‘crazy’ and ‘nasty’, can become the verbs to dirty, to empty, to total, or the nouns a crazy and a nasty. One may even hear of “*people doing the nasty*”.

Cornelius (2008) on his part sees conversion as another highly productive word-formation process whereby a word class changes without any morphological marking. Examples:

- (1) - party (noun), party (verb)
 - We will be at the party (noun).
 - They like to party (verb)
- (2) - Must (noun), must (verb)
 - It is a must that you call him (noun).
 - You must eat your soup (verb).

Cornelius (2008)

It should be borne in mind that conversion exists when it is clear that a word has been “copied” from one word class to another.

4.3.2.1 SUBTRACTION

The final subtype of modification, as Matthews (1991: 42) observes, is of subtraction, otherwise known as “minus formation”. Subtraction has been dealt with many times since Bloomfield’s classic exposition in the 1930s, as observed Matthews (1991). He posits that subtraction can be seen where masculine in French seems to be derived from feminine, e.g. ‘bone’ (good) feminine - ‘bon’ (good) masculine (by the removal of /e/); ‘bonne’ feminine - ‘bo’ masculine (by the removal of /n/ with accompanying nasalization of /ɔ̃/, etc. Furthermore, in

English, subtraction could be noticed in some verbs when changed to past form, e.g. meet - met, bleed – bled, etc.

Based on the findings, alternation otherwise known as modification has been identified as one of the processes of word-formation in English. Modification occurs when changes occur in words as a result of changes in vowels or the entire form of the word. When a whole word changes its form completely to form another, it is referred to as 'suppletion' in the words of Matthew (1974), Schane (1972), Asher (1994), Aronoff and Fudeman (2005), Fromkin and Rodman (1998), Rubba (2004), among others.

Schane's definition explains that suppletion could not be explained by any rule. In other words, there is no guiding principles in forming such words as the formation of the plural of such nouns as 'child' and 'bed'; whereas the plural of child is children (which is irregular), the plural of bed is simply beds (which is regular formation); the same thing applies to 'do – did', but 'go – went', etc.

Asher (1994) adds that suppletion could also be noticed when different affixes perform the same inflectional function, as in the case of forming plural nouns or past tense verbs. Aronoff and Fudeman (ibid) are of the same view with Asher, Matthew and Schane that complete modification or suppletion could not be predicted; hence could not be explained by any rule. Furthermore, Fromkin and Rodman (1998) accept such a view of irregularities in the formation of suppletion.

To summarize this part, it appears important to mention that this work finds all works cited as vital even though there are deficiencies in some respects.

Thus, for suppletion to be complete, it should be a whole modification in which the words are changed completely. These words could be either verbs derived from nouns, past forms of verbs derived from present forms or even adjectives derived from nouns, etc. Furthermore, it is observed that if vowels are changed to form another category of word, it is called partial modification. Aronoff and Fudeman (2005) observe that in such a process (what they termed 'partial suppletion'); the initial phoneme(s) of the word is retained while changes occur internally on the vowel(s). The internal change could be a single vowel as in man - men; sing- sang or doubles as in tooth - teeth, foot – feet, etc.

Moreover, some linguists like: Bloomfield (1930), Matthews (1991), Yule (1996) and Cornelius (2008) identify other sub-types of modification, e.g. stress shift, conversion and subtraction. Yule's contribution appears more explanatory because he divides stress shift, or what he and Cornelius call conversion, into two, namely: category change and functional shift. Matthews (1991) adds that modification could also be in the form of subtraction – this happens when vowel are removed from some words to form other words. This linguistic phenomenon mostly occurs in forming French words. It has been observed that in such cases, the last consonant is subtracted to derive masculine from feminine (in French). In English, subtraction may occur within the stem to form other words (meet - met). According to some linguists, this process should not be considered as one of the processes of vowel change or alternation of the operand, but rather a special instance of affixation, involving what has sometimes been called a 'discontinuous morph' (or morpheme realized 'discontinuously').

4.3.3 PARTIAL MODIFICATION IN HAUSA

It is noted here that vowel alternation or modification in Hausa occurs only within verb stems and the derived forms are nouns. Thus, all the vowels alternate from the Hausa verb stems to noun forms, e.g. gaada inherit (verb) – gaadoo inheritance (noun) - vowel /a/ alternate with /o/; buga beat (verb) – buguu beat (noun) - vowel /a/ alternate with /u/; zaânaa draw (verb) – zaâne drawing (noun) – vowel /a/ alternate with /e/, etc.

Consider the following cases given by Fagge (2004: 26):

(i) /a/ alternating with /i/

<u>Verb stem</u>	<u>derived form</u>	<u>gloss</u>
tuukaa	tuukii	driving
taafaa	taafii	clapping
tsaraa	tsarii	lying out
buudaa	buudii	opening

(ii) /a/ alternating with /u/

kaamaa	kaamuu	catching
buga	buguu	beating
saamaa	saamuu	obtaining

(iii) /a/ alternating with /e/:

kaamaa	kaâmee	catching
zaanaa	zaâne	drawing
auraa	aúree	marriage
jeeraa	jêeree	arrangement

(iv) /e/ alternating with /a/:

tseefee	tsiifaa	combing
feekee	fiikaa	sharpening
deebee	diibaa	plucks

(v)	/o/ alternating with /u/		
	sooyaa	suuyaa	frying
	googaa	guugaa	rubbing
(vi)	/a/ alternation with /o/		
	gaada	gaadóo	inherent
	toonaa	toonóo	dig
	gooyaa	gooyóo	carry on back

Fagge (2004:26).

One important thing noticed by Rufa'i (1979:9) is that alternation, as a kind of derivation, is also combined with a change in tone pattern. In Hausa, according to him, specifically the tone of the first syllable (if the base is a verb) is normally high but becomes low after the derivation. Examples:

Base	Class	Meaning	Derived word	Class	Meaning
taafa	V	to clap	taafii	n(abst)	clapping
dasa	V	to plant	dashee	n(abst)	planting
saya	V	buy	sayee	n(abst)	buying
fasa	V	cut open	fasoo	n(abst)	cutting
buga	V	beat	buguu	n(abst)	beating
daama	V	mix	daamuu	n(abst)	mixing
ciiza	V	to bite	ciizoo	n(abst)	biting
jeefa	V	to throw	jiifaa	n(abst)	throwing

Rufa'i (1979:9).

Concerning partial modification, both the languages exhibit this feature. English, for instance, features it in verbs (while changing from present to past e.g. bleed – bled {/i:/ - /e/}) and nouns (while forming their plurals e.g. louse – lice {/au/ - /ai/}). In Hausa, on the other hand, vowel modification or alternation

takes place where the root word is altered (basically the vowels) and it occurs with a change in tone pattern. Specifically, the tone of the first syllable (if the base is a verb) is normally high but becomes low after the derivation. Thus the alternation occurs from the verb stems to noun forms, as in auraa (to marry) – verb – auree (marriage) – noun {/a/ – /e/}. Thus, the research revealed that alternation in Hausa creates noun forms from verb forms.

4.4 BACKFORMATION

One of the productive words – formation processes of English is backformation but Hausa lacks it. Some English words appear ‘naturally’ with morphemes that seem to be affixes. Some words are, therefore, created by removing such morphemes. Such words are mostly nouns and the created words are verbs (that is, nouns are backformed into verbs) as in: editor – edit.

4.4.1 THE SOURCES OF BACK FORMANTS OF WORDS

Yule (1997:67) observes that one very regular source of backformed verbs in English is based on the pattern: worker - work. The assumption seems to have been that if there is a noun ending in ‘er’ (or something close in sound), then we can create a verb for what that noun – er does. He says:

*An editor must edit, a sculptor must sculpt and burglars,
peddlers and swindlers must burgle, peddle and swindle.*
Yule (1997:67)

Sometimes speaker of a language will analyze a word as containing affixes where none are present. By removing these assumed affixes, a lexeme can be back formed for instance, editor (to edit), babysitter (to baby-sit), etc.

