

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The human language is a system of vocal auditory communication that interacts with the experience of its users. The patterned sound units usually employed by language users are assembled according to a set of rules. Furthermore, language has several discrete units beginning with distinctive sounds and progressing to syllables and parts of speech, alternatively referred to as lexical categories.

The verb is one of the major lexical categories, which exists in virtually all the languages of the world. Throughout history, the syntactic and semantic properties of the verb as a lexical category have interested grammarians. As pointed out by Aarts and Meyer (1995:1), Dionysius Thrax stressed the importance of the verb (rhema) as early as 100 BC. He defined the verb as a part of speech lacking case inflection but inflected for tense, person and number. The interest in the verb by early grammarians has influenced linguists to pursue the study of verbs in different languages and has further made the verb to be recognized as a distinct word class. The verb is the central part of predication, hence its crucial semantic role in the sentence. A very important feature of the verb is its valency, which is the ability to be connected with other words in the sentence. Assigning the correct valency to a verb helps to enable appropriate and meaningful production of an utterance.

Following from the above, it is obvious that the verb is an important category that should be investigated for a proper description of the structure of languages. This is in consonance with the observation by Palmer (1965:1) that learning a language is (to a very large extent) learning how to operate the verbal forms of the language. Despite the significance of the verb, it is yet to be described in most minority languages. Etulo happens to be one of these many minority languages in Nigeria.

Following Arka (2013:75), "the term 'minority' is used here to refer to relatively small ethnic groups (and their languages). It is also a relative notion as it is defined in terms of relative size

and equality in power and opportunities against the dominant or majority groups in a given geographical space”

As Dixon (1997) rightly argues, “if all Ph.D thesis in linguistics are based on marginalized languages, then more linguistic materials would be globally available for analysis thereby contributing to the world stock of linguistic knowledge”. These reasons have spurred the researcher to delve into this research topic.

Taking cognizance of the different theoretical approaches to the study of the verb, this study agrees with the view expressed by Aarts and Meyer (1995:2) that an adequate understanding of the verb in any language is best achieved if theoretical treatments of the verbs are accompanied by a description of their actual usage. The concern of this study is to provide a descriptive account of the Etulo verb. The theoretical framework adopted is the Role and Reference Grammar. The perspective conceives language as being made up of grammatical structures, which can only be explained and understood, with reference to their semantics and communicative functions.

1.2 Geographical Background

This research work focuses on the Etulo language. Etulo belongs to the Idomoid group of the West Benue Congo of Niger Congo group of languages. (Gordon, 2005). Etulo refers simultaneously to both the language and the ethnic group. The Etulo are found in Benue and Taraba States, Nigeria. The Etulo speakers in Benue are found in Adi, Buruku Local Government Area and parts of Kastina-Ala, Kastina Ala Local Government Area. The Etulo in Benue state live in the shadow of the 2.1 million neighboring Tiv people

