

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the study

The term 'ergativity' originated from the Greek word "ergon" (work/deed) and was first used by Dirr (1912) and made popular through the publication in German of his 1928 survey of thirty-five Caucasian languages (Dixon 1994:3). It has been variously called: causative alternation (Haspelmath 1993 and Levin and Rappaport 1995), transitivity alternation (Hale and Keyser 1987), and unaccusativity alternation (Kiparsky 1998), among others. Ergativity is estimated to play a role in approximately 25 percent of the world's languages (Dixon 1994:2). It is an umbrella term used in modern typological linguistics to cover a variety of grammatical phenomena. Since the introduction of the term ergativity into modern linguistics at the start of the last century, it still took more than half a century of arduous descriptive work and typological studies that revealed a fuzzy but consistent pattern, for ergativity to enter the central arena of linguistic theorising. The standard conception of ergativity goes back to works such as Fillmore (1968) and Dixon (1979). Research on ergativity, as a phenomenon that linguistic theory cannot ignore, sprang with force in the seventies (Comrie 1978, Dixon 1979), and it has continued to be a lively area of research since then (for recent reviews, see Aldridge 2008 and McGregor 2009). According to Dixon (1994:1), "ergativity is used, in its generally accepted sense, to describe a grammatical pattern in which the subject of an intransitive clause is treated in the same way as the object of a transitive clause, and differently from the transitive subject".

Ergativity not only refers to the grammatical pattern of a construction but has also come to indicate the ergative system of a language, thus, being a categorisation used to discern a particular "type" of language. The term originally applied to languages like Basque in which the complement of a transitive verb and the subject of an intransitive verb were assigned the same morphological case. By extension, it has come to be used to denote verbs, which can have their objects as their subjects without changing their meanings. Basque is the only ergative language among the familiar languages of Europe. Ergativity is also found in some languages of Australia, Polynesia, North America, British Columbia, Central America, South America and New Guinea among others (see Dixon 1994:5).

During the last decades, researches on ergativity have progressively clarified a number of descriptive typological matters (types of ergativity, types of phenomena where ergativity surfaces in natural languages, enhanced description of ergative grammars) and has therefore delineated in a sharper way the scientific issues at stake (the status of grammatical relations in linguistic theory, the nature of transitivity, the mapping of grammatical relations among others. Moravcsik (1978) examines cross linguistic distribution of ergative and non-ergative patterns within languages. Nicholas (1993) looks at the geographical distribution of different alignment types in the world's languages. Dixon (1994) is an expansion of Dixon (1979), bringing additional data and generalisations while McGregor (2009) provides a more recent survey, focusing on case marking patterns on nominals.

Ergativity is not a common characteristic of African languages though it is found in a number of Western Nilotic languages from the Southern Sudan, neither is it readily encountered in the familiar languages of Europe (see Ejele, 2005). An ergative language maintains a syntactic or morphological equivalence (such as the same word order or grammatical case) for the object of a transitive verb and the single core argument of an intransitive verb, while treating the agent of a transitive verb differently. This contrasts with nominative-accusative languages such as English where the agent of a transitive verb and the single argument of an intransitive verb (called a subject) are treated alike and kept distinct from the object of a transitive verb. An ergative language is one in which the subject of an intransitive verb is morphologically similar to the patient of a transitive one. In case-marking languages, the agent of a transitive verb is in the ergative case while the object of a transitive verb and the subject of an intransitive verb are both absolutive. In nominative-accusative languages, the equation is A-S (Agent-Subject), where A and S occur in the same case or position. In ergative languages, the alternate equation S-O (Subject-Object) holds (Bomfoco 2006).

Syntax is generally understood to concern headedness, order and orderedness, interface, interconnection and interrelation among lexical items in language. Simply put, it is the study of lexical generation, word order and the government and binding relation existing between the lexical items of language (Mbah 2011:235). Word order refers to the syntactic arrangement of words in a sentence, clause or phrase. In other words, it is the order in which words occur in sentences. Furthermore, it refers to the different ways in which languages arrange the constituents of their sentences relative to each other. It is obvious that the words of any sentence occur in a particular order. Necessarily then, the constituents in a sentence also have ordered elements. To put it simply, sentences are expressed with an ordered

sequence of words. Every human language contains three major universal concepts; 'subject', 'object', 'verb' which are linearly ordered.

Semantics, on the other hand, is the study of the meaning of words, phrases and sentences (Yule 1996:114, Saeed 2003:1). However, it has to be noted that the meaning of meaning is elusive. On this, Anyanwu (2010:187) asserts that attempts to define meaning have not yielded any satisfactory answer. The syntactic system of a language is the set of principles that link the meaning of sentences with the form in which they are expressed. Meaning originates in the mind, and syntax is the study of the relationships between meaning and form.

The mind is not directly observable, so, there is no reason to assume that every aspect of syntax is directly observable. The surface structure of a sentence is only the form in which that sentence is expressed. By examining surface structure, one investigates only a single side of syntax. The other side pertaining to meaning rather than to surface form is not available for direct examination. Yet it does exist, for unless the study of syntax involves meaning as well as form, there is no way to explain how the speakers of a language understand the meaning of sentences. The analyses of the sentences are inadequate in many respects. First of all, they fail to take into account the difference between surface and deep levels of grammatical structures. This distinction was made by Chomsky's generative grammar, which is sometimes referred to as universal grammar. According to Chomsky, the deep structure of a sentence is the abstract underlying form, which determines the meaning of the sentence. It is present in the mind, but not necessarily represented directly in the physical signal.

It is a widely held belief among linguists that semantics must in some sense be dependent upon syntax. Syntax first provides scaffolding and semantics then follows the syntactic set-up, computing the meaning of a complex expression from the meaning of its syntactic parts. Syntax is, therefore, generative while semantics is interpretative. There is no doubt that the inherent meaning of the sentence is related to various aspects of its form. Indeed, the semantic interpretation of a sentence is determined by the intrinsic semantic content of lexical items and the manner in which they are related at the deep structure level.

The main purpose of generative grammar is to provide a means for analysing sentences at the deep structure level. To achieve this aim, Chomsky (1965) draws a fundamental distinction between a personal knowledge of the language and its use in real situation. The first is "language competence; and the second is called language performance". This is similar to

Saussure's distinction between *langue* and *parole*. Chomsky argues that linguistics should be concerned with the study of competence and not restrict itself to performance. Chomsky's proposals were intended to discover the mental realities underlying the way people use language. Competence is seen by him as an aspect of our general psychological capacity. The influential distinction between competence and performance, first drawn in Chomsky (1965), partly corresponds to the I-language (internalised language) versus E-language (externalised language) split. Competence is the 'speaker/hearer's knowledge of his language', performance 'the actual use of language in concrete situations' (Chomsky 1965:4). Since it was first proposed, this distinction has been the subject of controversy between those who see it as a necessary idealisation and those who believe that it abandons the central data of linguistics. Chomsky defines grammatical competence as

the cognitive state that encompasses all those aspects of form and meaning and their relation, including underlying structures that enter into that relation, which are properly assigned to the specific subsystem of the human mind that relates representations of form and meaning" (Chomsky 1980:59).

The grammar of competence describes the I-language in the mind, distinct from the use of the E-language, which depends upon the context of situation, the intentions of the participants and other factors. Competence is independent of situations; it represents what the speaker knows in the abstract.

The components of syntax and semantics are distinct; yet, they are related aspects of the system of communication. The semantic component represents the concept of competence since it decodes the relationship between concepts and their oral codes as stored in the human memory. It determines the fitting of words and the concept those words denote for them to be stored in the long term memory. On the other hand, the syntactic component represents the concept of performance since it is the actual vocalisation of what is stored in the mind or memory of the speaker of a language. It analyses the word order and arrangement either in production or in comprehension. A positive identification of the placement of units activates our analysis of the units, their combination and the context of usage.

It is traditional in grammar to see the sentence as containing relationships such as who is doing the action and who or what is being affected by the action. The verb largely determines

how a sentence conveys who does what to whom, in what way and in what context; the main verb typically dictates the sentence structure and meaning. The subject of the sentence is not always the "doer" of the action of the verb. The subject of the sentence is the "doer" only when the verb defines it as such (Pinker, 1994).

This work seeks to examine the relationships that exist in Igbo ergative structures. Much work has been done on transitivity in Igbo by Igbo scholars like Emenanjo (1975, 1978, 1984), Ubahakwe (1976), Uzoma (1999), Uwalaka (1983), Nwachukwu (1983, 1984, 1985), Iwundu (1987), Ogwueleka (1987), Mmadike (1997) and Mbah (1999, 2000) though not without some disagreements. This work differs from related works in Igbo in that it analyses the Igbo verb from the ergative point of view (ie. verbs that can be used transitively and intransitively). In doing this, the characteristics and manifestations of ergativity in some languages are investigated. Moreover, the work examines in some detail the interface of syntax and semantics in sample Igbo ergative structures.

## **1.2 Statement of the Problem**

Syntactically, verbs are classified according to the number of arguments. Accordingly, we have intransitive verbs (which select one argument), mono-transitive (which select two arguments), ditransitive (which select three arguments). It has also been recognised that some verbs behave differently from the above categorisation. For example, some verbs could appear in two distinct structures. In a certain structure they select one argument, whereas in another structure they select two arguments without any morphological modification. Moreover, the theta-role of the external argument of these verbs when used as intransitive is the same as the one assigned to the internal argument when these verbs are used as transitive. These verbs are called ergative verbs. Ergativity originally applied to languages in which the object of transitive verbs and subject of the intransitive verb are assigned the same morphological case. In case marking languages, the agent of a transitive verb is in the ergative case while the object of a transitive and the subject of an intransitive verb are both in the absolutive. In nominative-accusative languages, we find the equation A-S, where A and S occur in the same case or position. In ergative languages, the alternate equation S-O holds. Igbo is not a prototypical ergative language but has ergative forms. In the past years, linguists have been more interested in the studies of transitivity and intransitivity. Little or no attention is paid to the study of the term 'ergativity' particularly with regard to the Igbo language.

Some scholars such as Nwachukwu (1976, 1986), Mmadike (1997), Emenanjo (2005), Uchechukwu (2007) and Ogweleka (1987), Mbah (1999), Nweze (2014) agree that ergativity is a feature of Igbo syntax. Some of the existing works on Igbo ergativity are incidental comments on the phenomena.

Emenanjo (2015:16-17) reiterates that Igbo exhibits some features of ergativity; however, he adds that the ergative tendency in Igbo is complicated by the fact that transitivity is not a necessary phenomenon for classifying Igbo verbs asserting that all Igbo verbs are transitive. In line with modern linguistic analyses of Igbo on grammatical categories relevant to the Igbo verbal system, Emenanjo (2015) agrees that ergativity is a potential category that is necessary in the syntax-semantics of Igbo and in the classification of verbs in terms of complementation. Questioning whether the case of ergativity is the same as it is in Eskimo or a syntactic type or a feature for a class of verbs, he concludes that ergativity is a phenomenon that needs urgent research in the Igbo language.

The observation that not much has been written on the Igbo ergativity from the syntactic and semantic perspective necessitates this study. The study among other things establishes how ergativity is realised in the Igbo language. The work also seeks to analyse the relationship between syntax and semantics in the realisation of ergative structures in Igbo.

### **1.3 Purpose of the Study**

Ergativity is scarcely found in the European language families (Romance, Germanic, Celtic, Greek and so on to which Basque is unrelated) and is also rare in Africa. However, it is common in Australian languages, and also occurs widely in Tibeto-Burman languages, Mayan languages (Central America) and a number of Papuan languages (New Guinea), among others. In other words, ergative systems are not purely localised, but are spread around the world. Dixon (1994:10) estimates that perhaps one-quarter of the world's languages can be described as ergative languages. The objectives of this research are to:

- (i) Establish the nature and realisation of ergativity in Igbo.
- (ii) Identify the types of ergativity in Igbo.
- (iii) Identify and analyse the areas of interface between syntax and semantics in the Igbo ergative structures.
- (iv) Find out the verb types that can be ergativised in Igbo.

#### **1.4 Significance of the Study**

There are different ways in which languages represent the relationship between core NPs and verbal predicates on which they are dependent: constituent order, case marking and verb agreement. All languages use at least one of these methods, and often more than one. Constituent order may be very free or very fixed. In languages with free constituent order (or word order), it is more likely that there will be some system of either dependent marking (case) or head-marking (agreement) in order to identify the grammatical relation of each core NP participant. The two main case systems are the accusative and the ergative systems. Some languages such as Chinese and Igbo have neither morphological case nor agreement. But even in languages without morphological case, the need to recognise grammatical relations is evident in the syntax.

This work is significant as it shows how the concept of ergativity is realised specifically in the Igbo language. It analyses the interface of syntax and semantics in the Igbo ergative structures.

The study, apart from increasing readers' interest in the syntax and semantics of the Igbo language, is a reference point for further studies on ergativity.

This work reveals that Igbo verbs can be classified into ergative and non-ergative dichotomy. It is therefore hoped that the present work will contribute to our knowledge of Igbo verbs in general, since Igbo is a verb centered language; the understanding of the verb will go a long way to the understanding of Igbo grammar.

#### **1.5 Scope of the study**

Words and morphemes are the smallest meaningful units in a language. For the most part, however, we communicate in phrases and sentences which also have meaning. The meaning of a phrase or sentence depends on both the meaning of its words and how these words are structurally combined. The positioning of words and phrases in syntactic structure helps to determine the meaning of the entire sentence. The transitivity alternation is a cross-linguistically recognised phenomenon in which a verbal predicate undergoes a change in its transitivity, with respect to the syntactic realisation of the arguments of the predicate as well as the number of arguments it requires. Across languages, certain verbs show either a transitive or an intransitive use. The study focuses on the concept of ergativity in languages in general and on the manifestation of ergativity in Igbo specifically. Igbo ergative structures are analysed to identify the areas of interface between syntax and semantics. However, to discuss

the topic effectively, the study traces the origin and manifestations of ergativity in some languages. The characteristics of ergative languages are highlighted. The language variety used as data is the standard variety as well as dialects where applicable. The content of this work is limited to providing answers to the research questions.

### **1.6 Research questions**

The following questions guide the study.

- a. How is ergativity realised in Igbo?
- b. What are the types of ergativity in the Igbo language?
- c. What is the interface of syntax and semantics in Igbo ergative structures?
- e. What kind of verbs can be ergativised in Igbo?



## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

#### 2.0 Preamble

This chapter reviews relevant works related to this study under the following subheadings: Ergativity in languages, argument structure, predication, transitivity, and syntax and semantics interface. Empirical studies on Igbo ergativity are also reviewed.

#### 2.1 Conceptual framework

##### 2.1.1 Ergativity in languages

Linguistic typology is a subfield of linguistics that studies and classifies languages according to their structural features. Its aim is to describe and explain the common properties and structural diversity of the world's languages. It is well known that the languages of the world can roughly be divided into two groups, according to the strategy they employ to encode relations between a predicate and its arguments. Some languages are labelled nominative. In these languages, the sole argument of an unaccusative verb receives Nominative (NOM) Case like the DP-agent of a transitive verb and differently from DP-patient, identified instead with Accusative (ACC) Case. Cocchi (2009) in her work "Nominative and ergative languages: Towards a unified theory of case checking" observes that nominative accusative alignment uses the same coding system for subjects of transitive and intransitive verbs and a different coding system for direct objects of transitive verbs. These different kinds of arguments are represented as A, S and O. A is the subject (or most agent-like argument of a transitive verb), O is the direct object (or most patient-like argument of a transitive verb) and S is the sole argument of an intransitive verb. Cocchi gives the German example in (1) below. But there exist other languages, labelled 'Ergative', which follow a different strategy: the sole argument of an unaccusative verb is, in fact, identified with the same case (Absolutive, ABS) borne by the DP-patient of a transitive, while the DP-agent receives a different case, Ergative (ERG). The Ergative case system is exemplified in Kashmiri (from Bhatt. 1994:73; 37), in (2):

- 1 (a) Der            Mann sah    den            Lehrer  
         the-NOM    man saw the-ACC teacher  
         'The man saw the teacher'

(b) Der(\*den) Lehrer kam  
The-NOM teacher came  
'The teacher came'

2 (a) LaRk-an kheyi tsoT  
Boy-ERG ate-f.sg bread-ABS,f.sg  
'The boy ate the bread'

(b) LaRk (\*-an) ga-v skuul  
Boy-ABS went-m.sg school  
'The boy went to school'

The existence of the two different Case systems exemplified above is well-known in the literature and has received an exhaustive descriptive account (see Silverstein, 1976; Dixon, 1979, 1994; DeLancey, 1981; Comrie, 1981; Harris, 1982; Jelinek, 1993; Laka, 1993; Mahajan, 1990,1994; Bittner and Hale, 1996a-b.). Within the minimalist framework, Cocchi (2009) examines data from nominative and ergative languages, she concludes that a nominative language differs from an ergative one in that the former chooses to mark the DP-object, while the latter marks the DP-subject.

Interesting attempts to account for the existence of the two mentioned case systems as well as to capture the parameter underneath are found in Bobaljik (1992, 1993), Chomsky (1993) and Laka, 1993). Under the Minimalist framework, these authors assume that case is assigned, or better checked, by means of a specifier-head relation between a DP and an AGR-type head. Therefore, the number of AGR-heads, which must be present in a clause, mirrors the number of arguments needing Case: a transitive clause projects two AGR-heads, while an unaccusative clause will project only one argument.

According to traditional accounts on ergativity (like Silverstein, 1976; Dixon, 1979, 1994), ergative languages are those which identify with the same case (ABS) S and O, while nominative languages identify with the same case (NOM) S and A. Ergativity is a term that refers to a certain pattern that some languages show in treating arguments of a verb. Generally, arguments are classified into three types: the subject of a transitive verb, the object of a transitive and subject of an intransitive verb (see Otsuka 2000:13).

Matthews (2007:126) refers to ergativity as, “a case which identifies the agent in a basic transitive construction when the patient is absolutive”. The absolutive identifies the patients with the single argument or valent in an intransitive construction. In continuation, Matthews

says that the same terms are extended to other constructions in which an agent is similarly distinguished, but by, for example, word order instead of case. He classifies language, which has an ergative versus absolutive case or which distinguishes semantic roles by word order, in an equivalent way. Languages either partly or wholly of this type are said to illustrate the phenomenon of ergativity.

In line with the above view, Bomfoco (2006) says, “ergativity is an umbrella term used in modern typological linguistics to cover a variety of grammatical phenomena, and basically it is a grammatical pattern in which nouns are inflected or marked for case”.

Since Dixon’s (1972) classic study on the Australian language, Dyirbal, it is known that there are at least two classes of ergative languages: a small class of syntactically ergative languages (also inter-clausal), for example Caucasian and some Indo-Aryan languages (Hindi, Punjabi) and Georgia (Anderson 1976), and a large class of morphologically ergative languages (also intra-clausal) for example Basque, Tonga, Dyirbal and some accusative languages (e.g. Latin and Greek). The former (syntactically ergative language) shows an absolutive pivot, i.e. a grammatical subject grouping (subject of intransitive verb/object) on clausal coordination, while the latter (morphologically ergative languages) has nominal case marking and/or verbal agreement or cross referencing persons on the verb. For the most part, morphological ergative languages may have both systems at the same time, i.e. display ergative pattern for case marking and accusative for agreement. The foregoing view indicates that ergativity is realised differently in different languages.

In line with the above assertion, Moravcsik (1978:260) notes that Twi, a Ghanaian language, a verb pluralising morpheme is distributed ergatively such that the reduplication of verb stems may signal the plurality of objects or plurality of intransitive subjects but never the plurality of transitive subjects, as in 3a & b.

3 (a) *bu* 'break' vs *bubu* 'break many things'

(b) *wu* 'die' vs *wuwu* 'many die'

In example 3a, the verb *bu* means 'break', the reduplication of *bu* to *bubu* that the objects broken are more than one. Also in 3b, the verb *wu* 'die' is a singular verb, but *wuwu* is the plural form signifying the death of more than one object.

McGregor (2009) , in his work on typology of ergativity asserts that the notion of ergativity was first applied to morphological patterning, specifically to the case-marking pattern in which the Agent is case-marked differently from an Actor and Undergoer, which are case-marked identically. This is illustrated by the following Nyangumarta (Pama- Nyungan, Australia) examples taken from Sharp (2004).

4.mirtawa-lukuyi      kampa-rna  
woman-ERG    meat      cook-NFUT  
'The woman cooked the meat'

5. partany      karnti-nyi      mungka-nga  
child      climb-NFUT    tree-LOC  
'The child climbed the tree'

In (4) the Agent is marked by *-lu* ERG, whereas the Undergoer appears in the unmarked citation form, referred to as the absolutive in ergative systems, as does the Actor of intransitive (5).

Explaining further, McGregor notes that unlike Nyangumarta, most languages of Europe case-mark according to the nominative-accusative systems. This system is found in the pronouns of English (Indo-European), where Agent(6a) and Actor (6b)are accorded the same case form.

6(a) She cooked the meat

(b) She climbed the tree

The Undergoer normally appears in a different case as in 7a-b.

7(a) She saw her

(b) He called him

Burzio (1986) in his own contribution, characterises an ergative structure as, “one in which the superficial subject noun phrase (NP) originates as the underlying object of a transitive counterpart”. This means that an intransitive clause features as a transitive one with the transitive object corresponding to the ergative subject. The NP subject is moved into the superficial object position by a rule of NP movement.Hornby (1974) captures ergative verbs as, “verbs that can be used in both transitive and intransitive way with the same meaning

where the object of the transitive verb is the same as the subject of the intransitive verb". For example, the verb 'grow' is ergative because you can say "She grew flowers in her garden" or "Flowers grew in her garden". Here, the object of the verb "grew" in the first sentence became the subject of the same verb in the second sentence.

Adding to the discussion, Chung (2000) refers to ergative verbs as a type of derived intransitive verbs in English. In the following examples, he differentiates ergative structure and a middle.

- 8 (a) The vase was broken
- (b) The vase breaks easily
- (c) The vase broke

8a is a passive, (8b) a middle and (8c) an ergative. Ergatives differ from middles in that they do not require to be "adorned" by some materials like adverb or modals and they describe an event, not a property of the surface subject as shown in (9).

- 9 (a) The vase broke
- (b) His life changed
- (c) The government moved

Again the tense of the ergatives is not limited to the present tense; they can appear in the past tense and the progressive form, as shown in (10).

- 10 (a) The ice in the lake melted last year
- (b) The clothes will soon dry in the sun
- (c) The lake is thawing fast

Chung (2000) says that one of the properties of the ergative construction is eventive in the reading as shown in (9-10) above and (11-15) below:

- 11 (a) We generalised the solution
- (b) The solution generalised
- 12 (a) We centralised the department
- (b) The department centralised
- 13 (a) We demagnetised the recording head
- (b) The recording head demagnetised
- 14 (a) The Republicans want to Reaganise the country
- (b) The country refuses to Reaganise.
- 15 (a) We floated the ship.
- (b) Does the sunken ship float?

(Keyser and Roeper (1984:390))

Another important property of ergative verbs as described by Chung (2000) is that they have corresponding transitive construction, as shown in (10-15). Thus, we can assume that ergative verbs are derived from the transitive verbs without any overt morphological change. Chung explains the ergative formation in terms of argument structure as in (16) and (17) illustrates the argument structure change of a typical transitive verb in ergative formation:

#### 16. Ergative Formation

I. Delete the external argument

II. Externalise an internal argument

17.  $e, x.<y>=e, y<>$ .

In (16) the presence of the event argument indicates that the transitive verb and its derived ergative verb are eventive. Ergative formation in (16) involves two processes: The deletion of the external argument (x) and externalisation of internal argument (y). First, the external argument (x) is deleted (Keyser and Roeper 1984, Fagan 1992). Consider the following examples:

18 (a) \*The boat sank by the navy

(b) \*The sailor sank [PRO to save the world].

As shown in (18), the ergative construction cannot take the agentive *by* phrase and the rational clause. This implies that this construction does not contain the suppressed agent agreement, although the ergative construction is eventive in its reading. This non-agentive reading of the ergative construction is different from that of the middle construction. The contrast of the two constructions is evident in the following:

19 (a) The boat sank all by itself.

(b) \*Bureaucrats bribe easily all by themselves. (Keyser and Roeper 1984:405)

The phrase 'all by itself' means 'totally without external aid'. The meaning "without aid" is compatible with the agentlessness of the ergative construction, but not with the middles.

The second process in ergative formation in (16) is the externalisation of an internal argument. In Chung's words, externalisation takes place in the lexicon and thus this approach to ergative formation does not involve NP movement in syntax. But some linguists (Burzio

1986, among others) propose that ergative formation does not have externalisation and, thus, it involves movement in syntax. In this approach, the argument structure can be represented as follows:

(20) e, x <y>

The movement approach in (20) to ergative formation has only one operation, deletion of the external argument. The internal argument y will move to the subject position in syntax. This approach as Chung observes, does not reveal that ergative formation does not allow long distance or the insertion of the pleonastic elements 'it' or 'there'.

### 2.1.2 Types of ergativity

Ergative languages are classified roughly into two groups: those which show an ergative pattern only at the morphological level, those which exhibit an ergative pattern also at the syntactic level and those that manifest ergative patterning at discourse level. Only morphological and syntactic patterns will be briefly discussed in the sections that follow.

#### 2.1.2.1 Morphological ergativity

A language is said to be morphologically ergative if the S and O appear in the same case while a special case is assigned to A. The marked case which A receives in such a system is called ergative (ERG), while the case assigned to O and S is traditionally called absolutive (ABS). This type of case marking is different from the more familiar accusative system, in which S and A receive nominative case (NOM) and O receives accusative case (ACC). The contrast between the two systems is schematised below.

Ergative		Accusative
ERG	A } S }	NOM
ABS	O [	NOM
ABS		ACC

In the above schemata, the two case marking systems (Ergative and Accusative) are represented. In Ergative system, S and O are grouped together and they appear in the same case absolutive while A is assigned a special case-ergative.

In English, for example, this formal distinction is reflected in the form of pronouns. As illustrated in (30), the third person singular pronoun has the same form *he* and it occurs as S and A, while as O, it must take a distinctive form, *him*.

21 (a) He went to school

(b) He/\*him likes Mary

(c) Mary doesn't like him/\*he

Example 21, the third person singular pronoun 'he' occurs as S(subject) in 21a and as (A) agent in 21b showing nominative case. In 21b, the third person singular pronoun takes the accusative form as O (object). Replacing 'he' with 'him' as in 21b and vice versa in 21c yielded unacceptable structures respectively.

In contrast, the distribution of the case markers, 'a' and 'e' in Tongan shows an ergative pattern: 'a' occurs with S or O, while 'e' occurs exclusively with A. See (22), below.

22 (a) Na'e 'ala 'a/\*'e Sione ki he ako

Pst go ABS/\*ERG John to def school

'John went to school'

### 2.1.2.2 Syntactic ergativity

Mcgregor (2009: 484) refer to syntactic ergativity as situations in which syntactic rules or generalisation in a language treat the actor and the undergoer (entity affected by the action of the verb) in the same way but differently from the agent. Magregor says the term has a wide range of applications depending on how syntactic rules are construed theoretically. In his words, syntactic ergativity in the literature is normally understood to refer to patterns of inter-clausal syntax. More specifically, it is understood to refer to ergative patterning revealed by cross-clause co-reference conditions that must be met in certain types of clause combination. For instance, in Dyirbal, two clauses can be coordinated with the omission of the shared argument in the second clause if they show coreferentiality of Actor or undergoer (Dixon 1972, 1979:61-63). Thus, (23) and (24) can be coordinated to form (25a) and (26b), because the Actor in (23) is co-referential with the Undergoer in (24). Notice that the Undergoer has been omitted from the second clause in (22); this is optional, however.

23. nguma                      banaga-nyu  
father.ABS                      return-NFUT  
'Father returned'



24. nguma                    yabu-nggu            bura-n  
 father.ABS            mother-ERG            see-NFUT  
 'Mother saw father'.
- 25 (a) nguma                banana-nyu            yabu-nggu            bura-n  
 father.ABS                return-NFUT            mother-ERG            see-NFUT  
 'Father returned and mother saw him'.
- (b) nguma                yabu-nggu            bura-n                banana-nyu  
 Father.ABS                mother-ERG            see-NFUT                return-NFUT  
 'Father was seen by mother and returned'. (McGregor, 2009: 484)

Coordination with the omission of the shared argument is not possible. However, for (23) and (26) the Agent of (26) is co-referential with the Actor of (23), and (27) is ungrammatical. To coordinate (23) and (26), it is necessary for the latter clause to be antipassivised, as in

(28), which can then be coordinated with (26), as shown in (29).

26. yabu                    nguma-nggu            bura-n  
 mother. ABS            father-ERG            see-NFUT  
 'Father saw mother'.
27. \*nguma                banaga-nyu            yabu                    bura-n  
 father. ABS                return-NFUT            mother.ABS            see- NFUT  
 'Father returned and saw mother'.
28. ngumabural-nga-nyu    yabu-gu  
 father. ABS            see-APASS-NFUT            mother-DAT  
 'Father saw mother'.
29. nguma                banaga-nyubural-nga-nyuyabu-gu  
 father.ABS                return-NFUTsee-APASS-NFUTmother-DAT  
 'Father returned and saw mother'.

Syntactic ergativity is also revealed by most other types of complex sentence constructions in Dyirbal. For instance, as Dixon (1979:127-128) opines, relative clauses must have an Actor or Undergoer NP conferential with an NP in the main clause. And in purposive complements, the coreferential NP must be Actor or Undergoer in both main and complement clauses.

Another type of ergative patterning on the syntactic level is the pattern in word order whereby the agent of a transitive clause is treated differently from the Undergoer and the

intransitive Actor, which are the same. Few languages show this type of syntactic ergativity. Andersen (1988) gives Pari (Nilotic, Sudan) as an example of such a language, which has relatively rigid word order patterns in which the Actor and the Undergoer immediately precede the verb (as in 30-32), while the Agent occurs following the verb in the unmarked transitive, as in (31\*), but precedes the Undergoer if topicalised as in (32).

30. dháagc\* á-ŋèeth-c\*  
 Woman c-laugh-SUF  
 ‘The woman laughed’
31. dháagc\* á-yàaŋa ùbúrr-ì  
 Woman c-insult Ubur-ERG  
 ‘Ubur insulted the woman’
32. ùbúrr dháagc\* á-yáaŋa’ - è  
 ‘Ubur woman c-insult-3SG  
 ‘Ubur insulted the woman’

In 31, the agent (*ubur*) is following the verb in the transitive clause but in 32, the agent precedes the undergoer (woman) showing topicalisation.

## 2.2 Split ergativity

In addition to accusative languages (which treat subjects in a structurally similar manner and distinguish them from objects), and ergative languages (which group together subjects of intransitives and objects of transitives, and distinguish them from subjects of transitives), there is a third way of treating these basic grammatical relations. An important feature of all ergative languages is that they are never ergative in all aspects of their syntax and morphology; but they have a combination of ergative and accusative properties. No language is completely ergative with regard to morphology and syntax. Often, a language does not use just one case-marking system consistently for all instances of A, S and O, but instead has ergative case-marking for some construction and accusative case-marking for other constructions as will be exemplified shortly. Many morphological ergative languages show asymmetries in case-marking whereby the ergative system operates only in certain circumstances and, elsewhere, a different system applies. In many languages, the conditions under which the various systems apply are lexical or grammatically determined. This is referred to as split-ergativity.

Split ergativity has been the subject of numerous investigations both in particular languages (e.g. Comrie 1985; Tifou and Morin 1982; Camp 1985; Potts and James 1988; Takeuchi and Takahashi 1995; Valenzuela 2000; Li 2007), and typologically (e.g. Silverstein 1976; Dixon 1979:79-98, 1994:70-110; Tsunoda 1981; Delancey 1981). Split ergative languages (e.g. Georgian, Hindi) combine the two systems. These two languages sometimes use the nominative-accusative pattern and sometimes the ergative-absolutive system. This is a common pattern in languages of the world. In split ergativity, the split is conditioned by some other property or properties of the sentence, such as tense/aspect, lexical semantics of the verb, and possibly main vs. subordinate clause, or some property of the noun (e.g. full noun vs. pronoun, animacy).

The examples in (33) and (34) show the case-marking patterns in a split ergativity language; Georgian. Georgian case-marking generally splits according to the tense/aspect of the verb. The examples show two different tenses/aspects: the present tense in (33) and the aorist (a past tense for actions that are neither complete nor incomplete) in (34).

33 Georgian - Present

- (a) Student -i midis  
students -NOM goes (PRES)  
'The student goes.'
- (b) Student -i ceril -s cers  
student -NOM letter -ACC writes (PRES)  
'The student writes the letter.'

34 Georgian - Aorist

- (a) Student -i mivida  
student -NOM went (AOR)  
'The student went'
- (b) Student -ma ceril -i dacera  
student -ERG letter -NOM wrote (AOR)  
'The student wrote the letter.'

In these examples the (a) sentences show the same intransitive verb, and the (b) sentences show the same transitive verb. These examples show that sentences with the verb in the present (PRES) tense (shown in 33) have an accusative case-marking pattern (i.e. subjects are

treated similarly) while sentences with the verb in the aorist (AOR) tense (shown in 34) have an ergative case-marking pattern (i.e. subjects of intransitives and objects of transitives are treated similarly).

### **2.3 Characteristics of ergative languages**

Nigar and Nizami (2012) outlined the following characteristics which tend frequently to occur together with ergative constructions:

- (a) Ergative languages nearly always have the basic word order SOV (Subject-Object-Verb), occasionally VSO, but virtually never SVO.
- (b) Apparently, all languages that manifest ergativity at all (outside of certain derivational processes) show morphological ergativity, while very few exhibit syntactic ergativity.
- (c) In languages with ergative case marking, the ergative case is always overtly marked, while the absolutive case is usually morphologically unmarked.
- (d) It is very common for ergative languages to index direct objects in the verb.
- (e) It is very common for ergativity to be confined to certain tenses or aspects of the verb; in such cases, it is always the past tense or the perfective aspect which is ergative, while the non-past or imperfective verb forms show accusative constructions.
- (f) Few ergative languages have a fully developed passive voice.
- (g) In case marking languages, the ergative case is often identical with another case, most often the genitive or instrumental, sometimes the locative or dative.
- (h) It is very common for ergative constructions to be used when certain types of NPs, or certain combinations of NPs, appear in the subject and object position.

Silverstein (1974) is of the opinion that almost all of these languages can be fitted into hierarchy of NP types, ranging from the most agent-like NPs (first and second person pronouns) to the least agent-like NPs (inanimate and abstract nouns). In each case the ergative is used either when the agent lies below a certain (language specific) out-off point in the hierarchy, or else whenever the patients NP outranks the agent. Silverstein observes that few ergative languages appear to be entirely free of the two types of split ergativity mentioned in (e) and (h); among these few are Basque and the Mayan languages Tzeltal (Kaufman,

1971). On the other hand, hardly any languages appear to show both types of spilt. The only examples known are the Tibeto-Burman languages Jirel and Sherpa and the Australian language Yukulta (Keen, 1972).

## 2.4 Ergativity and case

Case is generally considered to be a property of an entire noun phrase, rather than just the head noun itself. In some languages, case is indeed marked on the head noun via changes in morphology (changes in its form) as in the Latin examples (35-37).

35. Puella veni-t (Latin)

Girl:NOM come-PRES:3SG

'The girl (S) comes.'

36. Puer-um puella audi-t.

boy-ACC girl:NOM hear-PRES:3SG

'The girl(A) hears the boy(O).'

37. Puella puer-um audi-t.

girl:NOM boy-ACC hear-PRES:3SG

'The girl(A) hears the boy(O).'

But elsewhere, for instance in German, case is typically not marked on the head noun, but is marked instead on the determiners and any adjective in the noun phrase as in the German example:

38. [Der gross-e Hund] knurrte (German)

the:NOM big-NOM dog growled

'The big dog growled'.

39. [Der gross-e Hund] biss [den klie-n-en Mann].

the:NOM big-NOM dog bit the:ACC small-ACC man

'The big dog bit the small man'.

In the examples, case is marked on the determiners and the adjectives. In 38 and 39, it is marked on the determiner - *der* 'the' and the adjective- *gross-e* 'big' showing nominative case. In 39, it is marked on the determiner- *den* 'the' and the adjective- *klie-en* 'small' showing accusative case.

In languages with case systems, the noun phrase dependents are marked to show their relationship with the head element in the phrase or clause. Case marking shows, for example, which NP is the subject and which is the object. The CORE ARGUMENTS of a verb are shown in Table 1 and the abbreviations S, A and O are used to designate their grammatical relations as indicated in Dixon (1972, 1979, 1994).

Table 1 The core arguments

Subject of an intransitive verb	S
Subject of a transitive verb	A
Object of a transitive verb	O

In table 1, Tallerman (2005:160) used the abbreviations S, A, and O to designate the grammatical relations of the core arguments. The subject of an intransitive verb is designated by S (subject), the subject of a transitive verb is designated as A (agent) while the object of a transitive verb is denoted as O (object).

For example:

40(a) The snake (S) hissed.

(b) The chicken (A) bit the snake (O).

'S' is the 'subject' but more transparently, as the 'single' argument of an intransitive verb; 'O' is the 'object', and 'A' is for 'agent', which is the prototypical semantic role taken by the subjects of transitive verbs such as 'bite', 'examine' or 'cut'. The example shows that the subject is the entity affected by or experiencing something as 'the snake' in 40a reveals. The agent is an actor performing an action. The chicken in 40b is the agent that performed the action of biting the snake.

All languages must have some way of distinguishing the transitive subject, A, from the object, O, so that we can tell, for example, who gets bitten (see example 40b). In languages like English, fixed constituent order does this work. One solution is to ensure that A has a different form from O: this is the role of case -marking. There are no clauses with both S and an A: they cannot co-occur, because within any given clause, the verb is either transitive or intransitive. Similarly, there are no clauses with both an S and an O: if the verb is intransitive,

it just has an S and not an O. So, to achieve the most economical case system possible, there are two equally logical alternatives, both of which require two case distinctions.

The first system marks S and A in the same way and O differently. In other words, all subjects receive one case-marking, and objects receive a different case. This is known as the nominative/accusative pattern, and it occurs in most European languages. In modern English, full noun phrase has no formal case marking, but we can see the relics of a previous nominative/accusative case system in the forms of the first and third persons:

41. We (S) left.

We (A) like her (O).

She (S) left.

She (A) likes us(O).

We and She are nominative form used for S and A. In other words, all subjects have the same form. Her and us are accusative forms used for O.

The second system marks S and O in the same way, but marks A differently; this is known as the Ergative/Absolutive pattern. Ergative case is the case of A - the subject of transitive verb. Absolutive is the case of both S and O, the subject of intransitive verb and the object of transitive verbs.

Table 2 The major case system

Accusative System		Ergative System	
A S	O	A	S O
Nomative	Accusative	Ergative	Absolutive

A summary of the two systems is shown in Table 2. As indicated, both case systems require two distinctions. One system groups S with A (since they never co-occur); the case system groups S with O (they too, never co-occur). Explaining further, Tallerman (2005) says the ERGATIVE/ABSOLUTIVE system (often known as ERGATIVE) has an SO/A pattern: S and O are marked in the same way, and A is marked differently. Lezgian (a Daghestanian language spoken in Caucasus) is a standard ergative language. The subject (A) of a transitive

verb has ergative case while the object (O) of a transitive verb and the subject (S) of an intransitive, both have absolutive case. Compare in particular the forms of the first person singular pronouns ('I/me in the English translations) in (42) through (44).

42. *Za zi balk'an c'ud xipe-qh ga-na* (Lezgian)

I: ERG my horse: ABS ten sheep-for give-PST

'I (A) gave away my horse (O) in exchange for ten sheep.'

43. *Zun ata-na.*

I: ABS come-PAST

'I(S) came.'

44. *Aburu zun ajib-da.*

they: ERG I:ABS shame-FUT

'They (A) will shame me (O).'

In the English translations, the first person singular pronouns have the same form, *I*, both as an A and S, while the O has a different form, *me*. By contrast, in Lezgian the A form (*za*) differs from the S, the S and O forms are identical (*zun*). When the pronoun meaning 'I/me' is an A- the subject of a transitive verb, as in (42) - it takes the ergative case, giving the form *za*. But when it is either an S (the subject of an intransitive verb) as in (43) or an O (an object) as in (44), it takes the absolutive case, giving *zun*.