Thus, in backformation, the bit chopped off is a recognizable affix or word ('ham' in 'hamburger', '- ion' in self-destruction).

Furthermore, Fromkin and Rodman (1998: 87) observe that ignorance, sometimes, can be creative. They are of the view that:

A new word may enter the language because of an incorrect morphological analysis. For example peddle was derived from peddler on the mistaken assumption that er (of peddler) was the "agentive" suffix.

Fromkin and Rodman (1998:87)

4.5 BLENDING

This is a common process of word – formation in English, however Hausa does not employ this process in forming any of its words; thus parts of two words are taken – blending the initial position of the first word with the final position of the second word and a new word is created; for instance: television + broadcast – tele (vision) + (broad) cast = telecast.

Many English words have originally come out through the process of blending. Thus, many linguists such as: Quirk and Greenbaum (1975: 449), Yule (1997:66), Fromkin and Rodman (1998:89), Rubba (2004), Wisniewski (2007), among others, cite some examples of words formed via blending, e.g.

- brunch ('a meal subsuming breakfast and lunch') is derived from br (eakfast) + (l) unch.
- motel from motor + hotel.
- smog, from smoke + fog
- transistor from transfer + resistor
- spork from spoon + fork
- chunnel from channel + tunnel
- chortle from chuckle + snort
- bit from binary + digit
- urinalysis from urine + analysis
- crabapple from cranberry + apple
- broasted from broiled + roasted

- telethon from television + marathon, etc

Furthermore, in order to describe the mixing of languages, people use terms which are formed via blending. For instance, Franglais (French + English), Spanglish (Spanish + English), Hinglish (Hindi + English), Tanglish (Tamil + English), Banglish (Bangla + English), Taglish (Tagalog + English), and in the Nigerian context, we come across Engausa (English + Hausa), etc.

This research has shown that even though both compounding and blending use a combination of words, blending takes only a part of each word (the other part is deleted), while compounding combines the whole words to create new words.

4.6 BORROWING

Borrowing is a linguistic feature that not only English and Hausa exhibit in forming their new terms, but it appears universal to all living languages. English, for instance, borrows words from several languages of the world like Arabic, Bantu, Dutch, German, African languages, just to mention a few. Hausa employs borrowing too which increases its vocabulary. In Hausa, borrowing differs on two grounds: the level of contact between the two languages concerned and the level of dependency on the donor language by the borrowing language. Thus, Hausa borrows numerous words from the two international languages it comes in contact with: English and Arabic. Linguists like Ahmed and Daura (1970) observe that two devices have commonly been employed while borrowing words from Arabic to Hausa.

(1) By changing the form of the source words to reflect the structural form of the Hausa language e.g. littafi from kitabun (book) allo from allauh (slate), Annabi from Annabiyu (Prophet) etc.

(2) By adopting the source words as they are in their Arabic form e.g. addu'a (prayer), jarida (newspaper), Kur'ani (Qur'an) etc.

Due to intimate contact with similar Arabic words the original meaning of some Hausa words has been slightly changed and adopted their Arabic counterparts as in:

The original Hausa words	The adopted Arabic words	Gloss
ubangiji	Allah	God
kushewa	kabari	grave
sani	ilimi	knowledge
tsotsayi	hadari	accident

Thus, many Hausa linguists, such as Abubakar (1972), Hiskett (1975), Ibrahim (1978), Zarruk (1978) and (1979), Wurma (1978) and many others, suggest some Hausa words that are borrowed from Arabic in relation to religion, administration, judiciary, scholarship, food, dress, days, accounting, culture, etc.

Examples of such words include:

<u>Hausa</u>	<u>Arabic</u>	<u>Gloss</u>	
Allah	Allah	God	} Religion
annabi	an-nabiy	prophet	
sallaa	salat	prayer	
daulaa	daulatun	kingdom	} Administration
mulkii	mulkun	administration	

hukumaa	mukumatun	government	
sharriaa	sharia	law	Judiciary
hukumcii	hukum	judgment	
adalcii	al -adl	justice	
maalamii	mu'allim	teacher	Scholarship
daalibii	talibun	student	
darasii	darasun	lesson	
sukarii	sukkarun	sugar	Food
albasaa	al-basl	onion	
inabii	inabun	grape	
kaftaanii	kaftan	long shirt for men	Dress
jabbaa	jubbatun	sleeveless gown	
farmalan	hurmulatun	waist coat	
asabar	al-sibr	Saturday	Days
alhamis	al-khamis	Thursday	
jumuaa	al-juma'a	Friday	
ishirin	ishirun	twenty	Accounting
talaatin	thalathun	thirty	
arbain	arba'un	forty	

saabuluu	sabunn	soap	} Customs etc
kazantaa	gazaratun	dirty	
janaa'izaa	janaza	funeral	

It is found that borrowing Arabic words in these areas is likely to continue as a result of change of governments, people's way of life and economy. These changes, however, are not hidden; as such the media houses will continue to search for words that will explain these changes.

Furthermore, it should be noticed that Hausa people have been borrowing many scientific, technical as well as economic words from languages in their bid to write science in Hausa: scientific researches are being conducted because of the ever increasing demand of our lives. However, the borrowed words should be simple and easy to pronounce by Hausa people.

The contact with the British has paved the way for the intrusion of new ideas, concepts, education and technology into the Hausa social life. Thus, it was natural for Hausa to adopt the English strange words in relation to administration, judiciary, security, scholarship, science and technology, trade, food, dress, etc.

Some of these words include the following:

HAUSA	ENGLISH	
gwamnaà	governor	} Administration
kwamishinaà	commissioner	
ministaà	minister	

jooji	judge	} Judiciary
lauyaà	lawyer	
kootu	court	

samanja	sergeant - major	} Security
sufeetoò	inspector	
manjo	major	

furaamaareè	primary school	} Scholarship
furincifal	principal	
digirii	degree	

janareetoo	generator	} Science and technology
lantarkii	electricity	
reediyoo	radio	

bankii	bank	} Trade
farashii	price	
kamfanii	company	

burodi	bread	} Food
ket	cake	
farfeesuu	pepper soup	

kwat	coat	} Dress	etc
shat	shirt		
singileeti	singlet		

This is far from being a complete list of the borrowed words, but it will suffice to give the reader an insight of the extent to which Hausa is indebted. The present study has, however, found this linguistic borrowing useful for showing the extent to which English (a language that has survived through borrowing) has, in turn, given words to Hausa.

Also, Parsons (1962), Ikara (1975) and Salim (1981) explain the linguistic borrowing of English loan words in Hausa by showing the various assimilative processes in which English words undergo (through phonetic modification and adaptation) to rhyme like the original Hausa words. Furthermore, Rufa'i (1979:15) identifies two processes which could be discussed under borrowing: loan blending and loan shift.

4.6.1 LOAN BLENDING

According to Rufa'i (1979:15), loan blending is:

The process of creating new idioms whereby borrowers adopt part of a model and replace part of it with something in their language. That is something from the giver language and something from the receiver language are blended together to give a different idea or meaning.

Rufa'i (1979:15)

Consider the following:

Arabic	Meaning	Hausa	Meaning
jaahilii	an ignorant person	jaahilcii	ignorance

makirii	a cunny person	maakircii	cunningness
shakiyyi	rogue	shakiyancii	roguery

Here, agentive nouns in Arabic have Hausa suffixes added to them to give common nouns in Hausa. For instance, Hausa borrowed the word "jaahil" and then blend it with the Hausa suffix "cii" to creat the word "jaahilcii".