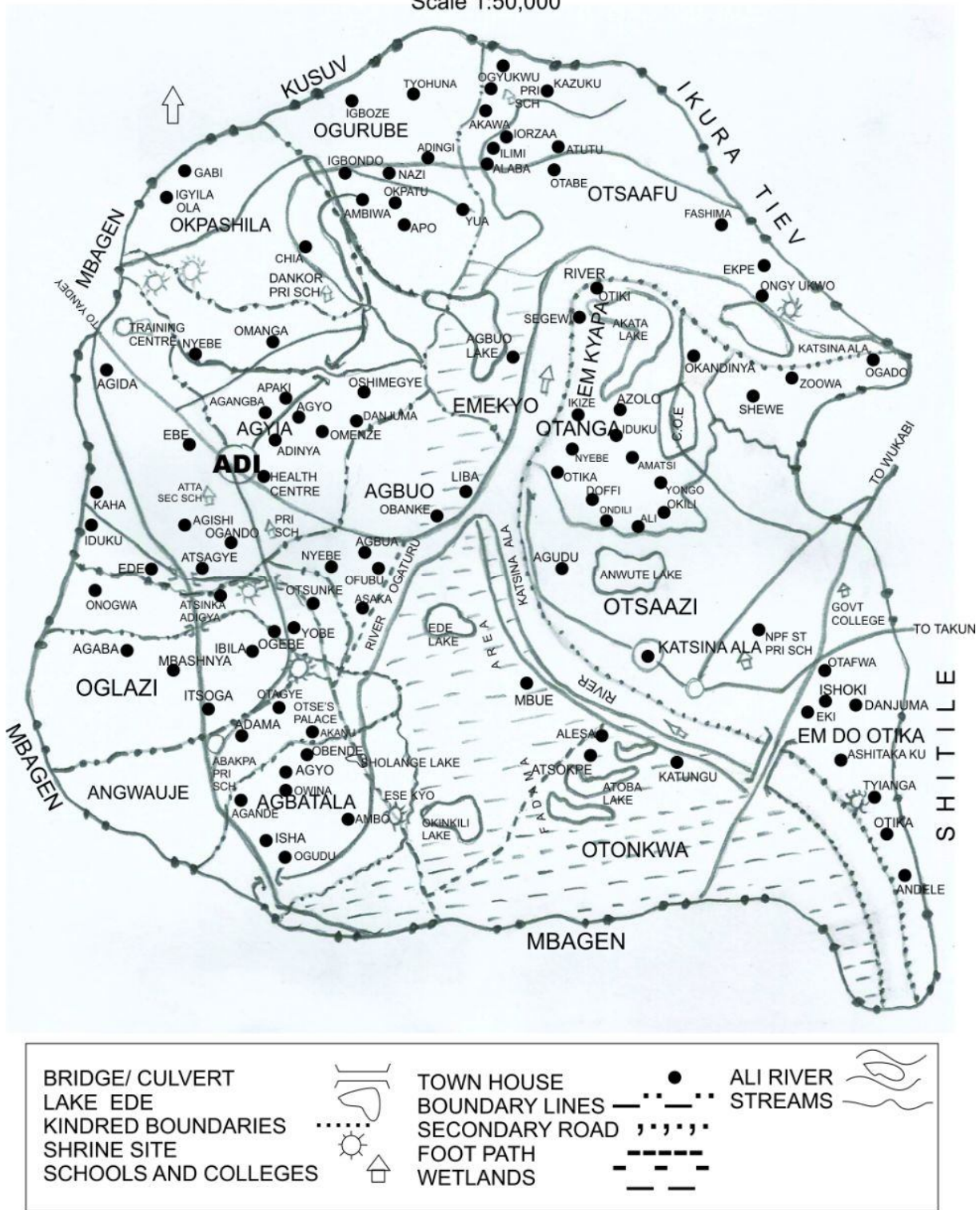
Tabe (2007:3) described the Etulo as one of the Jukunoid groups that formed the erstwhile Kwararafa kingdom in the Benue valley in the distant past. According to him, the Etulo live on both banks of the Katsina- Ala River, about 136 kilometres east of Markurdi, the Benue state capital. Tabe (2007:1) notes that the Etulo land (Ikpesse Etulo) stretches from 7⁰N to 9⁰N latitudes and lies 11⁰E and 13⁰E longitude.

Following the narration by Tabe (2007:4), the Etulo are the children of Ibagye, their progenitor, to whom they also trace their descent. Their mother was Ato. Itsikpe who was one of the many children of Ibagye was known as the leader of his people. Itsikpe became the father of three sons, namely: Okakwu, Ozi and Okwe : each of whom became the leader of his people. The three sons consequently established a royal family named after them to rule the Etulo people.

In Benue state, Etulo exists alongside other languages like Tiv, Idoma, Igede and Hausa. In Taraba state, the Etulo are found in Wukari. Etulo is therefore a minority language of Benue and Taraba states respectively

Etulo has about 10,000 speakers (Shain (1988)). Also as recorded by Joshua project, Etulo has about 16,000 speakers. However Mr Inju Clement, a language consultant, claims that Etulo recorded about 50-100 thousand speakers in the 2006 census. The Etulo are predominantly farmers and fishermen.

Figure 1: THE ETULO LAND IN BENUE VALLEY
 (EXTRACTED FROM KATSINA ALA SHEET 272 S E)
 Scale 1:50,000



Culled from Tabe 2007:5

1.3 Statement of the Problem

The verb in Etulo has not been subjected to substantial academic study. Thus literature pertaining to verbs in the language is scanty. Some studies carried out in the language such as notes on Etulo (Armstrong 1964) , history of Etulo (Tabe 2007), the investigation of the numeral system (Mmadike &Okoye 2009), monograph on reading and writing Etulo etc have not accounted for the verb in the language.