The second example comes from an ergative language spoken in Europe, namely Basque, which is a language isolate (a language with no known relatives). Examples from the Lekeitio dialect are given in (45) through (47): compare the case marking of the word for 'man' in each example.

45. **Gixona-k** liburûa erosi dau. (Basque)

man: ERG book:ABS buy AUX:3SG

'The man(A) has bought the book(O).'

46. **Gixona** etorri da.

man:ABS come AUX:3SG

'The man(S) has come.'

47. **Gixona** ikusi dot.

man:ABS see AUX: ISG

'I(A) have seen the man(O).'

(Adapted from Tallerman (2005: 163-164))



The NP meaning 'man' has the ergative case suffix *-k* (45), where it is an A, that is the subject of a transitive verb. When this NP is an S or O, as in (46) and (47), it takes the absolutive case.

## 2.5 Argument structure

Modern linguistics first took on the notion of argument from philosophy, where it had long served as a conceptual tool for the logical analysis of abstract predication, with roots that go back at least to Frege. For Frege, argument structure was an instrument for the formulation of 'pure thought' (1879[1960]) and any application to the grammar of particular languages was a secondary consideration. Argument structure effectively organises relations among the central grammatical components of a predication. Because of its ties to the lexical repertoire of the verb meaning in a given language, argument structure has been recognised as suffused with meaning, always implicitly and often explicitly. Argument structure implies an organising framework that establishes combinational relations between elements in at least two parallel dimensions, and again establishes a further set of relations between these dimensions. Along the combinational dimensions, (a) grammatically, nouns relate to verbs as subject, object etc. (However, the terms of these relations may be specified for a given language type); and (b) semantically (and/or conceptually), entity concepts relate to event concepts as agent, patient etc. (or proto-agent and proto-patient- again these roles may be characterized (Dubois, 2003). Conceptions of argument structure vary widely, even among practitioners of the same theory. This is to be expected, according to Bresnan (2001:304), the reason for this is that an argument has two faces, semantic and syntactic. On the semantic side, argument structure represents the core participants in events designated by a single predicate. From this point of view, it appears as a type of representation of event structure. On the syntactic side, argument structure represents the minimal information needed to characterise the syntactic dependents of an argument-taking head. From this point of view, it appears as a type of syntactic subcategorisation or valence register. Thus argument structure is an interface between the semantics and syntax of predicators (which we take to be verbs in the general case). It encodes lexical information about the number of arguments, their syntactic type and their hierarchical organisations necessary for the mapping to syntactic structure.

A verb's argument structure defines the number and relationship of participants needed for a complete event (Assadollahi & Rochstroh (2008)). The argument structure of the verb determines which elements of the sentence are obligatory. If a verb expresses an activity

involving two arguments, there will have to be at least two constituents in the sentence to enable these arguments to be expressed. Verbs are predicates that have argument structure, which specify the number and type of arguments that a specific predicate requires in order to complete its meaning.

### 2.5.1 Arguments

Arguments are the constituents required by the predicate. As Ouhalla (1999:148) puts it, "the participants involved in the event denoted by a predicate are arguments. They occur in sentences because of the requirements of verbs. The verb 'hit' for example is a predicate which takes two arguments and the verb 'smile' is a predicate which takes one argument. The arguments are the participants minimally required for the activity or state described by the predicate to be understandable. Finch (2000) sees argument as the term used by linguists to describe the role played by particular entities in the semantic structure of sentences. He says that all verbs are said to have arguments. Indeed, it is the number and nature of the arguments that they require, which distinguish them grammatically. Thus, argument is a relational term for a constituent that acts or receives an action from the verb.

Syntactically, verbs are classified according to the number of arguments. Some verbs take one argument while the others take two or more arguments. One argument (intransitive) verbs require only a subject to make a complete sentence. One argument verbs include these:

48(a) *He sleeps*

(b) *She works*

(c) *Emeka laughs*

The verbs in 48a-c, has only one argument each. 'He' in 48a is the argument of 'sleep', 'she' is the argument of the verb 'work' in 48b, while 'Emeka' is the argument of 'laugh' in 48c.

Two or three argument verbs (transitive and ditransitive) normally take direct and indirect objects as shown in the examples that follow.

49 (a) *I like her*

(b) *We fry bean-cake*

(c) *Ngozi helped us*

(d) *He gave them gifts*

(e) *The bank loans money to individuals*

(f) *Uju sent Amaka the letter*

The verbs in 49a-c, are two argument verbs. They are verbs that require two participants. The verb 'like' in 49a requires the initiator of the action 'I' and the one affected by the action 'her'. In 49b, the verb 'fry' takes two arguments: 'we' and 'bean-cake'. The verb 'help' in 49c has two arguments: 'Ngozi' and 'us'. On the other hand, the verbs in examples 49d-f are three argument verbs. In other words, each of the verbs requires three arguments to make a complete meaning. Thus, the verb 'gave' has the arguments: 'he', 'them' and 'gifts' (that is 'the giver', 'the gift' and 'the receiver'. In 49e, the verb loan has three arguments: 'bank', 'money', and 'individual' while the verb 'sent' in 49f also has three arguments: 'Uju', 'Amaka' and 'letter'.

The clause predicate, which is often a content verb, demands certain arguments. That is the arguments necessary to complete the meaning of the verb. The subject term and object term are the two most frequently occurring arguments of verbal predicate.

For instance;

50 (a) *Emeka* likes *Kate*

(b) *Ada* fried the *meat*

(c) *The old man* helped *the young man*

Each of these sentences contains two arguments (in italics), the first noun (phrase) being the subject argument and the second object argument. 'Emeka' for example is the subject argument of the predicate 'likes' and 'Kate' is the object argument. Verbal predicates that demand just a subject (eg. Sleep, work, laugh) are intransitive as in example 48a-c, verbal predicates that demand an object argument as well (like, fry, help) are transitive as shown in example 50a-c, and verbal predicates that demands two objects are ditransitive (eg. give, loan, send) as exemplified in 49e-f. Subject and object arguments are known as core arguments.

### **2.5.2 Syntactic versus semantic arguments**

An important distinction is between syntactic and semantic arguments. Content verbs determine the number and type of syntactic arguments that can or must appear in the environment; they impose specific syntactic functions (e.g. subject, object, oblique, specific preposition, possessor, etc.) on their arguments. These syntactic functions will vary as the form of the predicate varies (e.g. active verb, passive participle, gerund, nominal etc.) In languages that have morphological case, the arguments of a predicate must appear with the

correct case marking (e.g. nominative, accusative, dative, genitive etc.) imposed on them by their predicate. The semantic argument of the predicate, in contrast, remains, for example;

51(a) Jack is liked by Jill

(b) Jill's liking Jack

(c) Jack's being liked by Jill

(d) The liking of Jack by Jill

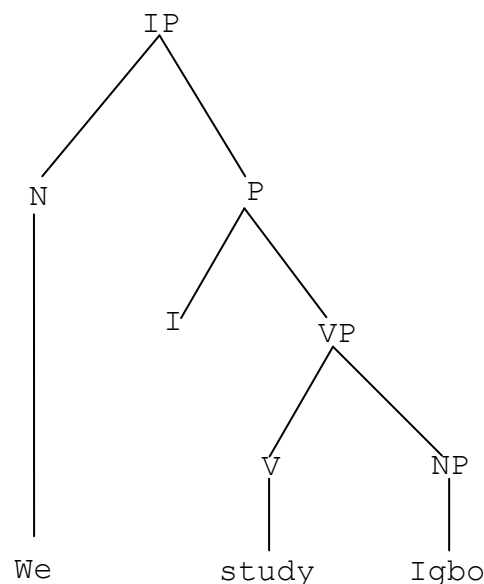
(e) Jill's like for Jack

The predicate 'like' appears in various forms in these examples, which means that the syntactic functions of the arguments associated with Jack and Jill vary. The object of the active sentence, for instance, becomes the subject of the passive sentence. Despite this variation in syntactic functions, the arguments remain semantically consistent. In each case Jill is the experiencer (the one doing the liking) and Jack is the one being experienced (the one being liked). In other words, the syntactic arguments are subject to syntactic variation in terms of syntactic functions, whereas the thematic roles of the arguments of the given predicate remain consistent as the form of the predicate changes.

Arguments are realised on or linked to some syntactic positions. Some arguments are always realised on subject positions and some on the object position. Based on the syntactic realisation, we can classify argument types as external and internal arguments. External argument is an argument, which is realised outside the maximal projection of the predicate whereas an internal argument is one realised inside the maximal projection of the predicate (Williams 1980, Chomsky 1981). For example;

52 (a) We study Igbo

Fig. 1



In fig.1, the subject 'we' is an external argument and the object 'Igbo' is an internal argument. The external argument is outside the maximal projection of the predicate (VP) in that it occupies a position external to the predicate, which is the immediate projection of the verb 'study', and the internal argument 'Igbo' is inside the VP 'study', this is because it is the argument contained within the VP. The subject argument at D-structure is an external argument and the object argument at the D-structure is an internal argument.

## **2.6 Transitivity**

Transitivity is a universal phenomenon. It is a property of the verb that relates to whether a verb can take direct object and how many such objects a verb can take. Crystal (2007:473) defines transitivity as a "grammatical category used in grammatical analysis of clause/sentence constructions, with particular reference to the verb's relationship to the dependent elements.

In traditional grammar, transitivity refers to the action carried from the subject to the object. It is a grammatical relation between the subject and the object through the action of the verb. Most importantly, the object must be present at the surface structure of the sentence. In other words, transitivity is currently seen as a relation over a set of arguments such that if an argument A relates to another argument B and B is related to another argument C, then A is related to C (Mbah,2012). Transitivity from its traditional perspective, necessarily involves at least two participants and an action which is typically effective in some way, either of the verb or construction. While semantic transitivity suggests transfer of activity from agent to the patient, syntactic transitivity lays emphasis on the number of arguments that a verb takes. According to Dixon (1994), "syntactic transitivity refers to the number and type of core argument which appear in the clause and which are determined by the predicated head (head).

A transitive construction involves a transitive predicate with two core arguments which are in the transitive subject function and a transitive object function while an intransitive clause requires an intransitive predicate (verb) and a single core argument which is an intransitive subject in function. A transitive verb therefore is a type of finite verb. The finite verb is considered transitive or intransitive depending on the relationship with some other words in the sentence.

Carnie (2007:51) opines, "in grammatical analysis, transitivity is that property which defines the number of internal arguments subcategorised by a verb. Thus a verb is classified as

transitive if it takes a direct object or intransitive if it is not accompanied by any object. Taiwo (2013:30ff) supporting (Carnie 2007) says that a verb that does not require any object, complement or any other element to complete its meaning is an intransitive verb. Thus, to complete a sentence, an intransitive verb can be added to the subject without any further addition. He illustrates with the following examples;

53(a) Everyone laughed

(b) The snow is falling

(c) The man died

(d) The child wept

From the above examples, the intransitive verbs occur as the final constituent of a sentence

54. \_\_\_\_\_#

Taiwo goes further to say that a transitive verb is a main verb which requires an object to complete meaning. For example, the verbs 'make' and 'kill' are transitive, since their objects cannot be omitted in the sentences such as:

55 (a) The new bakery on 4th street makes excellent bread

(b) The man killed the goat

(c) \*The new bakery on 4th street makes

(d) \*The man killed

In this type of verb, the action of the verb passes over from the subject to the object. They cannot typically occur without a following NP. These verbs continues Taiwo occur in the environment

56. \_\_\_\_\_NP

Taiwo identifies a third type of verb which he called ditransitive verbs. He says they are called ditransitives since they are typically followed by two NPs.

57. John gave Mary the book

These verbs occur in the environment

58. \_\_\_\_\_NP + NP

These verbs may be said to have two objects, the first of the two NPs in the structure shown is usually distinguished as the indirect object while the second is the direct object.

## 2.7 Change of state verbs

One verbal semantic property that is viewed as playing a crucial role in determining alternatability of verbs is that of "change". In linguistics literature, verbs undergoing the ergative alternation have been understood to indicate some sort of change brought about on a theme. As early as the 1920s, Jespersen pointed out that verbs that bring about a change in a person or a thing tend to be "double faced". In other words, they alternate in transitivity in English (Jespersen 1927:332-3). He gave the examples of change-class verbs below.

59. Break the ice                      The ice breaks

Boil water                         The water boils

Burst the boiler                 The boiler bursts

Levin (1985:18-19) specifies the type of change associated with verbs, maintaining that verbs of change of state and position undergo the ergative alternation in English as in 60 and 61.

(60) Change of state: break, crack, open, close, melt, freeze, harden, dry.

(61) Change of position: roll, bounce, move, float, drop, turn.

Traditionally, as Levin and Rappaport (1995:80) observes, change of state or more elaborately, "changes in the physical shape or appearance of some entity" has been viewed in the literature as the key semantic property determining whether a given verb may participate in the ergative alternation (Fillmore 1970, Smith 1978, Levin 1985, 1993a, Pinker 1989, Haspelmath 1993, Levin and Rappaport Hovav 1992b, 1993, 1994, 1995, Van Voorst 1995, S.T. Rosen 1996). The role of change of state in verbs alternatability is made more explicit when compared to verbs which inherently involve no change of state at all. Fillmore (1970) illustrates this point by comparing the verbs 'break' and 'hit'.

62(a) A rock broke the stick

      The stick broke

(b) A rock hit the tree

      The tree hit

According to Fillmore (1970), the reason why a contact verb like 'hit' fails to alternate in transitivity is that unlike 'break', it does not inherently entail any effect or change of state on a co-occurring theme. This will be illustrated more explicitly in (63).

63 (a) I hit the vase with a hammer, but it did not break; it was made of iron.

(b) \*I broke the vase with a hammer, but it did not break; it was made of iron.

Based on this observation, Fillmore concludes that 'break' participates in the ergative alternation because it lexically entails a change of state. The essential role of change in verbs alternatability is further illustrated by the verb 'bake' in a unique manner in the works of Kageyama (1996:161-2). The verb is normally categorized as a change of state verb and in this sense, as expected, it undergoes the ergative alternation.

64 (a) She baked the potatoes

(b) The potatoes baked (Kageyama (1996:161))

Interestingly enough, if we replace 'potato' with 'cake' then the intransitive constitution becomes ungrammatical.

65 (a) She baked the cake.

(b) \*The cake baked.

Levin and Rappaport Hovav (1992a:259) explain that the meaning of 'bake' in (64) is slightly different from the one in (65) in that baking a cake implies 'creation' in addition to the basic change-of-state meaning, roughly phrased into 'create by means of change of state bake'. In short, as pointed out by Levin and Rappaport Hovav (1992b:139a), only when 'bake' implies change of state does it exhibit the ergative alternation. That the additional semantic property of creation may hinder 'bake' from alternating in transitivity is further supported by the fact that other verbs of creation like 'make', 'produce', 'build', 'assemble', etc do not undergo such alternation.

Note, however, the change of state is not necessarily the sole factor in determining whether a given verb will undergo the ergative alternation. Firstly, as Levin and Rappaport Hovav (1994:41) point out, some group of verbs such as verbs of emission (sound or light) and position, which are not readily identified with verbs of change of state, alternate in transitivity as illustrated below.



66 (a) Tom beamed the flashlight.

The flashlight beamed.

(b) Tom hung the photo on the wall.

The photo hung on the wall.(Levin and Rappaport Hovav 1994:42).

More importantly, there are many verbs of change of state in English which do not alternate in transitivity as revealed in the works of Levin and Hovav (1992b: 133). As noted earlier, contact-effect verbs to which 'cut' belongs provide support for this statement. Levin(1993a:156) refers to this group of verbs simply as 'cut' verbs, listing the following members:

67. chip, clip, cut, hack, hew, nip, saw, scrape, scratch, slash, snip

Recall that while 'cut' is normally classified in a different semantic class than 'break', it crucially involves change of state (Fillmore 1970, Levin and Rappaport Hovav 1994,1995). Nevertheless, the transitive verb 'cut'fails to occur intransitively as illustrated below.

68 (a) Elsa clipped the article out of the paper.

(b) \*The article clipped out of the paper.

69 (a) I sawed the board in half.

(b)\*The board sawed in half.

70 (a) Jane scraped the carrot thoroughly.

(b)\*The carrot scraped thoroughly.

71 (a) Vandals had slashed most of the seats on the train.

(b)\* Most of the seats on the train slashed.

72 (a) I hurriedly snipped the string.

(b)\*The string hurriedly snipped. (Matsuzaki 2001)

Another semantic group of verbs that need to be mentioned here is what Levin refers to as destroy verbs (Levin 1993a:239)

73. *Destroy Verbs:*

Annihilate, blitz, decimate, demolish, destroy, devastate, exterminate, extirpate, obliterate, ravage, raze, ruin, waste, wreck.

Like *cut* verbs, the *destroy* verbs involve change of state but fail to alternate in transitivity.

74 (a) The bomb destroyed the whole city.

(b)\*The whole city destroyed.

75 (a) The bulldozer razed the building.

(b)\*The building razed.

Levin (1993a:239) notes that the 'destroy' verbs do not participate in the ergative alternation since they uniformly denote the total destruction of entities. The examples in (68)-(72) and (74)-(75) suggest that change of state is not the sole determining factor of the alternability of verbs in English.

## 2.8 Agentivity

Another semantic property that needs to be considered surrounding the ergative alternation is agentivity. When an entity is agentive, the entity or 'agent' always involves volition or intention (Talmy 1976, Delaney 1984). Agentivity is most typically associated with the subject of unergative verbs.

According to Matsuzaki (2001), one difficulty with agentivity is its definition. In particular, the difficulty has to do with the question of whether agentivity can be characterised by one single semantic feature such as 'animacy' or 'volition'. Due to the difficulty in pinpointing a single semantic property associated with agentivity, it has become more common, to take a multiple-element approach to this issues in recent years. Foley and VanValin (1984:32) consider a combination of animacy volition and control to be the contributing factor to the agentive interpretation of an "actor". Oosten (1980:482) proposes the most comprehensive view of agentivity, arguing that four semantic properties: intentionality, volition, control and responsibility combine to make an entity agentive. Relating agentivity to ergative constructions, Anyanwu (2007:44-45) observes that the theta role 'agent' is usually associated with agentive constructions. He states that an agentive construction is a type of construction where one of the arguments, the agent, is specified as being a willful, purposeful instigator of an action or event. Anyanwu (2007) gives the examples in 76a-c where 'Peter', 'John' or 'Mary' is the agent.

76(a) Peter hit James

(b) John ate the food.

(c) Mary reads the book.

He claims that the notion of causativity is related to the notion of agentivity. Whereas all causative constructions are agentive, not all agentive constructions are causative. Supporting Lyons (1968:384), Anyanwu further claims that agentive constructions are typically of two types: causative agentives and non-causative agentives. Thus, the subjects 'Peter', 'John' or 'Mary' in 76 are examples of a non-causative agent. The predicates (e.g. hit, eat, read, etc.) of such non-agentive subjects do not lend themselves to the analysis as realizations of verb + cause; hence, they are referred to as "basically transitive" verbs, which yield basic transitive constructions in the sense that they have both a deep and surface structure object.

Illustrating the causative agentive construction, Anyanwu (2007) cites the following examples from Lyons (1968:352) in (77) which involve the verb 'move'

77(a) The stone moved.

(b) John moved.

(c) John moved the stone.

Lyons argues that in (77a) and (77b), the verb 'move' is intransitive, while in (77c) it is transitive, being derived from (77a). He adds that the term that is generally employed by linguists for the syntactic relationship that holds between (77a) and (77c) is "ergative": the subject of an intransitive verb becomes the object of a corresponding transitive verb and a new "ergative" subject is introduced as the "agent" (or 'cause') of the action referred to 77c illustrates.

## **2.9 Thematic roles and thematic relations**

To explain the evidence that verbs seem to "select" semantically appropriate phrases with which they occur, linguists have proposed that these phrases, or arguments of a verb, are assigned certain semantic roles thematic roles, by the verb. In the literature, the more specific relationships between verbs and their arguments are referred to in terms of thematic roles or theta roles ( $\Theta$ -roles). Lamidi (2013:57) observes;

In the predicates argument structure, the subject and object positions of a verb are said to be occupied by arguments like nouns. The terms; subject and objects are, however relational terms which show the positions of an argument in relation to the verb. Since the verb is central, it means that the adjoining arguments are dependent on it for

their full interpretation. Thus, we say that the verb assigns thematic roles (or theta roles) to them. In other words it theta marks them.

The role assigned to a noun by the verb defines the thematic relations the noun has with the verb. In generative grammar (in particular Government binding theory and the Standard Theory of Transformational Grammar), as Sowa (2001) explains, a theta role is the formal device for representing syntactic argument structure (the number and type of noun phrases) required syntactically by a particular verb. For example, the verb 'put' requires three arguments (i.e. it is trivalent). The formal mechanism for implementing this requirement is based on theta role. The verb 'put' is said to "assign" three theta roles. This is encoded in a theta grid associated with the lexical entry of the verb.

Aerts (2002) is of the opinion that English sentences can be described in two ways, functionally and formally, for example, the sentence; 'The boy eats bananas' consists of subject which is 'the boy' and predicator (verb) which is 'eat' and direct object which is 'bananas'. The subject and direct object are filled by noun phrases whereas the predicator is filled by a verb. The verb 'eat' cannot form a sentence by itself; it needs other elements to construct a meaningful sentence. The above sentence shows that 'eat' needs who did the act of eating something and what is eaten, thus, the one who does the eating and what is eaten are called arguments or participants. As explained in the above examples, the verb like 'roll' cannot express a complete thought on its own, it needs to involve another participants like 'the boy' and 'the ball' if it is a transitive verb. If it needs only one participant, it is used as an intransitive verb; thus, these properties are linguistically called thematic roles or theta roles. So, if someone talks about the number of thematic roles that a predicate assigns, he refers to theta roles and each theta role assigns only one role in a sentence.

Haiden (2005) adds that according to Chomsky (1981), each argument assigns one theta role and each theta role assigns only one argument. Also, Saeed (2007) observes that for a language to be functional it must have some properties of assigning functions or roles to its lexical items to the extent that lexical items can be accessible to many roles but only one of the roles will be prominent. Below are the lists of some thematic roles assigned to different phrases according to Saeed (2003: 149-150).

**Agent:** Initiator of the action (capable of volition)

78. *The puppy* chewed up the shoe.

*Marty* played chess.

**Patient:** Entity undergoing the effect of some action or change of state

79. The ice melted.

The sun melted *the ice*.

Marty cooked *the bacon*.

**Theme:** Entity moved by the action or whose location is described (with no change of state)

80. *The horse* is in the stable.

Junita passed *the ball* to Jake.

Marty gave Leo *a book*.

**Experiencer:** Entity that is aware of the action or state described by the verb but is not in control of that action or state

81. *Marty* felt happy.

*The referee* observed the game.

*The deer* heard the hunter in woods.

**Beneficiary:** Entity for whose benefit the action was performed.

82. Marty gave *Leo* the book.

We baked a cake *for Lorian*.

**Instrument:** Means by which an action is performed or by which something comes about

83. She flipped the pancakes with *a spatula*.

Miss Scarlet killed Colonel Mustard with *a lead pipe*.

**Location:** Place in which something is situated or takes place.

84. We ate at *Denny's*.

John sprinted *to the goal*.

**Goal:** Entity towards which something moves, either literally or metaphorically.

85. Marty gave the book to *Leo*.

She gave a speech *to the club*.

**Maleficiary:** This semantic role is the function played by the entity, which suffers indirectly from an action which one entity performs on another of which the maleficiary has an interest. Mbah (2011) notes; The role indicates a negative impact on the maleficiary resulting from an action which an entity performs on another. Ndiribe (2008) attributes the

origin of this theta role to Napoli (1996) who gives the following examples from Kichaga a Bantu language spoken in Tanzania.

86. (a) N ā ī lyí ià m kà kélyā

Eat wife food

He is eating food/ on his wife

The argument translated as 'wife' is understood to be one whose benefit or detriment the eating took place. The maleficiary sense in Ndiribe's explanation can be compared to the sentence: 'My cat is lost on me', where the object of 'on' is understood to be adversely affected by the loss of the dog.

Kichaga appears to be a null subject language. It does not show the subject of the sentence overtly yet the rich morphology of the language sustains the interpretation of its covert presence. The agent *he* acts on the patient *food*.

Ndiribe (2008) differentiates between maleficiary and patient pointing out that maleficiary must be a human while a patient may or may not be a human. He maintains that the action of the agent must be negative to the recipient using the following Igbo examples.

87(a) Òke tabisiri wayà redio m̄

Rat eat break (PST) wire radio me

'Rat destroyed my radio wires'

(b) O riri nri nwunye yā

He eat rv past food wife him

'He ate the food that is meant for his wife'

(c) Oberè ràchàrà ofe nne yā

Obere lick rv past soup mother him

'Obere licked his mother's soup'

According to Ndiribe, the arguments in (87a-c) above as *m*, *nwunye ya*, and *nne ya* are understood to be the ones on whose detriment the 'destruction of wires', 'eating of food' and 'licking of soup' took place. In (87a) the possessive pronoun *m* has 'his radio' damaged as a result of the activities of the 'rat' which destroyed the wires. In (87b) the noun phrase *nwunye ya* has no food to eat as a result of the activity of the husband, who ate the food meant for the wife, while in (87c) Obere's mother had her soup tampered with as a result of

her child who licked the soup she kept in the house. All these actions of the agents in the sentences above are all negatives to the recipient. So, *m*, *nwunye ya*, and *nne ya* are the maleficiaries of the sentences above.

**Source:** Entity from which something moves, either literally or metaphorically.

88. The water bubbled from *the spring*.

They came all the way from *New Orleans*.

The verb *sleep*, for example assigns the thematic role *patient* to one argument, but the verb *meet* two arguments and assigns the role *agent* to one and *theme* to the other.

89. *sleep*: patient

*meet*: agent, theme

As stated here, the relationship between the verb and its arguments is purely semantic; what is lacking, however, is the information about where each argument occurs in the sentence and the category of the argument itself as NP, PP, and so on. Nothing in the above information about 'sleep' and 'meet' tells us for example, that 'meet' assigns the agent's thematic role to an NP in the subject position and the theme's thematic role to an NP in the object position. This syntactic information must be included somewhere in our grammatical knowledge, in what we refer to as argument structure. Our knowledge of syntax and semantics includes not only the thematic roles that a verb assigns but also principles and rules that determine the syntactic categories and positions of those arguments.

## 2.10 Empirical Review

Ergativity in Igbo has not received much attention as in other languages like Basque and some Australian languages. Nwachukwu (1983:108) as quoted in Mmadike (1997) observes that the characteristic whereby a subset of verbs can function either transitively or ergatively has also been observed in Igbo. Such verbs have been identified in Igbo by Nwachukwu (1976, 1983), Uchechukwu (2007) as well as in other languages (Lyons 1968, Kaddari 1973, Burzio 1986 cited in Radford 1988).

Nwachukwu (1983:103) agrees that some Igbo verbs are transitive even though this cannot be defined in strict structural terms; he resorts to a 'semantic - syntactic' approach in his explanation of transitivity in the Igbo language

Ogwueleka (1987) states that in Igbo and some other languages, there are some verbs which can be used in a sentence with a causative source as the initiator of the expression of the verb; the same verb may be used in another sentence to express a similar action but without an expressed causative source. The latter construction without a causative source he terms ergative. He argues that some of the causeless expressions are transitive in the sense that they have causative agents. For example;

90 (a) Obi kùru Ada osisi- "Obi hit Ada with a stick"

(b) Osisi kùrù Ada - "A stick hit Ada"

In 90(a), Ada is the entity affected by the transitive expression of the verb. In the causeless sentence in 90(b), it is still the affected entity. Therefore, the verb kùrù remains transitive both in (90a) and (90b), since the affected entity (Ada) remains affected in both (90a) and (90b) i.e. in both causative and causeless constructions respectively. Here the obvious difference between sentences in ergative pair is the presence or lack of the causative agent.

Mbah (1999), supporting Ihionu (1992) concludes that all Igbo verbs are transitive. He demonstrates the claim with a glossary of unaccusative as well as unergative verbs in English by Levin (1984/86), (1987) showing that such verbs subcategorise complements obligatorily in Igbo. Mbah 1999:153-154 gives an overview of such verbs in the examples below.

Unergative: Verbs of Communication

91(a)

- i. Sarah spoke.
- ii. Sarà kwuru okwu



(b) Verbs of manner of speaking

- i. She shouted
- ii. o tiri mkpu

(c) Verbs of Sounds made by animals

- i. The dog barked.
- ii. Nk [tà ahx gbq̄r̄q̄ x̄ja

(d) Verbs of bodily processes

- i. Paul coughed
- ii. Pol kwàrà xkwarà

(e) Verbs of gestures and signs

- i. Linda nodded.
- ii. Lindà kwèrè n'isi.

(f) Verbs of performance

- i. Chika danced.
- ii. Chikà gbàrà egwu.

92. Unaccusative Verbs

(a) Verbs of change of state.

- i. Jane died
- ii. Jane nw̄rx̄ (qn̄wx̄) .

(b) Verbs of change of colour

- i. The apple blackened.
- ii. Xdara ahx gbajiri ojii.

(c) Verbs of existence and occurrences

- i. She exists.
- ii. Q d [ ndx

(d) Verbs of appearance and disappearance

- i. Okoeke disappeared.
- ii. Okoeke dèrè mmiri (Nsukka dialect)

In Mbah's view, 91 and 92 support the contention that all Igbo verbs are transitive. They subcategorise complements.

Mmadike, (2008:148-155) used the principles and parameters framework of Chomsky (1981, 1986(a), 1986(b)) and other related works in highlighting ergative verbs in Igbo. He posits that in the ergative structure, the derived subject NP originates as the deep structure object NP of the ergative verb. The deep structure object subsequently moves into the base generated empty subject NP position having a coindexed trace of itself at the extraction site. He exemplifies ergatively derived structures in Igbo as follows:

93(a) [Mmanụ] m kwafùrù

Palm oil my spill-pst

'My palm oil got spilt'

(b) [Ahia] zùrù n'obom ụnyaahu

Market buy-pst in square yesterday

“There was a market transaction at the village square  
Yesterday”.

(c) [Ebelebe] gbùrù ebe ahụ

Wonder kill-pst place that

'Wonders were performed there'

(d) [Elekere ise] nà-àkụ ugbu à

Hour five Aux-knock now

'It is now five o'clock'

(e) [Ogelè] àkụọla n'ogè taà

Gong knock-perf in time today

'The gong has sounded early'

Uchekwukwu (2007) identifies the subject-object switching (SOS) phenomenon of the Igbo verb as being in accord with the peculiarity of the Igbo verbal structure or verbal complex or the inherent complement verb of Nwachukwu (1987). Using the cognitive grammar's concept of construal, he reveals that in the case where the subject is the experiencer, there is just one participant. When the case is reversed, two participants are then involved as soon as the

stimulus takes the role of the subject and the object becomes the experiencer. He gave the following examples.

94(a) Uche na- akwa xkwara  
 Uche AUX - verb cough  
 Subj-Experiencer Obj-Stimulus  
 [lit. Uche is coughing cough]  
 Uche is coughing

(b) xkwara na-akwa Uche  
 Cough AUX -verb Uche  
 Subj.-Stimulus Obj.-Experiencer  
 [Cough is coughing Uche]  
 'Uche has a cough'

In 94a, *Uche* is the subject-experiencer while *xkwara* 'cough' is the object-stimulus. But in 94b, *Uche* becomes the object-experiencer and *xkwara* - the subject-stimulus. The syntactic change of position between the subject and the object is what Uchechukwu referred to as subject-object-switching (SOS). The verbs that participate in this kind of inversion are subject-object-switching verbs.

Nweze (2014), in her study entitled *Ergativity in Igbo: Insights from Nsukka Dialect cluster* says ergativization process involves the deletion of the agent in the causative construction which is recoverable if desired implying that ergativity is more of a surface phenomenon. Noting that certain agentive constructions have causative sources as the initiator of the action, Nweze (2014) agrees with Ogwueleka (1987), holding that in Igbo and some other languages, there are some verbs which can be used in a sentence with a causative source in order to express the action of the verb with the following examples from Imiryike variety of the Nsukka dialect.

95(a) Ñkèchi gbàrè àmà - Nkechi leaked the information  
 (b) Àmà gbàrè - Information leaked

96(a) Chinedùkàrè ekwe - Chinedu rang the wooden gong  
 (b) Ekwe kàrè - The wooden gong rang

97(a) Qshua` hwurù eshxshua - The forest grew weed  
 (b) Eshxshxa hurù - Weeds grew.

Nweze (2014) observes that the syntactic positioning of words in "a and b" in the above examples show that the object now turns out to be the subject the construction. All the above

sentences have two nominals, one of which is the direct object, which shows that they contain causative agents. All constructions in 'a' part of the illustration have initiator of the action and consequently the entity that experiences the effect of the actions of the verb. Explaining further Nweze (2014) notes that it is not always obligatory that a causative sentence is uttered before a causeless one, causeless sentences may arise out of questions, excitement, fear, sorrow etc. just as causatives giving the examples- *Gini mere?*, *Odo nwxxrx*, *qkx gbarə* etc. However, Nweze adds that the omission of the causative agent in ergative structure should not paint the picture that non-agentive constructions have no initiator of actions. Nweze (2014) claims that the rule responsible for the formation of ergatives is move-Alpha ( $\alpha$ ) by which the object of the transitive verb is externalized taking the subject initial position. Nweze however notes that not all verbs in the dialect which can undergo ergativisation can do so in standard Igbo, adding that ergativity is a feature of Igbo syntax, hence the verbs involved vary from dialect to dialect. Nweze concludes adding that the verbs that easily yield to transitive alternations in Imiryike Dialect cluster include verbs of destruction and killing, alarm, verbs denoting body injury etc.

From this review of literature on ergativity in the Igbo language, we observe that not much has been done on the realization of Igbo ergative verbs.

## **2.11 Summary**

It is evident from the preceding review about works on ergativity that a huge amount of data on ergative verbs in many West African Languages has not been subjected to detailed investigation including those of the Igbo language. Mmadike (2008) and Nweze (2014) used the Move-Alpha principle for the formation of ergative structures. A critical appraisal of the review shows that to the best knowledge of the researcher, no scholar has analysed the interface of syntax and semantics in Igbo ergative structures using an eclectic framework.

## CHAPTER THREE

### METHODOLOGY AND THEORETICAL FRAMEWORK

#### 3.0 Preamble

In this chapter, we shall take a look at the methodology and different theories that are related to this work and then a critical study on the framework of the work will be emphasized.

#### 3.1 Method of data collection

The design of the study is descriptive-analytical. The data were drawn from primary and secondary sources. The primary sources comprise personal experiences as a native speaker of Igbo. To avoid being subjective, additional personal unstructured interviews were conducted and data were cross-checked with competent speakers of the language.

Secondary sources were drawn from books and materials from libraries. The internet was consulted in quest of useful materials that are related to the research topic. Journals, seminar and conference papers, which are pertinent to the study constitute the source of secondary data collection that were juxtaposed with data generated from primary sources. Materials from lecture notes and readings on theoretical models gave new insight into the organisation of facts. Inputs from previous thesis on related subject matter also guided the study.

#### 3.2 Theoretical framework

##### 3.2.1 Case Theory

When nominals or pronominals are given different morphological markings according to their grammatical role, we speak of case marking. Case is defined as the change in the form of nouns or pronouns in relationship to the other words in the sentences. The case of a noun or pronouns is an inflectional form that indicates their grammatical function in a phrase, clause or a sentence.

McGregor (1972) views case as a system of marking dependent nouns for the type of relationship they bear to their heads. It is a grammatical category determined by the syntactic or semantic function of a noun or pronoun. In other words, case is used to express the morphological relationship between a governor and the NP it governs. The case assigned to a given NP is determined by the function of that NP. It is claimed that

"the principal function of case features is to encode (indirectly) grammatical relations (subject, object etc) which in turn are mapped onto  $\theta$ -roles via the lexical properties of the predicates

to which they bear these relations. Since NP typically require  $\theta$ -roles, it is in some sense natural that they should bear the morphological features which indirectly encode these roles" (Jones 1988:100).

Case should be distinguished from thematic roles such as Agent and Patient. They are often closely related and in languages such as Latin, several thematic roles have an associated case, but cases are morphological notions, while thematic roles are semantic ones. Languages have often exhibit free word order, since thematic roles are not dependent on position in the sentence. Case theory accounts for the formal properties of overt NP's and integrates the traditional notion of case into the grammar. According to Ndimele (2004), case theory deals with the assignment of abstract to overt nominal elements that occur in case-marked position. The theory postulates that an overt nominal is assigned case by virtue of its morphological markings. In effect, the theory is responsible for the regulation and the distribution of NPs of a sentence.

Case is considered an obligatory feature of NPs; hence, a structure is ill-formed if an overt NP fails to be assigned case, or fails to appear in a position to which case can be assigned. This is clearly expressed in the case filter by Chomsky (1981:73); it states, "any sentence containing an overt NP (i.e. An NP that has phonetic content) is ill-formed if the NP is not case-marked.

Languages with rich nominal inflection typically have a number of identifiable declension classes, or groups of nouns with a similar pattern of case inflection. Latin is traditionally said to have six declension classes. They are: nominative, genitive, dative, accusative, ablative and vocative cases. Four major types of cases have been identified in English. They include: Nominative, Accusative, Oblique and Genitive cases. The conditions of cases assignment are partly structural: Structural case assignment may be reflected morphologically especially in pronouns (eg. him, her, them etc.). Accusative case is assigned under government.

McGregor 2009:262 observes that many languages employ a nominative- accusative system of case marking, a system in which as Latin, the subject of a clause occurs in nominative case, the object in accusative case. Typically, the nominative case is the unmarked case: formally, it has no overt marker, in contrast with the accusative, which is usually marked by a morpheme with phonological form. In Hungarian, for example, the nominative form of a

noun is its citation form (the form used when you mentioned the word), whereas the accusative is marked by the suffix-(v)t-thus *vonat* 'train' is the nominative and citation form, the accusative form being *vonat-at*. (The formal unmarkness of the nominative aligns with other characteristics typical of unmarked categories).

An alternative system of case marking, found in fewer languages, uses the same morphological marking for the subject of an intransitive clause and the object of a transitive clause, and different marking for the subject of a transitive clause (the term 'subject and object are used loosely here and are not meant to imply that these are genuine grammatical relations).

Languages are not always consistent in their case-marking systems and it is not uncommon to find a nominative- accusative system in one part of the grammar and an ergative-absolutive one elsewhere, or even complete absence of case-marking on some subjects and objects. Thus, Latin's daughter languages: French. Spanish and Italian have nominative accusative case-marking for pronouns, but not nouns. In Anguthimri (Pama- Nyungan, Australia), nouns inflect on an ergative- absolutive basis, while pronouns inflect according to a nominative- accusative system (McGregor 2009:262-263).The distribution of the two case-marking systems is not random. In cases like those just mentioned, the **animacy hierarchy** of Table 3 accounts for the case-marking system used on a nominal or pronominal. The way this is to be read is that if a nominative-accusative case system is used at some point, it will be used everywhere to the left of that point; and correspondingly, if an ergative-absolutive system is used at some point, it will be used everywhere to the right. This is in agreement with the Anguthimri facts mentioned above, and with Malayalam (Dravidian, India), where nominative-accusative marking covers the whole range of animate nouns, but not inanimate nouns.

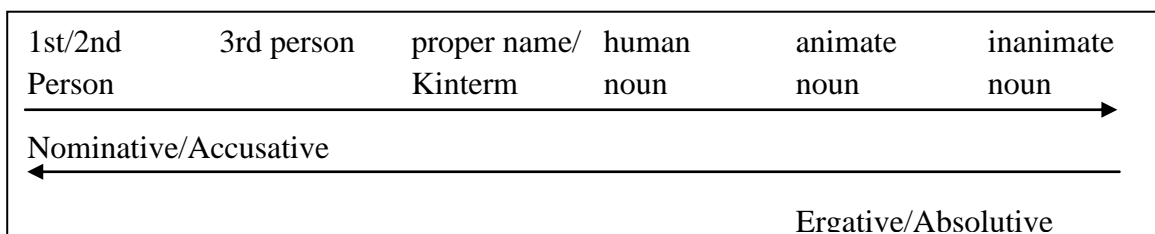


Table3. The animacy hierarchy

This hierarchy has proved useful beyond case-marking. It is also relevant to the grammatical category of number. If a number contrast is obligatory at some point, it will be maintained everywhere to the left of that point. Some languages- for example, Kharia (Munda, India) - distinguish number for animates, but not inanimates, or for pronouns, but not nouns.