4.6.2 LOAN SHIFT

Another feature of borrowing, which involves lexical and semantic changes, is loan shift. Rufa'i (ibid) is of the view that loan shift could be called loan translation or semantic loan. He cites examples of a few Arabic loan words; the Arabic models carrying one meaning and another after they have been borrowed into Hausa.

Arabic model	meaning	Hausa loan	meaning
al'aayaa	verse	laayaa	amulet
al'azan	call to prayer	laadan	prayer caller
ard	land	lardii	province

In sum, borrowing has been recognized as one of the major processes of forming Hausa words. As already mentioned, we have seen that Hausa borrows a great deal of its vocabulary from Arabic because of the continuous contact that exists between Arabic and Hausa languages. Furthermore, Hausa also borrows from English to build up its vocabulary even though that of Arabic is greater. We should note that Arabic and English are not the only languages that Hausa lay its hands on in terms of borrowing, but they are of the fore front. Thus, Hausa

borrowed from local languages too (the Nigerian languages that surround it), for instance, Yoruba, Kanuri, Fulfulde and Nupe.

Furthermore, a special type of borrowing called calque or loan translation exist, both in English and Hausa. In this process, a direct translation of the elements of words takes place in the borrowed language into the target language. For instance, the French word ‘ungratteciel’ was literally translated to ‘a scrape – sky’ which English loan it as ‘skyscraper’; others include:

Donor	Target language	The words
German	English	Lehwort —————> loan – word
German	English	Übermensch —————> superman
French	English	ungratteciel —————> skyscraper

In Hausa, on the other hand, Rufa’i (1979:15) identifies two processes of calque that Hausa employs: loan blending and loan shift. Creative new idioms by blending some parts of the giver language and some part of the receiver language to give a different idea or meaning is considered as loan blending e.g. ‘jaahil’ is an Arabic word which means ‘ignorant’; Hausa takes the word and blended it with a Hausa suffix “cii” to create the word “jahilcii”. Loan shift or what Rufa’i (1979) calls semantic loan involves lexical and semantic changes. Examples: “ard” means land but when Hausa loan it, it becomes ‘lardii’ which is semantically shift to ‘province’.

4.7 CLIPPING

Clipping is a very common linguistic phenomenon in English. Thus, a lot of English words are formed via clipping, such as fax (‘facsimile’), gas (‘gasoline’), bra (‘brassiere’), cab (‘cabriolet’), ad (‘advertisement’), condo (‘condominium’),

fan ('fanatic'), sitcom ('situation comedy'), phone ('telephone'), plane ('airplane'), bro ('brother'), pro ('professional'), veg ('vegetate' as in veg out in front of the TV), sub ('substitute or submarine'), info ('information'), flu ('influenza'), etc. Furthermore, Yule (1997: 66) observes that the educational sector encourages clipping because many words that underwent clipping could be found there; he says:

There must be something about educational environments that encourages clipping because just about every word gets reduced as in chem, exam, gym, lab, math, poly-sci, prof, and typo.

Yule (1997:66).

Similarly, English speakers like to clip each others names – that is, what Aronoff and Fudeman (2005) called nicknames as in Al ('Albert'), Ed ('Edward'), Rob ('Robert'), Trish ('Patricia'), Sue ('Susan'), Tom ('Thomas'), Sam ('Samuel'), etc.

4.7.1 TYPES OF CLIPPING

Clipping in English, according to Cornelius (2008), could be divided into three types:

- (1) **Front clipping** – This is the process of trimming words in the front. In this order, the front syllable is taken to stand as a word. For example: airplane - plane, telephone - phone, etc.
- (2) **Back clipping** – This is another process of clipping where the trimming takes place in the back thus, the back syllable is trimmed. For instance: advertisement - ad, gasoline - gas, fanatic - fan, polytechnic - poly, etc.

(3) **Front and back clipping** – This is where the clipping process takes place both in front and back of the word, for example, Influenza – flu, etc.

However, Fagge (2004:21) posits that clipping in Hausa is of two types: back-clipping and front - clipping. By way of an example, let us consider the following cases:

a. Back - clipping:

(i) Personal names

<u>Full form</u>	<u>clipping form</u>
Abubakar	Bukar
Muhammad	Madu/Muda
Khadija	Dija/Dije
Aishatu	Shatu

(ii) Names of items

Apart from names of people as mentioned above, back clipping could be noticed in other names (of items), such as:

<u>Full form</u>	<u>clipping form</u>	<u>gloss</u>
kuskure	kure	make a mistake
kwakwalwa	kwakwa	brain substance
hajijuwa	juwaa	giddiness

b. Front – clipping

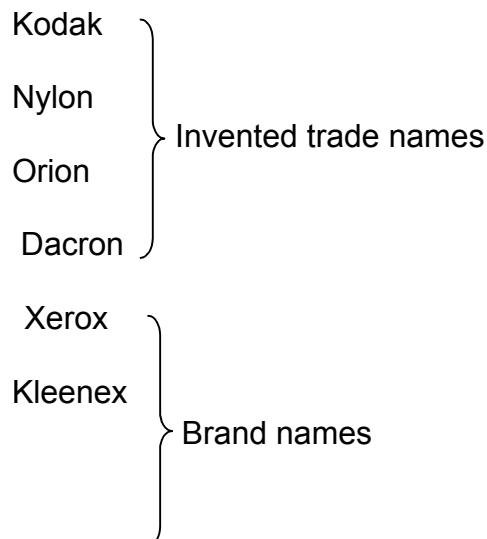
<u>Full form</u>	<u>clipping form</u>	<u>gloss</u>
fate – fate	fate	a musky food
kuli – kuli	kuli	groundnut cake

It has been found that in English many words happen to be clipped related to education sector, names of people and other fields of endeavor, for example: poly (polytechnic), Chris (Christopher) and fan (fanatic), respectively. However, in Hausa, clipping occurs either in personal names or other sectors; excluding the educational sector, for example: Manu (Sulaimanu) and kure (kuskure).

Furthermore, the research revealed that in English three types of clipping are observed: front, back and the combination of the two (front and back), while in Hausa the first two are common. More so, one important thing to put into cognizance is that even though blending and clipping may appear similar, yet clipping takes place within a single existing word, while blending takes place between two words. We should note here that, though clipping appears common in English, it is rather informal than formal.

4.8 COINAGE

This feature is found only in English but Hausa lacks it. In English, therefore, different sources of words that are formed via coinage include invented trade names, brand names and words from Greek, as well as names of the company inventors. Examples:



Jell-O

Vaseline

Thermometer (from “Thermos hot” plus “metron” nesure)

Acrophobia (from akros “topmost” and phobia “fear”)

Pornophobia (from prone “harlot” and phobia “fear”)

} From Greek words

Sandwich

Hoover

Celsius

Hertz

} Names of the company inventors (eponyms)

} etc.

4.9 COMPOUNDING

Compounding is a common process of word – formation that exists both in English and Hausa.

4.9.1 THE ELEMENTS OF COMPOUNDS IN ENGLISH

Asher (1994) observes that compounding is a linguistic unit, which is composed of elements that function independently in other circumstances. This brings the question of how many elements make a compound. According to Fromkin and Rodman (1998: 34), compounds may contain two or more free roots, thus, some compounds have more than one root and bound morpheme, as in ‘wastepaper basket’; ‘waste’ + ‘paper’ + ‘basket’ and ‘truck pusher’; ‘truck’ + ‘push’ + ‘er’.

The compounds of English words, therefore, may consist of two or more words, which could be either from different categories or even from the same category of words. Though two-word compounds are the most common in

English, it would be difficult to state an upper limit, for instance, ‘three-time loser’.