It is observed from studies on the verb in other languages that verbs play a central role in sentence construction and comprehension. Thus, the relevance of the verb in a language makes it possible for it to be used in isolation with an adequate conveyance of meaning. The verb also signifies an activity or process performed or undergone. In addition, the verb is the central part of predication, hence its crucial semantic role in the sentence. A very important feature of the verb is its valency, which is the ability to be connected with other words in the sentence. The features and functions of the verb, which have been confirmed for some languages, are yet to be determined for other languages especially the minority languages. This study therefore seeks to provide an account of the Etulo verb. It is concerned with accounting for the structure of the Etulo verb, describing the argument structure of the verb through lexical decomposition, grouping the verbs into classes based on their inherent temporal properties and examining the semantic classes of Etulo verbs from some domains. The study also investigates the realization of tense and aspect in Etulo and further describes Etulo Serial verb Constructions in terms of junctures. This study, apart from revealing interesting features of Etulo, would further situate the language within the larger context of languages whose verbs have been described.

1.4 Research Questions

The following questions have been posed to guide the study:

- a. In what way(s) can the verb in Etulo be classified?
- b. In what manner(s) can the argument structure of the verb in Etulo be determined?
- c. To what extent are the Etulo verbs constrained with regard to their co-occurrence?
- d. To what degree are the different semantic classes of Etulo verbs similar?
- e. In what way(s) are tense and aspectual distinctions realized in Etulo

- f. What juncture relations exist in Etulo Serial Verb constructions

1.5 Purpose of Study

Against the background of the research questions, the purpose of this research is to:

- a. classify Etulo verbs.
- b. account for the argument structure of Etulo verbs.
- c. describe co-occurrence restriction in Etulo verbs.
- d. account for correlation between Etulo verbs within specific semantic classes.
- e. illustrate the realization of tense and aspect in Etulo.
- f. describe junctures in Etulo Serial Verb Constructions.

1.6 Significance of Study

The study is significant because it would inform readers about the structure of Etulo verbs, the different classes of verbs in Etulo, their argument structure as well as co-occurrence restrictions between Etulo verbs and their object complements. In addition, readers would be aware of tense and aspectual distinctions in Etulo as well as the juncture relations in Etulo Serial Verb Constructions.

Most languages in Nigeria are endangered and as such face the danger of not being recorded before they go into extinction. In addition, very little is known about the speakers, their population, location, folklores and the grammatical structure of these languages. Etulo is one of such languages faced with endangerment. This work on Etulo verbs is therefore significant because an investigation of the verb in this language is a clear documentation of an aspect of the grammar of the language, which would reveal a lot about the language structure. The study would also serve as an easy reference material to researchers who are interested in this or other aspects of the language.

Languages with scanty research works or fewer studies are studied in order to document them for the sake of posterity. This also makes this work significant. Furthermore, the findings of this work will also be beneficial to comparative linguists because they can compare the verbs in Etulo with verbs of other languages. For those who may venture into producing either a

monolingual Etulo dictionary or an Etulo- English bilingual dictionary, the findings of this study would most likely contribute to the capacity of building the entries for verbs in such dictionaries.

The study will also add to cross-linguistic findings with regard to valence classes, verb classification and co-occurrence restrictions among others. In addition, the development of linguistic theories should depend on the findings from a variety of languages and not a few languages. The findings of this study are also significant in this regard.

Finally, this study is significant to all linguists especially those who are interested in less studied languages. It is very likely to spur the commencement of research into the numerous undeveloped minority languages.

1.7 Scope of the Study

This work is concerned with accounting for the structure of Etulo verbs, grouping the verbs into different classes based on the action they depict, describing the argument structure of Etulo verbs and examining some semantic classes of Etulo verbs to determine co-occurrence restriction. The study will further describe Etulo serial verb constructions in terms of junctures, and examine the realization of tense and aspect in Etulo. The idea behind the investigation of tense and aspect is aimed at providing a tenable account of the verb. The theoretical framework adopted is the Role and Reference Grammar approach.