Elaborating further, (Mcgregor 2009) adds that an alternative system of case marking, found in fewer languages uses the same morphological marking for the subject of an intransitive clause and the object of a transitive clause, and different marking for the subject of a transitive clause (the terms 'subject' and 'object' are used loosely here and are not meant to imply that these are genuine grammatical relations).The case of transitive subject is called ergative and of the intransitive subject and transitive object, absolutive. Such a case system is found in Chukchee (Chukocho- Kamachatkan, north-eastern Siberia).In examples 98 and 99, the transitive subject is marked by zero ( $\emptyset$ ), as is the transitive object in 99, but the subject of the transitive clause is marked by *-nan*. This is typical of an ergative-absolutive system; it is generally absolutive that is unmarked as McGregor (2009) exemplifies.

- |     |                             |                   |                 |          |
|-----|-----------------------------|-------------------|-----------------|----------|
| 98. | $\eta$ inreq- $\emptyset$   | gətg-etə          | qət-gʔi         | Chukchee |
|     | boy-ABS/SG                  | lake-DAT          | went-3SG        |          |
|     | 'The boy went to the lake.' |                   |                 |          |
|     |                             |                   |                 |          |
| 99. | gam-nan                     | walə- $\emptyset$ | tə-mne-gʔen     | Chukchee |
|     | 1-ERG                       | knife-ABS/SG      | 1SG-sharpen-3SG |          |
|     | 'I sharpened the knife'     |                   |                 |          |

(Adapted from Tallerman (2005: 163-164))

In 98, the transitive subject ( $\eta$ inreq- $\emptyset$ ) is marked by  $\emptyset$  as is the transitive object (walə- $\emptyset$ ) in 99. But the subject of the transitive clause is marked *gam-nan*.

In languages with rich inflectional morphology, as typified by Italian, Spanish, and Russian, caseforms are usually realised morphologically. This is referred to as morphological case. However, such languages as English and Igbo are deficient in inflectional morphology. In these languages, therefore, case forms do not manifest overtly, except in highly restricted cases. Thus, in such languages, abstract case is assigned. Case inflection is residual in English, it features in pronominal NPs to indicate number, gender, and person agreement.



In Igbo, only the first person (*m/mx*) second person (*i/[g l]*) and third person (*o/ɔ/ya*) singular pronominal forms seem to exhibit features of morphological case (see Mbah 2014). The rest of the pronominal forms are invariant, as the table below shows.

**Personal pronoun forms in Igbo**

Person	Singular			Plural		
	Subj.	Obj.	Poss	Subj.	Obj.	Poss
1st	<i>m/mx</i>	<i>m/mx</i>	<i>m/mx</i>	<i>àny[</i>	<i>àny[</i>	<i>àny[</i>
2nd	<i>i/[</i>	<i>g[</i>	<i>g[</i>	<i>xnx</i>	<i>xnx</i>	<i>xnx</i>

**3.2.2 Government and binding theory (GB Theory)**

Government and Binding theory is an approach to the study of human language based on an abstract and underlying representation and transformations successively altering that structure. This approach posits universal principles innately represented in the mind and simple parameters, fixed by the language learner from simple evidence, determining how languages can differ.

The theory constitutes a further development on the Extended Standard Theory (EST and Ultimately of Classical Transformation Grammar. It shifts from the study of rule systems to systems of principles which is to reduce the range of possible alternative rules in linguistic analysis.

As noted by Marantz (1995:352) GB is a continuation of the trend in syntactic theory which began in the late 1970s with the ultimate goal of moving from specific grammatical rules that describe particular syntactic constructions to more general principles, which interact to explain syntactic phenomena. The basic assumption according to Chomsky is that languages of the world consist of universal principles and an array of options (parameter). GB is basically concerned with universal principles of languages and this is seen in its modular character which allows for interaction at interfaces (i.e. one subsystem generates an output that serves as input for another). The name refers to two central sub theories of the theory : government, which is an abstract syntactic relation applicable, among other things, to the assignment of case and binding, which deals chiefly with the relationships between pronouns and the expressions with which they are co-referential.

This theory is more modular than any of the previous versions. A sentence is being assigned a description simultaneously at four levels of description and according to a set of principles that regulate a different level and relations between them, each level and each theory contribute to the total account of a sentence. Each of the various models and sub theories is concerned with a particular aspect of the description of a sentence. Each model will stipulate the degree of variation permitted for that particular model (Taiwo 2014).

#### Levels of Representation in GB

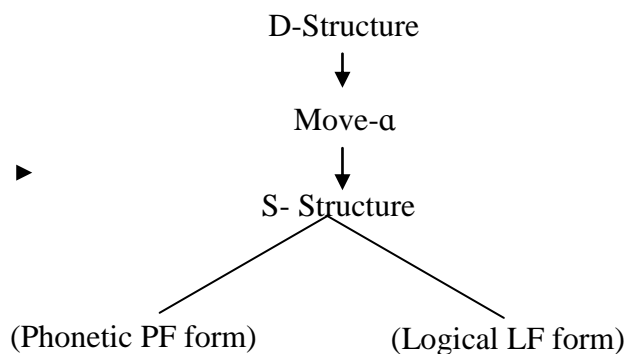


Fig. 2

GB differs in a number of significant ways from previous theories. In the Standard Theory for instance, the D structure was the sole determinant of meaning. But in GB, the rules of the semantic components operate exclusively on the S-Structure. Again, the phonological and semantic components of Standard Theory are now replaced in GB by two levels of analyses known as the "Phonetic Form (PF) and Logical Form (LF) respectively. The PF is the output of Grammar at the sound end, while the LF is the output of grammar at the meaning end. Carnie (2007) maintains that these two levels represent the final products of computation; hence they should appear at the end of the derivations.

In GB, the D-structures and S-structures are related to each other by transformation which is now known as 'Move  $\alpha$ ' which means moving anything but in reality it is severely controlled by the various sub-theories of the grammar. In effect, movement is restricted to lexical materials moving from one place to another, leaving an empty category behind, which is marked by a trace. Movement is chained so that it is visible, not only where a given item came from but also trace all its immediate landing sites.

### 3.2.3 Transformational Theory

This study will be conducted within the frameworks of Transformational Theory of Chomsky (1965) and Theta Theory of Universal Grammar in the analysis of syntax and semantic interface of Igbo ergative structures. The major aim of the syntactic theory which was made popular in *Aspects of the theory of Syntax* was to bring forth a general framework for specifying what is common to languages and how they tend to vary. Transformational theory came into being as a result of the failure of Phrase Structure Grammar (PSG) to fulfil the three levels of adequacies for any syntactic theory to be accepted. These shortcomings are summarized in Mbah (2011:59) as follows:

- (a) It restricts analysis to surface syntax.
- (b) The rules, though on an infinite number of sentences, are themselves few rules.
- (c) It is ineffective in explaining linguistic constructions.
- (d) It is limited by the type of operations which it can carry out e.g. it cannot rearrange items in a given sentence.
- (e) It merely represents the picture of a syntactic structure as it is presented in each language.
- (f) It cannot account for structural differences between pairs of semantically equivalent sentences.

The above shortcomings of the PS grammar necessitated the introduction of transformational theory as developed in the works of Chomsky (1965).

Chomsky (1965) claims that, it is not always that all the lexical items that give a sentence its meaning appear in the spoken form of the sentence. The fact that they are elliptically absent does not foreclose their existence in the underlying structure (Robinson 1970, Mbah 1999). In other words, adequate grammar syntax must be able to provide all the lexical items that contribute to the meaning of a sentence and account for what happened to them before the surviving lexical items are spoken. These postulations have resulted in three levels of transformational grammar, namely: deep or underlying structure, transformational and surface structure. The Deep Structure (D-Structure) is the level where lexical items that give a sentence its meaning appear in their natural order. It is an abstract level where the underlying representation of formation is fully specified and all the constituents are in their original positions. For example, the sentence in 100a has the following deep structure in 100b.

100(a) Eze riri ji

(b) Eze past-eat yam (Deep Structure).

Thus the meaning of the sentence is derived from its deep structure.

The strings in 100b are considered unpronounceable, thus, a mechanism that will make it pronounceable is needed; a condition that is satisfied under the transformational component, which is the second stage.

Mbah (2009) states that transformation is the changes which the D-structure undergoes to make its constituents take their phonological positions so that, the structures could be grammatical or acceptable. By transformation operations, the elements of syntactic structure can be moved from one syntactic position to another or deleted, such that even though they appear in the deep level, they become absent in the surface structure or may be adjoined such that even though they are absent in the D-structure level they find themselves at the S-structure level or they are substituted with elements which are not originally at the D-structure. It can then be said that transformation is a rule that states how constituents of a sentence are reorganised or moved from one node to another.

Transformations act on the D-structure and map elements there unto the surface structure. This means that it changes the structure which occurs at the D-structure to what is formed at the S-structure; in other words, the S-structure is the physical or concrete form or presentation of structures in which the structure finally appears after the application of transformations.

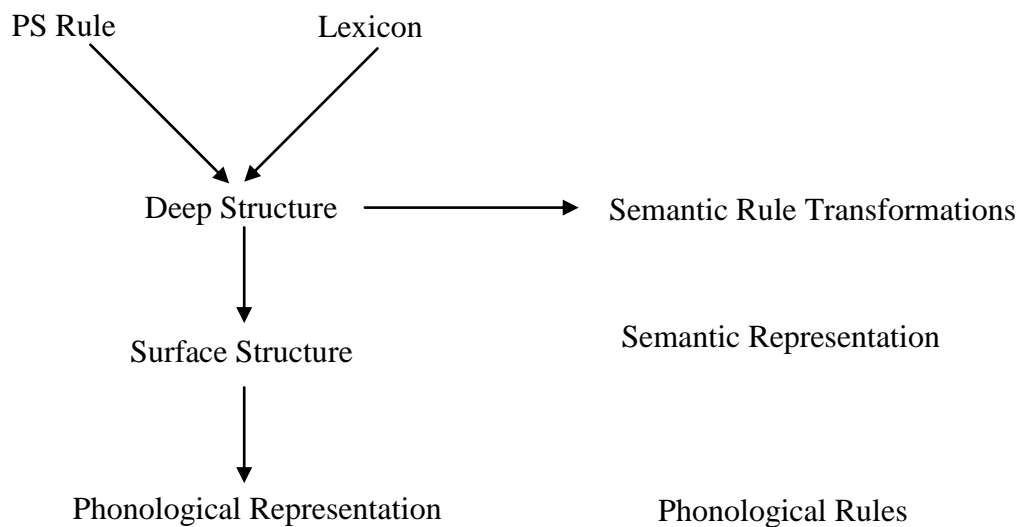
(a) Movement transformation: This type of transformation involves the movement of some elements of the surface structures from their original syntactic positions to a position before or after the original. When the landing site is before their original position, it is called topicalisation, while if the landing site is a position after their original positions, the movement is called extraposition.

(b) Affix hopping: This is a kind of movement transformation which takes place at a morphophonemic level. It involves a limited movement in which inflectional affixes are positioned after relevant verbs in readiness for their combining together through the application of the appropriate morphophonemic rules.

(c) Deletion transformation: This transformation involves the elimination of certain constituents from D-structure. In English and Igbo, many examples that buttress this point include: dative movement deletion, imperative deletion, equi-VP (verb phrase) deletion, deletion under the condition of indefiniteness and equi-NP (noun phrase) deletion.

In *Aspects*, Chomsky (1965) proposes the structure of grammar as follows: A grammar contains a syntactic component, a semantic component and a phonological component. The syntactic components consist of a base and a transformational component. The base component consists of a categorial subcomponent and a lexicon. The base generates the D-structure. A deep structure enters the semantic component and receives a semantic interpretation. It is mapped by transformational rules into a S- structure, which is then given a phonetic interpretation by the rules of the phonological components.

The standard theory of Chomsky (1965) holds that meaning is complete before transformation ever starts. Consequently, transformation presupposes that rearranged or deleted transformational structure have no meaning attached to them. This claim is represented in fig. 3



### 3.2.4 Theta theory

Theta or thematic theory is a sub-theory of Universal Grammar (UG) which deals with the valency requirements of verbs. It is an adaptation from the pioneering works of Fillmore (1968), Jackendoff (1972) and Gruber (1976) who had tried to develop theories that would account for the semantic content of the argument of a predicate. It incorporates a set of

principles regulating the assignment of thematic roles. It is assumed that in addition to the assignment of the categorial, subcategorisation, selectional, and morph-phonological features to lexical items, they should also assigned  $\Theta$ -roles. Heageman (1991) maintains that theta theory accounts for the semantic relationship between a verb and its arguments. That a verb theta-marks its arguments means that it assigns theta roles to these arguments. In this way, Riemsdijk (1986) defines theta-theory as the basic logical notion (argument of) that any theory of grammar must account for. The aim of this theory is to determine which NP can be an argument of a verb. Terms such as agent, goal, patient, and so on are commonly used to designate arguments of a verb. Different arguments play different roles with respect to the predicate. Thus, in the example below the subject of 'chew' in (101) plays the role of the 'chewer' and the object plays the role of the 'chewee' (the thing chewed).

101. The dog chewed the slipper

More generally, the subject of large number of verbs is the one that deliberately and consciously carries out the action described by the verb, a semantic role known as Agent. *The dog* is then the agent in (90). The argument that is acted upon by the Agent, i.e. the one sitting in object position, is called the Theme, exemplified by *the slipper* in (101). Roles such as Agent and Theme are known generally as thematic roles or  $\Theta$ -roles (theta roles). However, not all subjects are interpreted as Agents and not all objects as Themes. For example in;

102. John sent a letter to Mary.

John is the Agent of *send* and *a letter* is Theme. Mary has the role Recipient- the receiver of something, indicated by the preposition *to*. Alternatively, Mary is seen as the Goal, i.e. the end point of the action described by the verb. In:

103. Mary received a letter from John

Even though 'Mary' is the Subject; it is still interpreted as Recipient and certainly not as the Agent: Mary is not the one who deliberately performed the act of receiving- one can rarely choose to receive something. Also, consider the following:

104 (a) The dog chewed the slipper

(b) The dog saw the slipper

As have been discussed under example 101, the object *the slipper* is interpreted as Theme in (104a) but not in (104b) where nothing actually happened to the slipper as a result of the dog

seeing it. Moreover, the subject of *see* in (104b) is not an agent as there is no action performed in this case. We call this argument type an Experiencer. Clearly the semantic role that an argument bears depends on the predicate: the subject of *chew* is an Agent and its object is a Theme, while the subject of *receive* is a Recipient and the object of *see* is a Theme. This must then be lexical information about how individual verbs behave, showing that *chew* is different from *see*, and so must be stored in the lexical entry for each predicate.

105. *chew*: [- NP], <agent, Theme>

Receive: [ -NP PP] <recipient, theme, source>

See: [- NP], <experiencer, theme>

The above lexical entries in 105 not only include the subcategorisation frames of the verbs detailing what complements they take but also a theta grid supplying information about the roles that their arguments take.

The assignment of  $\Theta$ -roles to the argument positions of a predicate is not done randomly.  $\Theta$ -role is highly constrained by the  $\Theta$ -Criterion which is stated in Chomsky (1981(a):136) as follows:

(106) each argument bears one and only one  $\Theta$ -role, and each role is assigned to one and only one argument.

The implication of  $\Theta$ -Criterion is that "what the meaning entails about every argument must always be distinct enough that two arguments clearly do not fall under the same role definition" (Dowty 1991:549). In other words, the  $\Theta$ -Criterion ensures that  $\Theta$ -roles are assigned uniquely to the argument positions of a given predicate. Thus  $\Theta$ -roles and point of view are in a one-to-one correspondence.

### 3.2.5 Light verb hypothesis

Jespersen (1965) first coined the term light verb to refer to verbs which, though they may have a fuller semantic usage in other contexts, can be used in combination with some other element, typically a noun or verb, where their contribution to the meaning of the whole construction is reduced in some way. For example, consider the following:

107(a) We had a walk = We walked

(b) They did a dance = They danced

(c) I took a look = I looked

(d) She made a comment = She commented

(e) You should give it a kick = You should kick it

Jespersen notes that the contribution of light verbs to the meaning of an expression is a complex and subtle issue. Citing the examples in 107, he concludes that light verbs have something to do with argument structure as the main difference here is to do with the number of argument.

108(a) I took a bath = I bathed (myself)

(b) I gave him a bath = I bathed him

The light verb construction in 108a, has two arguments: 'I' and 'bath' but the full content verb construction in 108b has only one argument 'I'. The examples in 107 demonstrate that the contribution of the light verb can affect aspect (do a dance versus dance) and duration (take a look versus look) of an event. Observing further, Jespersen (1965) says that light verbs lie somewhere between thematic verbs with a full descriptive content and functional verbs which play no role in the thematic structure of the sentence. This is why they are called light verbs as they make a contribution to thematic and other aspects of semantic structure, though a lighter one than fully thematic main verbs. He equally mentioned that it has become standard in recent years to represent light verb with a lower case 'v' rather than an upper case 'V' which is used for fully thematic verbs.

Most theoretical approaches to light verb construction posit some kind of complex predicate formation. For example, Jackendoff (1974) posits a complex predicate rule that combines the verb and its complement into a single predicate. Grimshaw and Mester (1988) propose an operation of argument transfer that transfers argument of the noun to the light verb which is viewed as "thematically incomplete". In a similar analysis, Butt (1995) says that the light verbs are incomplete predicates which combine with complement by an argument fusion operation. Goldberg (2003) gives a construction grammar analysis where the V+NP forms a V. In their later analysis, Culicover and Jackendoff (2005) assert that the light verb contributes just a syntactic frame, while the meaning of N unifies with V. Agreeing with Culicover and Jackendoff, Bruening (2015) suggests that the defining property of a light verb construction is that the verb contributes relatively little to the meaning, while its complement, an NP provides the bulk of the semantics as his examples from English reveal.



- 109(a) She had a bath
- (b) Take a look at this
- (c) She put the blame for the accident on him
- (d) She gave a sigh

Bruening observes that NP complements to light verbs contribute the bulk of meaning, for example, 'take a look' is more or less equivalent to the simple verb 'look at'.

In their contribution Hale and Keyser (1993) in agreement with (Jespersen 1965) see light verb as 'v' (lower case) and regular verbs as 'V' (upper case). All the analysis treat light verb as special in some way. Except the last, every analysis proposes some kind of complex predicate formation. This study concurs with Bruening (2015) that the light verbs are regular verbs with fairly little semantic specification. Their complements are just regular complements. He stresses that the only two things that are independently needed to account for light verbs are the fact that NPs can be eventive; and the acknowledgement that the logical arguments of NPs can be controlled. On this view, light verbs are nothing more than members of a subcategory of obligatory control verbs. This theory will be used to analyse the light verbs used as data in this work.

### **3.3 Justification for the choice of theoretical frameworks**

The reasons for the choice of transformational and theta theory as the models of analysis are as follows: in the transformational theory, elements of syntactic structures can be moved from one syntactic position to another or deleted such that even though they appear in the deep level, they become absent in the surface structure. Ergativity is a surface phenomenon involving an intransitive sentence that originates from a transitive counterpart. It involves deletion and movement of arguments of predicates from one syntactic position to the other. Transformational theory is the linguistic theory that conveniently account for the syntactic derivation of ergative structures. Again, the present study is on the analysis of the interface of syntax and semantics in Igbo ergative structure and argument structure is the interface, the theta theory is employed to account for the semantic relationship between a predicate and its arguments in Igbo ergative structures. Moreover, upholding the transformational approach, (Mbah 1999) points out that transformational theory gives an insight into the argument structure of a sentence. In addition, from empirical studies (section 2.10) above, the few researches on ergativity in the Igbo language are carried out within the minimalist framework Mmadike (2008) and (Nweze 2014). Other works: Nwachukwu (1976, 1983), Emenanjo

(2006), Mbah (1999) and Uchechukwu (2007) are skeletal comments on the concept of ergativity in the Igbo language. To the best knowledge of the researcher, no research on the Igbo ergative structures has been conducted within the frameworks of transformational and theta theories. In addition, to account for ergativity in light verbs, the light verb hypothesis will be applied.

## **CHAPTER FOUR**

### **DATA ANALYSIS**

#### **4.0 Introduction**

This chapter makes use of the transformational and theta theories to account for the interface of syntax and semantics in Igbo ergative structure. For the purpose of clarity, the unergative and ergative Igbo verbs are examined.

#### **4.1 Ergativity in Igbo**

Igbo is a strict SVO language. Word order is crucial. It does not have surface morphological or syntactic case marking (except for some pronouns that change their forms in certain syntactic environments), or subject verb concord of any kind but has ergative forms. The language does not case-mark overtly because NPs do not have a morphological inflection to indicate their cases, and there is no number, noun or verb agreement. Igbo is neither strictly ergative nor accusative because there is no morphological inflection showing agreement between the verb and transitive object and intransitive subject or between the verb and the transitive subject. Ergativity is marked structurally in Igbo.

#### **4.2 Unergative and ergative verbs in Igbo**

One of the most interesting things about the Igbo language is its verbs. Generally, verbs are the source of the rich structure of the Igbo language. They conjugate, combine, and modify with other grammatical possibilities. One particular class of verbs, which is very interesting, is the ergative verb. Generally, a sentence has a verb; the verb has a "subject" and sometimes an "object".

In Igbo, some verbs can be used in a sentence with a causative source, that is, the initiator of the expression of the verb; the same verb may be used in another sentence to express a similar action but without a causative source. The construction without a causative source is the ergative construction. Unergative verbs are verbs whose subjects are Agents. In other words, they describe voluntary activities.

Unergative and ergative verbs differ both in their syntactic configurations and in their argument structure. The subject of an unergative verb is perceived as the "doer" of the action denoted by the verb, whereas the subject of the ergative verb has its origin as an object and is perceived as the logical complement of the verb. Both verbs are two types of intransitive verb (i.e. verbs that take only one argument). This distinction is a syntactic one, where the subject of an ergative verb is a derived form of the object, while the subject of the unergative verb

can be characterised as being an actual subject. The idea is that the underlying syntactic structures are different.

110. Ergative: [<sub>VP</sub> V NP<sub>vp</sub>]

111. Unergative: NP [<sub>VP</sub> V<sub>vp</sub>]

The NP that takes the subject position in the ergative structure is on the other hand derived from the NP that exists within the maximal projection of the verb and is therefore its internal argument. The NP that takes the subject position in unergative construction is the external argument because it exists outside the maximal projection of the verb shown by brackets in (111).

Tenny (1992) notes that there are strong general semantic tendencies associated with this syntactic distinction. The agent role has been associated with unergative verbs while a Patient or Theme role is generally associated with ergative verbs. Unergative verbs typically take humans or animals as their subject and describe volitional acts of their subject referents. The semantic role of the subject is that of Agent or Theme and the subject remains a subject in both underlying and surface structures. It is an unergative verb when it represents a volitional act of the Agent as in the example below.

- 112(a) Àda chì-rì qch [̣  
    Àda laugh-rV (past) laughter  
    'Àda laughed'  
(b) \*Qchì ch [̣-r [̣  
    Laugh laugh-rV(past)

In 112a, the verb *ch[r]* 'laughed' represents a volitional act of the subject referent. Though it subcategorises complement *qch* 'laughter' in Igbo (Mbah 1999:154), but the researcher supports Nweze (2014), the view that not all complements are arguments. This is because prepositional phrases may be complements. Arguments must be nouns or pronouns. For a verb to be ergativised, there must be an Agent and Theme (object) either at the surface or deep level, the object of which is capable of occupying the subject NP slot in the ergative pair.

Certain verb arguments cannot be subjects of ergative structures. For example, in the sentence *Nk[ta gbqrq x̣ja*, the ergativised version *\*Xja gbqrq* is ungrammatical showing that the argument of the verb *-x̣ja* cannot occupy the subject slot of an ergative structure. This explains why "qch[" in 112b cannot occupy the subject slot. The structure in 112b is not acceptable in Igbo language. This is because "qch[" though an argument, but is not capable of expressing the activity of the verb *ch[r[* 'laugh'. Other instances of unergative verbs are given below.

113(a) Nwa bè-rè akwa

Child cry-rV(past) cry

'The child cried'

(b) \*Akwa bè-rè

Cry cry-rV(past)

'Cry cried'

114(a) Ha gbà-rà egwu

They dance-rV(past) dance

'They danced'

(b) \*Egwu gbà-rà

Dance-rV(past)

115 (a) Ikem kwù-rù okwu

Ikem talk-rV(past) talk

'Ikem talked'

(b) \*Okwu kwù-rù

Talk talk-rV(past)

116(a) Nnè gwù-rù egwu

Mother play-rV(past) play

'Mother played'

(b) \*Egwu gwù-rù

Egwu gwù-rV(past)

The verbs in sentences 113a-116a cannot take part in ergativisation in Igbo because the complements of the verbs: *akwa* 'cry' (113a), *egwu* 'dance' (114a), *okwu* 'talk' (115a), *egwu* 'play' (116a) are inherent complements of the verbs rather than direct objects (the subjects are agents of the action denoted by the verb). This explains why the derived structure in 113b-116b are not acceptable in Igbo. Unergative verbs describe willed or voluntary acts and therefore assign agent theta role to their internal argument. These verbs include the following Igbo verbs and their compliments: *rx qrx* 'work', *te ofe* 'make soup', *kwu okwu* 'talk', *gbarx ihu* 'frown', *nwe qnx* 'happy', *gwu mmiri* 'swim', *gba qsq* 'run', *gba ama*, *gba izu*, *sx akwa* 'wash' cloth' etc.

#### 4.3 Middle and ergative constructions

Middles stand somewhere between the transitive and intransitive. It involves two arguments, but crucially is syntactically intransitive. A middle verb is associated with two arguments but it assigns one theta-role. While the middle is similar to the intransitive in terms of case-marking, it crucially involves two arguments. Middle verbs are often verbs of perception, emotion etc. Middle constructions do not make reference to an actual event having taken place rather they report a property of the grammatical subject. A very well known property of middles in languages like English is that they almost invariably come with an adverbial modifier that modifies the predicate. Most middles are unacceptable without such a modifier. Consider the example below.

117. \*This book reads

118. \*This wall paints

The behaviour of adverbial in middles is known as 'adverbial effect'. Fagan (1988:201) indicate that the middles in example 117 and 118 are unacceptable without an adverb because there is no activity pertinent to the use of books, for example that is conducted by reading a book rather than by doing something. A middle construction is only grammatical with the adverb occupying the sentence - final position. Middles are typically restricted to the simple tense according to Keyser & Roeper (1984), this characteristic of middles contributes to the

fact that they are generic sentences. The simple sentences are used in English to express timeless propositions, so middles should appear in this tense. Propositions stated are held to be generally true. Thus, middles do not describe particular event in time.

Jingquan (2007) observes that middles bear a striking structural similarity to the decausative in two important ways. First, both lack the expression of the logical subject argument of the transitive base verb and the internal argument is realised as the grammatical subject of the sentence and secondly, the verb does not show any overt morphological marking that distinguishes it from its active counterpart. While middles are always statives, inchoative decausatives (ergatives) can be eventive. There are some further observable consequences of this difference. For one thing, middle cannot be used to describe a particular event in time while ergatives can. The stative properties of middles are a direct consequence of the stativisation operation on the base verb and achieved by a modifier expressed potentially. Jingquan further argues, that a core property of the middle is the requirement of some modification, in most cases, an adverbial modifier. If not an adverb, some other element is typically present, such as negation, stress or modal element. The examples below are some middle constructions in Igbo, the agents are not involved. The verbs involved cannot be ergativised.

119 (a) Xkwarà kwà-rà Eke

Cough cough-rV(past) Eke

(b) Eke kwà-rà xkwàrà

Eke cough-rVpast

'Eke coughed'

120(a) Uzerè zè-rè mmad̀x̀

Sneeze sneeze-rV(past) person

(b) Mmad̀x̀ zè-rè uzere

Person sneeze-rVpast

'Somebody sneezed'

121 (a) Ǹnkq̀ tà-rà Ùgò

Belch belch-rV(past) Ugo

(b) Ùgò tà-rà nkq̀

Ugo belch-rV(past)

'Ugo belched'

122 (a) Agbq gbò-rò Ezè

Vomit vomit-rV(past) vomit

(b) Eze gbq̄-rq̄ agbq

Eze vomit-rV(past) vomit

'Eze vomited'

123 (a) Xt[r[̣ t[̣-r[̣ Èmekà

Straight stretch-rV(past) Èmekà

(b) Èmekà t[̣-r[̣

Èmekà strecht-rVpast straight

'Èmekà stretched'

The base forms of t'he verbs in examples 119a-123a: *kwa* 'cough' (119a), *ze* 'sneeze' (120a), *ta* 'belch' (121a), *gbq* 'vomit' (122a), *t[̣* 'stretch' (123a) are all involuntary bodily processes. The subjects of 119a-123a namely: *xkwara*, *uzere*, *nkq*, *agbq*, and *xt[r[̣* are symptoms rather than agents of the actions embodied in the structures. In other words, the actual causatives are overtly absent. This absence makes the structures middle constructions. The arguments subcategorised may be inverted but not ergativised as in traditional ergative structures. Examples 119b-123b are the derived counterparts. This is called subject-object-switching (SOS) verbs by Uwalaka (1988) and Uchechukwu (2007). Uwalaka (1988) explains that SOS sentences consist of a pair of sentences where one is derived from the other through the inversion of the positions of the subject and object as exemplified above. It differs from conventional ergative structures because in the structures, the subjects are still overtly present.

#### 4.4 Types of ergativity in Igbo

The types of ergativity in Igbo will be highlighted in this section. Igbo ergative verbs consist of two groups: those that manifest ergativity through the inversion of the positions of their subject and objects (arguments) and those that achieve



ergativity through transformation. However, this work centres on Igbo ergativity realised by transformation.

#### 4.4.1 Middle construction ergativity

In the Igbo language, it has been observed that there are some verbs that have the ability to swap their arguments (cf. Nwankwo 2012) (i.e. NP1 and NP2 exchange position with no morphological transformation). These verbs manifest ergativity without the usual deletion of the causative source in one of the two sentences. In this kind of ergativity, the object maintains the same semantic relation with the ergative verb in the two constructions and the effected entity remains the same in both structures without any morphological change on the verb. Here are some examples as Nwankwo (2012:9-17) observes .

124 (a) Nchara gbà-rà gbamgbam

Rust attack-rV(past) the zinc

(b) Gbamgbam gbà-rà nchara

Zinc attack-rV(past) rust

The zinc is attacked by rust

125 (a) Xtx̀ gbà-rà qkà

Weevil attack-rV(past) maize

Weevil attacked maize

(b) Qkà gbà-rà x̀tx

Maize attack-rV(past) weevil

'Maize is/was attacked by the weevil'

126 (a) Afq tò-rò Okoye

Belly grow-rV(past) Okoye

(b) Okoye tò-rò afq

Okoye grow-rV(past) belly

'Okoye has swollen belly'

127 (a) Eze nà-èche ùche

Eze ProgAUX-Vpref-think thought

(b) Ùche nà-èche Eze

Thought-ProgAUX-Vpref-think Eze

'Eze is thinking'

128 (a) Mmiri dè-rè akwà yā

Water soak-rV(past) cloth 3Sg

(b) Akwà yā dè-rè mmiri

Cloth 3Sg soak-rV(past) water

'His cloth soaked'

129 (a) Iwe nà-èwe nne

Anger ProgAUX-Vpref-infuriate mother

(b) Nne nà-èwe iwe

Mother ProgAUX-Vpref-infuriate

'Anger infuriates mother'

130 (a) Qkx gbà-rà xlq̀

Fire kick-rV(past) house

(b) Xlq̀ gbà-rà qkx

House kick-rV(past) fire

'The house burnt'

In both constructions, the same entity suffers the effect of the action of the themes which serve as the grammatical subjects of the constructions.

In examples 124a-130a, there are two elements, the theme and the goal. The action of the grammatical subjects (themes) affected the goals. Note that in each of the examples, the logical object in (a) remains the logical object in (b) despite the inversion. The idea here is to identify some Igbo verbs that can swap their arguments without any morphological transformation as different from the verbs that can be used in a transitive and intransitive alternation with the same meaning.

#### 4.4.2 Syntactic ergativity

This is the type of ergativity observed between two clauses, where a verb is used transitively in one clause and intransitively in another clause. In both clauses, the verb remains the same (no morphological change). In this case,

ergativity is realised through transformation. This study is based on mono-clausal and inter-clausal ergativity.

#### 4.5 Mono-clausal ergativity

This is the type of ergativity that is formed using simple second or third degree verbs (i.e. verbs with two or three arguments respectively).

##### 4.5.1 Ergativity based on second degree verbs

This is the type of ergativity formed from simple verbs that subcategorise two arguments. In the examples that follow; the transitive and ergative (intransitive) use of the simple verb are shown alongside the transformations that yielded the ergative version.

131(a) X kx-rx` mgb[r[mgba

X hit-rV(past) bell

'X rang the bell'

(b) Mgb[r[mgba kx-rx`

Bell hit-rV(past)

'The bell rang'

The ergative structure in 131b is derived via the transformations in 131c.

(c) X kx-rx` mgb[r[mgba

D-Structure: X-rx kx mgb[r[gba

Deletion of subj: -rx kx mgb[r[mgba

Movement of obj: mgb[r[mgba-rx kx

Affix hopping: mgb[r[mgba kx-rx

S-Structure: Mgb[r[gba kxr`

In 131c, the logical subject- X in the D-structure is deleted, the logical object -mgb[r[mgba subsequently moves into the base generated empty subject NP position. The last transformation is the affix hopping rule, in which the -rx

suffix *hops* over the ergative verb *kx* to arrive at the surface structure: *Mgb[r[mgba kxrx̣]*.

132(a) X *kpù-rù xgbq yā*  
Wind sink-rV(past) boat  
'The wind sank the boat'

(b) *Xgbq yā kpù-rù*  
Boat sink-rV(past)  
'The boat sank'

132c shows the realisation of the ergative structure in 132b

(c) X *kpù-rù xgbq yā*  
D-Structure: X -ru kpu xgbq yā  
Deletion of subj: -ru kpu xgbq yā  
Movement of obj: Xgbq ya -rx kpu  
Affix hopping: Xgbq ya kpu -rx  
S-Structure: Xgbq yā *kpùrù*

To arrive at the ergative version in 132b, the logical subject *-X* is deleted. The logical object *xgbq* moves into the base generated empty NP position. The *-rx* suffix then hops over the ergative verb *kpù* to arrive at the surface structure: *Xgbq yā kpùrù*

133(a) X *zx̣-rx̣ ah[a*  
X buy-rV(past) market  
'The students transacted market'

(b) *Ah[a zx̣-rx̣*  
Market buy-rV(past)  
'Market transacted'

133c illustrates the derivation of 133b

- (c) X z̀x-r̀x ah[a  
 D-Structure: X-rx zx ah[a  
 Deletion of subj: -rx zx ah[a  
 Movement of obj: ah[a -rx zx  
 Affix hopping: ah[a zx -rx  
 S-Structure: Ah[a z̀xr̀x`

In 133c, the logical subject *-X* is deleted, the logical object *-ah[a* subsequently moves into the base generated NP position. Then the *-rx* suffix hops over the ergative verb *zx* to arrive at the surface structure: *Ah[a z̀x-r̀x`*

- 134(a) X ti-r̀i mkpu  
 X shout-rV(past) shout  
 'X shouted'  
 (b) Mkpu ti-r̀i  
 Shout shout-rV(past)  
 'There was a shout'

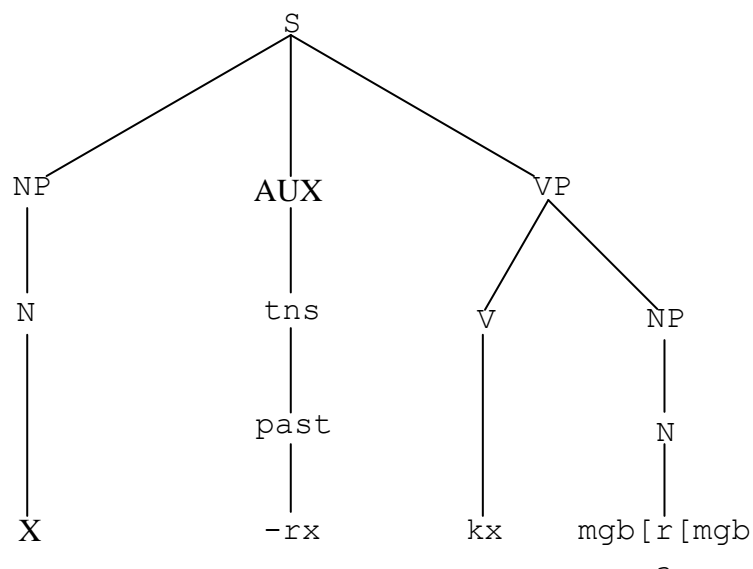
134c demonstrates the derivation of the ergative structure in 132b.

- (c) X ti-r̀i mkpu  
 D-Structure: X -ri ti mkpu  
 Deletion of subj: -ri ti mkpu  
 Movement of obj: mkpu -ri ti  
 Affix hopping: mkpu ti -ri  
 S-Structure: Mkpu t̀iri`

The structures in 134c illustrate the derivation of the ergative structure in 134b, the logical subject *X* in the deep structure is deleted leaving the structure with *-ri ti mkpu*. This is followed by the movement of the deep structure object into the base generated empty NP position. The *-ri* suffix then hops over the ergative verb *ti* to arrive at the surface structure- *Mkpu t̀iri`*.

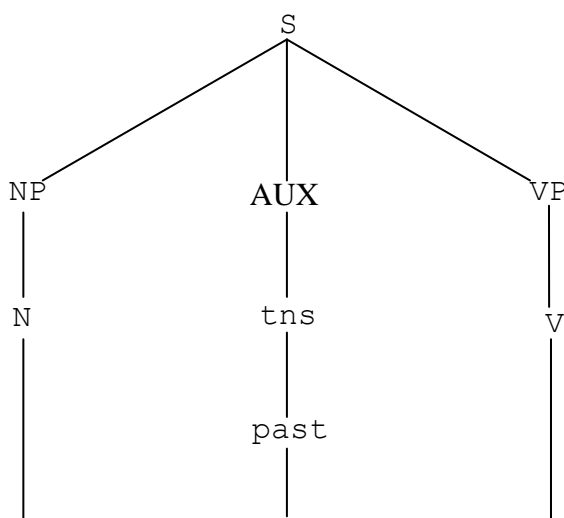
In the above constructions, the verbs participating in ergativity are simple verbs in their past tense form. It could be observed that the grammatical objects of 131a-134a function as grammatical subjects of 131b-134b. In the constructions, there are no changes in the morphology of both the verbs and the NPs involved in both transitive and their ergative counterparts. This implies that ergativity is manifested syntactically in the sentences. The tree diagrams of the derived versions are shown in 135-138. The tree diagrams in 135a and b shows the transitive and ergative use of the verb *kx* in 131:

135(a) D-Structure: X -rV *kx* *mgb[r[mgba]*



Transitive: X *kx-rx* *mgb[r[mgba]*

(b) D-structure: *Mgb[r[mgba]* -rV *kx*

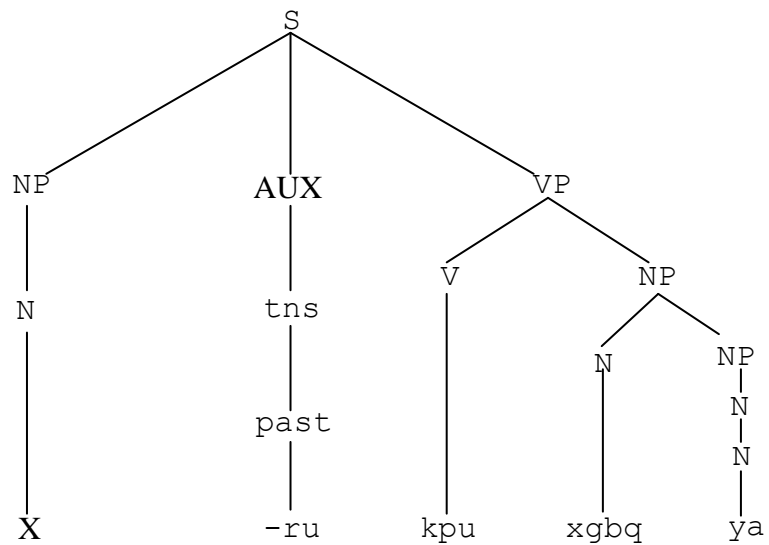


Ergative: Mgb[r[mgba kx-rx̣

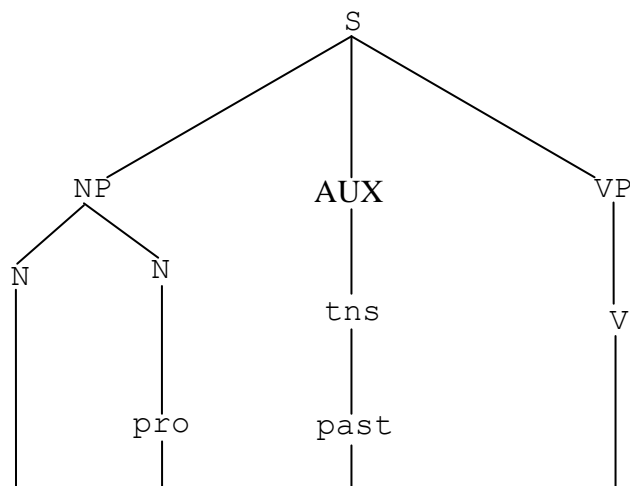
In 135a, the action of the verb *kx* was performed by the Agent **X**, portraying transitivity, but in 135b, the Theme *mgb[r[mgba* became the subject showing an ergative use.