Other examples of compound words include the following:

(a) Two-word compounds:

- classroom = class + room
- skyscraper = sky + scraper
- wallpaper = wall + paper
- good-looking = good + looking
- full-time = full + time (ibid)

(b) More than two – word compounds

These are group of compounds, which are formed with more than one root words, thus;

- commander – in – chief = commander + in + chief
- brother – in – law = brother + in + law
- second – in – command = second + in + command
- sergeant – at – arms = sergeant + at + arms
- mother – of – pearl = mother + of + pearl (ibid)
- four-dimensional-space-time = four + dimensional + space + time

This shows that the elements of compounds could be two, three, four (as in four-dimensional–space-time) or even more (as observed in the example given by Aronoff and Fudeman (2005) – “She is a high voltage electricity grid systems supervisor”).

4.9.2 THE ELEMENTS OF HAUSA COMPOUNDS

According to Rufa'i (1979:2) compounding, in Hausa, involves several combinations of elements, such as noun + noun, verb + noun, adjective + noun and some others. Examples:

(i) **Noun + noun**

bakan – gizo (bow of spider) = rainbow;

karen – motaa (dog of motor) = bus or truck attendant

'yar – sandaa (daughter of stick) = police woman (ibid)

(ii) **Verbal noun + noun**

kisan – kai (killing of head) = murder

jin – kai (hearing of head/self) = arrogance

cin – zumaa (eating of honey) = collection of honey from bee hives

usually by using smoke to drive the bees away (ibid).

(iii) **Verbal noun + noun**

hada – kai (joining head) = unity

auna – arziki (weigh wealth) = escape danger or evil happening

baata – rai (spoil soul) = to be angry (ibid)

(iv) **Adjective + noun**

bakin – jinii (darkness of blood) = being hated

jan-halii (red character) = bravery

farar-zuuciyaa (white heart) = good intention or good will (ibid).

4.9.3 THE COMBINATION TO FORM COMPOUNDS IN ENGLISH

According to Fromkin and Rodman (1998), there is almost no limit on the kinds of combinations that occur in English, as the following list of compounds shows:

	Adjective	Noun	Verb
Adjective	bitter sweet	poor house	high born
Noun	head strong	rainbow	spoon-feed
Verb	carry all	pickpocket	sleepwalk

Fromkin and Rodman (1998)

Thus, in English, we have word classes of constituents that make up the words. For example, noun compounds, verb compounds, etc. According to Quirk and Greenbaum (1975: 445), compounds could be divided into sub-groups such as:

- subject and verb compounds
 - verb and object compounds
 - verbs and adverbial compounds
 - verb less compounds
 - Bahuvrihi compounds
- } Noun Compounds
-
- verb and object compounds
 - verb and adverbial compounds
 - verb less compounds
- } Adjective Compounds
-
- Verb compounds
- } Verb Compounds

Quirk and Greenbaum (1975:445)

(1) NOUN COMPOUNDS

Noun compounds are those compounds that fall under the category of nouns, i.e. they perform the functions of nouns. The elements combined here include the following:

(a) Subject and verb (subject and verb compounds), examples:

sunrise	}	Noun + deverbial noun
bee-sting		
earthquake		
headache		
rattlesnake	}	Verb + noun
flashlight		
hangman		
dancing girl	}	Verbal noun + noun (ibid)
firing squad		
washing machine		

(b) Verb and object (verb and object compounds), examples:

sight-seeing	}	Noun + verbal noun
air-conditioning		
brainwashing		
dressmaking		
story-telling		
taxpayer	}	Noun + agentive + instrumental noun
gamekeeper		
songwriter		
window-cleaner		
blood test	}	Noun + deverbial noun
book review		
haircut		
birth-control		

self-control

call-girl
knitwear
scarecrow

} Verb + noun

chewing gum
cooking apple
spending money

} Verbal noun + noun
(ibid)

(c) Verb and adverbial (verb and adverbial compounds), examples:

swimming pool
typing paper
adding machine
walking stick

} Verbal noun + noun

daydreaming
sun-bathing
sleepwalking
handwriting

} Noun + verbal noun

baby-sitter
factory-worker
sun-bather
daydreamer

} Noun + agentive noun

homework
boat-ride
daydream
gunfight

} Noun + deverbial noun

searchlight	}	Verb + noun
dance hall		
plaything		

(ibid)

(d) Verb less Compounds

Here, the elements combined are either nouns or adjectives but verbs are not included, examples:

windmill	}	Noun + noun
hydrogen bomb		
motorcycle		

top factory	}	Noun + noun
oil well		
tear gas		

blood stain	}	Noun + noun
hay fever		
saw dust		

door knob	}	Noun + noun
shirt-sleeves		
table leg		
television screen		

girl-friend	}	Noun + noun
oak tree		
tape measure		

darkroom	}

blackboard Adjective + noun

madman

frogman	}	Noun + noun
goldfish		
kettle gum		
tissue paper		

snowflake	}	Noun + noun
bread-crumb		
sand dune		

ashtray	}	Noun + noun
coffee time		
facecloth		
fire engine		

(ibid)

(e) Bahuvrihi Compounds

A 'Bahuvrihi compound' names an entire thing by specifying some features, for instance:

paper back	}	Noun + noun
blackhead		
hunchback		
pot-belly		

fathead	}	Adjective + noun
loudmouth		

paleface (ibid)

(2) ADJECTIVE COMPOUNDS

These are the compounds that function as adjectives. They could be formed with the help of different elements such as:

(a) verb and object (verb and object compounds), examples:

man-eating	}	Noun + - ing participle
breath-taking		
heart-breaking		

(b) Verb and adverbial (verb and adverbial compounds), examples:

ocean-going	}	Noun + - ing participle
law-abiding		
mouth-watering		

heartfelt	}	Noun + -ed participle
handmade		
self-employed		

hard-working	}	Adjective/adverb + -ing participle
easy-going		
good-looking		

Quirk – frozen	}	Adjective/adverb + -ed participle
far – fetched		
new – laid		

(c) Verb less compounds. Examples:

class – conscious	}	cxxxv

duty-free	Noun + adjective
homesick	
grass-green	} Noun + adjective
brick red	
sea-green	
British-American	} Adjective + adjective
bitter-sweet	
deaf-mute	
	(ibid)

(3) VERB COMPOUNDS. Examples:

sightsee	} Noun + verb
house-hunt	
lip-read	
spring-clean	} Noun + verb
baby-sit	
sleep-walk	

(Quirk and Greenbaum, 1975: 445 – 448)

Furthermore, compounds in English, could, semantically, be divided into two categories: Regular and irregular compounds.

4.9.4 REGULAR COMPOUNDS

According to Fromkin and Rodman (1998: 84), regular compounds are those compounds whose meanings may be said to be constituted by one or the two compound elements. They posit that the meanings of some compounds include at least to some extent the meanings of the individual parts. Let us look at examples below:

- ferry trip – a trip made in (by) ferry,
- cold war – a state of hostility between nations without actual fighting,
- dark room – a room that is completely dark,
- goldsmith – a person who makes articles of gold.

Agezi (2004:59)

Fromkin and Rodman (ibid) observe that the meaning of a compound is not always the sum of the meanings of its parts, for instance, a 'black-board' may be green or white. Other compounds show that underlying the juxtaposition of words, different grammatical relations are expressed. A boathouse is a house for boats, but a 'cat house' is not a house for cats (it is slang for a house of prostitution or whorehouse). A 'jumping bean' is a bean that jumps, a 'falling star' is a star that falls, and a 'magnifying glass' is a glass that magnifies; but a 'looking glass' is not a glass that looks, nor is an 'eating apple' an apple that eats, and 'laughing gas' does not laugh. In the examples given, it should be observed that the meaning of each compound includes at least to some extent the meanings of the individual parts.

4.9.5 IRREGULAR COMPOUNDS

Irregular compounds are otherwise known as idiomatic compounds. Agezi says:

In idiomatic compounds, the meanings of the individual words that make up the compounds cannot be subsumed to produce the meaning of the compound words.

Agezi (2004:59).