1.8 Research Methodology

The research method adopted in the present study is the interactive interview method. Some Etulo speakers of Benue state found in Adi, Buruku Local Government Area, have been used as the informants for this research work. The data for this work were elicited from the following Etulo native speakers : Mr Clement Inju, Mr Andrew Otsele, Mrs Mary Inju, Elder Agyo and Mrs Audu. These informants have spent the major part of their lives in the community. The data, which are in the form of simple structured questions, were administered to the informants and their responses were recorded. The Leipzig Valency Questionnaire manual was also used as research instrument.

Data were tested for grammaticality with three native speakers of Ètùlo. This was to validate the translations and native speakers' acceptability of the forms used. The data elicited from the informants were accounted for descriptively within the Role and Reference Grammar framework as developed in Van Valin (2005) and Van Valin and La Polla (1997).

1.8.1 Orthography adopted

The data in the research work are based on a slightly modified version of the 2015 orthography devised for writing the Ètùlo language. The orthography was devised by the Ètùlo Language Development and Bible Translation Project, in partnership with the Nigerian Bible Translation Trust. It comprises thirty-three (33) letters of the Etulo alphabet. The letters of the alphabet are represented below:

Aa Ba Cc Dd DzdZ Ee Èè Ff Gg GBgb Hh Ii Jj Kk KPkp Ll
Mm Nn NGng NYny Oo Ɔo Pp Rr Ss SHsh Tt TSts Uu Vv
Ww Yy Zz

The present study modified the orthography to include two additional consonants. The additional consonants were observed in the informants' speeches and have been included to ensure adequate analysis. The modified orthography is represented below:

Aa Ba Cc Dd DzdZ Ee Èè Ff Gg GBgb GWgw Hh Ii Jj Kk KPkp KWkw
Ll Mm Nn NGng NYny Oo Ɔo Pp Rr Ss SHsh Tt TSts Uu Vv
Ww Yy Zz

1.8.2 Tone marking Convention

The language under investigation is a tone language having the high, low, downstep and gliding tones. In this study, we would follow Green and Igwe's (1963) tone marking convention. Following this convention, low tone is indicated with a grave accent [ˋ], step tone

is marked with a macron [-] , the gliding tone is marked with a modifier letter up arrowhead [^] while, the high tone is left unmarked.

CHAPTER TWO

LITERATURE REVIEW

2.0 Preamble

Over the years, the verb has been investigated in different languages adopting diverse approaches. This chapter examines the views of different authors concerning the verb in the human language. The chapter is divided into four major sections: the conceptual review, the theoretical review, theoretical framework and the empirical review. The conceptual review explains the basic concepts used in the description of the verb in Etulo. The theoretical review considers the views of authors concerning the verb and its characterization in addition to approaches that have been adopted in investigating the verb and the assumptions of these approaches. Aspects of the Role and Reference Grammar theory relevant to this study shall also be discussed in this chapter. The empirical review looks into previous studies on verbs in other languages as well as available studies that have been carried out on aspects of the Etulo language.

2.1 Conceptual Review

Some concepts used in the description of Etulo in the succeeding chapters are reviewed with the aim of providing a brief definition of the concepts as an aid to the understanding of the present study. Some of the concepts include aktionsart, predicate decomposition, and argument alternation.

2.1.1 Arguments

Carnie (2007:50-51) asserts that there are two major ways through which verbs can be divided into subcategories. The first way is based on tense/finiteness while the second means is to divide up verbs in terms of the number of noun phrases, prepositional phrases or the clauses they require. According to Carnie (2007), adopting the second technique means following the argument structure.

Carnie defines arguments as entities that participate in a relation defined by a predicate. The author further notes that these entities can be abstract or physical. In the sentence, *Ada slapped Obi*, there are two arguments *Ada* and *Obi*, the predicate *slap* expresses the relation between the two arguments, that is, it shows that the first argument (*Ada*) exerted some force on the second argument (*Obi*).

Webelhuth (1999:100) suggests that arguments of predicates are best distinguished in terms of ordered argument lists through the use of such keywords as Agent, Patient.

For Pylkkanen (2002:10), arguments name entities that stand in relevant relation to the event described by the verb. Pylkkanen divides arguments into true arguments and additional arguments. The latter, according to the author, do not belong to the basic structure of the verb while the former belongs to the basic structure of the verb. The additional arguments are often seen as adjuncts.