132b has the tree diagrams in 136a and b:

136(a) D-Structure: **X** -rV kpù xgbq yā



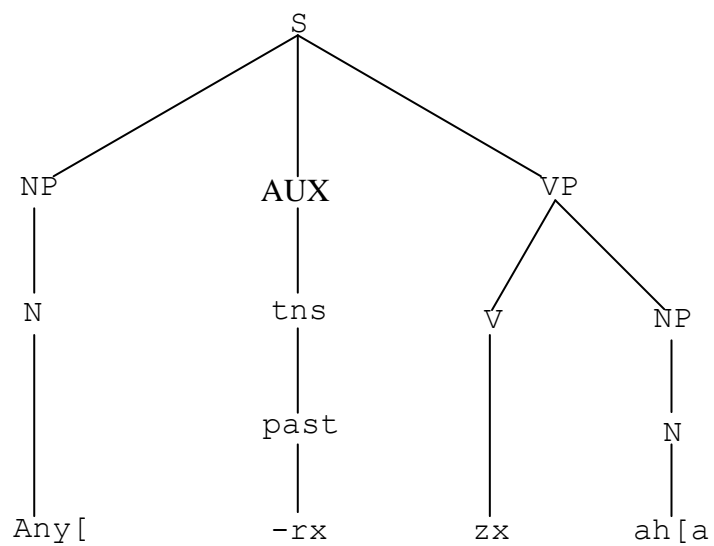
Transitive: **X** kpù-rù xgbq ya



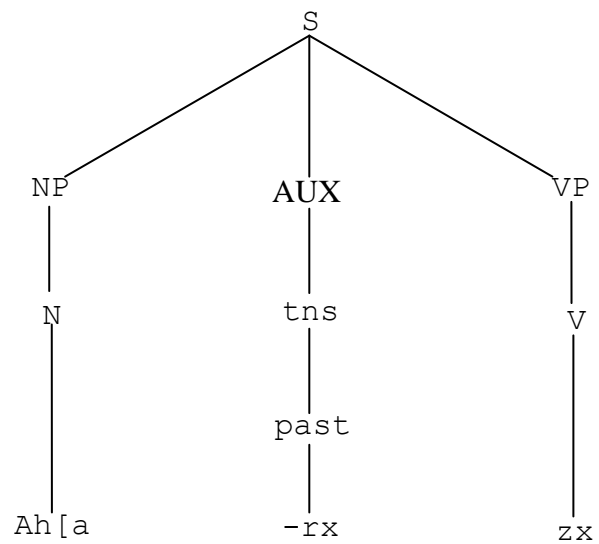
Ergative: Xgbq ya kpù-rù

133b has the following tree diagrams in 137a and b

137(a) D-Structure: X zx-rx ah[a



Transitive: X zx-rx ah[a

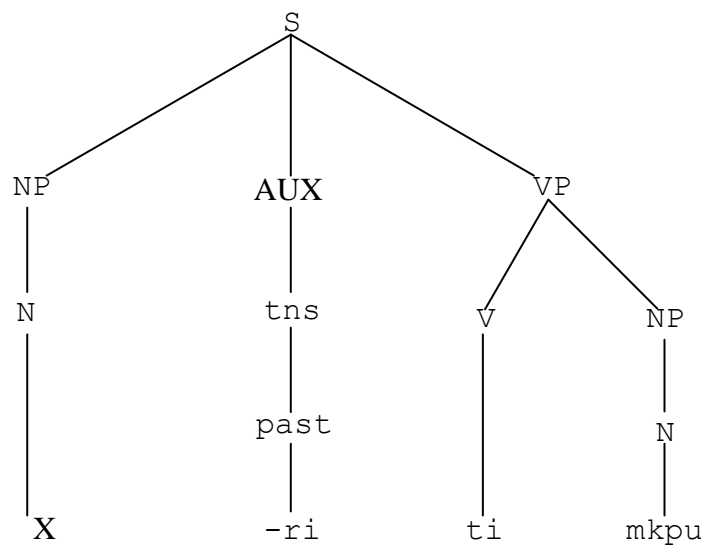




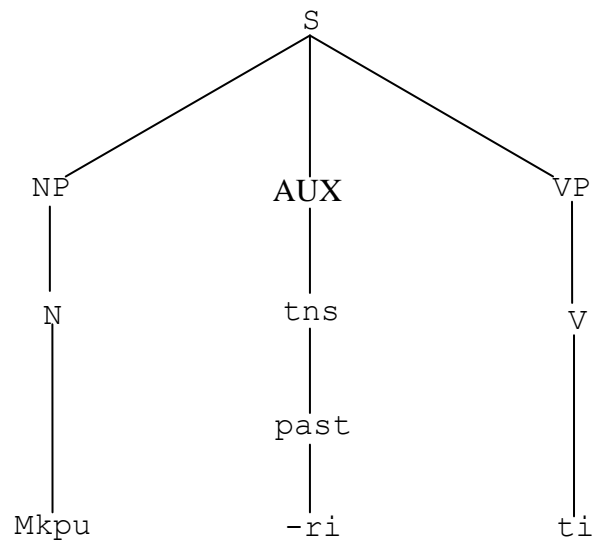
Ergative: Ah[a zx-rx

134b has the tree diagram 138a and b

138(a) D-Structure: X -rV ti mkpu



Transitive: X ti-ri mkpu



(b) Ergative: Mkpụ tì-rì

#### 4.5.2 Ergativity based on third degree verbs

This is the type of ergativity that is formed from simple verbs that subcategorise three arguments. Consider the following example.

139(a) X zì-rì Àda ozi

X give-rV(past) Ada message

'X gave Ada a message'

(b) Ada gà-rà ozi

Ada go-rV(past) message

'Ada went on errand'

140(a) X nyè-rè Y xdarà

X give-rV(past) Y apple

(b) Y nàtà-rà xdarà

Y receive-rV(past) apple

'Y received apple'

The verb in examples 139 and 140 are simple verbs involving three arguments. In 139a, the verb *ziri* is a verb of sending involving an Agent while the verb *gara* in 139b is a verb of compliance involving a Theme. 139b is the ergativised form of 139a. The verb *nyere* in 140a, is a verb of giving involving an Agent while *natara* in 140b is a verb of receiving involving a Theme. Following the definition of ergativity (verbs that can be used transitively and intransitively without morphological changes) adopted in this study, the third degree verbs in examples 139 and 140 involve morphological changes in their ergativised versions unlike the second degree verbs in examples 131-134 in section (4.5.1). Hence, the verb *ziri* in 139a changed to *gara* in 139b, while the verb *nyere* in 140a

changed to *natarà* in 140b. This shows that some simple verbs require morphological change to be ergativised.

#### 4.6 Inter-clausal ergativity

This is the type of ergativity formed from non-simple verbs. These verbs may be compound verbs.

##### 4.6.1 Compound ergative verbs (Verb+Verb)

The compound verb structure involves the combination of two simple verb roots. However, Oluikpe (1979) and Uchechukwu (2011) include verb root plus suffix in compound verbs. This in our opinion should be complex verbs rather than compound verbs. In both instances, no linguistic structures can come between the components of the compound verb in the form of inflectional affixes. The structures in 141a-146a are examples of compound verbs while 141b-146b exemplify the ergative counterparts.

141(a) X gbanwè-rè àgwà yā

X change-rV(past) character 1Sg

'X changed his character'

(b) Àgwà yā nwè-rè (Nsukka dialect)

Character his change-rV(past)

'His character changed'

142(a) X gbàjì-rì oche m̄

X kick-break-rV(past) chair 1Sg

(b) Oche m̄ jì-rì

Chair 1Sg break-rV(past)

'My chair broke'

143(a) X mètè-rè nwa

X wake-up-rV(past) child

X woke the child

(b) Nwa tè-rè

Child wake-up-rV(past)

'The child woke up'

144(a) X dḡkà-rà akwà m̄

X draw-tear-rV(past) cloth 1Sg

'X tore my cloth'

(b) Akwa *m̄* kà-rà

Cloth 1Sg tear-rV(past)

'My cloth got old by tearing'

145(a) X ghasà-rà ego *m̄* n'èzi

X scatter-rV(past) money me

'X scattered my money'

(b) Ego *m̄* sà-rà n'èzi

Money me scatter-rV(past) n'èzi

'My money scattered'

146(a) X kwàfù-rù ofe *m̄*

X spill-rV(past) soup me

(b) Ofe *m̄* fù-rù (Nsukka dialect)

Soup 1Sg lose-rV(past)

'My soup got lost'

The verbs in examples 141a-146a are compound verbs made up of two verb roots: *gbanwè* 'change' (141a), *gbajì* 'break' (142a), *metè* 'wake' (143a), *dqkà* 'tear' (144a), *ghasà* 'scatter' (145a), *kwafù* 'spill' (146a). Each of the compound verbs incorporates two events: V1, V2. The verbs in examples 141-146 can be decomposed and lexicalised to recover the simple sentence structures comprising the compound structure. Hence the surface structures; *Agwa ya nwèrè* (141b), *Oche m jìrì* (142b), *Nwa tèrè* (143b), *Akwa m kàrà* (144b), *Egō m sàrà n'èzi* (145b), *Ofe m̄ fùrù* (146b) as the ergative counterparts. The tone of the verbs also differs. In examples 142, 143 and 144, both the V1 and V2 in the compound verbs have low tone. Examples 145 and 146 have high tone in V1 and low tone in V2. The verbs in 141, and 146 have the same tone both in isolation and in their collocational combination, while the verbs- *gbàjì* in (142), *mète* in (143) and *dqka* in (144) have low tone in V1 and high tone in V2 in isolation. Some of the verbs are fossilised and

can no longer be decomposed (cf.140 and 144). The verb in 144 is fossilised and 140 can be decomposed.

The syntactic derivation of ergativity in compound verbs will be shown below using the structure in example 142. Thus, 147 results from combining 148(a) and (b).

147. X gbàjì-rì oche m̄

148(a) X gbà-rà oche m̄

X kick-rV(past) chair1Sg

(b) Oche m̄ jì-rì

Chair 1Sg break-rV(past)

'My chair broke'

To derive the ergative structure in 148b, the main verb and its external arguments get deleted. The light verb and its external argument emerge as the ergative structure. This is because the verb *gba* 'kick' subcategorises an agent and *oche* 'chair', object NP cannot perform the action of *gba* 'kick'. The second verb V2 *ji* 'break' which is the result of the action of the subject on the object NP is ergative and thus can take an object as NP. The argument structure of the sentences: *X gbàrà oche*, *Oche jìrì* in 148a and b respectively from where the string *X gbajìrì oche* in 147 is derived can be summarised in (149) as follows:

149. X gbà-rà oche m̄ oche m̄ jì-rì

X -rV gba oche oche oche rV ji

Argument structure:

Action of X is limited to *gba*

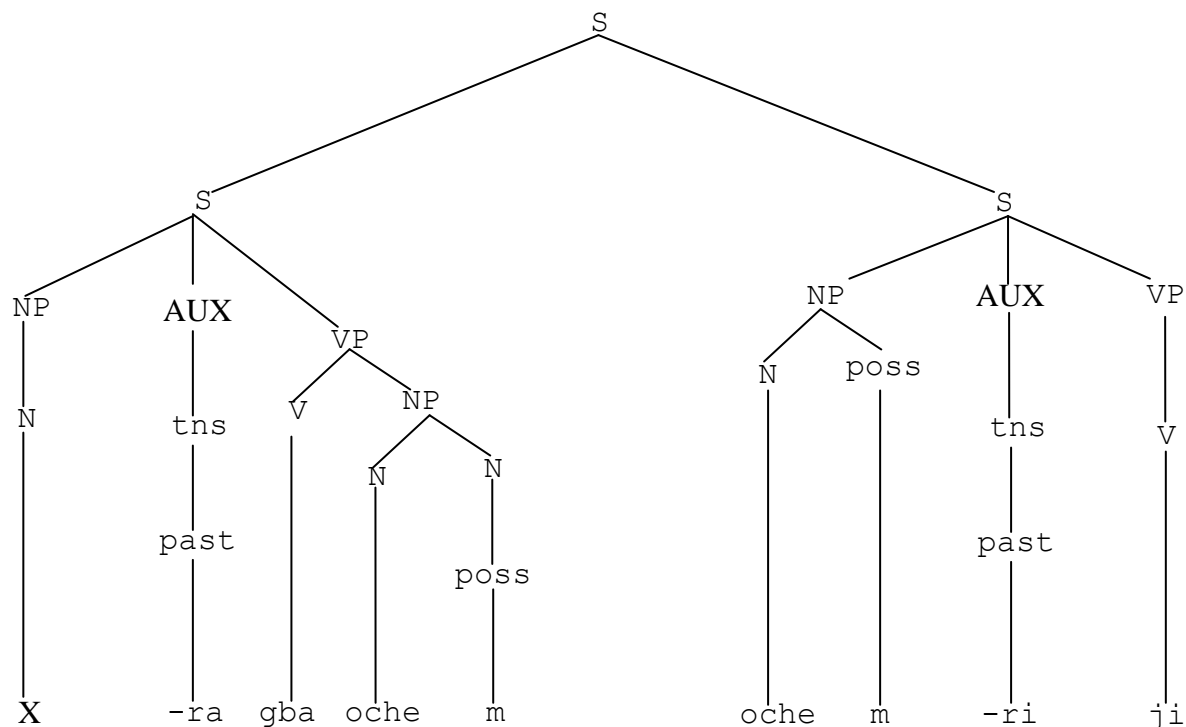
Oche is the object of *gba*

The verb *ji* - subcategorises only *oche m̄*

The verb *ji* is ergative.

The D-Structure and S-Structure of this ergative structure can be represented in the tree diagram in 150.

(150) D-Structure: X -rV gba oche Oche -rV ji



Transitive: X gbà-rà oche m̄

Ergative: Oche m̄ jì-rì

The analysis of *Obi gbàjìrì oche m̄* is an instance of ergative construction where V1, *gba* assigns its internal theta-role to *oche m* but the V2 *ji* does not because *oche m̄* is not its direct object. More examples of the derivation of compound ergative verbs will be given below.

151. X mè-tè-rè nwa

The structure in 151 results from combining 152a and b

152(a) X mè-rè nwa

X cause -rV(past)child

(b) Nwa tè-rè

Child 1Sgwake-rV(past)

'My child woke up'

The ergative version in 152b is derived via the deletion of the main verb *me* and its external argument. The light verb and its external argument emerge as the ergative structure. The

second verb (V2) *te* which is the result of the action of the subject on the object is ergative. The argument structure of the string *-X mè-rè nwa, nwa tè-rè* from where the string *X mè-rè nwa* in 151 is derived is summarised in 153.

153. *X mè-rè nwa nwa tè-rè*

*X*-rV *me nwa nwa*-rV *te*

Argument structure:

Action of *X* is limited to *me*

*Nwa* is the object of *me*

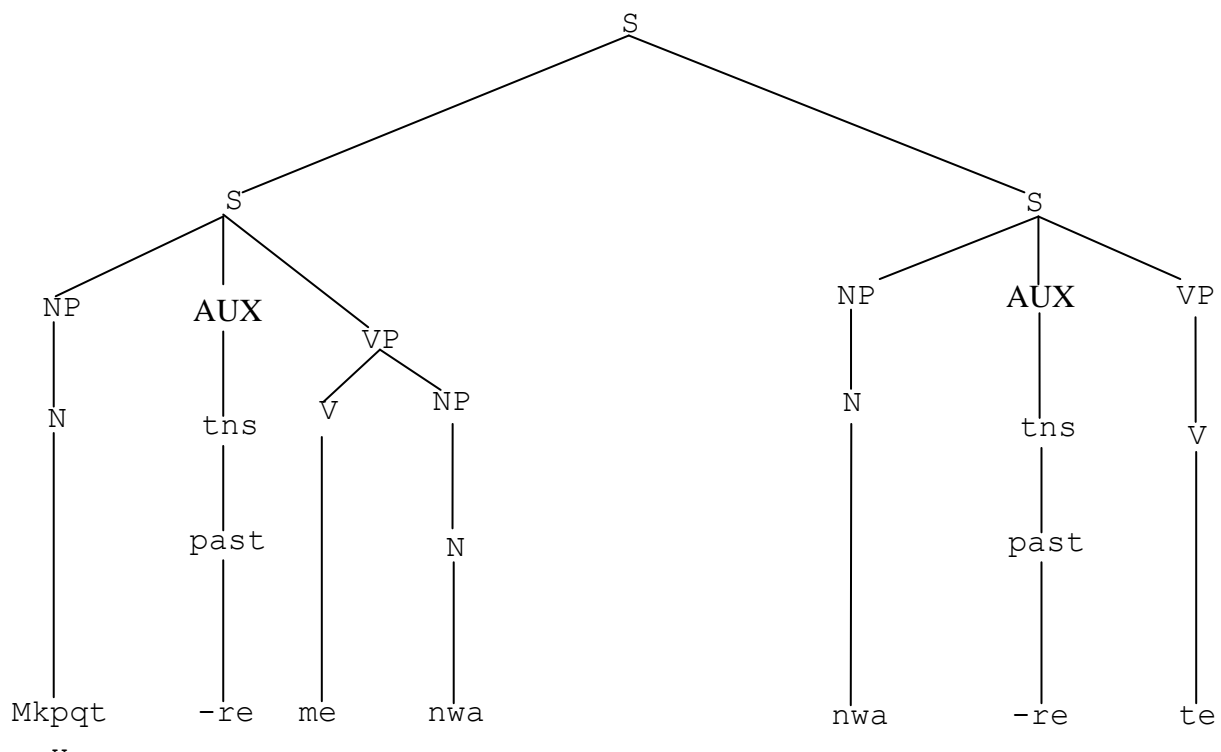
The verb *te* - subcategorises only *nwa*

The verb *te* is ergative.

The D-Structure and the S-Structure of this ergative structure can be represented in the tree diagram in 154.

154. *X mè-tè-rè nwa*

D-Structure: *X* -rV *me nwa nwa* -rV *te*



Transitive: *X mè-rè*

Ergative: *Nwa tè-rè*

155. X dɔkà-rà akwa m̄

The structure in 155 results from combining 156a and b

156(a) X dɔ̀-rɔ̀ akwa m̄

X draw -rV(past) cloth 1Sg

(b) Akwa m kà-rà

Cloth 1Sg tear-rV(past)

'My cloth tore'

The ergative version in 156b is derived via the deletion of the main verb *dɔ* and its external argument. The light verb and its external argument emerge as the ergative structure. The second verb (V2) *ka* which is the result of the action of the subject on the object is ergative. The argument structure of the strings: *X dɔ̀-rɔ̀ akwa m̄ akwa m̄ kà-rà* from where the string *X dɔkara akwa m* in 155 is derived is summarised in 157.

157. X dɔ̀-rɔ̀ akwa m̄ akwa m̄ kà-rà

D-Structure: X -rVdɔ akwa akwa -rV ka

X dɔ̀-rɔ̀ akwa m̄ akwa m̄ kà-rà

Argument structure:

Action of *X* is limited to *dɔ*

Akwa is the object of *dɔ*

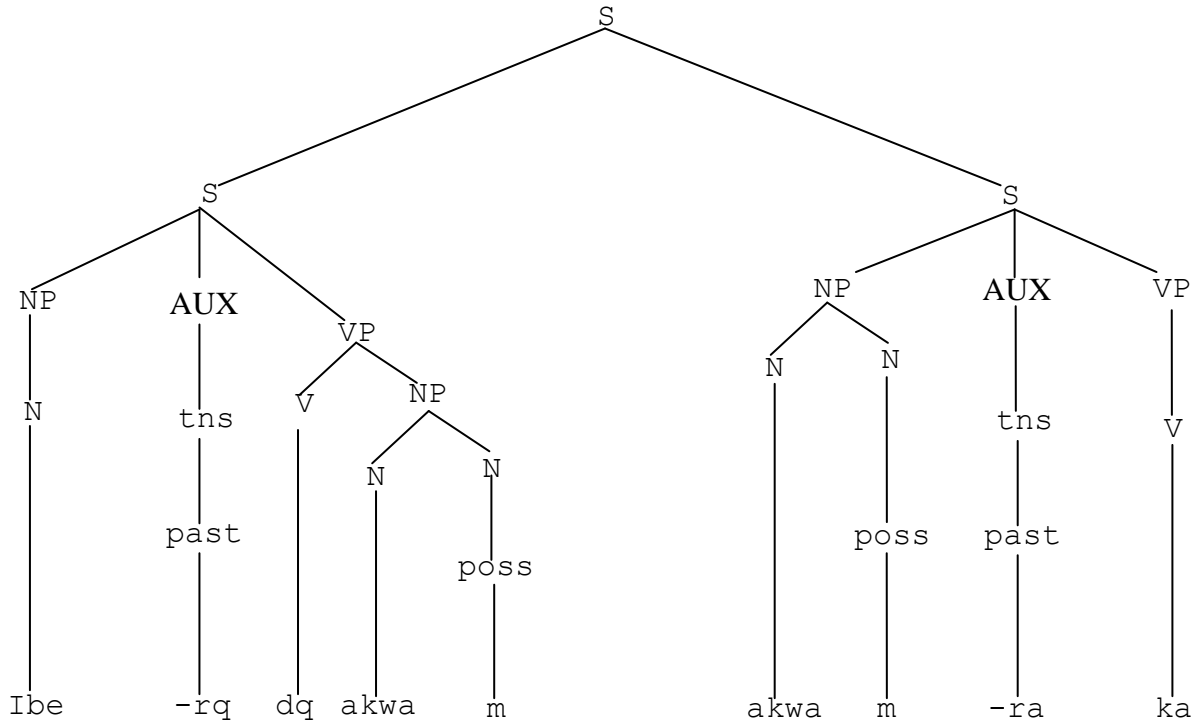
The verb *ka* - subcategorises only *akwà m̄*

The verb *ka* is ergative.

The D-Structure and S-Structure of the above ergative structure will be represented in the tree diagrams in 158.



158. D-Structure: Ibe -rV dq akwà m̄ Akwà m̄ -rV ka



Transitive: X dqr̀ akwà m̄

Ergative: Akwa m̄ kàrà

The strings in (159-166) show the derivation of ergativity in some more compound verbs.

159(a) X gbanwè-rè àgwà yā

The structure in 159a results from combining 159b and c

159(b) X gbà-rà àgwà yā

X change -rV(past) character 3Sg

(c) Àgwà yā nwè-rè

Character 3Sg change-rV(past)

'His character changed'

The ergative version in 159c is derived via the deletion of the main verb *gba* and its external argument. The light verb and its external argument emerge as the ergative structure. The second verb (V2) *nwè* which is the result of the action of the subject on the object is ergative. The argument structure of the structure: *X gbàrà àgwà yā, àgwà yā nwèrè* from where the string *X gbanwèrè àgwà yā* in 159 is derived is summarised in 160.

160 *X gbanwè-rè àgwà yā*

*X -rV gba àgwà Obi àgwà Obi rV nwè*

Argument structure:

Action of *X* is limited to *gba*

Agwa Obi is the object of *gba*

The verb *gba* - subcategorises only *agwa Obi*

The verb *nwè* is ergative.

161(a) *X yikà-rà akwà m̄*

The structure in 161(a) results from combinig 161b and c

161(b) *X yikà-rà akwa m̄*

*X wear-tear -rV(past) cloth 1Sg*

(c) *Akwà yā kà-rà*

*Cloth 3Sg tear-rV(past)*

'His cloth tore'

The ergative version in 161c is derived via the deletion of the main verb *yi* and its external argument. The light verb and its external argument emerge as the ergative structure. The second verb (V2) *ka* which is the result of the action of the subject on the object is ergative. The argument structure of the structure: *X yìrì akwà m̄, akwà m̄ kàrà* from where the string *X yikàrà* in 161a is derived is summarised in 162.

162. *X yikà-rà akwà m̄*

D-Structure: Ibe -rV yi akwa akwa -rV ka  
 X yi-rì akwa m̄ akwà m̄ kà-rà  
 Argument structure:  
 Action of X is limited to yi  
 Akwa m̄ is the object of ka  
 The verb kà - subcategorises only akwà m̄  
 The verb kà is ergative

163(a) X ghàsà-rà ego

The structure in 163(a) results from combining 163b and c

163(b) X ghà-rà ego

X scatter -rV(past) money

(c) Ego sàrà

Money scatter -rV(past)

'His character changed'

The ergative version in 163c is derived via the deletion of the main verb *gha* and its external argument. The light verb and its external argument emerge as the ergative structure. The second verb (V2) *sa* which is the result of the action of the subject on the object is ergative. The argument structure of the structure: X *ghàrà egō*, *egō sàrà* from where the string X *ghàsàrà egō* in 163(a) is derived is summarised in 164.

164. X ghàsà-rà egō

D-Structure: Ikuku -rV gha egō, egō -rV sà

Deletion of subj: -rV gha egō

Movement of obj: egō -rV sà

Affix hopping: egō sà -rV

S-Structure: Egō sàrà

165(a) X kwafù-rù ofe m̄

The structure in 165(a) results from combining 165a and b

165(b) X kwà-rà ofe m̄

X push-rV(past) soup 1Sg

(c) Ofe m̄ fù-rù

Ofe m 1Sg waste-rV(past)

'My soup wasted'

The ergative version in 165c is derived via the deletion of the main verb *kwa* and its external argument. The light verb and its external argument emerge as the ergative structure. The second verb (V2) *fu* which is the result of the action of the subject on the object is ergative. The argument structure of the structure: *X kwà-rà ofe m̄, Ofe m̄ fù-rù* from where the string *X kwafù-rù* in 165a is derived is summarised in 166.

166. X kwafù-rù ofe

D-Structure: X -rV kwa ofe ofe -rV fù

Deletion of subj: -rV kwa ofe ofe -rV fù

Movement of obj: ofe -rV fù

Affix hopping: ofe -rV fù

S-Structure: Ofe fù-rù

The verbs in the above examples are compound verbs. Each of them is made up of two actions. The verbs: *gbanwè* (160) and *yika* (162), *ghasà* (164), *kwafu* (166) are action-result verbs. The first element in the verb is the action while the second element is the result. The derived structures: *Àgwà yā nwèrè* 'His character changed' (160), *Akwa kàrà* 'The cloth tore' (162) *Ego sàrà* 'money spread' (164), *Ofe fù-rù* 'The soup was lost' (166) are grammatical and acceptable in the language.

#### 4.6.2 Tripartite ergative verbs (Verb+ Verb+Verb/Suffix)

Some compound verbs go beyond two verbs. They are made up of three verbs with a suffix. We analyse the compound verbs in examples 167, 169 and 171 to ascertain what the results look like.

167(a) X kxkàp̀x̀-rx̀ xzq̀m̄

X knock-tear-fall-off-rV(past)

The structure in 167 results from combining the structures in 167a,b,c, and d.

(b) X kx̀-rx̀ xzq̀m̄

Door 1Sgtear-rV(past)

(c) Xzq̀m̄ kà-rà

Door 1Sgfall-off-rV(past)

(d) Xzq̀m̄ p̀x̀-rx̀

'My door fell-off-rV(past)

The ergative structures in 167c-and d are derived by the transformations shown in 167e:

(e) X kxkàp̀x̀-rx̀ xzq̀

D-Structure: X -rV kx xzq̀ xzq̀ -rVka xzq̀ -rv px

Deletion of subj & main verb: xzq̀ -rVka xzq̀ -rV pu

Movement of obj: xzq̀ -rVka xzq̀ -rV px

Affix hopping: xzq̀ ka -rVxzq̀ px -rV

S-Structures: Xzq̀ kà-rà, Xzq̀ p̀x̀-rx̀

The ergative versions in 167b-c are derived via the deletion of the main verb *kx* and its external argument. The light verbs *ka* and *px* and their external arguments emerge as the ergative structures. The second and the third verbs (V2 and V3) *ka* and *px* which are the results of the action of the subject on the object are ergative. The argument structure of the ergative

structures in 167b-c from where the string *X kxkàp̀x̀rx̀ xzq̀m̄* in 167a is derived is summarised in 168.

168 *X kx̀-rx̀ xzq̀m̄, xzq̀m̄ kà-rà, xzq̀m̄ px̀-rx̀*

*X kxkàp̀x̀-rx̀ xzq̀m̄*

*X-rV kx xzq̀m̄, xzq̀m̄-rVka, xzq̀m̄-rV px*

Argument structure:

Action of *X* is limited to *kx*

*Xzq̀m̄* is the object of *kx*

The verb *kx*-subcategorises only *xzq̀m̄*

The verbs *ka* and *px* are ergative

169(a) *Xgbajìp̀x̀-rx̀ xkwx oche m̄*

*X* kick-break-off(past) leg chair

'*X* broke off the leg of the chair'

The structure in 169 results from combining the structures in 169b, c and d

(b) *Xgbà-rà xkwx oche m̄*

*X* kick-rVpast leg chair 3Sg

(c) *Xkwx oche m̄jì-rì*

Leg chair me break-(past)

(d) *Xkwx ochè m̄px̀-rx̀*

Leg chair go-off(past)

The ergative structures in 169c and d are derived by the transformations shown in 169e:

(e) *Xgbajìp̀x̀-rx̀ ukwu ochè*

D-structure: *X -rv gba xkwx oche ukwu oche -rV jì*  
*xkwx oche -rV px*

Deletion of subj & main verb: *-rV jì -rV px xkwx oche*

Movement of obj: *Xkwx oche -rVjì -rVpx*

Affix hopping: *Xkwu oche jì-rV px -rV*

S-Structures: *Xkwx ochè jìrì, Xkwx ochè p̀rx̀*

The ergative versions in 169c and d are derived via the deletion of the main verb *gba* and its external argument. The light verbs- *ji* and *px* and their external arguments emerge as the ergative structures. The second and the third verbs (V2 and V3) *ji* and *px* which are the results of the action of the subject on the object are ergative. The argument structure of the ergative structures in 169b and c from where the string *X gbajìpx̀rx̀oche m̄* in 169a is derived is summarised in 170.

170. *X gbà-rà ochè m̄, ochè m̄ jì-rì, oche m̄ px̀-rx̀*

*X gbajìpx-rx oche m̄*

*X -rV gba oche m̄, oche m̄ -rV ka, oche m̄ -rV px*

Argument structure:

Action of *X* is limited to *gba*

*Oche m* is the object of *gba*

The verb *gba* -subcategorises only *ochè m̄*

The verbs, *ji* and *px* are ergative

171(a) *X meghèpù-rù xzq̀*

*X* open-wide (past) door

'*X* opened the door wide'

The structure in 171a results from combining 171b and c

(b) *X mè-rè xzq̀ m̄*

*X* cause-rV(past) door 1Sg

(c) *Xzq̀ m̄ ghè-rè*

Door open-rV(past)

(d) *Xzq̀ m̄ pù-rù*

Door 1Sg wide-open-rV(past)

The ergative structures in 171b-and c are derived by the transformations shown in 171e:

(e) *X meghèpù-rù xzq̀ m̄*

D-Structure:*X -rV me xzq̀ m̄ xzq̀ -rVghe xzq̀- rV pu*

Deletion of subj & main verb: -xzq  $\bar{m}$  rVghe xzq  $\bar{m}$  -rV pu  
 Movement of obj: xzq m -rV ghe -rV pu  
 Affix hopping: xzq ghe -rV xzq pu-rV  
 S-Structure: Xzq` ghèrè, xzq` pùrù

The ergative versions in 171b and c are derived via the deletion of the main verb *me* and its external argument. The light verbs *ghe* and *pu* and their external arguments emerge as the ergative structures. The second and the third verbs (V2 and V3) *ghe* and *pu* which are the results of the action of the subject on the object are ergative. The argument structure of the ergative structures in 171c and d from where the string *X meghepùrù xzq  $\bar{m}$*  in 169a is derived is summarised in 172.

172 X mèrè xzq`  $\bar{m}$ , xzq  $\bar{m}$  ghè-rè, xzq`  $\bar{m}$  p`x-r`x`

X meghepù-rù xzq`  $\bar{m}$

X -rV me xzq  $\bar{m}$ , xzq`  $\bar{m}$  -rV ghe, xzq  $\bar{m}$  -rV pu

Argument structure:

Action of X is limited to me

Xzq  $\bar{m}$  is the object of me

The verb *me* subcategorises only xzq`  $\bar{m}$ . The verbs *ghe* and *pu* are ergative

The verbs in examples 167, 169, and 171 are tripartite verbs made up of three verb roots. Each of the verbs incorporates three events: VI, V2 and V3. In 167, the compound verb- *kxkapx* is made up of three verb roots: *kx*, *ka* and *px*. In each of them, it is either the second or the last verb is the result while the first verb remains the action. When the actions of the agents in the transitive structures (167a, 169a, and 171a) are separated from the result on the objects, the examples yielded grammatical and acceptable structures in Igbo. Hence, examples 167a yielded these acceptable ergative structures: *Xzq`  $\bar{m}$  kàrà* (167c) and *Xzq`  $\bar{m}$  pùrù* (167d). 169a yielded *-Xkwu ochè*

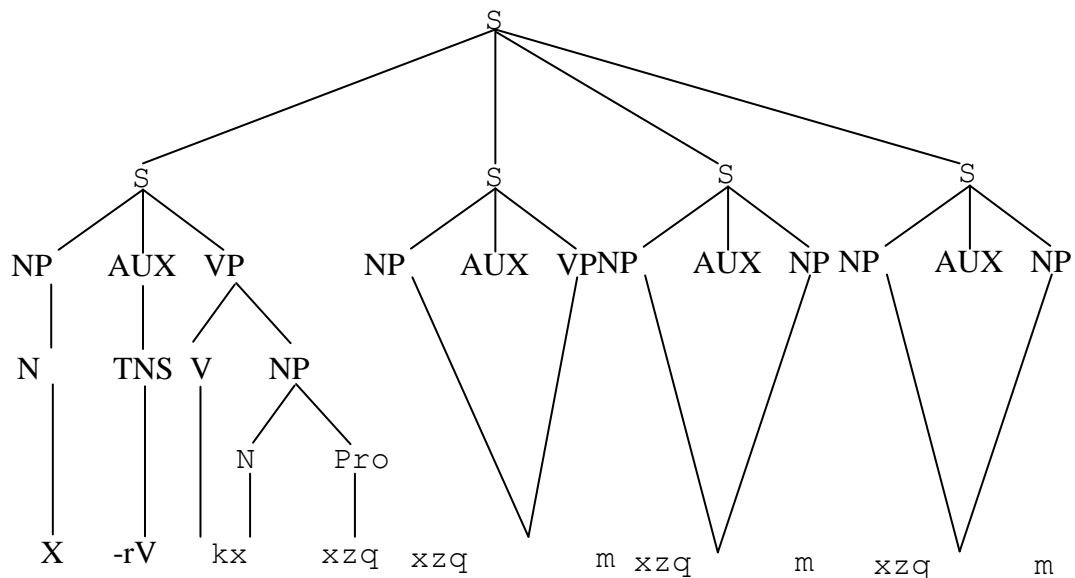


*m̄ jiri* (169c) and *Xkwx ochè m̄ pxrx̄* (169d). 171a yielded - *Xzq̄ ghèrè* (171c) and *Xzq̄ pxrx̄* (171d).

In example 167a, the verb *kxkàpx̄* is made up of one action and two results: *kx* 'knock' (V1) is the action, while *ka* 'break' (V2) and *px* 'drop' (V3) are the results or the effect of the actions on the object (*xzq*). V2 -*ka* and V3-*px* appeared in the derived versions; *Xzq̄ kàrà* and *Xzq̄ pxrx̄*. *Gbajìpx̄* in 169a, has one action and two results: *gba* 'kick' (V1) is the action, *ji* 'break' (V2) and *px* (V3) are the results/effects of the action on the object *ochè m̄*. The verb *meghèpu* in 171a is made up of the action: *me* 'cause' (V1), The results are *ghe* 'open' and *pu* 'widen' (V3), this appeared as the derived version in the surface structure. 167a has the following tree diagram.

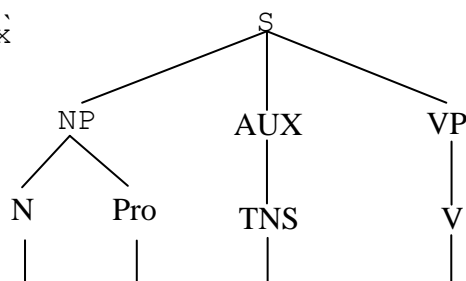
Transitive: X *kxkàpxrx̄ xzq̄ m̄*

X *kxrx̄ xzq̄ m̄*, *xzq̄ m̄ kaprx̄*, *xzq̄ m̄ kàrà*, *xzq̄ m̄ pxrx̄*

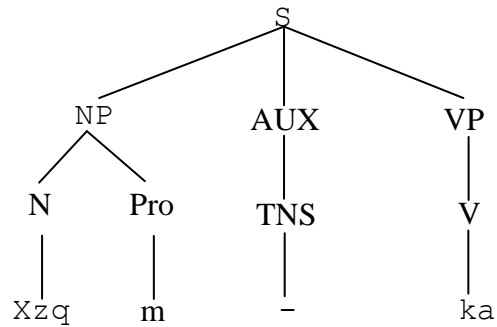


Ergatives: *Uzq̄ m̄ kaprx̄*, *Xzq̄ m̄ kàrà*, *Xzq̄ m̄ pxrx̄*

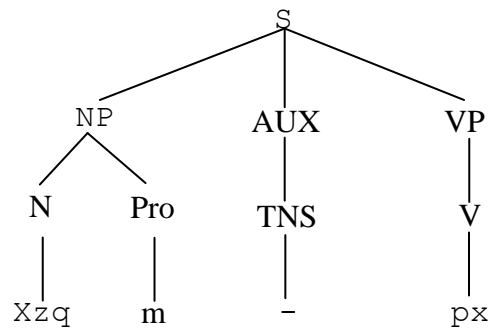
(a) *Xzq̄ m̄ kaprx̄*



(b) Xzq̄m̄ kà-rà



(c) Xzq̄ m px̄-rx̄



#### 4.7 Ergativity and other verb forms

The ergative verb forms are analysed in the following construction types: imperativisation, perfective, future, negativisation, serialisation, consecutivisation, and subjunctivisation.

##### 4.7.1 Ergativity and imperativisation

An imperative sentence is used to make a request or give an order. Imperative verbs are used to give orders, commands and instructions. In Igbo, the imperative verb-form is the regular

CV-root + an Open Vowel suffix but there can be other types of suffixes depending on the type of verb and the desired meaning as Nwachukwu (1995:17) observes. The imperative verb form can be simple or complex, affirmative or negative. Some imperative verbs can be ergativised, and the form used is usually the same as the base form. The examples below illustrate ergativised imperatives.