According to Fromkin and Rodman (1998), irregular or idiomatic compounds are “those compounds that do not seem to relate to the meanings of the individual parts at all”. For instance,

a – jack – in – a – box is a tropical tree and a turncoat is a traitor. A highbrow does not necessarily have a high brow, nor does a bigwig have a big wig, nor does an egghead have an egg-shaped head.

Fromkin and Rodman (1998)

Other examples that Agezi cites include the following:

- banana republic – a small politically instable country, whose economy is dependent upon a single crop.
- scape goat – a person who is punished for the faults of somebody else.
- bluebottle – a particular kind of insect.
- mouthpiece – a person, news, etc, that expresses the opinion of others. (ibid).

Based on that, therefore, Fromkin and Rodman (ibid) observe that “the meaning of many compounds must be learned as if they were individual simple words”. If, for instance, one has never heard the word ‘hunchback’, it might be possible to infer the meaning: but if one has never heard the word ‘flatfoot’, it is doubtful one would know it means “detective” or “policeman” even though the origin of the word, once the meaning is known, can be figured out. Therefore, the words as well as the morphemes and the morphological rules must be part of our mental grammars.

4.9.6 THE COMBINATIONS TO FORM COMPOUNDS IN HAUSA

According to Fagge (2004:30), Hausa employs a number of ways to form compounds. Examples are the following:

4.9.6.1 NOUN – BASED COMPOUNDS

This sub-category has the structure which consists of two nominal bases for the formation of compound nouns, as shown below:

<u>Noun + noun</u>	<u>Gloss</u>
bakan – gizo	rainbow
dankon – zumunci	amicable relationship
gambon – wata	the seventh month in the Hausa calendar

Fagge (2004:30).

4.9.6.2 VERB – BASED COMPOUNDS

This is the next sub-category in the series, which has a verb as its core for the formation of Hausa compounds. Some examples are the following:

<u>Verb + noun</u>	<u>Gloss</u>
amsa – kuwwa	loud-speaker
buuda – baaki	the first meal taken to break the fast
cii – raani	temporal migration (ibid)

4.9.6.3 ADJECTIVE – BASED COMPOUNDS

This is the third sub-category, which has an adjective as a base morpheme for the formation of some compound nouns in Hausa. In other words, adjective based compound nouns have adjectives as their core. The following are some of the examples:

<u>Adjective + Noun</u>	<u>Gloss</u>
bakin-jinii	unpopularity

bakin-ciki

worry

bakar-zuuciya

bad temperedness (ibid)

4.9.6.4 ADVERB – BASED COMPOUNDS

This is the fourth category which uses the adverb as a morpheme for the realization of compound nouns in Hausa. In other words, this is a situation whereby adverbs are used as the core for the formation of compound nouns, as shown in the following:

<u>Adverb + Noun</u>	<u>Gloss</u>
bayan – gidaa	toilet
gooshin – magaribaa	close to sunset
gaabar – koogii	close to the river (ibid)

4.9.6.5 ADVERBIAL COMPOUNDS

Galadanci (1976, cited in Fagge 2004:39) indicates that adverbial compounds make reference to the time, place, manner and degree of an action. In Hausa, adverbial compounds can be divided into two segments: (i) Simple Adverbial Compound (ii) Adverbial Cluster. By way of examples, let us consider the following cases:

i Simple Adverbial Compound

<u>Stem</u>	<u>Adverbial Compound</u>	<u>Gloss</u>
nan	nan-nan	just here
can	can-can	just there
kusa	kusa-kusa	close-by (ibid)

ii. Adverbial cluster

<u>Stem</u>	<u>Adverbial cluster</u>	<u>Gloss</u>
can	can-karshe	extreme end

nan	nan-gaba	later
lallai	lallai-yau	surely-today (ibid)

4.9.6.6 IDIOPHONE - BASED COMPOUNDS

This is the fifth category which uses up to three morphemes in realizing compound nouns with idiophones as their core. Some examples on how idiophone-based compound nouns are formed are given below:

<u>Idiophone + Noun</u>	<u>Gloss</u>
rub-da-cikii	lying face down
subul-da-baka	slip of tongue
kyal-kyal-banza	good for nothing (ibid)

4.9.6.7 PRONOUN - BASED COMPOUNDS

This is the sixth and the last category which has a pronoun as its core in realizing compound in Hausa. It uses at least two morphemes for the formation of pronoun-based compound nouns, as can be seen below:

<u>Pronoun + Noun</u>	<u>Gloss</u>
kaa-fi-alluraa	kind of medicine
kaa-fi-zaboo	a kind of seasoning
kaa-shaa-guudaa	bridegroom (ibid)

Furthermore, apart from the categories mentioned so far, there are other sources of compounds in Hausa as Fagge (2004:38) posits. These include title names, nick names and the months of the year.

(a) Title names

These kinds of compounds are formed through the use of title names, examples: Sarkin-yanka (head butcher), Sarkin-aska (a chief barber). Others include names of title holders in Hausa land such as Zazzau Emirate Council (Zaria): Yariman – Zazzau, Dan – Buran – Zazzau, Barden Arewan – Zazzau, Barden – Kudun – Zazzau, Wamban – Zazzau, Sarkin – Dawakin – Zazzau, Sarkin – Fadan – Zazzau, etc.

(b) Nicknames

The use of nicknames also forms the sources of Hausa compound nouns. Examples of such compound nouns include Hausa nicknames in relation to the day a child is born (within days of the week): Lahadi (Sunday) – Dalladi, Litini (Monday) – Dan-liti, Talata (Tuesday) – Mai-talata, Laraba (Wednesday) – Dan-larai, Alhamis (Thursday) – Dan-lami, Juma'a (Friday) Dan-juma/Dan-jummai and Asabar (Saturday) Dan-Asabe.

Now, it is pertinent to mention that these entire nicknames mentioned above are masculine. Definitely, there exist the feminine counterparts, which are deliberately not included here because they are single nouns, not compounds. Furthermore, sometimes single nouns (nicknames) are used instead of the compound nouns above, for instance, Bala or Balarabe could be used instead of Dan - Larai for a child born on Wednesday.

(c) The months of the year

In Hausa, some months of the year can also be used to form compounds. Examples of such include: gambon-wata, watan-bawa, tagwan-farko, watan-cika-ciki or watan-cin-jela meaning the seventh month, the eleventh month, the third month, and the first month, respectively.

Based on the discussion so far, it is observed that there exist some discrepancies on the formation of compounds in the two languages. In English, for instance, we have noun compounds, adjective compounds and verb compounds while in Hausa we have noun – based compounds, verb – based compounds, idiophone – based compounds, adjective – based compounds, adverb – based compounds, pronoun – based compounds and adverbial – based compounds. Let us have comparison between them

4.9.7 NOUN COMPOUNDS IN ENGLISH AND HAUSA

In English noun compounds are those compounds that perform the functions of nouns, while in Hausa, they are the compounds which consist of two noun bases for the formation of compound nouns. Thus, in English, for instance, noun compounds could have the combination of some elements which include: subject and verb (e.g. earthquake), verb and object (e.g. call – girl), verb and adverbial (e.g. walking stick), verbless compounds (e.g. blood stain) and Bahuvrihi compounds (e.g. blockhead). In Hausa, on the other hand, the structure of noun compounds are always noun + noun as in ilimin manya (adult education), mulkin – kai (self independence), juuyin mulki (coup d'etat) etc.

4.9.8 ADJECTIVE COMPOUNDS IN ENGLISH AND HAUSA

Adjective compounds, in English, are those compounds that function as adjectives; while in Hausa, they are the compounds that are based with adjectival morphemes – in other words, they have adjectives as their core. The English adjective compounds are formed with the help of different elements such as: verb and object (e.g. breath-taking), verb and adverbial (e.g. law – abiding) and verb less compounds (e.g. homesick). Hausa adjective compounds, on the other

hand, are formed with the help of 'adjective + noun' formula as in gajen – hakurii (impatience).