Marantz (1984) in Pylkkanen (2002:122) argues that the external argument is not an argument of the verb but rather an argument of the verb phrase. Marantz views the internal argument as the core argument of the verb because of its ability to trigger special interpretations of the verb and the subsequent inability of the external argument to trigger such interpretations.

Marantz instantiates the above claim using the following examples in 1 and 2

1ai Throw a party

ii Throw a baseball

iii Throw support behind a candidate

1bi Kill an audience

ii Kill a conversation

iii Kill a cockroach

2ai The police threw a party

ii The school management threw a party

iii The man threw a party

bi Silence killed the conversation

ii The drunk killed the conversation

(Culled from Pylkkanen 2012: 122)

In the expressions in 1ai-iii and 1bi-iii, the object NPs trigger different interpretations for the verbs *throw* and *kill* while in 2ai-iii and bi-ii, the subject NPs do not trigger such difference in the interpretation of the verbs *throw* and *kill*

However, some authors do not subscribe to the claim by Marantz. For them, (see Bresnan 1982, Grimshaw 1990), the subject rather being excluded from the core arguments of the verb should be assumed to be the last argument that composes with the verb.

2.1.2 Argument Structure

Argument structure for Carnie (2007) refers to the number of participants a particular predicate requires. However, Aarts (2001:93) posits that argument structures indicate not only the number of arguments taken by a predicate but also their categorical status. i.e, they make explicit the argument positions and the exact number of arguments accruable to a verb alongside implicit ones.

Bresnan (1995:1) sees argument structure as the interface between the syntax and semantics of verbs, which functions to link lexical semantics to syntactic structures. Furthermore, argument structure encodes information about the number of arguments, their syntactic type and the organization necessary for mapping from semantics to syntax

2.1.3 Argument alternation

Levin (2014:3) posits that argument alternation applies to verbs that can be found in more than one context with all or some of the verb's arguments expressed in both contexts in different ways. This explanation by Levin suggests that alternation of arguments can be complete or partial. It is complete where all arguments are expressed in both contexts and partial when not all are expressed.

For Malchukov, Haspelmath and Comrie (2007:13), an alternation occurs where the same verb can occur with different constructions with roughly the same meaning. The submission of Malchukov et al incorporates the preservation of meaning in the alternation of arguments.

Levin (2014:3) outlines some challenges in the analysis of argument alternation as follows: characterizing the relationship between the two variants that make up the alternation, determining the factor underlying the preference of one variant to the other, distinguishing the basic from the derived variant among other issues. In as much as these issues are important, the present study shall not go into exploring them as our aim here is to provide a definition of argument alternation that will help in the understanding of this work.

2.1.4 Ergativity

Ergativity refers to the alternation between transitive and intransitive patterns that a verb allows. Elspeth and Bain (1996:350) define ergative verbs as verbs that allow the object of a transitive clause to be the subject of an intransitive clause without changing voice.

For Dixon (1998:1), ergativity is used to describe a grammatical pattern where the subject of an intransitive clause is treated in a similar way as the object of a transitive clause.

Haspelmath (2005a) in Chukwuogor (2015) views ergativity as a type of monotransitive alignment. Alignment refers to the comparison of the properties of arguments across constructions. According to Haspelmath, ergativity is a type of alignment where S and P are treated alike. S corresponds to the single argument of an intransitive verb while P is the patient- like argument of a transitive verb.

Aldridge (2008: 987) explains that morphological ergativity is defined by the uniform assignment of inherent case to subjects by transitive verbs. A language is described as morphologically ergative if S and O appear in the same case while a special case is assigned to A. The syntactic ergativity of a language is established by co-ordination and relativization

2.1.5 Serial Verb Constructions

The phenomenon of serial verb constructions (henceforth SVCs) is common to Benue Congo languages. According to Aikhenvald (2006:1) serial verb constructions describe what is conceptualized as a single event. Dixon 2006:339 agrees with Aikhenvald's view and further adds that the multiple verbs in a SVC, conceived of as describing a single action can sometimes, but not always, be analyzed into sub events that relate to one verb.