#### 4.7.1.1 Simple imperative: Affirmative

This construction has no overt NPs. The verb has only one element which is often the low tone followed by a harmonizing vowel suffix -e/a; -o/q as the examples reveal.

173(a) Kxq̣̣̣ aka

Kx-OVS aka

(b) Aka kxq̣̣̣

Hand stike-OVS

'Clap hands'

The ergative structure in 173b is derived by the following transformations in 173c.

(c) Kxq̣̣̣ aka

D-Structure: { modal kx aka

Deletion of subj: ga-akx aka

Deletion of modal aux:kx aka

Imperativisation: kx OVS aka

S-Structure: Kxq̣̣̣ aka

Ergative: Aka kxq̣̣̣

174(a) Gbaà àmà

kick-OVS betray

(b) Àmà gbaà

Betray kick-OVS

'Let there be betrayal'

The ergative structure in 174b is derived by the following transformations in 174c

(c) Gbaà àmà

D-Structure: { modal gba àmà  
Deletion of subj: ga-agba àmà  
Deletion of modal aux: gba àmà  
Imperativisation: gba-OVS àmà  
S-Structure: Gbaà àmà  
Ergative: Àmà gbaà

175(a) Txq` xzx`

Throw-OVS uproar

(b) Xzx` txq`

Uproar throw-OVS

'Let there be uproar'

The derivation of the ergative construction in 175b is shown in 175c

(c) Txq` xzx`

D-Structure: X modal tx xzx`  
Deletion of subj: ga-atx xzx`  
Deletion of modal aux: tx xzx`  
Imperativisation: tx -OVS xzx`  
S-Structure: Txq` xzx`  
Ergative: Xzx` txq`

176(a) Zxq` ah[a

Buy-OVS market

(b) Ah[a zxq`

'Market hold'

176b is realised via the following transformations in 176c.

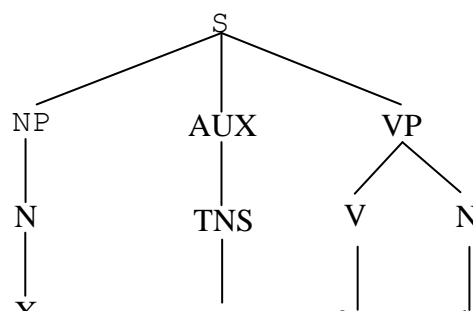
(c) Zxq` ah[a

D-Structure: X modal zx ah[a  
 Deletion of subj: gá-àzx ah[a  
 Deletion of modal aux: zx ah[a  
 Imperativisation: zx -OVS ah[a  
 S-Structure: Zxq̇ ah[a  
 Ergative: Ah[a zxq̇

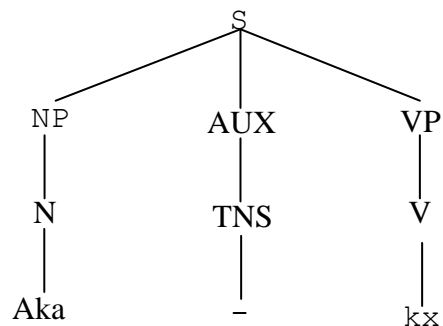
The structures in examples 173a-176a are simple affirmative imperative forms. The verbs *kxq̇* 'clap' (173a), *gbaà* 'kick' (174a), *Txq̇* 'throw' (175a), and *zxq̇* 'buy' (176a) are simple imperative verb forms. *Kxq̇ aka* in 173a yielded *Aka kxq̇* in (173b) as the ergative counterpart. *Àmà gbaà* in 174b is derived from *Gbaà àmà* in 174a. *Txq̇ xzẋ* in 175a has *Xzẋ txq̇* (175b) as the ergative version. The ergative structure in 176b -*Ah[a zxq̇* is derived from 176a -*Zxq̇ ah[a*.

The strings in 173c-176c indicate that the derivation of ergative structures from imperative sentences involves the following transformations on the D-structure string: deletion of the logical subject of the transitive structure, deletion of the modal auxiliary and the imperativisation of the verb form. In 173a, the logical subject **X** and the modal auxiliary in the D-structure are deleted leaving the structure with -*kx* OVS *aka*. The verb *kx* is imperativised resulting in *Kxq̇* *aka* as the surface structure. The object *aka* moves to the subject position showing ergativity. 173a has the following tree diagram in 177a and b.

177(a) *Kxq̇ aka*



(b) Ergative: Aka kxq̣



#### 4.7.1.2 Simple imperative: Negative

This verb form always has a harmonizing negative imperative suffix *-la* in the underlying structure. The negative suffix is low tone following low tone verbs or following a low tone in a complex verb. Otherwise, it has a high tone (Emenanjo 1987:193). This verb form has a high tone harmonizing vowel prefix *-a-*. The verb stems in examples 178-181 is step for high tone verbs: *kx* 'clap' (178), *gba* 'kick' (179), *tx* 'throw' (180), *zx* 'buy' (181).

178(a) Akxlạ́ aka

Vpref-clap-NEG hand

(b) Aka akxlạ́

Hand pref-clap-NEG

'No clapping'

The derivation of the ergative construction in 178b is shown in 178c

(c) Azxlạ́ ah[a

D-Structure: X modal NEG zx ah[a

Deletion of subj: gaghī azx ah[a  
 Deletion of modal aux: -zx-NEG ah[a  
 Imperativisation: pref-zx-NEG  
 S-Structure: Azūlà ah[a  
 Ergative: Ah[a azūlà

179(a) Agbalà àmà

Vpref-kick-NEG dance

(b) Àmà agbālā

Betrayal pref-kick-NEG

'No betrayal'

The ergative form in 179b is derived from the following transformations in 179c

(c) Agbālā àmà

D-Structure: X modal NEG gba àmà

Deletion of subj: gaghī agba àmà

Deletion of modal aux: -gba-NEG àmà

Imperativisation: pref-gba-NEG àmà

S-Structure: Agbalà àmà

Ergative: Agbalà àmà

180(a) Atxlà ẏẏ

Vpref-throw-NEG uproar

(b) ẏẏ atxlà

Uproar throw-NEG

The ergative form in 180b is derived from the following transformations in 180c

(c) Atxlà ẏẏ

D-Structure: X modal NEG tx ẏẏ

Deletion of subj: gaghì atx ẏẏ

Deletion of modal aux: -tx-NEG ẏẏ

Imperativisation: pref-tx-NEG ẏẏ

S-Structure: Atxlà ẏẏ

Ergative: X̀zx̀ atxlà  
 181(a) Azxlà ah[a  
           Vpref-buy-NEG market  
 (b) Ah[a azxlà  
       Market Vpref-buy-NEG  
       'Don't do business'

The following transformations in 181c yielded the ergative structures in 181b.

(c) Azxlà ah[a  
       D-Structure: X modal NEG zx ah[a  
       Deletion of subj: gagh[ azx ah[a  
       Deletion of modal aux: -azx-NEG ah[a  
       Imperativisation: azx-NEG ah[a  
       S-Structure: Azxlà ah[a  
       Ergative: Ah[a azxlà

The derivation of ergative structure from imperative sentences involves the following transformation on the D-structure strings: deletion of logical subject of the transitive structure, deletion of the modal auxiliary and imperativisation of the verb form.

#### **4.7.1.3 Imperative-progressive: Affirmative**

This imperative form has affirmative and negative equivalents. As the name indicates, it combines the features of imperative and progressive (Emenanjo 1987:194). In this form, the progressive marker *-na* is always high tone. The participle following the progressive marker retains its usual tones. The ergative imperative-progressive verb forms will be shown in 182-185 below.

182(a) Na-àkx aka  
       Prog AUX-Vpref-knock hand  
 (b) Aka na-àkx



Hand ProgAUX-Vpref-knock

Let hands keep clapping

182c illustrates the derivation of ergative structure in 182b from 182a

(c) Na-àkx aka

D-Structure: X ProgAUX-Vpref-kx aka

Deletion of subj: ProgAUX-Vpref-kx aka

Movement of obj: aka ProgAUX-Vpref-kx

Affix hopping: aka kx-ProgAUX-Vpref

S-Structure: Aka na-àkx

183(a) Na-àgba àmà

ProgAUX-Vpref-kick dance

(b) Àmà na-àgba

Betrayal ProgAUX-Vpref-kick

'Let betrayal continue'

The transformations that yielded the ergative structure in 183b are shown in 183c

(c) Na-àgba àmà

D-Structure: X ProgAUX-Vpref-gba àmà

Deletion of subj: ProgAUX-Vpref-gba àmà

Movement of obj: betrayalProgAUX-Vpref-gba

Affix hopping: betrayal gba-ProgAUX-Vpref

S-Structure: Àmà na-àgba

184(a) Na-àtx xzx`

ProgAUX-Vpref-throw uproar

(b) Ùzx` na-àtx

Uproar ProgAUX-Vpref-throw

'Let uproaring continue'

184c shows the derivation of ergative sentence in 184b from 184a.

(c) Na-àtx x̀z̀x̀

D-Structure: X ProgAUX-Vpref-tx x̀z̀x̀

Deletion of subj: ProgAUX-Vpref-tx x̀z̀x̀

Movement of obj: x̀z̀x̀ ProgAUX-Vpref-tx

Affix hopping: x̀z̀x̀ si-Prog AUX-Vpref-tx

S-Structure: Ùz̀x̀ na-àtx

185(a) Na-àzx ah[a

ProgAUX-Vpref-buy market

(b) Ah[a na-àzx

Market ProgAUX-Vpref-buy

'Market must go on'

The ergative structure in 185b is derived from 185a via the following transformations in 185c.

(c) Na-àzx ah[a

D-Structure: X ProgAUX-Vpref-zx ah[a

Deletion of subj: ProgAUX-Vpref-zx ah[a

Movement of obj: ah[a ProgAUX-Vpref-zx

Affix hopping: ah[a zx-ProgAUX-Vpref

S-Structure: Ùz̀x̀ na-àtx

The sentences in 182a-185a are imperative progressive affirmative forms. The verbs: *na-àkx* 'keep clapping' (182a), *na-àgba* 'keep kicking' (183a), *na-àtx* 'keep throwing' (184a), *na-àzx* 'keep buying' (185a) are used transitively in the constructions in 182a-185a. In 182b-185b, the verbs are used intransitively showing ergativity. The structures in 182c-185c show the transformations that realised the ergative versions in 182b-185b. In 182c, the deep structure logical subject X gets deleted, the deep structure objects: *aka* 'hand', moves into the subject position. The Verb prefix (-Vpref) hops over the ergative verbs *kx* 'clap' to arrive at the surface structure: *Aka na-àkx* 'Let hands keep clapping'. In

183c, the logical subject *X* is deleted and the logical object *àmà* 'betrayal' moves into the subject position. The prefix hops over the verb *gba* 'kick', to arrive at the surface structure - *Àmà na-àgba* 'Let betrayal continue'. The logical subject represented by *X* in 184c is deleted and the logical object *ẁẁẁ* 'uproar' gets into the subject position. The verb prefix hops over the resultative verb *tx* 'throw' in the surface structure-*ẁẁẁ na-àtx* 'Let uproaring continue'. In 185c, the deep structure logical subject- *X* is deleted, the deep structure object- *ah[a* 'market' moves to the NP position. The verb prefix hops over the ergative verb *zx* 'buy' resulting in the surface structure -*Ah[a na-àzx* 'Let market continue'.

#### 4.7.1.4 Imperative progressive: Negative

In this form, the progressive auxiliary as Emenanjo (1987) explains has a step tone with the prefix *a-*, and is followed by the imperative marker *-la*. The participles retain their inherent tone patterns as exemplified.

186(a) *Anāla àkx aka*

Vpref-ProgAUX-NEG hand

(b) *Aka anāla àkx*

Hand Vpref-ProgAUX-NEG Vpref-beat

'Hands should not be clapping'

The transformation that yielded the ergative string in 186ab is illustrated in 186c.

(c) *Anāla àkx aka*

D-Structure: *X Vpref-ProgAUX-NEG-Vpref-kx aka*

Deletion of subj: *VprefProgAUX-NEG-Vpref-kx aka*

Movement of obj: *aka Vpref-ProgAUX-Vpref-kx*

Affix hopping: aka kx-Vpref-ProgAUX-Vpref  
S-Structure: Aka anāla àkx

187(a) Anāla àgba àmà

Vpref-ProgAUX-NEG Vpref-kick ama

(b) Àmà anāla àgba

Betrayal Vpref-ProgAUX-NEG Vpref-gba

'Betrayal should not go on'

187c shows the realisation of the ergative structure in 187b

(c) Anāla àgba àmà

D-Structure: X Vpref-ProgAUX-NEG-Vpref-gba àmà

Deletion of subj: Vpref-ProgAUX-NEG-Vpref-gba àmà

Movement of obj: àmà Vpref-ProgAUX-Vpref-gba

Affix hopping: àmà gba -Vpref-ProgAUX-Vpref

S-Structure: Àmà anāla àgba

188(a) Anāla atx ẏẏ

Vpre-ProgAUX-NEG VPref-tx ẏẏ

(b) ẏẏ anāla àtx

Uproar Vpref-ProgAUX-NEG-Vpref-tx

The ergative structure in 188b is realised as shown in 188c

(c) Anāla àtx ẏẏ

D-Structure: X Vpref-ProgAUX-NEG-Vpref-tx ẏẏ

Deletion of subj: Vpref-ProgAUX-NEG-Vpref-tx ẏẏ

Movement of obj: ẏẏ Vpref-ProgAUX-Vpref-tx

Affix hopping: ẏẏ -Vpref-ProgAUX-Vpref

S-Structure: ẏẏ anāla àtx

189(a) Anāla azx ah[a

Vpref-ProgAUX-NEG-Vpref-buy

(b) Ah[a anāla àzx

Market Vpref-ProgAUX-NEG-Vpref-buy

'Market should not be on'

The realisation the ergative structure in 189b is shown in 189c.

(c) Anāla àzx ahia

D-Structure: X Vpref-ProgAUX-NEG-Vpref-zx ah[a

Deletion of subj: VprefProgAUX-NEG-Vpref-zx ah[a

Movement of obj: zx Vpref-ProgAUX-Vpref-zx ah[a

Affix hopping: ah[a -Vpref-ProgAUX-Vpref

S-Structure: Anāla àzx ah[a

The imperative sentences in 186a-189a are the transitive forms of the imperative progressive negative sentences while the strings in 186b-189b are the intransitive uses of the forms. The structures in 186c-189c illustrate the realisation of the ergative structures imperative progressive negative forms in 186b-189b. In 186c, the deep structure logical subject X gets deleted, the deep structure object: aka 'hand', moves into the subject position. The Verb prefix (-Vpref) hops over the ergative verbs *kx* 'clap', to arrive at the surface structure; Aka *anāla àkx* 'Let clapping not continue.' The logical object -Àmà 'betrayal' in 187c, moves into the subject position following the deletion of the logical subject. The prefix hops over the verb *gba* 'kick', to arrive at the surface structure - Àmà *anāla àgba* 'Let betrayal not continue'. The logical subject represented by X in 188c is deleted and the logical object *x̀zx̀* 'uproar' gets into the subject position. The verb prefix hops over the resultative verb *tx* 'throw' in the surface structure -*X̀zx̀ anāa àtx* 'Let uproaring not continue'. In 189c, the logical subject -X is deleted, the logical object- *ah[a* 'market' moves to the NP position. The -Vpref hops over the

ergative verb *zx* 'buy' resulting in the surface structure -  
*Ah[a anàla àzx* 'Market should not hold yet'.

#### 4.7.1.5 Simple negative progressive

This complex verb form has the unfulfilled marker *-ka* on a low tone and with a high tone a-  
 prefix. It is followed by a participle to which the imperative high tone negative marker (*-la*) is  
 suffixed.

- 190 (a) *Akà àkxla aka*  
           pref- modal NEG clap hand
- (b) *Aka akà àkxla*  
           Hand pref-modal NEG V N  
       'Hands should not clap yet'

The structures in 190c will illustrate the realisation of  
 ergativity in 190b.

- (c) *Akà akxla aka*
- D-Structure: Subj Modal NEG V N  
 Transitivity: { ka -la kx aka  
 Deletion of subj: ka -la kx aka  
 Imperativisation: Aka akxla aka  
 Affix hopping: aka akxla aka  
 S-Structure: *Akà àkxla aka*  
 Ergativity: *Aka akà àkxla*

The strings in 190a illustrate the transitive forms of the  
 simple negative progressive form while 190b is the ergative  
 counterpart. The structure in example 190b yielded grammatical  
 and acceptable sentence in the derived version. The strings in  
 190c illustrate the realisation of ergativity in simple  
 negative progressive forms.

To realise the ergative version, the deep structure logical  
 subject *-{* is deleted, the object *aka* 'hand' moves into the NP  
 position, the verb prefix hops over the resultative ergative  
 verb-*kx* 'clap' to arrive at the surface structure-*Aka akà*  
*àkxla* 'Hands should not clap yet'.

191(a) Akà àgbala egwu  
3Sg Mod NEG dance dance

(b) Egwu akà àgbala  
Dance Mod NEG  
'No dancing yet'

The structures in 191c will illustrate the realisation of ergative structure in 191b.

(c) Akà àgbala egwu  
D-Structure: Subj Modal NEG V N  
Transformation: { ka a-la gba egwu  
Deletion of subj: ka a-la gba egwu  
Imperativisation: Aka a -la gba egwu  
Affix hopping: Aka a -la gba egwu  
S-Structure: Akà àgbala egwu  
Ergativity: Egwu akà agbala

The strings in 191a illustrate the transitive forms of the simple negative progressive form while 188b is the ergative counterparts. The structures in examples 191b yielded grammatical and acceptable sentences in their derived version. The strings in 191c illustrate the realisation of the ergative construction in 191b.

To realise the ergative version, the deep structure logical subject -{ is deleted, the object *egwu* 'dance' moves into the NP position. the verb prefix hops over the resultative ergative verb-*gba* 'beat' to arrive at the surface structure-*Egwu akà agbala* 'No dancing yet'.

192(a) Akà èsila nri  
pref-Mod NEG cook food

(b) Nri akà èghela  
Food pref-Mod NEG cook food  
'Food should not be cooked yet'

The structures in 192c will illustrate the realisation of ergativity in 192a.

(c) *Akà èsila nri*

D-Structure: Subj Modal NEG V N  
 Transitivity: { ka la si nri  
 Deletion of subj: ka la si nri  
 Imperativisation: *Akàla* si nri  
 Affix hopping: *Akà esila* nri  
 S-Structure: *Akà èsila nri*  
 Ergativity: *Nri akà èghela*

192a illustrate the transitive form of the simple negative progressive form while 192b is the ergative counterpart. The structures in examples 192b yielded grammatical and acceptable sentences in their derived version. The strings in 192c show the derivation of ergativity in the strings in 192b.

To realise the ergative version, the deep structure logical subject -{ is deleted, the object *nri* 'food' moves into the NP position. the verb prefix hops over the resultative ergative verb-*si* 'cook' to arrive at the surface structure-*Nri akà èghela* 'Food should not be cooked yet'.

193(a) *Akà èkwula okwu*

pref-modal NEG speak speak

(b) *Okwu akà àpxtala*

The structures in 193c will illustrate the realisation of ergativity in 193a

(c) *Akà èkwula okwu*

D-Structure: Subj Modal NEG V N  
 Transitivity: { ka -la kwu okwu  
 Deletion of subj: ka -la kwu okwu  
 Imperativisation: *Aka* a -la kwu okwu



Affix hopping: Aka èkwula okwu

S-Structure: Akà èkwula okwu

Ergativity: Okwu akà àpxtala

The structure in 193a illustrates the transitive form of the simple negative progressive form while 193b is the ergative counterpart. The string in 193b yielded grammatical and acceptable sentences in their derived version. 193c shows the realisation of ergative version of 193b.

The ergative version in 193b, is realised through the deletion of the deep structure logical subject -{ , and the movement of the logical object *okwu* 'word' moves into the NP position. The verb prefix hops over the resultative ergative verb-*kwu* 'speak' to arrive at the surface structure-*Okwu akà àpxtala* 'No talking yet'.

194(a) Akà àzxla ah[a

pref-modal NEG buy market

(b) Ah[a akà àzxla

Market pref modal NEG buy market

'Market should not hold yet'

The strings in 194c will illustrate the realisation of ergativity in 194b

(c) Akà àzxla ah[a

D-Structure: Subj Modal NEG V N

Transitivity: { ka -la zx ah[a

Deletion of subj: ka -la zx ah[a

Imperativisation: Aka a -la zx ah[a

Affix hopping: Akà àzxla ah[a

S-Structure: Akà àzxla ah[a

Ergativity: Ah[a akà àzxla

The structure in 194a shows the transitive form of the simple negative progressive form while 194b is the ergative

counterpart. The string in 194b yielded grammatical and acceptable sentence in its derived version. 194c shows the realisation of ergative version of 194b.

To derive the ergative version, the deep structure logical subject -{ is deleted, the object *ah[a* 'market' moves into the NP position. The verb prefix hops over the resultative ergative verb-*zx* 'buy' to arrive at the surface structure-*Ah[a akà àzxla* 'Market should not hold yet'.

#### **4.7.1.6 Complex imperatives: Affirmative**

This form has more than one element in its basic form. The verbs involved here are verb+verb compound. The form is understood as two events that have an internal action-result or action-goal meaning whereby the first verb expresses the action while the second verb/suffix expresses the result or goal of the action. The first verb in the compound verbs expresses the command while the second expresses the intended results. Syntactically, examples 195a-202a are superficially verb phrases; however, they are intuitively understood to be perfect sentences which command someone or some entity to do something (Yusuf 2007:218). Yusuf posits that imperative sentences give commands and make requests. A discriminating feature of this sentence type is its missing subject, but it is known pragmatically that the second person is being addressed in commands. Oye (2010:67) suggests for some reasons that the addressee in imperative sentences is 'you'. The surface form is arrived at through the 'you' subject deletion. A practical explanation for positing deletion would be that the addressee has to be present. The verb forms are presented together with the transformational process that yielded the ergative versions in 195-202 below. The derived constructions in 195b-202b are ergatives, they are regarded as overtly

agentless (see Paterson (1983)) and the subjects are portrayed as though initiating the actions themselves.

195(a) Nupu xgbq` ahx`

Push-out boat that

(b) Xgbq ahx` pxq`

Boat that move-OVS

'Let the vehicle move'

The realization of the ergative version in 195b will be shown in 195c

(c) Nupù xgbq ahx`

D-Structure: X nu-OVS xgbq ahx` xgbo ahx` pu-OVS

Deletion of subj & main verb: px-OVS xgbq

Movement of obj: xgbq px -OVS

Affix hopping: xgbq -OVS pu

S-Structure: Xgbq ahx` pxq`

In the above structure, the imperative verb *nupù* in 195a encodes two event. The first verb *nu* expresses the command while the second verb *pu* expresses the intended result of the command. 195b is the ergative form derived from 195a. 195c illustrates the derivation of the ergative version. The derivation involves the deletion of the logical subject-*X* and the main verb *nu*, the movement of the logical object *xgbq ahx`* to the empty subject position and the hopping of the suffix-*q* over the resutative verb *px* to arrive at the surface structure-*Xgbq ahx` pxq`*.

196(a) Gbàjiè osisi ahx`

Break-OVS-PERF stick that

(b) Osisì ahx` jiè

Stick that break -OVS

'Let the stick break'

The constructions in 196c will illustrate the derivation of the ergative version in 196b

(c) Gbàjiè osisi ahx

D-Structure: X gba -OVS osisi ahx` Osisi ahx` -ji -OVS

Deletion of subjs & main verb: wa-OVS osisi

Movement of obj: Osisi ahx`-ji -OVS

Affix hopping: Osisi ahx`ji -ovs

S-Structure: Osisi ahx` jiè

In the above structure, the imperative verb *gbaji* in 196a, encodes two event. The first verb *gba* expresses the command while the second verb *ji* expresses the intended result of the command. 196b is the ergative form derived from 196a. 196c illustrates the derivation of the ergative version. The derivation involves the deletion of the logical subject-*X* and the main verb *gba*, the movement of the logical object *osisi* to the empty subject position and the hopping of the suffix-*eover* the resutative verb *ji* to arrive at the surface structure-*Osisi ahx` jiè`*.

197(a) Gbàwaa bqlx` ahx`

Kick-break-OVS ball that

(b) Bqlx` ahx` waa`

Ball that break-OVS

'Let the ball break'

197c will show the derivation of the ergative structure in 197b

(c) Gbàwaa bqlx` ahx`

D-Structure: X gba -OVS bqlx` ahx bqlx` ahx-wa -OVS

Deletion of subjs & main verb: wa-OVS b`olu` ahx

Movement of obj: bqlx` ahx-wa -OVS

Affix hopping: bqlx` ahx -OVS wa

S-Structure: Bqlx` ahx` waa`

In the above structure, the imperative verb *gbàwa* in 197a, encodes two event. The first verb *gba* expresses the command while the second verb *wa* expresses the intended result of the command. 197b is the ergative form derived from 197a. 197c illustrates the derivation of the ergative version. The derivation involves the deletion of the logical subject-*X* and the main verb *gba*, the movement of the logical object *bq̀lx` ahx* to the empty subject position and the hopping of the suffix over the resutative verb *wa* to arrive at the surface structure *-Bq̀lx` ahx` waà*.

198(a) *Kx̣waa ènyò ahx̀*

Break-split-OVS mirror that

(b) *Ènyò ahx̀ waà*

Mirror that split-OVS

'Let the mirror break'

In 198c, the transformations that yielded the ergative version in 198b are shown

(c) *Kx̣waa ènyò ahx̀*

D-Structure: *X kx -OVS enyo ahx ènyò ahx -Vpre- wa -OVS*

Deletion of subjs & main verb: *wa -OVS ènyò ahx*

Movement of obj: *ènyò ahx wa-OVS*

Affix hopping: *enyo ahx OVS-wa*

S-Structure: *Ènyò ahx̀ waà*

In the above structure, the imperative verb *kxwa* in 198a, encodes two event. The first verb *kx* expresses the command while the second verb *wa* expresses the intended result of the command. 198b is the ergative form derived from 198a. 198c illustrates the derivation of the ergative version. The derivation involves the deletion of the logical subject-*X* and the main verb *gba*, the movement of the logical object *ènyo ahx̀* to the

empty subject position and the hopping of the suffix-*a* over the resutative verb *wa* to arrive at the surface structure - *Ènyò ahx` waà*.

199(a) *Gbàjuo ìtè ahx`*

Fill-up-OVS pot that

(b) *Ìtè ahù juò*

Pot that -fill-OVS

'Let the pot fill'

The construction in 199c illustrates the realization of the ergative structure in 199b

(c) *Gbàjuo ìtè ahx`*

D-Structure: X *gba* -OVS *ite ahx` ìtè ahx` -ju* -OVS

Deletion of subjs & main verb: *ju*-OVS *ìtè ahx`*

Movement of obj: *ite ahx` ju* -OVS

Affix hopping: *ìtè ahx` -OVS ju*

S-Structure: *Ìtè ahx`juò*

In the above structure, the imperative verb *gbàju* in 199a encodes two event. The first verb *gba* expresses the command while the second verb *ju* expresses the intended result of the command. 199b is the ergative form derived from 199a. 199c illustrates the derivation of the ergative version. The derivation involves the deletion of the logical subject-*X* and the main verb *gba*, the movement of the logical object *ìtè ahx`* to the empty subject position and the hopping of the suffix over the resutative verb *ju* to arrive at the surface structure - *Ìtè ahx` juò*

200(a) *Mènyxq` qkx ahx`*

Put-off-OVS fire that

(b) *Qkx ahx` nyxq`*

Fire that be-off -OVS

'Let the light go off'

200c shows the derivation of ergative structure in 200b.

200(c) Mènyxq̣ qkx ahx

D-Structure: X me-OVS qkx ahx qkx ahx -nyx-OVS

Deletion of subjs & main verb: nyx-OVS qkx ahx

Movement of obj: qkx ahx nyx-OVS

Affix hopping: qkx ahx nyx-OVS

S-Structure: Qkx ahx̣ nyxq̣

In the above structure, the imperative verb *menyx̣* in 200a, encodes two event. The first verb *me* expresses the command while the second verb *nyx* expresses the intended result of the command. 200b is the ergative form derived from 200a. Example 200c illustrates the derivation of the ergative version. The derivation involves the deletion of the logical subject-*X* and the main verb *me*, the movement of the logical object *qkx ahx̣* to the empty subject position and the hopping of the suffix over the resultative verb *nyx* to arrive at the surface structure - *Qkx ahx̣ nyxq̣*.

201(a) Mèteè nwa ahx

Wake-up-OVS baby that

(b) Nwa ahx̣ teè

Baby that wake-OVS

'Let the baby wake'

201c shows the derivation of ergative structure in 201b.

(c) Mèteè nwa ahx̣

D-Structure: X me-OVS nwa ahx nwa ahx te-OVS

Deletion of subjs & main verb: te-OVS nwa ahx

Movement of obj: nwa ahx te-OVS

Affix hopping: nwa ahx te-OVS

S-Structure: Nwa ahx` teè

In the above structure, the imperative verb *mète* in 201a, encodes two event. The first verb *me* expresses the command while the second verb *te* expresses the intended result of the command. 201b is the ergative form derived from 201a. 201c illustrates the derivation of the ergative version. The derivation involves the deletion of the logical subject-*X* and the main verb *me*, the movement of the logical object *nwa ahx`* to the empty subject position and the hopping of the suffix over the resultative verb *te* to arrive at the surface structure - *Nwa ahx` teè*.

202(a) Tufuò egō ahx`

Throw-away-OVS money that

(b) Egō ahx` fuò

Money that lost-OVS

'Let the money lose'

The structure in 202c illustrates the derivation of ergative structure in 202b

(c) Tufuò egō ahx`

D-Structure: X tx-OVS ego ahx ego ahx fu-OVS

Deletion of subjs & main verb: fu-OVS ego ahx

Movement of obj: ego ahx fu-OVS

Affix hopping: ego ahx fu-OVS

S-Structure: Egō ahx` fuò

In the above structure, the imperative verb *tufu* in 202a encodes two event. The first verb *tu* expresses the command while the second verb *fu* expresses the intended result of the command. 202b is the ergative form derived from 202a. 202c illustrates the derivation of the ergative version. The derivation involves the deletion of the logical subject-*X* and



the main verb *tx*; the movement of the logical object *ego ahx`* to the empty subject position and the hopping of the suffix over the resutative verb *te* to arrive at the surface structure - *Ego ahx` fuò*.

#### 4.7.1.7 Complex imperatives: Negative

The negative forms of the above imperative verbs are given below with their ergativised counterparts (see 4.6.1.6 for more on complex negative imperatives).

- 203(a) *Enūpùlà xgbq ahx`*  
           'VPref-push-out-NEG boat that'  
 (b) *Xgbq ahx` apxlà*  
           Boat that Vpref-move-NEG  
           'That boat should not move'

The derivation of the ergative structure in 203b will be shown in 203c

- (c) *Enūpxlà xgbq ahx`*  
       D-Structure: **X** Vpref-nupu-NEG *xgbq ahx*  
       Deletion of subj & main verb: Vpref-pu -NEG *xgbq ahx*  
       Movement of obj: *xgbq ahx* Vpref -pu-NEG  
       Affix hopping: *xgbq ahx pu -Vpref -NEG*  
       S-Structure: *Xgbq ahx` apxlà*

In 203c, the derivation involves the deletion of the logical subject-*X* and the main verb *nu*, the movement of the logical object *xgbq ahx* to the empty subject position and the hopping of the suffix *-la* over the resutative verb *px* to arrive at the surface structure - *xgbq ahx` apxlà*.

- 204(a) *Agbàjìlà osisi ahx`*  
           Pref-break-NEG stick that  
 (b) *Osisì ahx` ejilà*  
           Stick that Vpref-break-NEG  
           'That stick should not break'

The derivation of the ergative structure in 204b will be shown in 204c

(c) Agbàjlà osisi ahx`

D-Structure: X Vpref-gbàji-NEG osisi ahx

Deletion of subj & main verb: Vpref-pu -NEG osisi ahx

Movement of obj: osisi ahx Vpref -ji-NEG

Affix hopping: osisi ahx ji -Vpref -NEG

S-Structure: Osisì ahx` ejilà

204c illustrates the derivation of the ergative form in 204b, it involves the deletion of the logical subject-*X* and the main verb *gba*, the movement of the logical object *osisi ahx`* to the empty subject position and the hopping of the suffix *la* over the resutative verb *ji* to arrive at the surface structure - *osisi ahx` ejilà*.

205(a) Agbāwàlà bqlx` ahx`

Vpref-kick-break-NEG ball that

(b) Bqlx` ahx` awàlà

Ball that Vpref-break-NEG

'That ball should not break'

The derivation of the ergative structure in 205b will be shown in 205c

(c) Agbāwàlà bqlx` ahx`

D-Structure: X Vpref-gbawa-NEG bqlx` ahx

Deletion of subj & main verb: Vpref-wa -NEG bqlx` ahx

Movement of obj: bqlx` Vpref -wa-NEG

Affix hopping: bqlx` ahx` wa -Vpref -NEG

S-Structure: Bqlx` ahx` awàlà

In 205c, the ergative form in 205bis derived via the deletion of the logical subject-*X* and the main verb *gba*, the movement

of the logical object *bq̄lx` ahx`* to the empty subject position and the hopping of the suffix *la* over the resultative verb *wa* to arrive at the surface structure - *Bq̄lx` ahx` awalà`*.

206(a) *Akūwalà` ènyò` ahx`*

Vpref-break-split-NEG mirror that

(b) *Ènyò` ahx` awalà`*

Mirror that Vpref-break-NEG

'That mirror should not break'

The derivation of the ergative structure in 206b will be shown in 206c

(c) *Akūwalà` ènyò` ahx`*

D-Structure: ~~X~~ Vpref-kxwa-NEG enyo ahx`

Deletion of subj & main verb: Vpref-wa -NEG enyo ahx`

Movement of obj: ènyò` ahx` Vpref -wa-NEG

Affix hopping: enyo ahx` wa -Vpref -NEG

S-Structure: *Ènyò` ahx` awalà`*

In 206c, the ergative form in 206b is derived via the deletion of the logical subject-~~X~~ and the main verb *kx*, the movement of the logical object *ènyò` ahx`* to the empty subject position and the hopping of the suffix *la* over the resultative verb *wa* to arrive at the surface structure - *Ènyò` ahx` awalà`*.

207(a) *Agbājulà` itè` ahx`*

Vpref-fill-NEG pot that

(b) *itè` ahx` ejūla`*

Pot that Vpref-fill-NEG

'The pot should not be filled'

Example 207c will illustrate the derivation of the ergative structure in 207b.

(c) Agbājula ìtè ahx̀

D-Structure: X Vpref-gbaju-NEG ìtè ahx̀

Deletion of subj & main verb: Vpref-ju -NEG ìtè ahx̀

Movement of obj: ìtè ahx̀ Vpref -ju-NEG

Affix hopping: ìtè ahx̀ ju -Vpref -NEG

S-Structure: Ìtè ahx̀ ejūla

207c shows that the ergative form in 207b is derived via the deletion of the logical subject-*X* and the main verb *gba*, the movement of the logical object *ìtè ahx̀* to the empty subject position and the hopping of the suffix *la* over the resutative verb *ju* to arrive at the surface structure - *Ìtè ahx̀ ejūla*.

208(a) Emenyūla qkx ahx̀

Vpref-put-off-NEG fire that

(b) Qkx ahx̀ anyūla

That fire Vpref-put-off-NEG

'The fire should not go off

The derivation of the ergative structure in 208b is shown in 208c

(c) Emenyūla qkx ahx̀

D-Structure: X Vpref-menyx-NEG qkx ahx̀

Deletion of subj & main verb: nyx-NEG qkx ahx̀

Movement of obj: Qkx ahx̀ Vpref -nyu -NEG

Affix hopping: Qkx ahx̀ nyx -Vpref -NEG

S-Structure: Qkx ahx̀ anyūla

In 208c, the ergative form in 208b is derived via the deletion of the logical subject-*X* and the main verb *me*, the movement of the logical object *qkx ahx̀* to the empty subject position and the hopping of the suffix *la* over the resutative verb *nyx* to arrive at the surface structure - *Qkx ahx̀ anyūla*.

209(a) Emētela nwa ahx̀

Vpref-wake-up-NEG baby

(b) Nwa ahx̀ etēla

That babyVpref-wake-up-NEG

'The baby should not wake-up'

209c shows the derivation of the ergative version of 209b

(c) Emētela nwa ahx̀

D-Structure: *X*Vpref-mete-NEG nwa ahx̀

Deletion of subj& main verb: Vpref-te -NEG nwa ahx̀

Movement of obj: nwa ahx̀ Vpref -te -NEG

Affix hopping: nwa ahx̀ te -Vpref -NEG

S-structure: Nwa ahx̀ etēla

In 209c, the ergative form in 209b is derived via the deletion of the logical subject-*X* and the main verb *me*, the movement of the logical object *nwa ahx̀* to the empty subject position and the hopping of the suffix-*la* over the resutative verb *te* to arrive at the surface structure - *Nwa ahx̀ etēla*.

210(a) Etufùla egō ahx̀

Pref-throw-away-NEG money that

(b) Egō ahx̀ efùla

Money that Pref-lose-NEG

'The money should not be lost'

(c) Etufùlà egò ahx̀

D-Structure: *X* Vpref-tufu-NEG ego ahx̀

Deletion of subj& main verb: Vpref -fu -NEG ego ahx̀

Movement of obj: egō ahx̀ Vpref -fu -NEG

Affix hopping: egō ahx̀ fu -Vpref -NEG

S-Structure: Egō ahx̀ efùlà

The structures in 210c illustrates the realisation of the ergative version in 210b

In 210c, the ergative form in 210b is derived via the deletion of the logical subject-*X* and the main verb *tx*, the movement of the logical object *egō ahx̀* to the empty subject position and the hopping of the suffix *-la* over the resutative verb *fu* to arrive at the surface structure - *Egō ahx̀ efùlà*.

The structures in examples 203a -210a are the negative forms of the imperative affirmative verb forms in examples 195a-202a. The verbs involved are verb+ verb compound. Each of the verbs has an internal action-result or action -goal meaning whereby the first verb expresses the action while the second verb expresses the result or goal of the action. In addition, the verbs have the harmonising simple present negative imperative suffix *-la* in the underlying structure with a high tone harmonising vowel prefix *e-/-a*. Examples 203b-210b are the ergativised versions of the imperative negative verb forms. The structures in 203a-210a are complex negative imperative forms without overt NPs but underlyingly, the second person is being addressed. Examples 203b-210b are derived ergatives from 203a-210a. The structures in 203c-210c illustrate the derivation of ergative structures in affirmative and negative imperatives.

To account for the derivation of ergativity in imperatives, the construction in (204) is used.

211. Gbàjiè` osisi\*\*

D-Structure: X gba-OVS osisi osisi ji-OVS  
 Deletion of subjs & main verb: ji-OVS osisi  
 Movement of obj: osisi ji-OVS  
 Affix hopping: osisi OVS-ji  
 S-Structure: Osisi jie

The strings in 211 indicate that the derivation of ergative structure from the imperative involves the following transformation on the D-Structure strings: deletion of logical subject of the transitive structure, movement of object, and affix hopping. The logical subject in the D-Structure are deleted leaving the structure with *ji-OVS osisi ahx`*. The deep structure object *osisi ahx`* subsequently moves into the base generated empty subject NP position. The last transformation is the affix hopping rule, in which the -OVS affix hops over the resultative ergative verb *ji* to arrive at the surface structure: *Osisi ahx` jiè*. The verb 'gbaji' is a verb+ verb compound involving two events that have internal action-result or action-goal meaning whereby the first verb *gba* expresses the action while the second verb/suffix *ji* expresses the result or goal of the action.