4.9.9 VERB COMPOUNDS IN ENGLISH AND HAUSA

Verb compounds, in English, are those compounds which act as verbs such as 'sight see and baby – sit' while in Hausa, verb – based compounds are those compounds which have verbs as their core, as in gamoo-da-katar (accidental fortune).

Apart from those discussed so far, Hausa has additional categories of compounds which do not exist in English, for instance: adverb – based compounds (shekaran-jiya – day before yesterday), adverbial compounds (dazu-dazu – a while ago), and idiophone – based compounds (subul da baka – slip of tongue) and pronoun based compounds (Ta annabi, a feminine nick name).

4.9.10 THE ELEMENTS OF HAUSA AND ENGLISH COMPOUNDS

Several elements combine together to make both English and Hausa compounds. These elements obviously function independently in other circumstances as Asher (1994) and Rufa'i (1979) confirm. Thus, both English and Hausa compounds could contain two elements, three elements or even more. However, Fromkin and Rodman (1998:84) observe that English compounds may contain two or more free roots thus, some compounds have more than one root and bound morpheme as in table – cleaner = 'table' + 'clean' + 'er'; where 'table' and 'clean' are roots and 'er' is a bound morpheme (which has a semantic value of 'doer of'); while Hausa compounds may contain two or more roots but no bounds morpheme is employed here as in: wasan – kwaikwayoo (play or drama), 'yan – fashii (armed robbers) and rufaa – ido (trick)

where each element may stand as a root or a free morpheme. Let us look at some examples on the two languages:

cat lover	}	Two word compounds in English
finger print		
white wash		

fidda kai (charity)	}	Two word compounds in Hausa
cin – hancii (corruption)		
jan – halii (courage)		

mother – in – law	}	More than two word compounds in English
four – dimensional space – time		

nagari – na – kowa (upright person)	}	More than two word compounds in Hausa
yaakii – da – jahilci (literacy education)		

Now, it is important to observe that the combination of the elements that makes English compounds and Hausa compounds differs. Hence, whereas some elements could be combined to make compounds in both the languages, some elements could be used in just one language for instance, noun + noun, verbal noun + noun, verb + noun, adjective + noun could be found in English and Hausa. However, combinations such as adjective + adjective, noun + adjective, verb + adjective, adjective + verb, noun + verb, noun + -ing participle, noun + -ed participle and adjective or adverb + -ing participle could only be found in Hausa.

To sum it up, compounding as a process of word-formation plays a vital role in words creation not only in Hausa, but in other languages of the world, e.g. English and Arabic. As seen so far, compounding helps to form many of the English and Hausa words, far more than those mentioned in this research work. The research finds this very important because it helps in displaying the unification of linguistic elements existing in different languages of the world.

4.10 REDUPLICATION

Reduplication has to do with morphemic repetition. It is a morphological process that both English and Hausa use while building some of their vocabularies. It could be full or partial as Rufa'i (1979:10), Al-Hassan (1983:22), Aronoff and Fudeman (2005) and Encyclopedia (2008) posit.

4.10.1 TYPES OF REDUPLICATION IN ENGLISH

According to Rufa'i (1979; 10), duplication can be either full or partial. A partial duplication is the one in which a part of a base morpheme is reduplicated. A full duplication is the one in which the base as a whole is duplicated. Further more, Al-Hassan (1983: 220) posits that two types of reduplication may occur in a language: complete reduplication, where the whole word is copied and partial reduplication, where only a part of the word is copied.

4.10.1.1 PARTIAL REDUPLICATION IN ENGLISH

Reduplication is said to be partial when only part of the operand or root is reduplicated. Matthews (1975:134) affirms that:

It is partial (in the sense that only part of the base is reduplicated), and it is prefixal and initial (in the sense that the reduplicative form is added before the base and it is the beginning of the base which is repeated).

Matthews (1975:134)

Examples of partial reduplication include zigzag, rift – raft, tip – top, wishy – washy, higgledy – piggleddy, etc.

4.10.1.2 COMPLETE REDUPLICATION IN ENGLISH

The complete reduplication is otherwise known as total or full reduplication, which occurs when the whole word is copied. In other words, complete reduplication takes place when the whole of the operand is reduplicated, that is, completely repeated. In the words of Rufa'i (1979), complete reduplication occurs when the base of a word is repeated. Quirk and Greenbaum (1975:448) and Aronoff and Fudeman (2005:167) observe that most reduplications are highly informal or familiar, many of which are derived from the nursery (e.g. 'din – din' for dinner) or children acquiring language (for instance, an English speaking child says 'shoe' for one shoe, but 'shoe shoe' (complete reduplication) for two shoes.

Furthermore, Matthews (1974, cited in Agezi 2004: 20) observes that reduplication in English may be:

- a. Suffixal – suffixal reduplication occurs when the end of the base is repeated.
- b. Infixal – Infixal reduplication happens in a case where the structure of the base itself is broken into parts and reduplication formative comes at the middle.
- c. Prefixal or initial – In this kind of reduplication, the reduplicated formative is added before the base and it is the beginning of the base which is repeated. Matthews (1974).

Quick and Greenbaum (ibid) have agreed with the above classification citing examples under each as follows:

This difference between the two elements (involve in reduplication) may be in the initial consonants, as in walkie-talkie or in the medial vowels e.g. criss-cross.
(Quirk and Greenbaum, 1973: 448)

At this juncture, it should be observed that even though reduplication could be categorized into two bases – in one base, reduplication is viewed according to its morphemic analysis (where three groups – suffixal, infixal or prefixal reduplication are realized). In the other base, reduplication is viewed according to the processes where changes occur on the reduplicative (here: partial and complete reduplications are observed). Though the general categorization is the latter, yet the former is also important morphologically.

4.10.1.3 COMPLETE REDUPLICATION IN HAUSA (CIKAKKEN NANNAGE)

Complete reduplication or full duplication as in the words of Rufa'i, occurs when the base of a word is repeated. In his view, Rufa'i mentions that an area in which we see much of full duplication is idiophones. Examples:

lakakai – lakakai (slowly)

kyamus – kyamus (thin)

lif – lif – (blooming - as when trees grow green leaves) (ibid)

According to Fagge (2004: 36), complete reduplication in Hausa, occurs in three areas:

(a) Qualification compounds

These happen when words are reduplicated to indicate an amount or number of things. Thus, it is produced by a complete reduplication of the stem base.

Consider the following examples:

Words	Complete reduplication derived
rumbu (store)	rumbu-rumbu (in storages)
jaka (bag)	jaka-jaka (in bags)
dami (bundle)	dami-dami (in bundles) (ibid)

(b) Numerical compounds

Numerical compounds could be produced by complete reduplication of the base. Consider the following cases;

Word	Complete reduplication
uku (three)	uku – uku (in threes)
hudu (four)	hudu – hudu (in fours)
biyar (five)	biyar – biyar (in fives) (ibid)

(c) Color based compounds

These occur when colors are produced through complete reduplication of the stem base (of colors). Consider the following cases;

Word	Complete reduplication derived form
rawaya (yellow)	rawaya – rawaya (yellowish)
fari (white)	fari – fari (whitish)
jaa (red)	jaa – jaa (reddish) (ibid)

Furthermore, Al-Hassan (1982:22) posits that complete reduplication could show pluralization, intensification and detensification.

(i) Pluralization

Salim (1981: 198) is of the view that reduplicative pluralization occurs in Hausa when the base (singular) is reduplicated to form the plural of a simple nominal; he says: “In the case of simple nominal, the singular base form is simply repeated with no change either segmentally or tonally”. He goes further to cite examples:

Singular	Plural
yaakii (war)	yake – yake (wars)
zaagii (abuse)	zaage – zaage (abuses)
buguu (to hit)	buge – buge (to hit several times) (ibid)

(ii) Intensification

Reduplication could occur in full form in Hausa to show intensification. For intensification, the base form is copied without any segmental or tonal change. Examples:

Simple forms	Intensified form
yau (today)	yau – yau (compulsorily, today)
yanzu (now)	yanzu – yanzu (immediately)
kusa (near)	kusa – kusa (very much close) (ibid).