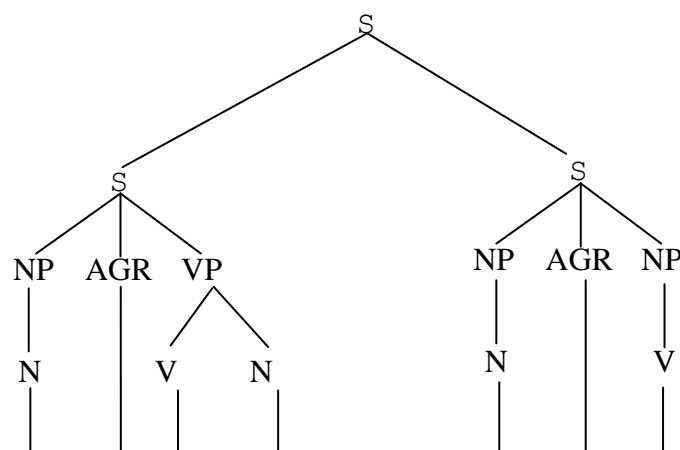
212 has the following tree diagrams:

(a) Transitive: Gbàjiè osisi

D-Structure: X gba-OVS osisi osisi ji-OVS

S-Structure: Gbaà osisi, osisi jiè

Ergative: Osisi jiè



#### 4.7.2 Ergativity and perfective verb form

Perfectivity implies a completed process. Perfective refers to a completed action whose influence is still felt in the present (Emenanjo 1987:180). In this study, only two types of perfective verb forms are considered: perfective affirmative and perfective negative.

##### 4.7.2.1 Simple present perfective affirmative

This verb form is tagged different names such as 'Subject Verb Form 11', 'Main (Initiating)' or the 'perfect tense' or the 'completive', or simply the *la*-form of the verb (Emenanjo 1978:179). In standard Igbo, it is marked by the '-la' suffix. The suffix is on high tone irrespective of the tone class of the verb. Some perfective-affirmative verb forms can be ergativised. 213a-217a are illustrative.

213(a) X àkxq̄la ekwe

X Pref-beat-OVS-PERF wooden gong

(b) Ekwe àkxq̄la

Wooden gong Pref-beat-OVS-PERF

'The wooden gong has sounded'

In 213c, the derivation of the ergative version in 213b is illustrated.

(c) X àkxq̄la ekwe

D-Structure: X Vpre -kx -OVS -Vla ekwe

Deletion of subj: Vpre -kx -OVS -Vla ekwe

Movement of obj: ekwe Vpre -kx -OVS -Vla ekwe

Affix hopping: ekwe kx -vpre -OVS -Vla ekwe

S-Structure: Ekwe àkxòla



To realize the ergative structure in 213b, the logical subjects (represented by X) get deleted. Deleting the logical subject from 213c leaves the structure with *Vpre -ku -OVS -Vla ekwe*. The logical object *-ekwe* accordingly moves into the base generated subject NP position. The last transformation is the affix hopping rule in which the *-Verb* prefix hops over the resultative ergative verb *-kx* to arrive at the surface structure *-Ekwe àkxòla*.

214(a) X àkq̀qla akwà m̄

XPref-OVS-dry-PERF cloth 1Sg

(b) Akwà m̄ àkq̀qla

Cloth 1Sg PEF-dry-OVS-PERF

'My cloth has dried'

214c illustrates the realisation of the ergative structure in 214b.

(b) X àkq̀qla akwa m̄

D-Structure: X Vpre kq -OVS -Vla akwa m̄

Deletion of subj: Vpre kq -OVS -Vla akwa m̄

Movement of obj: akwà m̄ Vpre kq -OVS -Vla

Affix hopping: akwà m̄ kq -Vpre -OVS -Vla

S-Structure: Akwà m̄ àkq̀qla

The ergative structure in 214b is derived through the deletion of the logical subject X. This is followed by the movement of the logical object (*akwà*) into the empty subject position. The last transformation is the affix hopping rule in which the *-Verb* prefix hops over the resultative ergative verbs: *kq* to arrive at the surface structure *-Akwà m̄ àkq̀qla*.

215(a) X èbidola egwu

X Pref-start-OVS-PERF dance

(b) Egwu èbidola

Music Pref-start-OVS-PERF dance

'The music has started'

The derivation of the ergative structure in 215b is shown in 215c.

(c) X èbidola egwu

D-Structure: X Vpre bido -Vla egwu

Deletion of subj: Vpre bido -Vla egwu

Movement of obj: egwu Vpre bido -Vla

Affix hopping: egwu bido -Vpre -Vla

S-Structure: Egwu èbidola

The structures in 215c show the realisation of the ergative version in 215b. The derivation involves the deletion of the logical subject X and the movement of the logical object (*egwu*) into the empty NP position. Lastly, the verb prefix hops over the ergative verb *bido* to arrive at the surface structure- *Egwu èbidola*.

216(a) X èmegheèla xzq̣ oghē

X Pref-open-OVS-PERF door open

(b) Xzq̣ ègheèla oghe

Door Pref-open-rV-PERF

'The door has opened'

The derivation of the ergative version in 216b is shown in 216c

(c) X èmegheèla xzq̣ oghē

D-Structure: X Vpre meghe - OVS-Vla xzq̣ oghē

Deletion of subj: Vpre meghe -OVS-Vla xzq̣ oghē

Movement of obj: xzq̣ Vpre bido-OVS -Vla

Affix hopping: xzq̣ meghe-OVS-Vpre -Vla

S-Structure: Xzq̣ ègheèla oghē

To realize the ergative structure in 216b, the logical subject (represented by **X**) gets deleted. Deleting the logical subject from 216c leaves the structure with *Vpre -ku -OVS -Vla xzq̇*. The logical object - accordingly moves into the base generated subject NP position. The last transformation is the affix hopping rule in which the verb prefix hops over the resultative ergative verb *-meghe* to arrive at the surface structure *-xzq̇ èmegheèla oghē*.

217(a) **X** èmebiela akwxkwq̇m̄

**X** Pref-spoil-OVS-PERF

(b) Akwxkwq̇m̄ èmebiela

Books 1Sg AGR-spoil-PERF

'My books are spoilt'

217b is realised by the transformations in 217c.

(c) **X** èmebièla akwxkwq̇m̄

D-Structure: **X** Vpre mebi- OVS-Vla akwxkwq̇m̄

Deletion of subj: Vpre mebi -OVS-Vla akwxkwq̇m̄

Movement of obj: akwxkwq̇m̄ Vpre bido-OVS -Vla

Affix hopping: akwxkwq̇m̄ mebi-OVS-Vpre -Vla

S-Structure: Akwxkwq̇m̄ èmebièla

Example 217c shows the realisation of the ergative structure in 217b. The derivation involves the deletion of the logical subject (represented by **X**). Deleting the logical subject from 217c leaves the structure with *Vpre mebi -OVS-Vla akwxkwq̇m̄*. The logical object- *akwxkwq̇m̄* accordingly moves into the base generated subject NP position. The last transformation is the affix hopping rule in which the verb prefix hops over the resultative ergative verb *-mebi* to arrive at the surface structure - *Akwxkwq̇m̄ èmebièla*

The perfective marker in Igbo is a suffix -VLA (-Vla/-Vle), which is attached to the participle form of the verb. V is the harmonising vowel of the preceding syllable (Green and Igwe, 1963; Emenanjo 1978), which is followed by the suffix -la. The perfective affirmative verb form retain their inherent tones while the perfective suffix (-VLA) bears a high tone irrespective of the tonal classes of the verbs with which the suffix collocates in both transitive and intransitive constructions. The structures in 213a-217a are sentences denoting perfective affirmative forms; the verbs subcategorise two arguments showing transitive use. In 213a, the verb *àkxq̄la* 'has beaten' subcategorises two arguments: X and *ekwe* 'wooden gong', *àkq̄la* 'has dried'. 214a has two arguments: X and *akwà m̄* 'my cloth'. The compound verb *èbidola* 'has started' in 215a has the arguments: X and *egwu* 'music' etc. *Èmegheèla* 'has opened' in 216a has the arguments X and *xzq*, *èmebièla* 'are spoilt' in 217 also has two arguments X and *akwxkwq̄ m̄* as exemplified. The derived structures in 213b-217b are ergative. Each of the verbs has one argument at the surface structure level. For example, the verb *akxq̄la* in 213b has *ekwe* 'wooden gong' as the only argument. *Àkq̄la* 'dried' in 214b subcategorises *akwà m̄* 'my cloth' at the surface structure level. The verb *èbidola* in 215b has *egwu* as the only argument. In 216b, the verb *èmegheèla* has *xzq* as the sole argument while *èmebiela* in 217b has *akwxkwq̄ m̄* as the only argument.

#### 4.7.2.2 Simple present perfective negative

This verb form has the disyllabic element *-beghi* affixed to it. By contrast, the prefix in the negative perfective verb form is consistently on high tone. The transitive and ergative use of the verb form will be presented along with the derivation process. Here are some examples.

218(a) X akūbeghi ekwe

X Vpref-beat-NEG ekwe

(b) Ekwe akūbeghi

Wooden gongVpref-beat-NEG

'The wooden gong has not sounded'

The ergative version in 218b is derived through the transformations in 218c.

(c) X akūbeghi ekwe

D-Structure: X Vpref-kx-NEG ekwe

Deletion of subj: Vpref -kx -NEGekwe

Movement of obj: ekwe Vpre -kx -NEG

Affix hopping: ekwe kx -Vpre -NEG

S-Structure: Ekwe akūbèghi

219(a) X akōbeghi akwà

X Vpref-dry-NEG akwà

(b) Akwa akōbeghi

ClothVpref-dry-NEG

'The cloth has not dried'

The derivation of the ergative structure in 219b is shown in 219c

(c) X akōbèghi akwà

D-Structure: X Vpref-kq-NEG akwà

Deletion of subj: Vpre -kq -NEG akwà

Movement of obj: akwà Vpref -kq -NEG

Affix hopping: akwà kq -Vpref-NEG

S-Structure: Akwà akōbèghi

220(a) X ebidobèghi egwu

X Vpref-start-NEG egwu

(b) Egwu ebidobeghi

Egwu Vpref-start-NEG

'The dance has not started'

The ergative structure in 220b is derived through the transformations in 220c

(c) X ebidobèghi egwu

D-Structure: X Vpref-bido-NEG egwu  
Deletion of subj: Vpre -bido -NEG egwu  
Movement of obj: egwu Vpref -bido -NEG  
Affix hopping: egwu bido -Vpref-NEG  
S-Structure: Egwu ebidobèghi

221(a) X emēghèbèghi xzq èmèghe

X Vpref-open-NEG xzq`

(b) Xzq` emēghèbèghi èmèghe

'The door has not opened'

221b is derived via the transformations in 221c

(c) X emēghebèghi xzq`emeghe

D-Structure: X Vpref-meghe-NEG èmèghe  
Deletion of subj: Vpre -meghe -NEG xzq` èmèghe  
Movement of obj: xzq` Vpref -kq -NEG èmèghe  
Affix hopping: xzq` meghe -Vpref-NEG èmèghe  
S-Structure: Xzq` emēghèbèghi

222(a) X emēbibèghi akwxkwq

X Vpref-open-NEG akwxkwq

(b) Akwxkwq emēbibèghi

'The book has not spoilt'

222c illustrates the derivation of the ergative version in 222b.

(c) X emēbibèghi akwxkwq

D-Structure: X Vpref-mebi-NEG akwxkwq  
Deletion of subj: Vpre -mebi -NEG akwxkwq  
Movement of obj: akwxkwq Vpref -mebi -NEG  
Affix hopping: akwxkwq mebi -Vpref-NEG  
S-Structure: Akwxkwq emēbibèghi

The structures in 218a-222a are the direct negatives of the affirmatives in 213a-217a. The low tone *-bèghi* is affixed to the verb which retains its inherent tone. Examples 218b-222b are the derived ergative versions of the negative perfective forms of the perfective verb form.

As seen in the above examples, the structures in 218a-222a show the transitive use of the verbs, 218b-222b are the ergative uses while 218c-222c illustrate the derivation of the ergative versions. In deriving the ergative form, the logical subjects *X* are deleted. The logical objects move into the empty subject NP position. Then the verb prefixes hop over the resultative ergative verbs to arrive at the surface structures - *Ekwe akxbeghi* (218b), *Akwa m akōbèghi* (219b), *Egwu ebīdobèghi* (220b), *Xzq emēghebèghi* (221b) and *Akwxkwq emēbibèghi* (222b).

#### **4.7.3 The Future perfective verb form**

This verb form is also called the future tense or the *Ga-* form of the verb. Some types will be discussed and their alternativity is verified. The types to be discussed include: simple future, future progressive and future perfect forms. Affirmative and negative forms of the future verb forms are highlighted.

##### **4.7.3.1(a) The simple future perfective affirmative**

This verb form has the general future marker, the auxiliary *ga* - on a low tone followed by the participle.

223(a) X *gà-esè àm̀x̀m̀*

X Fut AUX-Vpref-flash lightning

(b) *Àm̀x̀m̀ gà-esè*

Lightning Fut AUX-Vpre-flash

'There will be lightning'

224(a) X *gà-atx̀ x̀zx̀*

X Fut AUX-Vpre-throw uproar

(b) X̀z̀x̀ g̀a-atx̀

Uproar Fut AUX-Vpre-throw

'There will be uproar'

225(a) X g̀a-agb̀a àm̀a

X Fut AUX-Vpre-kick betrayal

(b) Àm̀a g̀a-agb̀a

Betrayal Fut AUX-Vpre-kick

'There will be betrayal'

226(a) X g̀a-egb̀u ebenebe

X Fut AUX-Vpref-kill wonder

(b) Ebenebe g̀a-egb̀u

Wonder Fut AUX-VPref-kill

'There will be wonders'

227(a) X g̀a-ezè xlq̀ ha

X Fut AUX-Vpre-collapse 3Sg

(b) Xlq̀ ha g̀a-ezè

House 3Sg Fut AUX-Vpre-collapse

'Their house will collapse'

In examples 223a-227a, the auxiliary verb *g̀a-* 'will' goes with the verbs, which are in their participle forms. The verbs in 223a-227a: *g̀a-ese* 'will flash' (223a), *g̀a-atx̀* 'will throw' (224a), *g̀a-agb̀a* 'will kick' (225a), *g̀a-egb̀u* 'will kill' (226a), and *g̀a-ezè* 'will collapse' (227a) are used transitively. Each of the verbs has an agent and a direct object. In the examples above, *X* is the uniform agent while each of the verbs has a theme as shown. In examples 223b-227b, the verbs are used intransitively without the logical subjects. The derived structures in 223b-227b are ergative, because the subjects are not agents. The ergative realisation of the derived structures in 223b-227b will be shown in 228a-e.



228 (a) X gà-esè àmxmà

D-Structure: X FutAUX-Vpref-se àmxmà

Deletion of subj: Fut AUX- Vpref-se àmxmà

Movement of obj: àmxmà Fut AUX- Vpref-se

Affix hopping: àmxmà se-Fut AUX-Vpref

S-Structure: Àmxmà gà-esè

(b) X gà-atx` xzx`

D-Structure: X Fut AUX-Vpre-tx` xzx`

Deletion of subj: Fut AUX- Vpref-tx` xzx`

Movement of obj: Xzx` Fut AUX- Vpref-tx`

Affix hopping: Xzx` tx-FutAUX-Vpref

S-Structure: Xzx` gà-atx`

(c) X gà-agbà àmà

D-Structure: X FutAUX-Vpref-gba àmà

Deletion of subj: FutAUX- Vpref-gba àmà

Movement of obj: àmà FutAUX- Vpref-gba

Affix hopping: -àmà gba FutAUX-Vpref

S-Structure: Àmà gà-agbà

(d) X gà-egbù ebenebe

D-Structure: X Fut AUX-Vpref-gbu ebenebe

Deletion of subj: Fut AUX- Vpref-gbu ebenebe

Movement of obj: ebenebe Fut AUX- Vpref-gbu

Affix hopping: ebenebe gbu Fut AUX-Vpref

S-Structure: Ebenebe gà-egbù

(e) X gà-ezè xlq` ha

D-Structure: X Fut AUX-Vpref-ze xlq` ha

Deletion of subj: Fut AUX- Vpref-ze xlq` ha

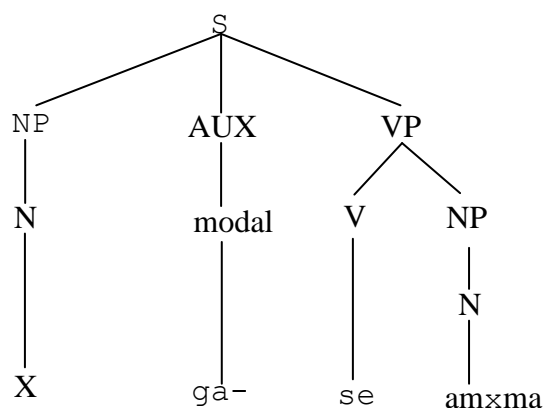
Movement of obj: Akwxkwq m Fut AUX- Vpref-ze

Affix hopping: xlq` ha ze Fut AUX-Vpref

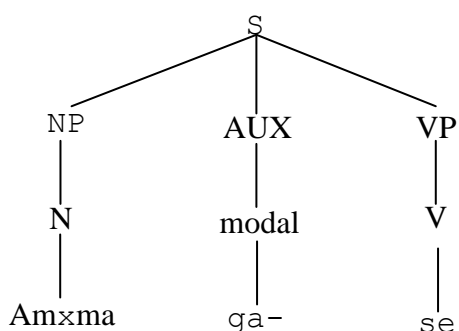
S-Structure: Xlq` ha gà-ezè

The structures in examples 228a-e illustrate the derivation of ergative constructions from simple future affirmative verb forms. It involves the deletion of the logical subject and the movement of the logical object. In 228a, the logical subject X is deleted and the logical object - àmxmà 'lightning' moves into the empty NP subject position. The -Vpref hops over the resultative ergative se to arrive at the surface structure -Àmxmà ga-ese. In 228b-e, the deep structure logical subjects-X get deleted. Consequently, the deep structure objects- xzx 'uproar' (228b), àmà 'betrayal' (228c), ebenebe 'wonder' (228d) and xIQ ha 'their house' (228e) move into the empty NP subject positions respectively. Lastly, the verb prefixes hop over the ergativeverbs- se, tx , gba, gbu, and ze yielding the surface structures- Àmxmà gà-esè (228a), Xzx` gà-atx` (228b), Àmà gà-agbà (228c), Ebenebe gà-egbù (228d), XIQ ha gà-ezè (228e) as the examples reveal. Example 228a has the following tree diagrams:

(a) Transitive: X gà-esè àmxmà



(b) Ergative: Àmxmà gà-esè



#### 4.7.3.1(b) The simple future negative perfective

This verb form has the auxiliary -ga followed by the participle. The auxiliary is then followed by the negative suffix -gh[ 'not'.

229(a) X agàgh[ esè àmxmà

X Vpre-FutAUX-NEG Vpre-flash lightning

(b) Àmxmà agàgh[ esè

Lightning Vpre-FutAUX-Vpre-flash

'There will be no lightning'

230(a) X agàgh[ atx` xzx`

X Vpre-FutAUX-NEG Vpref-tx xzx`

(b) Xzx` agàgh[ atx`

Uproar Vpre-FutAUX-NEG Vpref-tx

'There will be no uproar'

231(a) X agàgh[ agbà àmà

X Vpre-Fut AUX-NEG Vpref-kick betrayal

(b) Àma agàgh[ agbà

Betrayal Vpre-Fut AUX-NEG Vpre-kick betrayal

'There will no betrayal '

232(a) X agàgh[ egbù ebenebe

X Vpre-FutAUX-NEG Vpre-kill wonder

(b) Ebenebe agàgh[ egbù

Wonder Vpre-FutAUX-NEG Vpre-kill

'There will be no wonders'

233(a) X agàgh[ eze xlq` ha

X Vpre-FutAUX-NEG Vpref-collapse house 3Sg

(b) Xlq` ha agàgh[ eze

House 3Sg Vpre-FutAUX-NEG Vpre-collapse

'Their house will not collapse'

Examples 229a-233a are future negative sentences. The introduction of negative marker *-gh[* in sentences (229-233) changes the meaning from affirmative to negation sentence. In examples 229a-233a, the negative marker *-gh[* is attached only to the future tense auxiliary verb, *gà -*. Examples 229a-233a have agents **X** which are responsible for the actions of the verbs showing that the verbs are used transitively. In examples 229b-233b, the verbs *se* (229b), *tx* (230b), *gba* (231b), *gbu* (232b) and *ze* (233b) are used intransitively showing ergativity. The prefix of the future marker has a high tone while the root of the auxiliary has a step tone. The one stem verbs *se*, *tx*, *gba*, *gbu*, and *ze* in 229a -233a respectively retained their inherent tones. Structures in 234a-e illustrate the derivation of ergative structures in future negative construction.

234(a) **X** agagh[ esè àmx`mà

D-Structure: **X** Vpre-FutAUX-NEG Vpre-se àmx`mà

Deletion of subj: Vpre-FutAUX-NEG Vpre-se àmx`mà

Movement of obj: àmx`mà Vpre-FutAUX-NEG Vpre-se

Affix hopping: àmx`mà se-Vpre-FutAUX-NEG

S-Structure: Àmx`mà agagh[ esè

(b) **X** agagh[ atx` xzx`

D-Structure: **X** Vpre-Fut AUX-NEG Vpre-tx xzx`

Deletion of subj: Vpre-Fut AUX-NEG Vpre-tx xzx`

Movement of obj: Xzx` Vpre-Fut AUX-NEG Vpre-tx

Affix hopping: Xzx` tx-Vpre-Fut AUX-NEG

S-Structure: Xzx` agagh[ atx`

(c) **X** agagh[ agba àmà

D-Structure: **X** Vpre-FutAUX-NEG Vpref-gba àmà

Deletion of subj: Vpre-FutAUX-NEG Vpre-gba àmà

Movement of obj: àmà Vpre-FutAUX-NEG Vpre-bido

Affix hopping: àmà gba -Vpre-FutAUX-NEG

S-Structure: Àmà gagh[ agba

(d) X agagh[ egbu ebenebe

D-Structure: X Vpre-FutAUX-NEG Vpref-gbu ebenebe

Deletion of subj: Vpre-Fut AUX-NEG Vpre-gbu ebenebe

Movement of obj: ebenebe Vpre-Fut AUX-NEG Vpre-gbu

Affix-hopping: ebenebe gbu-Vpre-Fut AUX-NEG

S-Structure: Ebenebe agagh[ egbu

(e) X agagh[ eze xlq` ha

D-Structure: X Vpre-Fut AUX-NEG Vpref-eze xlq` ha

Deletion of subj: Vpre-Fut AUX-NEG Vpref-eze xlq` ha

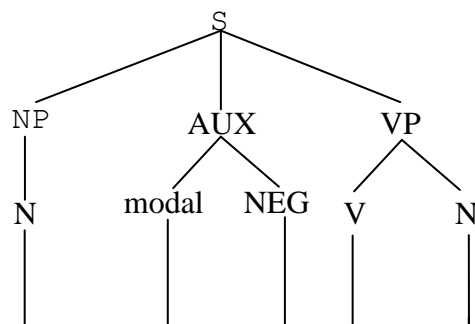
Movement of obj: xlq`ha Vpref-Fut AUX-NEGVpref-ze

Affix-hopping:xlq` ha ze -Vpre-Fut AUX-NEG

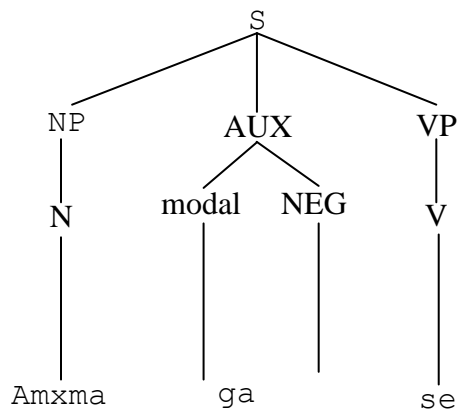
S-Structure: Xlq` ha agagh[ eze

The structures in 234a-e illustrate the derivation of ergative structure from simple future negative construction. The derivation involves the deletion of logical subject, movement of the logical object and affix hopping of the verb prefix. In 234a, the deletion of the logical subject X leaves the structure with *Vpre-FutAUX-NEG Vpref-se àmxmà*. The logical object *-àmxmà* moves into the empty NP subject position as the example shows. The last transformation is the affix hopping rule in which *-Vpref* hops over the resultative ergative seto arrive at the surface structure - *Àmxmà agagh[ èsè*. The same transformations took place in 234b-e, and the results are the following surface structures *-Xzz` agagh[ atx* (234b), *Amà agagh[ agba* (234c), *Ebenebe agagh[ egbu* (234d), and *Xlq ha agagh[ eze* (234e). 234a has the following three diagrams.

(a) Transitive: X agagh[ esè àmxmà



(b) Ergative: Àmxmà agàgh[ esè



#### 4.7.3.2(a) The simple future progressive: Affirmative

This is a complex form with the features of the future and the progressive verb forms. It has the affirmative and negative. Structures in 235-239 illustrate affirmative progressive forms.

235(a) X gà na-àkx ekwe

X Fut Prog AUX-Vpre-beat wooden gong

(b) Ekwe gà na-àkx

Wooden gong Fut ProgAUX-Vpre-beat

'Wooden gong will be sounding'

236(a) X gà na-àkq akwà m̄

X Fut ProgAUX-Vpre-dry cloth 1Sg

(b) Akwa m̄ gà na-àkq

Cloth 1Sg Fut ProgAUX-Vpre-dry

'My cloth will be drying'

237(a) X gà na-èbido egwu

X Fut Prog AUX-Vpre-start

(b) Egwu gà na-èbido

Dance Fut Prog AUX-Vpre-start

'Dance will be starting'

238(a) X gà na-èmeghe xzq̄ oghe

X Fut Prog AUX-Vpref-open door open

(b) Xzq̄gà na-èghe oghè

Door Fut Prog AUX-Vpre-open open

'The door will be kept open'

239(a) X gà na-èmebi akwxkwq m̄

X Fut Prog AUX-Vpre-spoil book 1Sg

(b) Akwxkwq m̄ gà na-èmebi

Books 1Sg Fut Prog AUX-Vpre

'My books will be spoiling'

Sentences 235a-239a are examples of future progressive affirmative forms. The auxiliary *ga na* 'will be' co-occurs with the verb root which takes the verbal prefix *e-(e-/a-)*, which could be realised as 'e-/a-' depending on the vowel harmony. The prefix is attached to the verb root to realise the participle form of the verb. The future marker *ga* has a low tone followed by a high tone progressive marker *-na*. The prefixes of the participles have a high tone. In examples 231a-235a, the verbs: *gà na-àkx* 'will be sounding', *gà na-àkq* 'will be drying', *gà na-èbido* 'will be starting', *gà na-emèghè* 'will be opening', and *gà na-èmebi* 'will be spoiling', are used transitively with X as the agent in each case. In 235a, X is

the agent of *ga na-àkx* while *ekwe* is the theme. Also, the sentences in 236a-239a have agents and themes. In 235b-239b, the verbs are used without agents; the themes are used as though they performed the actions of the verbs which show ergativity. The derivation of ergative version is shown in examples 240a-e.

240(a) X *gà na-àkx ekwe*

D-Structure: X Fut Prog AUX-Vpref-kx ekwe

Deletion of subj: Fut Prog AUX- Vpref-kx ekwe

Movement of obj: ekwe Fut Prog AUX-Vpref-kx

Affix hopping: ekwe kx- Vpref-Fut Prog AUX

S-Structure: Ekwe *gà na-àkx*

(b) X *gà na-àkq àkwa ñ*

D-Structure: X Fut Prog AUX-Vpref-kq àkwa ñ

Deletion of subj: Fut Prog AUX- Vpref-kq àkwa ñ

Movement of obj: àkwa ñ FutProg AUX-Vpref-kq

Affix hopping: àkwa ñ kqVpref-Fut Prog AUX

S-Structure: *Àkwa ñ gà na-àkq*

(c) X *gà na-èbido egwu*

D-Structure: X Fut Prog AUX-Vpref-bido egwu

Deletion of subj: Fut Prog AUX- Vpref-bido egwu

Movement of obj: egwu Fut Prog AUX-Vpref-bido

Affix hopping: egwu bidoVpref-Fut Prog AUX

S-Structure: Egwu *gà na-èbido*

(d) X *gà na-èmeghe xzq`oghè*

D-Structure: X Fut Prog AUX-Vpref-meghe xzq`oghè

Deletion of subj: Fut Prog AUX- Vpref-meghe xzq`oghè



Movement of obj: xzq̣ Fut Prog AUX-Vpref-meghe oghè  
 Affix hopping: xzq̣meghe Vpref-Fut Prog AUX  
 S-Structure: Xzq̣ gà na-èghe oghè

(e) X gà na-èmebi akwxkwq m̄

D-Structure: X Fut Prog AUX-Vpref-mebi akwxkwq m̄  
 Deletion of subj: Fut Prog AUX- Vpref-mebi akwxkwq m̄  
 Movement of obj: akwxkwq m̄ FutProg AUX-Vpref-mebi  
 Affix hopping: akwxkwq m̄ mebi Vpref-Fut Prog AUX  
 S-Structure: Akwxkwq m̄ gà na-èmebi

The structures in 240a-e illustrate the realisation of ergative versions of the affirmative future progressive verb forms. The application of the transformations as shown in the examples resulted in the surface structures: *Ekwe gà na-àkx* (240a), *Àkwa m̄ gà na-àkq* (240b), *Egwu gà na-èbido* (240c), *Xzq̣ gà na-èghe oghè* (240d), *Akwxkwq gà na-èmebi* (240e).

#### 4.7.3.2(b) The simple future progressive negative

This is the negative form of the affirmative sentences under 4.7.3.2(a). They share all but one of the features of the affirmative form. The difference lies in the use of the negative suffix - *gh* [ 'not' with the auxiliary. Here are some examples .

241(a) X agàgh[ na-àkx ekwe

X Vpre-Fut Prog AUX-NEG-Vpre-beat wooden gong

(b) Ekwe agàgh[ na-àkx

Wooden gong Vpre-Fut-AUX-NEG-be-Vpre-beat

'Wooden gong will not be sounding'

242(a) X agàgh[ na-àkq akwa m̄

X Vpre-Fut ProgAUX-NEG-Vpre-dry cloth 1Sg

(b) Akwà m agàgh[ na-àkq

Cloth 1Sg Vpre-Fut ProgAUX-NEG-Vpre-dry  
'My cloth will not be drying'

243(a) X agàgh[ na-èmeghe xzq̄ oghè

X Vpre-Fut ProgAUX-NEG-Vpre-open door open

(b) Xzq̄ agàgh[ na-èghe oghè

Door Vpre-Fut ProgAUX-NEG-Vpre-open open  
'The door will not remain open'

244(a) X agàgh[ na-èbido egwu

X Vpre-Fut ProgAUX-NEG-Vpre-start dance

(b) Egwu agàgh[ na-èbido

Dance Vper-Fut ProgAUX-NEG-Vpre-start  
'The dance will not be starting'

245(a) X agàgh[ na-èmebi akwxkwq m̄

X Vpre-FutProgAUX-NEG-Vpre-spoil book 1Sg

(b) Akwxkwq m̄ agàgh[ na-èmebi

Book 1Sg Vpre-Fut ProgAUX-NEG-Vpre-spoil  
'My book will not be spoiling'

Sentences in 241a-245a are negative forms of the affirmative sentences in 235a-239a. The negative suffix *-gh[* is attached to the future marker *gà* (on a low tone) followed by the progressive marker *-na* on a high tone. These two are then followed by a participle as shown in all the examples. The prefix of the participles in the examples is on low tone. For instance, the tone of the prefixes in sentence 241 is low while the verb *kx* a high tone. The derivation of ergative structures in future progressive negative forms are shown in 246a-e.

246(a) X agagh[ na-àkx ekwe

D-Structure: X Vpref-Fut Prog AUX-NEG-Vpre-kx ekwe

Deletion of subj: Vpref-Fut Prog AUX-NEG-Vpref-kx  
ekwe

Movement of obj: ekwe Vpref-Fut Prog AUX-NEG-Vpref-  
kx

Affix hopping: ekwe kx-Vpref- Fut Prog AUX-NEG  
S-Structure: Ekwe agagh[ na-àkx

(b) X agàgh[ na-àkq àkwa m̄

D-Structure: X Vpref-Fut Prog AUX-NEG-Vpref-kq akwa m̄

Deletion of subj: Vpref-Fut Prog AUX-NEG-Vpre-kq  
akwa m̄

Movement of obj: akwa m̄Vpref-Fut Prog AUX-NEG-Vpre-  
kq

Affix hopping: akwa m̄ kq-Vpref- Fut Prog AUX-NEG  
S-Structure: Akwa m̄ agàgh[ na-àkq

(c) X agàgh[ na-èmeghe xzq̇ oghè

D-Structure: X Vpref-Fut Prog AUX-NEG-Vpre-meghe xzq̇ oghè

Deletion of subj: Vpref-Fut Prog AUX-NEG-Vpref-meghe xzq̇  
oghè

Movement of obj: xzq̇ Vpref-Fut Prog AUX-NEG-Vpre-ghe

Affix hopping: xzq̇ ghe-Vpref-Fut Prog AUX-NEG

S-Structure: Xzq̇ agàgh[ na-èghe oghè

(d) X agàgh[ na-èbido egwu

D-Structure: X Vpref-Fut ProgAUX-NEG-Vpref-èbido egwu

Deletion of subj: Fut ProgAUX-NEG-Vpref-èbido egwu

Movement of obj: egwu Fut ProgAUX-NEG-Vpref-bido

Affix hopping: egwu bido-Vpre Fut ProgAUX-NEG

S-Structure: Egwu agàgh[ na-èbido

(e) X agàgh[ na-èmebi akwxkwq m̄

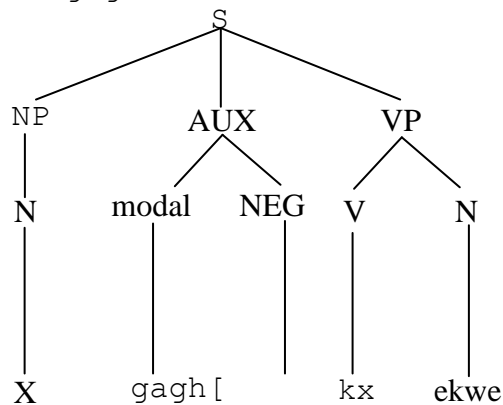
D-Structure: X Vpre-Fut Prog AUX-NEG-Vpre-mebi akwxkwq m̄

Deletion of subj: Fut Prog AUX-NEG-Vpre-mebi akwxkwq m̄

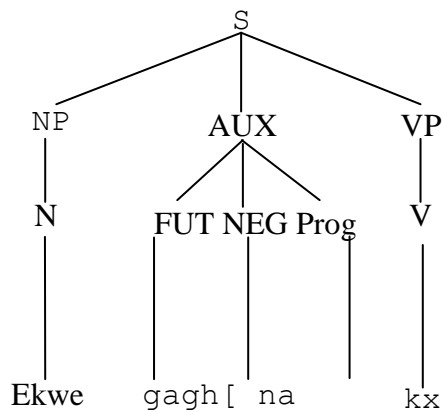
Movement of obj: akwxkwq m̄Fut Prog AUX-NEG-Vpre-mebi  
 Affix hopping: akwxkwq m̄ bido-Vpre Fut Prog AUX-NEG  
 S-Structure: Akwxkwq m̄ gagh[ na-èmebi

The strings in 246a-e show the derivation of ergative structures from the future progressive negative verb forms. Examples 246a-e illustrate the derivation of ergative negative future of progressive forms. Transformations acted on the deep structures in to arrive at the ergative surface structures- *Ekwe agagh[ na-àkx* (246a), *Akwa m agagh[ na-àkq* (246b), *Xzq agagh[ na-èghe oghè* (246c), *Egwu agagh[ na-èbido* (246d), *Akwxkwq m̄ gagh[ na-èmebi* (246e) respectively. The structure in 246a has the following tree diagram:

(a) Transitive: X agagh[ na-àkx ekwe



(b) Ergative: Ekwe agagh[ na-àkx



#### 4.7.3.3(a) The future perfect affirmative

This is a complex form which shares features of the future and perfective. It has the future tense marker *ga-* followed by the participle or the infinitive forms of the verbs. The affirmative and negative forms will be exemplified. The sentences in 247-251 are the affirmative forms of future perfective aspect.

247(a) X gàràla [kx̀ ekwe

X Fut-PST-Perf -Vpref-beat wooden gong

(b) Ekwe gàràla [kx̀

Wooden gong Fut-PST Perf-VPref-beat

'The wooden gong will have sounded'

248(a) X gàràla [kō akwà m

X Fut-PST Perf-VPref-dry cloth 1Sg

(b) Akwà m̄ gàràla [kq̀

Cloth 1Sg Fut-PST-Perf -Vpref-dry

'My cloth will have dried'

249(a) X gàràla ibīdo egwu

X Fut-PST-Perf -Vpref-start dance

(b) Egwu gàràla ibīdo

Dance Fut-PST-Perf -Vpref-start

'The dance will have started'

250(a) X gàràla imèghe xzq̀ oghè

X Fut-PST-Perf -Vpref-open door open

(b) Xzq̀ gàràla èghe oghè

Door Fut-PST-Perf -Vpref-open open

'The door will have been opened'

251(a) X gàràla imèbi akwxkwq m̄

X Fut-PST-Perf -Vpref-spoil book 1Sg

(b) Akwxkwq m̄ gàràla imèbi

Book 1Sg Fut-PST-Perf -Vpref-spoil

'My book will have spoilt'

The verbs in 247a-251a, are used transitively while in sentences 247b-251b they are used intransitively showing ergativity. Observe also that the verbs retain their inherent tones, while the perfective aspect suffix (-V1A) bears a high tone irrespective of the tonal classes of the verb with which the suffix collocates (Emenanjo 1978).

#### 4.7.3.3(b) The future perfect negative

In this form, the negative suffix -gh[ 'not' is suffixed to the elements going with the auxiliary. This in turn affects the meaning of the construction. Some examples of future perfective negative forms are as follows:

252(a) X agāalagh[ akx ekwe

X VPref-Fut-OVS-Perf-NEG Vpref-beat wooden gong

(b) Ekwe agāalagh[ akx

Wooden gong VPref-Fut-OVS-Perf-NEG Vpref-beat

'The wooden gong will not have sounded'

253(a) X agāalagh[ akq akwa m̄

X VPref-Fut-OVS-Perf-NEG Vpref-dry cloth 1Sg

(b) Akwa m agāalagh[ akq

Cloth 1Sg VPref-Fut-OVS-Perf-NEG Vpref

'My cloth will not have dried'

254(a) X agāalagh[ ebido egwu

X VPref-Fut-OVS-Perf-NEG Vpref-start dance

(b) Egwu agāalagh[ èbido

Dance VPref-Fut-OVS-Perf-NEG Vpref-start

'The dance will not have started'

255(a) X agāalagh[ emèghe xzq̄ oghè

X VPref-Fut-OVS-Perf-NEG Vpref-open door open

(b) Xzq̄ agāalagh[ eghe oghè

DoorVPref-Fut-OVS-Perf-NEG Vpref-open open

'The door will not have opened'

256(a) X agāalagh[ èmebì akwxkwq m̄

X VPref-Fut-OVS-Perf-NEG Vpref-spoil book 1Sg

(b) Akwxkwq m agāalagh[ emebì

Book 1Sg VPref-Fut-OVS-Perf-NEG Vpref-spoil

'My book will not have spoiled'

The sentences in examples 252a-256a illustrate future perfective negatives. The structures are the negative forms of the affirmative structures in examples 247a-251a above. The prefix of the future marker is on high tone followed by a step tone future marker. The perfective marker *-la* is also on low tone while the negative marker is on high tone. Sentences in 252a-256a are transitive in that the verbs have two arguments: the subjects which are agents and objects which are themes. The 252b-256b sentences are intransitive structures having only one argument each which is a theme. The ergative structures in examples 252-256b are derived through transformations as shown below. The constructions in example 257a-e are used to illustrate ergativity in the affirmative and negative perfective forms .

257(a) X gàràlà [kx̄ ekwe  
(Affirmative)

D-Structure: X Fut-PST-Perf -Vpre-kx̄ ekwe

Deletion of subj: Fut ProgAUX-Vpre-kx̄ ekwe

Movement of obj: ekwe Fut ProgAUX-Perf Vpre-kx̄

Affix-hopping: ekwe kx̄-Vpre Fut ProgAUX

S-Structure: Ekwe gàràlà akx̄

(b) X gàràlà [kq̄ akwà

(Affirmative)

D-Structure: X Fut-PST Perf-Vpref-kq̄ akwà

Deletion of subj: Fut ProgAUX-Vpre-kq̄ akwà

Movement of obj: akwà mFut ProgAUX-Perf Vpre-kq̄

Affix-hopping: akwà kq̄-Vpre Fut ProgAUX

S-Structure: Akwà gàràlà akq̄

(c) X gàràlà ibīdo egwu

(Affirmative)

D-Structure: X Fut-PST-Perf -Vpref-bido egwu

Deletion of subj: Fut ProgAUX-Vpre-bido egwu

Movement of obj: egwu Fut ProgAUX-Perf Vpre-bido

Affix-hopping: egwu bido-Vpre Fut ProgAUX

S-Structure: Egwu gàràlà ibĭdo

(d) X agàalagh[ emèghe xzq̄ oghè

(Negative)

D-Structure: X VPref-Fut-OVS-Perf-NEG Vpref-meghè xzq̄  
oghè

Deletion of subj: VPref-Fut-OVS-Perf-NEG Vpref-meghè  
xzq̄ oghè

Movement of obj: xzq VPref-Fut-OVS-Perf-NEG Vpref-  
meghè

Affix-hopping: xzq meghe-VPref-Fut-OVS-Perf-NEG

S-Structure: Xzq̄ agàalagh[ ighè oghè

(e) X agàalagh[ emèbi akwxkwq m̄

(Negative)

D-Structure: X VPref-Fut-OVS-Perf-NEG Vpref-mebi akwxkwq  
m̄

Deletion of subj: VPref-Fut-OVS-Perf-NEG Vpref-mebi  
akwxkwq m̄

Movement of obj: akwxkwq m̄ VPref-Fut-OVS-Perf-NEG Vpref-  
mebi

Affix-hopping: xzq meghe-akwxkwq m̄ mebi-VPref-Fut-OVS-  
Perf-NEG

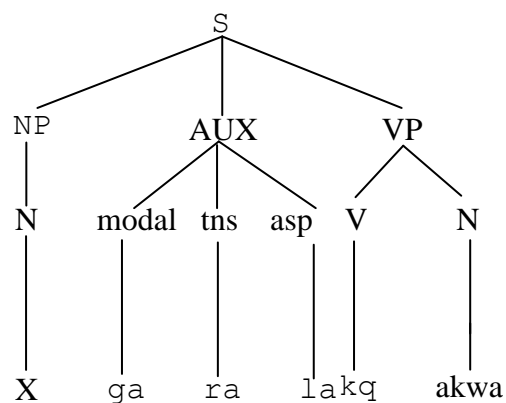
S-Structure: Akwxkwq m̄ agàalagh[ imebi

Examples 257a-e illustrate the realisation of ergativity in affirmative perfect negative forms. Structures in 257a-c show ergative realisations of the affirmative perfect forms while 257d and e show the ergative derivation in negative perfect forms. To realise the ergative version in 257a-c, the logical subjects X are deleted as revealed in the examples. As a result, the logical objects- ekwe (257a), akwà m̄ (257b) and egwu (257c) move into the empty NP subject positions. Lastly,

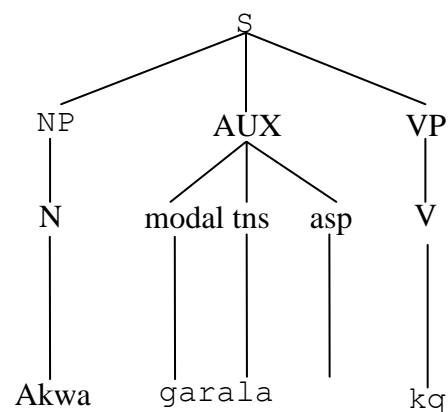


the verb prefixes hop over the ergative verbs to arrive at the surface structures-*Ekwe gàrala [kx̣̀* (257a), *Akwà m̄ gàrala [kq̣̀* (257b), *Egwu gàrala ibido* (257c). Similarly, in examples 257d and e, the logical subject-*X* get deleted. Consequently, the logical objects- *xzq̣̀* and *akwxkwq̣̀ m̄* move into the base generated subject position. To satisfy the affix hopping rule, the verb prefixes in 257d and e respectively hop over the ergative verbs *ighè* (257d) and *mebī* (257e) to appear in the surface structures as:*Xzq̣̀ agàlagh[ ighè oghè* (257d), and *Akwxkwq̣̀ m̄ agàlagh[ imèbi* (257e). Example 257b has the following tree diagram:

(a) Transitive:        *Xgàràla [kq̣̀ akwà*



(b) Ergative: *Akwà gàrala [kq̣̀*



#### 4.7.4 Ergativity and negativisation

Negation is a means of denying an affirmation. It is the means of denial of a parallel positive proposition. It is a common feature of human language although the transformational strategies differ from one language to another. The function of negation as a universal feature of human language is to deny or contradict a positive or affirmative sentence (Taiwo 2014:59). Most analysts in Igbo identify *gh[* as the simple past negative marker. Emenanjo (1985) divides the negative suffix into two: imperative *-la* and non-imperative negative *-ghi*. The examples show the ergativisation of verbs with the imperative *-la* and non-imperative *-gh[* negative suffixes.

##### 4.7.4.1 Ergativity in imperative -LA negative suffix

Here, the form has complex negative imperative verbs with *-la* suffix. The examples show some complex negative imperative verb forms that can be ergativised. The structures in 258a - 262a illustrate complex negative imperative verb forms. The root verb has a low tone while the *-la* suffix has a high. Note that the examples here have the same form as the examples in 4.7.1.7, but here we are looking at negative imperative *-la* as a form of negativisation in Igbo.

258(a) Asx̀kala akwà m̃

Vpref-wash-tear-NEG cloth 1Sg

(b) Akwà m̃ akàla

Cloth 1Sg Vpref-wash-tear-NEG

'My cloth should not tear'

258c shows the derivation of the ergative structure in 258b.

(c) Asx̀kala akwà m̃

D-Structure: X Vpref-sxka-NEG akwà m̃

Deletion of subj & main verb: Vpref-ka-NEG akwà m̃

Movement of obj: akwà  $\bar{m}$  Vpref -ka-NEG

Affix hopping: akwà  $\bar{m}$  ka -Vpref -NEG

S-Structure: Akwà  $\bar{m}$  akàlà

258c shows the derivation of the ergative form in 258b. The ergative version is derived via the deletion of the logical subject -X and the main verb *sx* 'wash', the movement of the logical object *akwà  $\bar{m}$*  to the empty subject position and the hopping of the suffix *-la* over the resultative verb *ka* to arrive at the surface structure - Akwà  $\bar{m}$  akàlà.

259(a) Ebèkàlà akwxkwq  $\bar{m}$

Vpref-cut-tear-NEG paper 1Sg

(b) Akwxkwq  $\bar{m}$  akàlà

Paper 1Sg Vpref-tear-NEG

'My paper should not tear'

The strings in 259c illustrate the derivation of the ergative structures in 259b.

(c) Ebèkàlà akwxkwq  $\bar{m}$

D-Structure: X Vpref-beka-NEG akwxkwq  $\bar{m}$

Deletion of subj & main verb: Vpref-ka-NEG akwxkwq

$\bar{m}$

Movement of obj: akwxkwq  $\bar{m}$  Vpref -ka-NEG

Affix-hopping: akwxkwq  $\bar{m}$  ka -Vpref -NEG

S-Structure: Akwxkwq  $\bar{m}$  akàlà

In 259c, the transformations that yielded the structure in 259b are illustrated. The ergative version is derived via the deletion of the logical subject-X and the main verb *be* 'cut' and the movement of the logical object *akwxkwq  $\bar{m}$*  to the empty subject position and the hopping of the suffix *-la* over

the resultative verb *ka* to arrive at the surface structure -  
*Akwxkwq m̄ akàlà*.

260 (a) *Emèchilà xzq̄m̄*

Vpref-close-NEG door 1Sg

(b) *Xzq̄m̄ echilà*

Door Vpref-close-NEG

'My door should not close'

The derivation of the ergative version in 260b is illustrated in 260c.

(c) *Emèchilà xzq̄m̄*

D-Structure: **X** Vpref-close-NEG *xzq̄m̄*

Deletion of subj & main verb: Vpref-chi-NEG *xzq̄m̄*

Movement of obj: *xzq̄m̄* Vpref -chi-NEG

Affix hopping: *xzq̄m̄* chi -Vpref -NEG

S-Structure: *Xzq̄m̄ echilà*

260c shows the transformations that yielded the structure in 260b. The ergative version is derived via the deletion of the logical subject-**X** and the main verb *me* 'do' and the movement of the logical object *xzq̄m̄* to the empty subject position and the hopping of the suffix-*la* over the resultative verb *ka* to arrive at the surface structure - *Xzq̄m̄ echilà*.

261 (a) *Adàwàlà ngwa ah[à yā*

Vpref-fall-break-NEG commodity 3Sg

(b) *Ngwaah[à ya awalà*

Commodity 1SgVpref-break-NEG

'My commodity should not spoil'

261c demonstrates the realisation of the ergative construction in 261b.

(c) Adàwàlà ngwa ah[a m̄

D-Structure: X Vpref-dawa-NEG ngwa ah[a m̄

Deletion of subj & main verb: Vpref-wa-NEG ngwa ah[a m̄

Movement of obj: ngwa ah[a m̄ Vpref -wa-NEG

Affixhopping: ngwaah[a m̄ wa -Vpref -NEG

S-Structure: Ngwa ah[a m̄ awalà

In 261c, the ergative version in 261b is derived via the deletion of the logical subject-*X* and the main verb *dà* 'fall' and the movement of the logical object *ngwa ah[a m̄* to the empty subject position and the hopping of the suffix-*la* over the resutative verb *ka* to arrive at the surface structure - *Ngwa ah[a m̄ awalà*

262(a) Esūpula efere m̄

Vpref-burn-open-NEG plate 1Sg

(b) Efere m̄ epùla

Plate 1SgVpref-open-NEG

'My plate should not break'

(c) Esūpula efere m̄

D-Structure: X Vpref-supu-NEG efere m̄

Deletion of subj & main verb: Vpref-pu-NEG efere m̄

Movement of obj: efere m̄ Vpref -pu-NEG

Affix hopping: efere m̄ pu -Vpref -NEG

S-Structure: Efere m̄ epulà

The drivation of the ergative structure in 262b is shown in 262c. The ergative version in 262b is realised through the deletion of the logical subject-*X* and the main verb *su* 'hit'.

This is followed by the movement of the logical object *efere m̄* into empty subject position. The suffix *-la* hops over the ergative verb *-pu* to arrive at the surface structure-*Efere m̄ epulà*.

The structures in 258a-262a show transitive use of the verbs while the structures in 258b-262b illustrate the intransitive use. The verbs in the 'a' structures have two arguments each while the verbs in 'b' sentences have only one argument each. Examples 258b-262b are derived from 258a-262a through the transformations as shown in 258c-262c.

#### 4.7.4.2 Ergativity in non-imperative -GH{ negative suffix

This form of negatives has *-gh[* suffix on non-imperative verb forms. Here are some examples.

263(a) X adqbagh[ akwà m̄

X Vpre-draw-tear-NEG cloth 1Sg

(b) Akwà m̄ abàgh[ (Nsukka dialect)

Cloth 1Sg tear-NEG

'My cloth did not tear'

263c illustrates the derivation of the ergative version in 263b

(c) X adōbagh[ akwà m̄

D-Structure: XVpref-dqba -NEG akwà m̄

Deletion of subj&main verb: Vprefba-NEG akwà m̄

Movement of obj: akwà m̄ Vpre ba -NEG

Affix hopping: akwà m̄ ba -Vpref -NEG

S-Structure: Akwà abāgh[ (Nsukka dialect)

264(a) X ebèkàgh[ akwxkwq

X Vpre-cut-tear-NEG akwxkwq

(b) Akwxkwq m̄ m akāgh[

Book Vpre-tear-NEG

'Mybook did not tear'

264c shows the realisation of the ergative version in 264b.

(c) X ebèkàgh[ akwɔkwɔ

D-Structure: X Vpref -beka -NEG akwɔkwɔ

Deletion of subj & main verb: Vpref -ka -NEG akwɔkwɔ

Movement of obj: akwɔkwɔ Vpref -ka -NEG

Affix hopping: akwɔkwɔka -Vpref -NEG

S-Structure: Akwɔkwɔ akāgh[

265(a) X emèchighì xzq̄ m̄

X Vpre-start-NEG book

(b) Xzq̄ m̄ echighì

Book Vpre-close-NEG

'My book did not close'

The ergative version in 265b is derived through the transformations in 265c.

(c) X emèchighì xzq̄

D-Structure: X Vpref -mechi -NEG xzq̄

Deletion of subj & main verb: Vpref -chi -NEG xzq̄

Movement of obj: xzq̄ Vpref -chi -NEG

Affix hopping: xzq̄chi -Vpref -NEG

S-Structure: Xzq̄ echighì

266 (a) X adàwàgh[ ngwaah[a m̄

X Vpre-fall-break-NEG commodity 1Sg

(b) Ngwaah[a m̄ awāgh[

Commodity Vpre-break-NEG

'My commodity did not break'

The ergative version in 266b is derived through the transformations in 266c.

(c) X adàwàgh[ ngwa ah[a m̄

D-Structure: X Vpref -dawa -NEG ngwa ah[a m̄

Deletion of subj & main verb: Vpref -wa -NEG ngwa ah[a`m̄  
 Movement of obj: ngwa ah[a m̄ Vpref -wa -NEG  
 Affix hopping: ngwa ah[a m̄ wa -Vpref -NEG  
 S-Structure: Ngwa ah[a m̄ awāgh[

- 267(a) X akxpughì efere m̄  
 X Vpr-knock-break-NEG plate 1Sg  
 (b) Efere m̄epughì  
 Plate 1Sg Vpre-break\*-NEG  
 'My plate did not break'

The ergative version in 267b is derived through the transformations in 267c.

- (c) X akxpughì efere m̄  
 D-Structure: X Vpref -kxpu-NEG efere m̄  
 Deletion of subj& main verb: Vpref -pu -NEG efere m̄  
 Movement of obj: efere m̄ Vpref -pu -NEG  
 Affix hopping: efere m̄ pu -Vpref -NEG  
 S-Structure: Efere m̄ epughì

Examples 263a-267a show the transitive use of the non-imperative GH{ negative-suffix verb forms. Hence, the examples have two arguments. For example in 263a, the verb *dq* has *X* and *akwà m̄* as arguments showing a transitive use. 263b has a sole argument showing an intransitive use. The strings in 263b-267b are the derived version from 263a-267a. The derived versions have one argument each in their intransitive use showing ergativity .

The constructions in 263c-267c show the derivation of ergative structures in sentences with imperative '-gh ['] negative suffixes. In 263c for instance, the first step in deriving the ergative structure is the deletion of the logical subject (*X*) and the main verb *dq* followed by the movement of the logical object *akwà m̄* into the empty subject position. Lastly in the derivation process is the hopping of the verb prefix (Vpref) over the verb *ba* to arrive at the surface structure-*Akwà m̄ abagh [']*. In example 264, *X* is deleted and the object *akwxkwq m̄* moves into the subject position, the verb prefix hops over the



verb *ka* to arrive at the surface structure - *Akwxkwq m̄ akāgh[*.  
 The same transformations took place in 265c-267c to arrive at  
 the surface structures: *Xzq m̄ echīghi* (265), *Ngwa ah[à m̄ awāgh[*  
 (266c), *Efere epūghi* (267c).

The argument structure for the negative verbs *dqbagh[* and  
*kxpughi* is shown in 268a and b below.

268(a) *X adqbagh[ akwa*

*X dq-NEG akwa akwa ba-NEG*

Argument structure:

Action of *X* is limited to *dqgh[*

*Akwa* is the object of *dqgh[*

The verb *bagh[* subcategorises only *akwa*

The verb *bagh[* is ergative

(b) *X akxpughi efere*

*X kx-NEG efere efere pu-NEG*

Argument structure:

Action of *X* is limited to *kxgh[*

*Efere* is the object of *kxgh[*

The verb *pughi* subcategorises only *efere*

The verb *pughi* is ergative

The structures in 268a and b illustrate the realization of  
 ergative structures in the negative compound verbs *dqbagh[* and  
*kxpughi* respectively.

#### 4.7.5 Ergativity and serialisation

Serial verb construction (Stewart 1963) also known as (verb)  
 serialisation (George 1975) or verb stacking is a syntactic  
 phenomenon whereby two or more verbs or verb phrases are  
 strung together in a single clause (Tallerman 1998). Verb

serialisation in Igbo is a construction where two or more verbs occur in series without an overt connective morpheme between the verbs but with intervening variables between the first two verbs (V1 and V2), and V1 and V2 cannot form verb-verb (V-V) compound in the language. Verb serialisations in Igbo are derived from two or more underlying sentences via some transformational rules, such as Equi-NP-Deletion rule which deletes all but the first subject NP in the constructions. In constructions with the same object NP at the D-structure, the second object NP is also deleted by transformation (Onuora 2014). We exemplify below.

269(a) X gbàrà m̄ àmà gbaa Chikè

X set-forth-rV-(past) 1Sg betrayal set-forth-rV Chikè

(b) Àmà gbàrà m̄ gbaa Chikè

Betrayal set-forth-rV-(past) 1Sg set-forth-OVS

Chikè

'I was betrayed and also Chike'

269c shows the derivation of the ergative structure in 269b.

(c) X gbàrà m̄ àmà gbaa Chikè

D-Structure: X-rVgba m̄ àmà gba-OVS Chikè

Deletion of subj: -rVgba m̄ àmà gba-OVS Chikè

Movement of obj: àmà-rVgba m̄ gba -OVS Chikè

Affix hopping: àmà gba -rVm̄ gba -OVS Chikè

S-Structure: Àmà gbàrà m̄ gbaa Chikè

The serial verbs in the constructions consist of two events. In 269a, two verbs: *gbàrà* 'betrayed' and *gbaa* 'betray' occur in series with the inherent verb complement (direct object) of V1, *àmà* (betrayal) as the intervening variable between the initial verb (V1) and the second verb (V2). The verbs in series share an obligatory single syntactic subject which is expressed before the V1, hence, in example 269a,



(c) X mèrè m̄ ihe meè Ibe

D-Structure: X -rVme m̄ ihe me -OVS Ibe

Deletion of subj: -rV me m̄ ihe me OVS Ibe

Movement of obj: ihe rv -me m̄ me -OVS Ibe

Affix hopping: ihe me -rv m̄ me -OVS Ibe

S-Structure: Ihe mèrè m̄ mee Ibe

272(a) X tàrà ya xtà taa nd[ be ha

X eat-rV-(past) eat-OVS people his

(b) Xta tàrà ya taa nd[ be ha

Blame eat-rV-(past) 3Sg eat-OVS people his

'He was blamed and also his people'

The ergative structure in 272b is derived via the transformations in 272c

(c) X tàrà ya xtà taa nd[ be hā

D-Structure: X rV-ta yā xtà ta -OVS nd[ be hā

Deletion of subj: -rVta yaxtà ta -OVS nd[ be hā

Movement of obj: xtà -rV ta yā ta -OVS nd[ be hā

Affix hopping: xtà ta -rV yā ta -OVS nd[ be hā

S-Structure: Xta tàrà ya taa nd[ be hā

273(a) X màrà ya ikpe maa nwunyè ya

X condemn-rV-(past) 3Sg judgement condemn-OVS wife 3Sg

(b) Ikpe màrà yā màà nwunye yā

Judgement condemn-rV-(past) 3Sg condemn-OVS wife

3Sg

'He was condemned with his wife'

273c illustrates the derivation of the ergative version in 273b.

(c) X màrà ya ikpè maa nwunyè ya

D-Structure: X -rV ma ya ikpe ma -OVS nwunyè ya

Deletion of subj: -rv ma ya ikpe ma -OVS nwunyè ya

Movement of obj: ikpe -rV ma ya ma -OVS nwunyè ya

Affix hopping: ikpe ma -rV ya ma -OVS nwunye yā

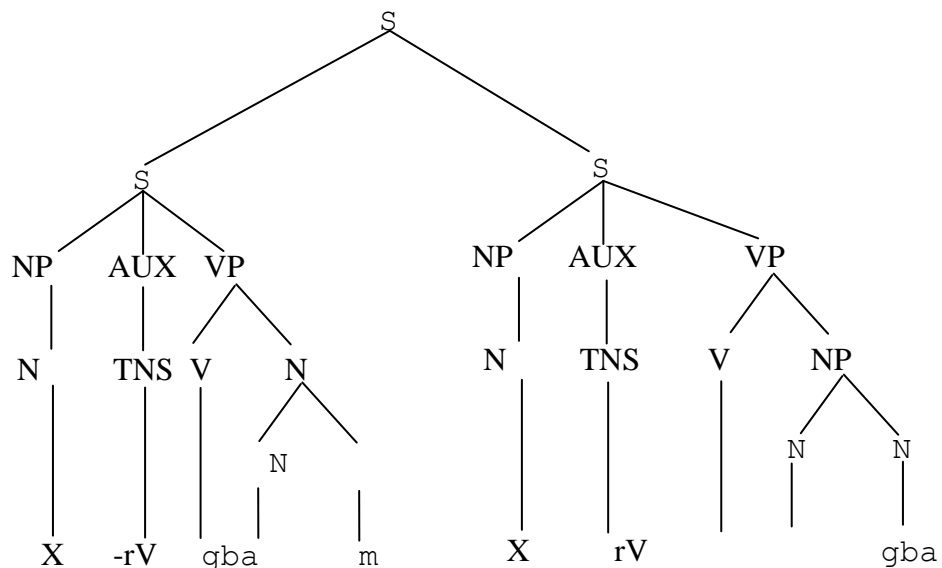
S-Structure: Ikpe mārà ya maa nwunyè ya

To account for the ergative structures in 270b-273b, the following transformations act on the structures in 270a-273a to produce the ergative structures in 270b-273b: deletion of the logical subjects in the deep structure, movement of the deep structure objects into the base generated empty subject positions, and lastly the affix hopping rule in which the -rV suffixes hop over the ergative verbs to arrive at the surface structures: *Mgbq̄ txr̀x̀m txq̄ Okafo* (270b), *Ihe mèrè m mee Ibe* (271b), *Xtà tàrà ya taa nd[ be hā* 272b), *Ikpe mārà ya maa nwunyè ya* (273b).

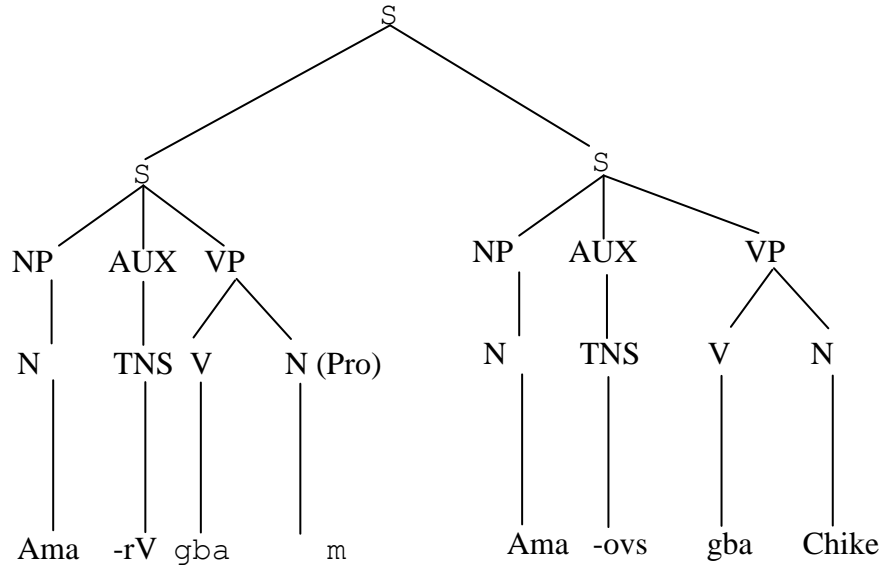
The tree diagram of the ergative structure in 269b (*Àma gbàrà m̄ gbaa Chike*) is shown below.

(a) Transitive: X gbàrà m̄ àmà gbaa Chike

X gbàrà m̄ àmà, X gbàrà Chike àmà



(b) Ergative: Àmà gbàrà m̄ gbaa Chikè



In the first diagram (a), the subject X is the Agent of the action of the ergative verb *gba*, but in the second diagram (b), the Theme *àmà* emerges as the logical subject showing ergativity.

#### 4.7.6 Ergativity and consecutivisation

Consecutivisation in Igbo is a construction where two or more verbs occur in series without either an overt connective morpheme between the verbs or intervening variables between the first two verbs (V1 and V2), but V1 and V2 can form verb-verb (V-V) compound in the language (see Onuora 2014). The following examples from Onuora (2014) illustrate consecutivisation.

274(a) Egō m dàrà fùo

Money 1Sg fell-rVPST be-lose-OVS

'My money dropped and got missing'

(b) \*Fùo dàrà

Lose fell-rV(past)

275(a) Nnìxh fèrè pùq

Bird that fly-rV-(PST) leave-OVS

(b) \*Pùq fèrè

Leave-OVS fly-rV(past)

276(a) Ada jèrè fùo

Ada walk-rV-(PST) lose-OVS

(b) \*Fùo jèrè

Lose-OVS walk-rV(past)

The constructions in 274a-276a illustrate consecutive verbs in Igbo. Examples 274a and 275a consist of two events(verbs): *dàrà* 'fell', *fùo* 'lost' and *ferè* 'flew' *pùq* 'left' (V1, V2), while 276a consist of two events: *jèrè* 'went', and *fùo* 'lost'. In 274a, the events, *dàrà* 'fell' and *fùo* 'lost' has *egō* 'money' as both the Agent (subject) and Theme (object). Examples 274b-276b reveal that consecutive verbs cannot be ergativised as the attempt yielded ungrammatical and unacceptable structures.

#### 4.7.7 Ergativity and subjunctivisation

The subjunctive is the mood of a verb used to show hope, doubt, wish, etc. The phonemic shape of the Igbo subjunctive verb forms in nearly all cases is identical with that of the imperative form. One difference is the presence of the conjunction 'ka' in all the subjunctive expressions and its absence in their imperative counterparts (Nwachukwu 1995). Subjunctive verb forms can be ergativised as the following sentences illustrate.

277(a) Kà x kpee ekpere

Let x pray-OVS prayer

(b) \*Ekpere kpee

Ekpere pray-rV(past)

278(a) Kà x gbaa yā àmà

Let x set-forth-OVS 3Sg betray

(b) Àmà gbaa yā

Betray set-forth-OVS 3Sg

'Let him be betrayed'

The ergative structure in 278b is realised as shown in 278c.

(c) **Kà X** gbaa yā àmà

D-Structure: Ka **X** gba-OVS yā àmà

Deletion of subj: Ka gba-OVS yā àmà

Movement of obj: Ka àmà gba -OVS yā

Affix hopping: Ka àmà-OVS gba yā

S-Structure: **Kà àmà** gbaa yā

279(a) **Kà X** mee yā iherè

Let **X** do-OVS 3Sg shame

(b) Iherè mee yā

'Let them be ashamed'

279c shows the realisation of the ergative structure in 279b.

(c) **Kà X** mee yā iherè

D-Structure: **Kà X** me-OVS ya iherè

Deletion of subj: **Kà** ihere me-OVS yā

Movement of obj: **Kà iherè** me-OVS yā

Affix hopping: **Kà iherè**-OVS me yā

S-Structure: **Kà iherè meè** yā

280(a) **Kà X** txq yā òkwutè

Let **X** throw-OVS 3Sg stone

(b) Òkwutè txq yā

'Let stone hit him'

The derivation of the ergative structure in 280b is illustrated in 280c.

(c) **Kà X** txq yā òkwutè



D-Structure: Ka X tx-OVS yā okwutè  
 Deletion of subj: Kà tx-OVS yā okwutè  
 Movement of obj: Kà òkwute tx-OVS yā  
 Affix hopping: Kà òkwutè-OVS tx yā  
 S-Structure: Kà òkwutè txq yā

281(a) Kà x maa yā ikpē

Let x condemn-OVS judgement

(b) Ikpē maa yā

Judgement condemn-OVS 3Sg

'Let him be condemned'

281c illustrates the derivation of the ergative structure in 281b.

(c) Kà x maa yā ikpē

D-Structure: Kà X ma-OVS ya ikpē

Deletion of subj: Kà ma-OVS ya ikpē

Movement of obj: Kà ikpè ma-OVS yā

Affix hopping: Kà ikpe-OVSma yā

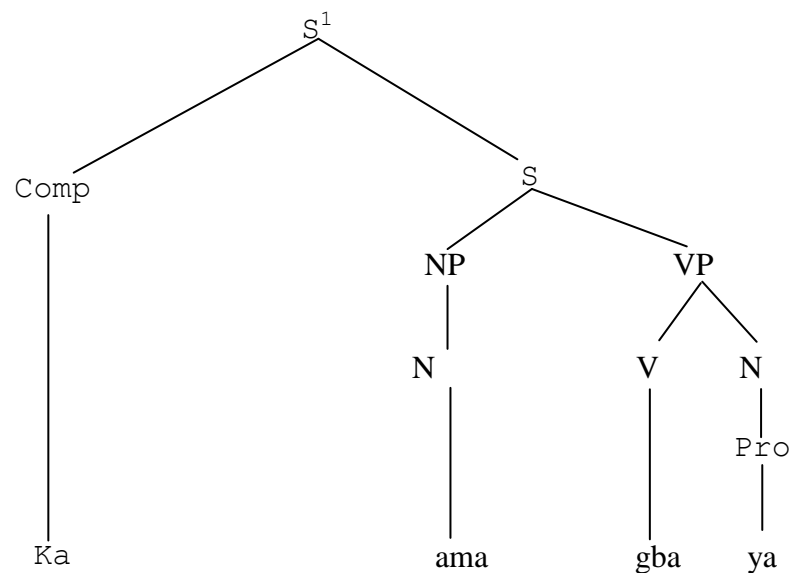
S-Structure: Kà ikpè maà yā

In examples 277a-281a, the subjects of the structures are represented as X. The verb *kpe* 'pray', cannot be ergativised as shown in 277b, but other verbs in 278a -281a: *gbaa* 'betray' (278a), *mee* 'do' (279a), *txq* 'throw' (280a) and *maa* 'condemn' (281a) can be ergativised, hence the acceptable structures in 278b-281b. The derivation of ergative structure in subjunctive verb structures are shown in examples 278c-281c. The process involves the deletion of the deep structure subject and the movement of the object. A look at example 278c shows the deletion of the subject x and the movement of the object *àmà* to fill the empty subject NP position. The verb suffix then hops

over to arrive at the S-Structure - *Ka àmà gbaa yā*. The tree structure is shown in below.

Transitive: *Kà X gbaa yā àmà*

Ergative: *Kà àmà gbaa yā*



#### 4.8 Analysis of the interface of syntax and semantics in Igbo ergative structures

An ergative language maintains a syntactic or morphological equivalence for the object of a transitive verb and the single core argument of an intransitive verb, while treating the Agent of a transitive verb differently. This contrasts with nominative-accusative languages where the agent of a transitive verb and the single argument of an intransitive verb (called a subject) are treated alike and kept distinct from the object of a transitive verb. Ergativity is a cross-linguistically recognised phenomenon in which a verbal predicate undergoes a change in its transitivity, with respect to the syntactic realisation of the arguments of the predicate as well as the number of arguments it requires. In the Igbo language, certain verbs show either a transitive or an intransitive use. The sentences such as (282a and b) involve a shift in the verbs transitivity and the syntactic representation of the arguments.

282 (a) X kxwàrà àkwa

X break.split-rV-(past) egg

(b) Àkwa wàrà

Egg break.split-rV-(past)

'The egg broke'

In the example above, two verbs (V1,V2) are involved in the construction. The first verb (V1) is *-kx* 'break' while the second verb (V2) is *-wa* 'split'. The resulting compound verb *-kxwa* can be translated as 'be split from being hit/knocked upon'. In line with Lord's (1973) explanation, the first verb codes the action, while the second codes the result. The syntactic object *-àkwa* in the transitive sentence (282a) occurs as the syntactic subject of the sentence in the transitive counterpart (282b). Despite the different syntactic position, the subject of the intransitive variant bears the same semantic relation to the verbal predicate as the object of the transitive variant, i.e. the Theme.

In the transitive counterpart (282a), we also observe an additional argument which serves as the syntactic subject of the sentence. There is a close correlation between the verbal meaning and the structure, and that the syntactic behaviour of a verb, particularly with respect to the expression and interpretation of its arguments is, to a large extent, determined by its meaning. To put it in another way, the syntactic behaviour of a verb can be predicted by the meaning of a given verb. In the transitive use, the verbal predicate *kxwa* requires two obligatory arguments. Semantically, the subject argument *X* is the initiator or performer of the action, hence an Agent; the object argument denotes a participant, which undergoes a change of state or location; hence, it carries the thematic role of Theme. The difference in the two structures is that in 282a, the verb *kxwa* encodes

the action of the Agent *-X* and the effect on the Theme *-àkwa* while in 282b, the verb *wa* encodes only the effect/result of the action of the Agent on the Theme. Another difference in the two structures is the number of arguments: an Agent and Theme for the transitive and only a Theme for the intransitive. Apparently, the transitive member has a causative meaning to convey.

On the conceptual level, a causative relation holds between two events or situations. In (282a), the Agent of the verb *kxwa* is realised as the external argument *X* and specifies who is responsible for the breaking. Therefore, the sentence describes an event in which *X* brings about or causes a change of state and it is equivalent to *X mètè kà àkwa wàà*. In view of the element of causation involved in the interpretation of the transitive use of *kxwa* in (282a), this use of the verb is referred to as the causative pattern. By contrast, the same sense of causation is absent in the intransitive use of break in (282b); it merely shows that the egg is engaged in the activity of breaking. The intransitive sentence denotes a change of state that the egg undergoes, and the transitive sentence describes the event in which *X* brings about or causes this change of state. The alternate of the verb, which has the theme as its surface syntactic subject is called an inchoative verb, meaning that it expresses a change of state of its argument. From the foregoing, we infer that some Igbo verbs can be used transitively and intransitively- in which case the object (complement) is not overtly manifest.

#### **4.8.1 Argument structures of Igbo ergative verbs**

According to Radford (1988), an argument is a participant minimally involved in an action defined by the predicate. A predicate describes an event or situation in which some participants are required. In other words, the required participant of the predicate is called argument. It is a

nominal position to which a theta role may be assigned. Arguments are linked to some syntactic positions. External arguments are always linked to the subject position and the internal arguments to the object position. Based on the syntactic realisation, arguments are classified as external and internal argument. An external argument is an argument, which is realised outside the maximal projection of the predicate, whereas the internal argument is the one realised inside the maximal projection of the predicate (Williams, 1980, Chomsky, 1981, and Radford, 2006). Argument structure representation is meant to encode the syntactically relevant argument-taking properties of a verb. It is a representation of the number and type of arguments associated with a particular predicate.

Verbs differ in terms of the number and type of NPs they can take as complements. The various NPs that occur with a verb are its arguments. Thus, intransitive verbs have one argument: the subject; mono transitive verbs have two arguments: the subject and direct object; the ditransitive verbs have three arguments: the subject, direct object and indirect object. The arguments are participants minimally required for the activity or state described by the predicate to be understandable. The argument structure of the verb determines which elements of the sentence are obligatory. If a verb expresses an activity involving two arguments, for example, there will have to be at least two constituents in the sentence to enable these arguments to be expressed. Consider this Igbo example.

283. X mèghèrè xzò

X make-open-rV-(past) door

'X opened the door'

The verb *mèghe* 'open' refers to an activity involving two participants or arguments; the one who opens and the thing which opened. It is difficult to think of the activity of

*mèghe* without also thinking of these participants. A verbal predicate requires a number of participants to engage in a certain state of affairs. As such, we say that a verbal predicate has an argument structure. The argument requirement of the following Igbo ergative verbs in the underlisted structures can be captured in the following argument structure notation.

284(a) X gbazèrè mmanx m̄

X melt-rV-(PST) oil 1Sg

(b) Mmanx m̄ gbazèrè

Oil 1Sg melt-rV-(PST)

'My oil melted'

285(a) X kwafùrù ofe m̄

X spill-rV-(PST) soup 1Sg

(b) Ofe m̄ kwafùrù

Soup 1Sg spill-rV-(PST)

'My soup spilt'

286(a) X bidòrò nzùkq

X start-rV-(PST) meeting

(b) Nzùkq bidòrò

Meeting start-rV-(PST)

'The meeting started'

Each of the above structures in 283-286 has (a) and (b). Structures in 283a-286a are the transitive uses of the verbs while 283b-286b are the ergative (intransitive) uses of the verbs. The argument structures of the above ergative transitive verbs are as follows:

287(a) Gbazè 'melt': [V]: [NP1, NP2]

<Agent, theme>

(b) Kwafù 'spill': [V]: [NP1, NP2]

<Agent, theme>

(c) Gbawa 'kick-break': [V]: [NP1, NP2]  
<Agent, theme>

(d) Bidò 'start': [V]: [NP1, [NP2]]  
<Agent, theme>

The verbs in 287a-d involve two participants (Agent and Theme) in their transitive use. In this usage, the ergative verbs have two arguments as well as two thematic roles; thus, NP1 and NP2 as their arguments, and Agent and Theme as respective theta roles. In contrast, the usages of the above ergative verbs as intransitives are as follows.

288(a) Gbazè 'melt': [V]: [NP1]  
<Theme>

(b) Kwafù 'spill': [V]: [NP1]  
<Theme>

(c) Gbawa 'kick-break: [V]: [NP1]  
<Theme>

(d) Bidò 'start': [V]: [NP1]  
<Theme>

In 288a-d, the ergative verbs have only one argument structure as well as only one theta role; hence, NP1 as argument and theme as its thematic role.

#### **4.8.2. Thematic roles in Igbo ergative structure**

Theta theory is concerned with regulating the assignment of  $\theta$ -role to the structurally realised argument positions of a particular predicate. The assignment of  $\theta$ -role is not done randomly. Each argument bears one and only one  $\theta$ -role, and each role is assigned to one and only one argument.

Theta roles have to do with thematic functions. It is believed by some linguists that the verbs in a sentence assign thematic

roles to the noun phrases in the construction (see Chomsky (1981), Remsdijk and Williams (1986), Napoli (1996) and Mbah (2006)). In the thematic roles, the functions like: agent, patient, recipient, experiencer, location, beneficiary, goal, instrument, motive, force, etc, are generally employed by scholars to define the various roles of the verb to the individual components of the sentence. The verb plays important roles in assigning  $\theta$ -roles to arguments in the sentence structure. The thematic roles in Igbo ergative structures are exemplified below:

**Agent:** An agent is the perceived external instigator, initiator, controller of an action, event or state. Napoli (1996) asserts that one of the qualities of an agent is the ability to carry out its functions voluntarily. In other words, the agent has the power to control his actions. An agent is a wilful, purposeful instigator or doer of an action or event. Also, it should be alive and be able to take conscious decisions. It is mostly the subject of a clause. In Igbo ergative structures, there are two constructions: one is transitive and the other is intransitive. The transitive construction has two participants (arguments) while the intransitive construction has one argument. The arguments in the transitive construction are the subject and the object. The subject is the Agent while the object is the Theme. Put differently, an ergative verb needs to involve two participants if it is used transitively, whereas it needs only one participant if it is used intransitively. In the following ergative transitive structures, the agent is the purposeful instigator of the action or event.

289(a) X k̀x̀r̀x̀ mgb[r[mgba

X ring-rV- (PST) bell

(b) Mgb[r[mgba k̀x̀r̀x̀



Bell ring-rV-(PST)  
'The bell rang'

290(a) X nupùrù xgbq hā  
X move-rV-(PST) boat 3Pl  
(b) Xgbq hā p̀̀r̀̀x̀̀  
'Their vehicle moved'

In sentences 289a, X has the theta role of the agent. In other words, X can control his activity on the *mgb[r]gba* 'bell' by deciding not to ring it but *mgb[r]gba* cannot resist to be rung. In 290a, X is the Agent. The action being described is under the volition of X. X has control over his activity. In other words, X can decide not to move the vehicle. Here X has the theta role of Agent. The ergative verbs *kx* and *nu* assign theta roles of Agents to X in 289a and X in 290a.