(iii) Detensification

Complete reduplication occurs to show detensification in Hausa. In detensification, there is a segmental change, shortening the final vowel of the base form in the reduplicated form. Examples:

<u>Simple form</u>	<u>Detensified form</u>
bakii (black)	baki – baki (blackish)
doogoo (tall)	doogo – doogo (not quite tall)

mahaukacii (lunatic) mahaukaci – mahaukaci (not quite mad) (ibid)

4.10.1.4 PARTIAL REDUPLICATION IN HAUSA (RAGAGGEN NANNAGE)

Partial reduplication occurs when a part of the stem base is duplicated – the part could be the initial part of the base, the medial part of the base or even the final part of the base as Al-Hassan (1982: 24) observes: “Partial reduplication involves the copying of only part of the word”. According to him, partial reduplication in Hausa is of two types:

The first is the one in which three consecutive phonemes in the word, the second of which is a syllabic are copied, thus in isolation the copied form represents a syllable in Hausa – the CVC type the second one is that in which a consonant in the root is copied in the reduplicated form.

Al- Hassan (1982:24)

(a) CVC reduplication

In Hausa, this kind of reduplication occurs in two respects: intensivization and derivation of adjectival nouns.

(i) Intensivization. Examples:

Verb

Derived form

saaree (to cut)

sassaaree (cut several times)

gyaaraa (to repair or arrange)

gyaggyaara (arrange several times)

keewayaa (to go round)

kekkeewayaa (circumnavigation) (ibid)

(ii) Derivation of adjectival nouns. Examples:

Nouns

Adjectival nouns

karfii (strength)

kakkarfaa (somebody strong or something hard)

kyaawoo (beauty)

kyakkyawaa (somebody or something beautiful)

saukii (cheap/simple)

sassaukaa (something cheap or somebody simple)

(b) Consonantal reduplication

Consonantal reduplication occurs in two ways in Hausa, as Al-Hassan (1983:25 – 26) observes. According to him, partial reduplication in form of consonantal reduplication is employed in forming some Hausa plural words and in the derivation of exclamatory adjectives.

(i) Pluralization

In pluralization, the reduplication of the last consonant in the base form is accompanied by a change of last vowel. Where the change of vowel is from a front to a central or back vowel, depalatalization occurs. The tonal pattern of the singular form is H - L while the plural form is either L – H or HL – H. Examples:

Noun	plural form
muuguu (wicked man)	muggaa (wicked people)
tuduu (hill)	tuddai (hills)
reeshee (branch)	rassaa (branches) (ibid)

(ii) Derivation of exclamatory adjectives

In the derivation of exclamatory adjectives, the last consonant of the base word is copied and inserted between two long /e/'s. The tone pattern of the base word is H – L (H), while the exclamatory adjective has a low tone on the last syllable. All other syllables carry high tone.

Base form	exclamatory adjectives
shirgi! (What a head!)	shirgeegee!
dirki! (What a thrust!)	dirkeekee!
malkwadi! (What a disfiguration!)	malkwadeedee! (ibid)

According to Rufa'i (1979: 10), partial reduplication is generally prefixal, e.g.

yanka (cut)	yayyanka (cut several times)
-------------	------------------------------

hankada (push)

hahhankada (push several times)

lauya (blend)

lallauya (bend several times) (ibid)

Fagge (2004:37) posits that partial reduplication could be used to form some numerals in Hausa. For instance: daddaya (one by one), bibbiyu (in twos), hurhudu (in fours), etc.

Based on the analysis, it is found that complete reduplication occurs in both English and Hausa. Some English linguists like Quirk and Greenbaum (1975:448) and Aronoff and Fudeman (2005:167) are of the view that most of the English reduplicatives are highly informal or familiar and many are, therefore, derived from the nursery or while English children are acquiring language. This shows that there are few English words that are formed via complete reduplication.

Hausa, on the other hand, creates a lot of its vocabularies with the help of the process of complete reduplication. For instance, Rufa'i posits that an area in which we see much of it in Hausa is idiophones e.g. kif-kif (vigorously – as of walking on hard surface). Fagge (2004:36) adds that it could also be found in three areas: qualification compounds, numerical compounds and color-based compounds, as in dami-dami (in bundles), tara- tara (in nines) and baki – baki (blackish), respectively. In addition to that, Al- Hassan (1983:22) posits that complete reduplication could also be, in Hausa, to show pluralization (e.g. yake-yake – wars), intensification (e.g. gobe-gobe – surely tomorrow) and detensification (e.g. mahaukaki-mahaukaci – not quite mad).

Concerning partial reduplication, it occurs in both English and Hausa. In English, it occurs in a prefixal position that is when the beginning of the base is repeated e. g. zigzag. In Hausa, however, it occurs when part of the stem base is duplicated which could be either initially (as that of English), medial or even final part of the base as Al-Hassan (1983:24) observe. Furthermore, while English has only one type of partial reduplication, Hausa has two types: CVC (as in fesa – {spray} – the stem base – fef {prefix} + fesa {the base} = feffesa {the derived form}); or consonantal reduplication (as in takobi {sword}-the base form – takubba {swords} i.e. reduplication of the last consonant).

In addition to that, reduplication could be viewed on its morphemic analysis. Based on that, therefore, partial reduplication in English may be suffixal, infixal or prefixal as Mathews (1974, cited in Agezi 2004:28) and Quirk and Greenbaum (1973:448) observe; for instance, walkie – talkie, zigzag and criss – cross. In Hausa, on the other hand, partial reduplication is generally prefixal as in:

hankada (push) – the base form

hah (prefix) + hankada - the base

= hahhahnkada (push several times) – the derived form

At this juncture, a sample of the comparative analysis is given in a tabular form as shown below;

4.1 WORD –FORMATION PROCESSES ACROSS THE TWO LANGUAGES

PROCESS	ENGLISH	HAUSA	REMARKS
ACRONYM	i- Pronounced alphabetically e.g. KSA (Kingdom of Saudi Arabia) ii- pronounced as words but retain their capitals e.g. NACA (National Agency for the Control of Aids) iii – pronounced as words and lost their capitals e.g. zip (Zone Improvement Plan)		English forms several words via acronyms while Hausa lacks this feature; thus, it does not form words via acronyms.
AFFIXATION	i – prefixes – - dis + agree = disagree - co+ existence = coexistence ii- infixes–abso+blomin+lutely = absoblominlutely iii-suffixes – beauty + fy = beautify iv – circumfixes – un +count +able= uncountable	i-dafa-goshi (prefixes) - ba+hausa=bahaushe(Hausaman) ma+sakaa = masakaa (weaving factory) ii- dafa ciki (infixes) - -turmi (mortar) -tur + a + me= turame(mortars) iii-dafa- keya (suffixes) - -gafara+ta=gafarta (forgiveness)	-Whereas prefixes, infixes, and suffixes are common to both English and Hausa languages, circumfixes are common to English alone. - While infixation is formal in Hausa, it appears informal in English.
ALTERNATION	i- total modification- -go-went -be- was -think – thought ii- partial modification- -begin-began- [i]-[a] -mouse- mice- [au]-[ai]	partial modification- Gaada- gaado /a---/o/ Jeefa – jiifa /e--- /i/	-Total modification is not common in Hausa, but in English the feature is common. -Both English and Hausa languages exhibit partial modification.
BACK-FORMATION	Words formed via backformation: -swindler – swindle -moving picture - movie -editor - edit		-Even though English exhibits backformation, Hausa lacks this linguistic feature.