**Theme:** This refers to the participant who in a broad sense is affected by the action or states identified by the verb (Fillmore 1968:25). In 289a and 290a, the activities of the agents: X and X affected *mgb[r]mgb* and *xgbq*. Hence, *mgb[r]mgb* and *xgbq* are themes. The ergative verbs: *kx* and *nu* assign Theme roles to *mgb[r]mgb* and *xgbq*; the receivers of the actions of the verbs.

**Benefactive:** This is the entity benefiting from some action. This thematic role gains from the activity of the verb. Here are some examples:

291(a) X weteere Àmaka egō  
X bring-rV-rV Amaka money  
'X brought money for Amaka'  
(b) \*Egō Àmaka wètèèrè  
Money Àmaka bring-rV(past)

In 291a, *Àmaka* is the indirect object of the verb *wètèèrè* and a beneficiary of the action of the subject (*X*). *X* is the subject and Agent of the verb, while *egō* is the indirect object and Theme of the verb *wètèèrè*. *Amaka* who benefited from the action of *X* has the theta-role of beneficiary. This shows that the verb *wètèèrè* 'bring-for' is a verb + verb compound which changes to verb + preposition. In 291a, the Agent argument realised as the external argument *X* specifies who is responsible for bringing the money. The construction in 291a is a transitive use of the verb *wètèèrè* which subcategorises three arguments with the theta roles: *X* (Agent), *egō* (Theme), and *Àmaka* (beneficiary). The verb *wètèèrè* could not be ergativised as shown in 291b

**Instrument:** This is the means by which some action comes about, an inanimate entity used as a means of fulfilling some action.

292(a) *X jì qdū gbuo òke*

*X* hold pestle kill-OVS rat

'*X* killed a rat with pestle'

(b)\* *Òke gbuo*

Rat kill-OVS

293(a) *X jì osisi kxq ògenè*

*X* hold stick beat-OVS gong

(b) *Ògenè k̀̀r̀̀x̀̀*

Gong beat-rV(past)

'The gong sounded'

294(a) *X jì òkwutè txwaa itè*

*X* hold stone throw-break-(past) pot

(b) *Ìte wàrà*

Pot break-rV(past)

'The pot broke'

In 292a-294a, the italicised words: *qdx* 'pestle', *osisi* 'stick', and *òkwute* 'stone' are the instruments with which the actions were performed. The instruments are used by the Agents represented as *x* to fulfil the actions of the verbs: *gbuo* (292a), *kxq* (293a), *txwa* (294a). *X* is the Agent that performed the action of killing in 292a, *X* performed the action of beating the gong in 293a, while *X* instigated the action of breaking the pot in 294a. In 292b, the action of *X* in 292a resulted in the death of the rat, hence *oke nwrxr*. Similarly, the action of *X* in 294a resulted in the breaking of the pot in 294b. In the ergative counterparts in 292b-294b, there are subjects that are not Agents, showing that the activities of the verbs: *nwx*, *kx*, *wa* took place on their own without the action of an agent. This is to say that the rat died on its own - i.e. *Oke nwrxr* in 292b, the gong sounded on its own - *Ogene kxrx* as is evidenced in 293b and the pot broke on its own i.e. *Ite wara* as we see in 294b.

**Locative (LOC):** Place in which an entity is located. The entity described as locative function describes a place where some other entity is situated. Generally, the locative is introduced by prepositions or nouns incorporating a prepositional notion (Mbah 2012:158).

295(a) *X jè-rè* Legqs

*X go-rV(past)* Lagos

(b) \*Lagos *jè-rè*

Lagos *go-rV(past)*

296(a) *Àkwa d[ n'igbe*

Cloth be in box

'The cloth is in the box'

(b) \*N'igbe *d[*

In box be

297 (a) X tì-rì egwu n'xlq̀

X beat-rV-(past) music in house

(b) \*N'xlq̀ egwu ti-ri

In house music beat-rV(past)

In examples 295a-297a, *Legqs*, *igbe* 'box', *xlq* 'house' are locatives. They show places where entities move into as in 295a or where entities are situated as in 296a and 297a. In 295b-297b, attempt was made to ergativise the verbs in the locative constructions, the results: \**Legqs jere* (295a), \**N'igbe d[* (296a), \**N'xlq egwu tiri* (297a) are ungrammatical. Arguments that are complements of propositions appear not to be subject to ergativisation.

**Goal:** It is the intended destination of a theme from the source in a motion function. Whether this is realised or not is immaterial as shown below (Mbah 2012:158).

298(a) X kq̀q̀-rq̀ nne yā akxkq̀ ahx̀

X narrate-to-rV-(past) mother 3Sg story that

'X narrated the story to her mother'

(b) \*Akxkq̀ ahx kq̀q̀-rq̀

Story that narrate-rV

299(a) X nyè-rè onye nkuzi akwxkwq̀ yā

X give-rV(past) teacher book 3Sg

'X gave the teacher his book'

(b) \*Akwxkwq̀ ya onye nkuzi nye-re

Book 3Sg teacher give-rV(past)

300(a) X chq̀rq̀ [bū qgaranya

X want-rV(past) to be wealthy person

'X wants to be wealthy'

(b) \*Qgaranya [bū

Wealthy person to be

The examples in 298a-300a involve a change of state. The new state which the theme changes or intends to change is its goal (Mbah, 2006:103). The italicised words: *nne yā* 'his/her mother' (298a), *onye nkuzi* 'the teacher' (299a), *qgaranya* 'wealthy man' (300a) are the goals of the structures. The verbs in the constructions cannot be ergativised as could be seen in examples 298b-300b.

Ergative verbs mostly take inanimate as their subjects and describe changes of state of their subject referents. The semantic role of such subject is a Theme, and the only argument of an ergative intransitive behaves in many ways like an object instead of a subject, even though it plays the role of subject in the surface form of the sentence. It is assumed to originate as the underlying direct object and subsequently moves into the subject position. It represents a non-volitional act of the subject referent, as in the following examples:

- 300(a) Xgbq p̀rx̀  
           Car move-rV-(past)  
           'The car moved'
- (b) Egō ya f̀r̀r̀  
       Money his lose-rV-(past)  
       'His money got lost'
- (c) Mgb[r[mgba k̀rx̀.  
       Bell ring-rV(past)  
       'The bell rang'

In structures (301a-c), the semantic role of the only argument in each of the structures is a Theme. Thus *xgbq* (301a), *egō ya* (301b), *mgb[r[gba* (301c), have the semantic roles of Themes.

Thus, the interface between syntax and semantics in Igbo ergative structure is the argument and thematic structure. The ergative structure has one argument in the intrasitive use and

two arguments in the transitive use. In a transitive ergative structure, the two arguments involved are the subject and object NPs. The subject is the external argument while the object is the internal argument. The semantic roles of the two arguments involved in a transitive ergative structure are Agent and Theme. The subject (external argument) is the Agent while the object (internal argument) is the Theme. In the intransitive ergative structure, the ergative predicate has only one argument and the semantic role of the sole argument is a Theme. The argument structures of some other ergative verbs identified in this work are shown below.

#### **4.9 Argument and thematic structure of ergative verb forms**

In the sub-sections that follow, the argument and thematic structures of the verb forms highlighted in the work are analysed. The verb forms to be analysed include: simple and compound verb forms.

##### **4.9.1 Argument and thematic structure of simple ergative verbs**

The argument structure of simple ergative verb roots identified in this work is represented in the structures that follow. The analyses include the identification of the arguments and thematic structure of the ergatives in both transitive and intransitive usages.

302 (a) Kx 'beat' [V]: [NP1, NP2]

<Agent, Theme>

(b) Kpù 'sink' [V]: [NP1, NP2]

<Agent, Theme>

(c) zx 'buy' [V]: [NP1, NP2]

<Agent, Theme>

(d) Ti 'shout' [V]: [NP1, NP2]

<Agent, Theme>

In the above analysis, the ergative verbs in example 300a-d are used transitively. In this usage, the ergative verbs have two arguments as well as two thematic roles; NP1 and NP2, as arguments and Agent and Theme as theta roles. In contrast, the usage of these ergative verbs in intransitive structures is shown below.

303(a) Kx 'beat' [V]: [NP1]

<Theme>

(b) Kpù 'sank' [V]: [NP1]

<Theme>

(c) zx 'buy' [V]: [NP1]

<Theme>

(d) Ti 'shout' [V]: [NP1]

<Theme>

The structures in 303a-d represent the argument and thematic structures of the ergative verbs in their intransitive use. In this usage, the verbs have one argument as well as one thematic role. For instance, in 303a, the ergative verb *kx* has NP1 as the only argument and theme as its theta role.

#### **4.9.2 Argument and thematic structure of compound ergative verb forms**

Compound verbs involve the combination of two simple verb roots. The argument and thematic structure of the transitive and intransitive usage of compound ergative verbs forms used in the work are analysed below.

304(a) Gbanwè 'cause to change' [V]: [NP1, NP2]

<Agent, Theme>

(b) Mete 'cause to wake-up' [V]: [NP1, NP2]

<Agent, Theme>

(c) Yika 'wear-tear' [V]: [NP1, NP2]

<Agent, Theme>

(d) Nupù 'cause to move' [V]: [NP1, NP2]

<Agent, Theme>

(e) Kxwa 'knock-break' [V]: [NP1, NP]

<Agent, Theme>

(f) Gbaju 'fill-up' [V]: [NP1, NP2]

<Agent, Theme>

(g) Menyx 'put-off' [V]: [NP1, NP2]

<Agent, Theme>

(h) Tufù 'throw-away' [V]: [NP1, NP2]

<Agent, Theme>

(i) Sxka 'wash-tear' [V]: [NP1, NP2]

<Agent, Theme>

(j) Bèka 'cut-tear' [V]: [NP1, NP2]

<Agent, Theme>

(k) Mèchi 'cause to close' [V]: [NP1, NP2]

<Agent, Theme>

(l) Dàwa 'fall-break' [V]: [NP1, NP2]



<Agent, Theme>

(m) Sùpu 'box-open' [V]: [NP1, NP2]

<Agent, Theme>

In 304a-m, the analyses show that the compound verbs are used transitively; thus, each of the verbs has two arguments, NP1 and NP2. Each argument has a theta role; NP1 has the theta role of Agent while NP2 has the theta role of Theme. The verbs in this category encode the action of the logical subjects on the first element of the verb (V1) and the reflex of the logical subject on the theme on the second element (V2) (see 4.5.2) for more on this verb form). The argument and thematic structure of the intransitive usage of the above compound verbs are indicated in 305a-k.

305(a) Nwèrè 'changed' [V]: [NP1]

<Theme>

(b) Tèrè 'woke-up' [V]: [NP1]

<Theme>

(c) Kàrà 'tore' [V]: [NP1]

<Theme>

(d) Pẁrẁ 'left' [V]: [NP1]

<Theme>

(e) Wàrà 'broke' [V]: [NP1]

<Theme>

(f) Jùrù 'got filled' [V]: [NP1]

<Theme>

(g) Nyẁrẁ 'went-off' [V]: [NP1]

<Theme>

(h) Fùrù 'got lost' [V]: [NP1]

<Theme>

(i) Kàrà 'got old' [V]: [NP1]

<Theme>

(j) Chìrì 'closed' [V]: [NP1]

<Theme>

(k) Pùrù 'opened' [V]: [NP1]

<Theme>

The strings in 305a-k reveal the argument and thematic structure of the intransitive use of the compound verbs used in this study. In this usage, the verbs have a single argument and thematic role each. The sole argument (NP1) has the theta role of Theme as indicated. The verbs: *nwèrè* (305a), *tère* (305b), *kàrà* (305c), *pàrx`* (305d), *wàrà* (305e), *jùrù* (305f), *nyx`rx`* (305g), *fùrù* (305h), *kàrà* (305i), *chìrì* (305j), *pùrù* (305k), in their intransitive use encode only the result of the action of their agent in their transitive use.

## CHAPTER FIVE

### SUMMARY AND CONCLUSION

#### 5.0 Preamble

This chapter presents the major observations that are made in this research. The chapter further concludes the study based on the findings of the investigation.

#### 5.1 Findings

The term ergativity originally applied to languages in which the complement of a transitive and the subject of an intransitive verb were assigned the same morphological case. By extension, it has come to be used to denote verbs, which can have their objects as their subjects without changing their meanings.

The study identifies two types of ergativity in the Igbo language: argument inversion and inter-clausal ergativity.

Ergativity in Igbo is manifested syntactically and semantically as a conceptual category realised as an inter-clausal relation. In ergative constructions, the object maintains the same semantic relation with the ergative verb in an intransitive construction.

The analyses show that the interface of syntax and semantics in the Igbo ergative structure is the argument and thematic structure. In the transitive use of ergative verbs, two arguments are involved: Agent and Theme while in their intransitive use, only one argument- Theme is involved.

Ergativity in the language is also restricted to verbs that can be used in a transitive and intransitive alternation with

the same meaning, where the theme of the transitive verb is the same as the subject of the intransitive verb. Verbs that take part in ergativity are not movement or locative verbs; rather, they are dynamic verbs that express a change of state.

## **5.2 Summary**

This thesis analyses ergative structures in the Igbo language to ascertain the areas of interface in the syntax and semantics. The transformational and theta theories were used to account for the interface.

Igbo language does not have surface morphological or syntactic case marking or subject verb of any kind but has ergative features. Igbo is not strictly ergative or accusative because there is no morphological inflection showing agreement between the verb and transitive object and intransitive subject or between the verb and the transitive subject.

In Igbo, the construction without a causative source is the ergative construction. The study distinguished ergative construction as one whose subject has its origin as an object and is perceived as the logical complement of the verb. Ergative structure differ from middle construction in that while middle constructions do not make reference to actual events having taken place, ergative structures are eventive.

The NP that takes the subject position in the ergative structure is derived from the NP that exists within the maximal projection of the verb and is therefore its internal argument. Semantically, an ergative structure is generally associated with Theme role.

Verbs that describe willed or voluntary acts and that assign agent role to their internal arguments cannot take part in

ergativity because their subjects are agents both in the deep and surface structure.

The work identifies two types of ergative verbs in Igbo: Verbs that manifest ergativity by swapping their arguments and other verbs that manifest ergativity through the deletion of the causative source in one of the two sentences.

The verbs that are used in the work include simple verb roots- *kx* 'hit', *kpu* 'sink', *zx* 'buy', *ti* 'shout' and compound verbs comprising two simple verb roots or the combination of one simple verb root with a suffix. The ergativised compound verbs include: *gba-nwe*, *gba-ji*, *me-te*, *yi-ka*, *gha-sà*, *kwa-fù*. Each of these verbs incorporates two events; the first verb is the action while the second is the result. The light verb hypothesis was used to account for the action-result verbs. Compound verbs made up of three verbs with a suffix also go through ergativity e.g *kx-ka-px* 'knock-out', *gba-ji-pu* 'kick-break', *me-ghè-pu* 'open-wide'. In these tripartite verbs, it is the second or the last verbs that encode the result while the first verbs remain the action. In *kx-ka-px* for instance, the first verb *kx* is the action, while *ka* and *px* are the results/effects of the action of the verb on the Theme.

Other verb forms including: imperativisation, perfective, future, negativisation, serialisation, consecutivisation and subjunctivisation were subjected to ergativisation process. The results show that imperative, perfective, future, negative, serialising verbs can be ergativised. Consecutive verbs (verbs that occur in series without either an overt connective morpheme between the verbs or intervening variable between the first two verbs) could not go through the process of ergativisation.

The analyses show that the syntactic behaviour of a verb can be predicted by the meaning of a given verb. In the transitive

use of ergative verbs, the verbal predicate requires two obligatory arguments. Semantically, the subject argument is the initiator or performer of the action, hence an Agent; the object argument denotes a participant which undergoes a change of state or location; hence, it carries the thematic role of Theme. The intransitive use has only a Theme argument; hence the transitive structure has a causative meaning.

The analyses include the identification of the argument and thematic structure of the ergative verbs in both their transitive and intransitive usages. In the transitive usage, the ergative verbs have two arguments as well as two thematic roles: NP1 and NP2 as arguments and Agent and Theme as theta roles. In the intransitive usage, the verbs have one argument- NP1 and a Theme as the thematic role. The analyses show that the interface of syntax and semantics in the Igbo ergative structure is the argument and thematic structure.

### **5.3 Conclusion**

This work has analysed the interface of syntax and semantics in Igbo ergative structures with the result that while Basque, Eskimo etc. manifest ergativity morphologically, Igbo does so syntactically and semantically.

Ergativity is essentially expressed through a parallel relationship existing between the direct object of transitive verb and the subject of its intransitive counterpart since an ergative construction is the intransitive variant of the transitive sentence. The syntactic derivation in transformational grammar involves the deletion of the subject and the movement of transitive objects to the subject positions of the ergative sentences.

The relationship of transitivity and ergativity is expressed by the notion of causative. The same semantic role is maintained in both agentive and non-agentive constructions.

One major characteristics of an action involving ergative verb is that it expresses an action involving the theme without the aid of the initiator. Argument structure is an interface between semantics and syntax of predicates.

### REFERENCES

- Aerts, B. (2002). *English syntax and argumentation*. London: Macmillan.
- Aldridge, E. (2008). Generative approaches to ergativity. *Language and Linguistics Compass* 2.9, 60-95.
- Andersen, T. (1998). Ergativity in Pari, a Nilotic OVS language. *Lingua* 75. 289-324.
- Anderson, J. (1979). *On being without a subject*. Bloomington: Indiana University Linguisticsclub.
- Anderson, S. (1976). On the notion of subject in ergative languages. In C.N.Li. (Ed). *Subject and topic* (pp 1-24).New York: Academic Press.
- Assadollahi, R., & Rockstroh, B. (2008). Representation of the verb's argument structure in the human brain. *BMC Neuroscience*, 9:69.
- Bhatt, R.M. (1994). Word order and case in Kashmiri. Ph.D Dissertation, University of Illinois at Urbana- Champaign.
- Bittner, M.&Hale, K. (1996). The structural determination of case and agreement. *Linguistics Inquiry* 27:1-68.
- Bobaljik, J.D. (1992). Nominally absolutive is not absolutely nominative. *Proceedings of WCCFL II CSLI* (pp,77-90). Stanford University.
- Bobaljik, J.D. (1993). Ergativity and ergative unergativity. In C. Philips (Ed), *Papers on case and agreement II*(pp.45-88).MIT working Papers in Linguistics 19.
- Bomfoco, M. A. (2006). What is ergativity? Retrieved 1st July, 2012. <http://ezinearticles.com/?whatisergativity?&id=249623>.

- Bresnan, J. (2001). *Lexical functional syntax*: Oxford: Blackwell.
- Bruening, B. (2015). Light verbs are just regular verbs. To appear in *U. Penn Working Papers in Linguistics* 22.1: Proceedings of the 30th Annual Penn Linguist colloquium.
- Burzio, I. (1986). *Italian syntax*. Dordrecht: Reidel.
- Butt, M.(1995). *The structure of complex predicates in Urdu*. Stanford, CA:CSLI.
- Camp, E.I. (1985). Split ergativity. In *Carineng International Journal of American Linguistics* 51. 38-58.
- Carnie, A. (2002). *Syntax: A generative introduction*.Oxford: Blackwell
- Carnie, A. (2007). *Syntax*. Malden, MA: Blackwell Publishing.
- Chomsky, N. (1965). *Aspects of the theory of syntax*. Cambridge: MIT Press.
- Chomsky, N. (1980). On binding. *Linguistic inquiry* 11, 1-46.
- Chomsky, N. (1980a). *Lectures on government and binding*. Dordrecht: Foris.
- Chomsky, N. (1981). *Lectures on government and binding*. Dordrecht: Foris Publications.
- Chomsky, N. (1986). *Knowledge of language: its nature, origin and use*. New York: Praeger.
- Chomsky, N. (1993). A minimalist program for linguistic theory. In K. Hale & S.S.J. Keyser (Eds). *The view from Building 20: Essays in Linguistics in Honour of Slyvaian Bromberger*, 1-52.Cambridge, Mass: MIT Press.
- Chung, T.(2000). Argument structure of English intransitive verbs. *Studies in generative grammar* 10.2, 389-425.
- Cocchi, G. (2009). Nominative and ergative language: towards a unified account of case checking. *Syntax* 2: 103-129.
- Comrie, B.(1972). The ergative: Variations on a theme. *Lingua* 32, pp 239-253.
- Comrie B. (1978). Ergativity. In W. P. Lehmann (Ed.).*Syntactic typology: Studies in the phonology of language* (pp.329-394). Austin: University of Texas Press.
- Comrie, B.(1981). *Language universals and linguistic typology*. Chicago: Chicago University Press.
- Comrie, B. (1985). Causative verb formation and other verb deriving morphology. In T. Shopen (Ed). *Language typology and syntactic description Vol 1-3: Grammatical categories and the lexicon*(pp.309-348). Cambridge: Cambridge University Press.
- Crystal, D. (2007). *A dictionary of linguistics and phonetics*. Oxford: Blackwell Publishing.
- Culicover, P. & Jackendoff, R.(2005).*Simpler syntax*. Oxford:Oxford University Press.
- De Lancey, S. (1981). An interpretation of split ergativity and related patterns. *Language* 57. 626-57.



- Delaney, S.(1984). Notes on agentivity and causation. *Studies in Languages* 8:181-213.
- Dirr, A. (1912). Rutulskij Jazyk [ *The Rutu language*]. Sbornik mate rialov dlya Opisaruya y. Plemn Kavkaza 42. 1-204.
- Dirr, A. (1928). Einfubrung in *Das studum der kaukasischen sprachen*. Leipzig: Verlag der Asia Major.
- Dixon, R.M.W. (1979). Ergativity.*Language* 55, 59-138.
- Dixon, R.M.W. (1972). *The Dyirbal language of North Queensland*.Cambridge: Cambridge University Press.
- Dixon, R.M.W. (1994). *Ergativity*. Cambridge: Cambridge University Press.
- Dowty, D. (1991). Thematic proto-roles and argument selection. *Language* 67, 547-619
- Dubois, J.W. (1987). The discourse basis of ergativity. *Language* 63, 805-855.
- Dubois, J.W.(2003). Argument structure: Grammar in use.In J. W. Dubois, Lorraine E. Kumpf, and William J. Ashby (Eds),*Preferred Argument structure; Grammar as Architecture for function*. 11-60. Amsterdam: Benjamins.
- Durie, M. (1987). Grammatical relations in Acehnese. *Studies in language* II, 365-99.
- Ejele, P.E. (2005). The Syntax and Semantics of Ergativity: The Esan example. In O. Ndimele (Ed.). *Trends in the Study of Language andLinguistics in Nigeria: A Festschrift for Philip Akujuobi Nwachukwu* (pp.511-524), Port Harcourt: Grand Orbit Communications and Emhai Press.
- Emananjo, N.E. (1975). The Igbo verbal: A descriptive analysis. M.A dissertation, University of Ibadan Nigeria.
- Emananjo, N.E. (1975). Aspects of the Igbo verbs. In F.C. Ogbalu & E. N. Emananjo (Eds) *Igbo language and culture*. Ibadan: Oxford University Press. 161-173.
- Emananjo, N.E. (1978). *Element of Modern Igbo grammar*.Ibadan: Oxford University Press.
- Emananjo, E.N. (1984). Igbo verbs: Transitivity or complementation? A paper presented at the Fifth Annual Conference of the Linguistic Association of Nigeria. University of Lagos, Oct 25-31<sup>st</sup>.
- Emananjo, E.N. (1985). Auxiliaries in Igbo syntax: A comparative study. *Studies in African grammatical system No 2*. Pp.210-231.
- Emananjo, N.E. (2005). Igbo verbs: Transitivity or complementation. In O.M. Ndimele (Ed.), *Trends in the study of languages and linguistics in Nigeria: A festschrift for Philip Akujuobi Nwachukwu* (pp.479-497). Port Harcourt: Grand Orbit.
- Fagan, S.(1988). The English middle. *Linguistic inquiry* 19:181-203.
- Fagan, S. (1992). *The syntax and semantics of middle constructions*. Cambridge: Cambridge University Press.

- Fillmore, C.J. (1968). The case for case. In E. Bach & R.T. Harms (Eds.). *Universals in linguistic theory* (pp. 1-88). New York: Holt, Rinehart and Winston. 1-88.
- Fillmore, C.J. (1970). The grammar of cutting and breaking. In R. A. Jacobs & P. S. Rosenbau (Eds.). *Readings in English transformation grammar* (pp.120-133) Ginn, Watham. M. A.
- Finch, G. (2000). *Linguistic terms and concepts*. London: Macmillan Press.
- Foley, W.F., & Van Valin, R.D. Jr. (1984). *Functional syntax and universal grammar*. Cambridge: Cambridge University Press.
- George, I.(1975). A grammar of kwa-type verb serialisation: Its nature and significance in current generative theory. Ph.D. dissertation, University of California.
- Golberg, A.E.(2003). Constructions: a new theoretical approach to language. *Trends in Cognitive sciences* 7(5): 219-224.
- Green, M. M. & G. E. Igwe (1963). *A descriptive grammar of Igbo*. London: Oxford University press.
- Grimshaw, J. & Mester, A. (1988). Light verbs &  $\theta$ -marking. *Linguistic inquiry* (pp.205-232). JSTOR.
- Gruber, J.S. (1976). *Lexical structures in syntax and semantics*. Amsterdam: Holland.
- Haegeman, L. (1991). *Introduction to GB theory*. Oxford: Blackwell.
- Haiden, M.(2005).Theta theory. Volume 78 in *Generative grammar*. France: Walter de Gruyter.
- Hale, K. & Keyser, S.J. (1993). On argument structure and the lexical expression of semantic relations.In K. Hale and S.J. Keyser (Eds), *The view from Building 20* (pp.53-109).MIT Press, Cambridge mass.
- Harris, A. C. (1982). *Georgian Syntax: A study in relational grammar*. Cambridge: Cambridge University Press.
- Haspelmath, M.(1993). More on the typology of inchoative/causative verb alternations. In Comrie & M. Polinsky (Eds.).*Causative and transitivity* 87-120. Amsterdam: John Benjamins.
- Ihionu, P.U.(1992). Verb compounding in Igbo: An Overview. In C. Collins &V. Manfredi (Eds.). *Proceedings of the Kwa comparative syntax workshop*. MIT, Working Papers in Linguistics 17, 165-182. Cambridge, MA: MIT Department of Linguistics.
- Iwundu, M. (1987). Igbo relative clauses: Some general aspects of language. *Nsukka journal of linguistics and African Languages*.
- Jackendoff, R.(1974). A deep structure projection rule. *Linguistic Inquiry* 5, 481-506.
- Jelinek, E.(1993), Ergative "splits" and argument type.In papers on *Case & Agreement I*. Working Papers in Linguisticsvol 18:15-42.
- Jespersen, O. (1927). A modern English grammar on historical principles.

- Jespersen, O. (1965). *The philosophy of language*. New York: Bantam.
- Jingquan, H. (2007). Argument structure and transitivity alternation. Ph.D Dissertation, Department of Chinese, Translation and Linguistics, City University of Hong Kong.
- Jones, M.A (1988). Cognate objects and the case-filter, *Journal of Linguistics* 24:89-110.
- Kachru, Y. (1987). Ergativity subjecthood and topicality in Hindi-Urdu, *Lingua* 71. 223-38.
- Kageyama, T. (1996). *Dooshi Imiron (Theory of verb meaning)*, kuroshiro.
- Kaufman, T. (1971). *Tzeltal Phonology and Morphology*. California: University of California Press.
- Keen, S.L.(1972). A description of the Yukulta language -an Australian Aboriginal language of north-west Queensland. MA Thesis, Monash University 298pp.
- Keyser, S.J. & Roeper T.(1984). On the middles and ergative constructions in English. *Linguistics Inquiry* 15. 381-416.
- Kiparsky, P. (1998). Partitive case and aspect. In M. Butt, & G. Wilhelm (Eds). *The projection of arguments: Lexical and compositional factors* 265-307. Stanford: CSLI Publication.
- Laka, I. (1993). Unergatives that assign ergative, unaccusatives that assign accusative. In J. D. Bobaljik & C. Philips (Eds.). *Papers on case and agreement*. MIT, Working papers in Linguistics 18. 149-172.
- Lamidi, M.T. (2008). *Aspects of Chomskyan grammar*. Ibadan: University Press.
- Levin, B. (1983). On the nature of ergativity. Doctoral Dissertation, MIT Cambridge, MA.
- Levin, B. (1983). Unaccusative verbs in Basque. *Proceedings of the 13th Annual Meeting of North-eastern Linguistics society* 129-144.
- Levin, B. (ed) (1985). Lexical semantics in review. *Lexicon project working papers* 1, centre for cognitive science, MIT, Cambridge, MA.
- Levin B. (1987). The middle construction and ergativity, *Lingua* 71, 17-31.
- Levin, B. (1993). *English verb classes and alternations*. Chicago: Chicago University Press.
- Levin, B. & Rappaport-Hovav M. (1992). The lexical semantics of verbs of motion: the perspective from unaccusativity. In I. M. Roca (Ed.). *Thematic structure: Its role in grammar* 247-269. Berlin: Walter de Gruyter.
- Levin, B. & Rappaport-Hovav, M. (1995). *Unaccusativity: At the syntax-lexical semantic interface*. Cambridge MA: MIT Press.
- Li, G.(2007). Second language and literacy and learning in school and at home: An ethnographic study of Chinese- Canadian first graders' experiences. *Journal of language teaching and learning* 11 (1), 1-40.
- Lord, C. (1975). Igbo verb compounds and the lexicon. *Studies in African linguistics*. 6.1:23-48

- Lord, C. (1993). *Historical change in serial verb constructions*. Amsterdam: John Benjamins.
- Lyons, J. (1968). *Introduction to theoretical linguistics*. London: Cambridge University Press.
- Mahajan, A.(1990). On the A/A-distinction and movement theory. Ph.D Dissertation, MIT.
- Mahajan, A. (1994). The ergativity parameter: Have-be alternation, word order and split ergativity. In *Proceedings of NELS 24*.317-331. GLSA Amherst.
- Marantz, A.(1995) The minimalist program. Webelhuth, G. (Ed.) *Government and binding theory and the minimalist program*349-381. Oxford: Blackwell.
- Matsuzaki, T.(2001). A semantic approach to transitivity alternations in Japanese lexical idiosyncrasies vs post-lexical derivations SECOLIXIV. The University of Tennessee: MS.
- Matthews, P. H. (2007). *The concise oxford dictionary of linguistics*. (2<sup>nd</sup> ed.). Oxford: Oxford University Press.
- Mbah, B. M. (1999). *Studies in syntax: Igbo phrase structure*. Nsukka: Prize publishers.
- Mbah, B. M. (2006). *GB syntax: Theory and application in Igbo*. Enugu: St. Jon-Afam Publishers.
- Mbah, B.M. (2011). *GB Syntax: A minimalist theory and application to Igbo*. Cross River: Association of Nigerian Authors.
- Mbah, B.M. (2012). Transitivity in Igbo: When the paradigm shifts. In C. Uchechukwu (Ed.) *The transitivity problem of the Igbo verb (Igbo language study series 5*, 35-54. Umunze: Annyco Publishers.
- Mbah, B. M & Mbah E. E. (2014). *Atxtx amxmamx asxsx*. Nsukka: University of Nigeria Press.
- McGregor, W.B (1989). Discourse basis of Ergative marking in Gooniyani. *La Trobe University working Papers in Linguistics* 2. 127-158. Mcgrego, W. B. (2009). Typology of ergativity, *Language and Linguistics compass* 3:480- 508. DOI:101111/j. 1749-818X. 2008.00118. X.
- McGregor, W.B.(1998). 'Optional' ergative marking in Gooniyandi revisited: Implications to the theory of marking. *Leuvense Bydragen* 87, 491-534.
- Mmadike, B. I. (1997). Antecedent anaphor relations in Olu Dialect of Igbo. Doctoral Thesis, University of Ibadan.
- Mmadike, B. I. (2008). The Igbo ergative/unergative verb. In *Journal of Modern European languages and literature*. No.1, 148-155.
- Moravcsik, E. (1978). On the distribution of ergative accusative patterns. *Lingua* 45: 233-79.
- Napoli, D. (1996). *Linguistics*. New York and Oxford: Oxford University Press.

- Ndimele, O. (2004). Negation marking in Igbo. In O.M. Ndimele (Ed.). *Language and culture in Nigeria: A festschrift for Okon Essien*, 939-958. Aba: NINLAN and M & J Grand Orbit.
- Ndiribe, M.O. (2008). The argument structure of the Igbo verb: A minimalist approach. An M.A Dissertation. Department of Linguistics, Igbo and other Nigerian languages, University of Nigeria Nsukka.
- Nicholas, T. I. (1993) . Handbook of WA Aboriginal languages south of the Kimberley Region Canberra: *Pacific Linguistics*.
- Nigar, A. & Nizami, J.(2012). Problems of ergativity theory. *International review of social sciences & Humanities*, Vol. 2 Issue 2.94.
- Nwachukwu, P.A. (1976). Stativity, ergativity and the suffixes in Igbo. *African language 2*: 119-143.
- Nwachukwu, P.A. (1983). Towards a classification of Igbo verbs. In P.A. Nwachukwu (Ed.), *Readings on the Igbo verb* 17-42. Onitsha: African-FEP.
- Nwachukwu, A.P. (1985). Inherent complement verbs in Igbo. *Journal of Linguistics Association of Nigeria (JOLAN)* 3.
- Nwachukwu, P.A.(1986). Inherent complement verbs in Igbo. *Journal of Linguistics Association of Nigeria* 1. 47-61.
- Nwachukwu, A.P. (1995). *Tone in Igbo Syntax*. Nsukka: Igbo Language Association.
- Nwachukwu, P.(1995). Topic, focus and move-alpha in Igbo. *Issues in African languages and linguistics: Essays in honour of Kay Williamson*. In E. Emenanjo & O. Ndimele (Eds), 181-192. Aba: National Institute for Nigerian languages.
- Nwankwo, N.J. (2012). Equi-predicative ergativity in the Igbo Language. A Ph.D seminar paper presented in the Department of Linguistics, Igbo and other Nigerian languages. June 2012.
- Nweze, I.M (2014). Ergativity in Igbo: Insights from Nsukka Dialect cluster. In *Society for research and academic excellence*. <http://academicexcellencesociety.com/ergativity-in-igbo.html>. Retrieved: March 25, 2015.
- O'Dowd, E.(1990). Discourse pressure, genre and grammatical alignment -after Dubois. *Studies in language* 14.365-403.
- Ogwueleka O.S. (1987). Thematic roles and syntactic process in Igbo. University of Ife, Ph.D Thesis.
- Oluikpe, B.O. (1979). *Transformational syntax: The Ngwa example*. Onitsha: Africana-FEP.
- Onuora, J.E. (2014). Verb serialisation and consecutivisation in Igbo. Ph.D Thesis, Department of Linguistics, University of Nigeria Nsukka.
- Oosten, V.J. (1980). Subject topics and agents: Evidence from "property factoring". *Proceedings of the 6th Annual Meeting of the Berkeley Linguistics Society*. Berkeley, Cal: Berkeley linguistics society:157-189. Retrieved: March 25, 2015.

- Ore, U.(2007).(Ed.). *Basic Linguistics for Nigerian languages teachers*. Port Harcourt: M&J Grand orbit communications.
- Otsuka, Y. (2000). Syntactic Ergativity in Tongan: Resumptive pronouns revisited.
- Ouhalla, J. (1999). *Introducing transformational grammar: From principles and parameters to minimalism*. 2nd Edition. New York: Oxford University Press.
- Oye, T. (2013). Lecture notes on LIN 321: Grammar. Department of linguistics and African languages, University of Ibadan.
- Oye, T. (2014) Lecture notes on transformational grammar. Department of Linguistics and African languages, University of Ibadan.
- Paterson S. J. (1983). Voice and Transitivity, Ph.D Thesis UCI.
- Payne, D. (1987). Information structuring in Papago narrative discourse. *Language* 63. 783-804.
- Pinker, S. (1989).*Learnability and cognition: The Acquisition of Argument structure*. Cambridge, MA: MIT Press.
- Pinker, S. (1994). *The language instinct*. New York: W.Morrow & co.
- Radford, A. (1988). *Transformational Grammar*. Cambridge: Cambridge University Press.
- Radford, A.(2006). Minimalist syntax revisited <http://courses.essex.ac.uk/ig/ig514>. Retrieved: August 18, 2014.
- Riemsdijk, V.H. & Williams, E. (1986). *An introduction to the theory of grammar*. Cambridge: MIT Press.
- Robinson, J.(1970). Dependency structures and transformational rules. *Language* 46, 259-285.
- Rosen, S.T. (1990). *Argument structure and complex predicates*. New York: Garland.
- Saeed, J. (2003). *Semantics*. Malden M.A: Blackwell Publishers.
- Saeed, J. I. (2007). *Semantics* (2nd ed.). Oxford: Blackwell Publishing Company.
- Scancarelli, J. (1986). Referential strategies in Chamorro narratives: preferred clause structure and ergativity. *Studies in language* 10. 335-62.
- Sharp, A. (2004). Language learning and awareness of personality type in Chinese settings. Retrieved from <http://www.asian-efl-journal.com>. Retrieved: April 14, 2015.
- Silverstein, M. (1976). Hierarchy of features and ergativity. In R.M.W. Dixon (Ed.) *Grammatical categories in Australian languages*. Canberra institute of Aboriginal studies. 112-171.
- Smith, C.S.(1978). Jespersen's 'move and change class' and causative verbs in English. In A.J. Mohammed Ali, Edgar C.P.&Wemer W. (Eds.).*Linguistics and literacy studies in Honour of Archibal A. Hill 2: Descriptive Linguistics*. Mouton: The Hague:101-9.

- Sowa, J.F. (2001). *Knowledge representation: Logical philosophical and computational foundations*. Pacific Grove: Brooks/Cole.
- Stewart, D.J.(1963). The language of Ethics. *Philpapers.org/rec/STEWCL*. Retrieved March 16, 2016.
- Takeuchi, T. & Takahashi, Y. (1995). Split ergative patterns in transitive and intransitive sentences in Tibetan: A reconsideration. In Y. N. James, A. Matissoff, & Y. Nagano (eds.). *New horizons in Tibeto-Burman morphosyntax*, 277- 88.Osaka. National Museum of Ethnology.
- Tallerman, M. (2005). *Understanding syntax*. (2nd ed). London: Hodder Arnold.
- Talmy, L.(1976). Semantic Causative Types.In M. Shibatani (Ed). *Syntax and Semantics 5:Japanese Generative Grammar* 43-116. New York: Academic Press.
- Tenny, C.(1992). The aspectual interface hypothesis. In I.A. Sag & A. Szabolsci (Eds.) *Lexical matters*, 1-27. Stanford: Stanford University Press.
- Tiffon, E. & Morin, Y. (1982). A note on split ergativity in Burushaski. *Bulletin of the School of Oriental and African Studies*. University of London 45. 88-94..
- Tsunoda, T. (1981). Split case-making patterns in verb-types and tense/aspect/mood. *Linguistics* 19. 389-438.
- Ubahakwe, E. (1976). On the question of transitivity and intransitivity in Igbo verbs. *Odenigbo* 1:45-56.
- Uchechukwu, C. (2007). Subject-object switching and Igbo lexicon. *Annual review of cognitive linguistics*, 5, 55-76.
- Uchechukwu, C. (2011).(ed) *Extentional suffixes and clitics in Igbo*. Onitsha: Varsity Press.
- Uwalaka, M.A.N. (1983b). Motion verbs: Semantics and syntactic analysis. In P.A. Nwachukwu (Ed.). *Readings on the Igbo verb* 147-170. Onitsha: African-FEP.
- Uwalaka, M.A.N. (1988). The Igbo verb: A semantic syntactic analysis.*Beitrag Zur African Band* 35:63-72.
- Uzoma, C. N. (1999). Transitivity and complementation: Issues in Igbo syntax- another dimension. M.A Dissertation Abia State University.
- Valenzuela, P.M.(2000). Ergativity en wariapano, yaminawa y shipibo-konibo, indigenous languages of Lowland South America, In H.V. Voort, & S.V.Kerke (Eds), *Indigenous languages of Latin America* (ILLA), Vol 1,111-28. Leiden: University of Leiden.
- Van Voorst, J.(1995). The Semantic structure of causative constructions. *Studies in language* 19:489-523.
- William, E.S. (1980). Predication. *Linguistic inquiry* 11, 203-38.