BLENDING	Blended words: -breakfast + lunch = brunch -smoke + fog = smog -motor + hotel = motel		-Some English words are formed via blending but Hausa could not use such linguistic feature to form any word .
BORROWING	i- Borrowing words- alcohol (from Arabic), robot, pistol (from Czench), boss (from Dutch), zebra (from Bantu) etc. ii-calque– -loan word from lehnwort -superman from ubermensch	i- borrowing words - -Ubangijii – Allah (God) –sani—ilimi (knowledge) - bokitii (bucket) ii- calque- - ard + ii =lardii (province) -jaahil + cii =jahilcii (ignourance)	-All the languages exhibit borrowing as a process of forming words. - Calque could also be found in English and Hausa languages.
CLIPPING	i- front clipping – -airplane - plane -Augustina – Tina ii- back clipping – -bra – brassiere - gas – gasoline iii- front and back clipping – -flu – influenza	i –front clipping - - fate -fate –fate (a mushy food) Abubakar- Abu (a personal name) ii- back clipping - - kwalwa- kwakwalwa (brain substance) -juwaa- hajijuwa (giddiness)	-Whereas front and back clipping could be found in both the languages, the combination of the two could be found in English alone.

COINAGE	i- invented trade names: Kodak, Xerox, Kleenex. ii- names of inventors: sandwich, Volt, Jumbo iii- Brand names: Xerox, Vaseline iv- Greek origin: Thermometer, Acrophobia		This feature could be found in English but Hausa lacks it.
COMPOUNDING	i – noun compounds: walking stick, earth quake, call – girl ii - adjectival compounds: breath – taking, homesick, law – abiding iii - verb compounds: sight see, baby - sit	i- noun –based compounds: ilimin- kimiyya (adult education) mulkin- kai (self independence) juyin – mulki (coup d’ etet) ii- adjective –based compounds: farar –hulaa (civilian) gajen-hakuri (impatient) tsawon –rai (long life) iii- verb –based compounds: fasa –kwaure (smuggling) girgizar –kasaa (earthquake) iv- adverb –based compounds: tsakar –gida (compound) saman –bakwai (sky) v- adverbial compounds: yanzu – yanzu (immediately) nan – gaba (later) vi- idiophone –based compounds: kyal-kyal-banza (good for nothing) Subul-da-baka (slip of tongue) vii- pronoun –based compounds: kaa –shaa –maikoo (bridegroom) kaa –fi –zaboo (a kind of seasoning)	i - Even though compounding is found in both English and Hausa languages, the former exhibits fewer types (three times) than the latter (seven times) ii- While each type tends to perform the functions their names represent, in English; in Hausa the emphasis is not on function but on the core-based of the formation. For instance, while noun compounds perform the functions of nouns in English, noun-based compounds are those formed with nouns as their core, in Hausa.

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CHAPTER FIVE

SUMMARY AND CONCLUSION

5.0 INTRODUCTION

This chapter contains the summary of this research work, the findings observed based on the data gathered at the end of the analysis and the conclusion.

5.1 SUMMARY

This work is an attempt to respond positively to the current trends of intellectualism from the point of view of language revealing the similarities of ungenetically related languages, which are concealed in the linguistic structure.

The Hausa and English were chosen to be worked upon comparatively by implication contrastively at the morphological level. It is assumed, in this work, that the two languages under comparison share a lot in their processes of word – formation, and it is only through an extensive research study that such an assumption can be affirmed. The work, therefore, attempts to investigate some processes of forming words in English and Hausa, which include: acronyms, affixation, alternation, backformation, blending, borrowing, clipping, coinage, compounding and reduplication. It, thus, looks at literature related to the topic, using headings and sub-headings to enhance the effectiveness of some arguments. For a comparative analysis of the word-formation processes in English and Hausa, examples of each process in both languages were drawn.

Among other models or approaches to language study, the researcher chose the descriptive, especially as advanced by Nida (1949). This approach is chosen because it emphasizes the idea that linguistic features and systems must be descriptive as they are – that is clearly. Furthermore, Carl's (1996) model in line with Oyetunde's (1983) assertion

was also adopted for the description and analysis of the data collected in this work. So, these processes were compared in the two languages: English and Hausa, in that similarities and differences were realized and remarks were offered. From the description, analysis and interpretation of the word – formation processes in the two languages under comparison, the researcher realizes some findings.

5.2 THE RESEARCH FINDINGS

The major results of the findings are enumerated as follows:

- (1) English and Hausa languages form their words by using some processes, for instance, affixation, acronyms, alternation, blending, borrowing, clipping, compounding, reduplication, etc.
- (2) Affixes in Hausa have counterparts in English. For example:
 - i. Hausa has prefixes, which could also be found in English;
 - ii. Hausa uses a lot of suffixes, so also does English;
 - iii. However, while infixes are common in Hausa, English realizes quite a few. Furthermore, circumfixes take the reversal position – while circumfixation occurs commonly in English. Hausa employs a little (none of it in creating words).
- (3) Hausa has morphemes in its structure like most languages, such as English.
- (4) Hausa employs word – formation processes just like English. For instance:
 - (a) Hausa uses a lot of affixation to create some words likewise English.

- (b) Even though Hausa employs alternation in forming some words, it employs only one type, i.e. the partial, while English employs both partial and complete modification.
- (c) Both English and Hausa borrow a lot of words from other languages of the world.
- (d) Clipping, as one of the processes of forming words, is being used to form several English and Hausa words. However, while Hausa employs two types (front and back clipping), English employs three (front, back and a combination of the two).
- (e) Compounding is another common process of forming words in English and Hausa languages. Here, it is discovered that both the languages use nouns, verbs, and adjectives, etc. as their bases. Furthermore, the elements that make such compounds (in English as well as Hausa languages) could be two or more.
- (f) Even though Hausa and English employ reduplication in forming some words, it is realized that:
 - (i) Complete reduplication is more common in Hausa and the derived words could be used formally; whereas English uses complete reduplication to create words, which are considered as highly informal.
 - (ii) Concerning partial reduplication, it is realized that while in English it occurs at the initial position, in Hausa it occurs at initial, medial or even final positions.

- (5) Both Hausa and English languages employ many word – formation processes, such as coinage, backformation, borrowing / calque, etc
- (6) Some of the processes of word- formation (in this study) could be found in both languages (e.g. affixation, alternation, borrowing, clipping, compounding and reduplication); others are employed by alone (e.g. acronyms, back- formation, blending, and coinage).

Even though the researcher is not unaware of the fact that the findings are limited to the materials randomly sampled from texts, internet and native speakers' constructions, she wishes to posit that such findings and discussions are generalizable within the context of comparative linguistic analysis.

5.3 CONCLUSION

In conclusion, this research work on the English and Hausa word - formation processes has attempted to reveal, to a great extent, how diverse, complex and similar the languages are at the morphological level. English has played a significant role of a base language whose word – formation processes are used to elicit word – formation processes in Hausa for the purpose of comparative study. It must be mentioned, at this juncture, that even though the present study is not pursued for its academic value, it shall serve as a reference material to socio –linguists, morphologists and educationists, especially text-book writers.

Besides, it is believed that the Hausa part of this work will be an eye opener to future Hausa linguists, especially those who may be interested in the area of morphology. The study will also contribute in no small measure to facilitating more research into the

syntax, phonology, semantics and pragmatics of Hausa. It is true that works already exist on some of these fields of linguistic study in Hausa, but some controversial issues may be resolved if the word- formation processes discussed are carefully studied.

Furthermore, it is believed that some of the questions raised at the beginning of this work have, to a reasonable extent, been answered. Thus, there should be more meaningful, intensive and extensive research conducted in this field of morphology in other Nigerian languages as well. This will help in creating a standard for the local languages and according them recognition and wider currency like the other world recognized languages of the world, particularly English and French.

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