Baker (1989) opines that SVCs are constructions in which a sequence of verbs appears in a single clause. The author further observes that the verbs in a series have a single subject and share logical objects.

Foley and Olson (1985) in Caesar (2016: 33) view SVCs as constructions in which verbs sharing a common subject and object are merely juxtaposed without any intervening conjunction. Emenanjo (2015: 540) asserts that, from existing literature, SVCs have the following features: verb or verb phrases are in a row or series, the first verb bears all the inflectional markers for tense aspect and negation and all verbs share the same subject, the verbs in a series lack overt connectors.among other features.

2.1.6 Lexical decomposition

The motivation behind verbal decomposition is the assumption that verbs are complex and that they can be decomposed into component parts. Lexical decomposition involves splitting words into minute units of linguistic representation. The motivation for lexical decomposition may be phonological, semantic or syntactic.

With respect to semantic decomposition, which is part of the motivation in this study, (the other being syntactic) it is necessary to detach abstract properties associated with the lexical item from the concrete properties of the word. The semantic decomposition of verbs is referred to as predicate decomposition.

Beavers (2006:278) asserts that predicate decomposition is relevant in capturing the sub-event structure of an event. Sub-events according to Beavers are relevant for argument realization. In addition, decomposition enables one to constrain the possible event templates in terms of sets of basic semantic primitives from which more complex event structures are built.

Pustejovsky (2009:8) highlights some approaches in the decomposition of lexical information. They include parametric decomposition, simple predicative decomposition, and full lexical decomposition. The parametric approach considers additional parameters such as contexts and presuppositional information in the decomposition of verbs. Within the parametric approach, Pustejovsky posits that information considered as adjuncts are represented through conventional mechanisms of logical entailment. In simple predicative decomposition, concepts are seen as conjunctions of primitive features while a combination of parametric and simple predicative approaches yields what Pustejovsky terms full predicate decomposition.

Other authors have further explored predicate decomposition (Dowty (1979), Levin and Rappaport (1995, 2005), Liebner (2004) Van Valin and La Polla (1997) and Van Valin (2005).

Liebner's (2004) approach to decomposition posits two distinct components, which are the body and the skeleton. Whereas the body corresponds to the encyclopedic knowledge, skeleton corresponds to the argument structure. For Levin and Rappaport (1995, 2005), lexical decomposition involves interpreting meaning using a single representation which describes the argument and event structure of verbs by means of primitive predicates and constants which form a lexical semantic template.

For Van Valin and La polla (1997) and Van Valin (2005), the lexical decomposition of verbs is based on Vendler's (1957) theory of *Aktionsart*. Within this approach, the decomposition of predicates reveals the event depicted by the verb in addition to the argument structure of the verb. It also captures the link between the syntax and semantics of the language. This study adopts the Role and Reference Grammar predicate decomposition approach. Section 2.3, which discusses the theoretical framework, examines the issue of lexical decomposition within the Role and Reference Grammar in some detail.

2.1.7 Tense

Comrie (1985:7) observes that locating situations in time is a conceptual notion and as such independent of distinctions made in any particular language. He thus views tense as the grammaticalization of location in time. The author distinguishes between absolute and relative tenses. Absolute tense takes the present moment as the deictic centre while relative tense does not include the present moment as part of its deictic meaning (1985:35).

According to Comrie, the present, past and future tenses are instances of absolute tense. The present tense is used to describe states and processes that hold at the time of speech but began before the time of speech and may likely continue beyond the speech time as in the expression *Ada is working on the Etulo language*. The past tense locates a situation prior to the present moment while the future tense locates a situation at a time subsequent to the present moment. Comrie (1985: 44-46) however posits that the controversy surrounding the future reference with respect to whether it should be subsumed under tense or mood remains an empirical question that can only be answered based on the investigation of future time reference across languages.

Frawley (1992:336) sees tense as the grammatical and morphological means employed by a language to locate an event in time. Frawley notes that languages vary in their assignment of tense locus and thus distinguishes between absolute and relative tenses. Frawley's tense distinction aligns with that of Comrie (1985). According to Frawley (1992:343), absolute tense reaches directly into the speech event by relating the event to the present position of the speaker, i.e., it relies on here and now to determine the tense locus. He also observes that the tense locus is inherited from a point outside the moment of speech. With regard to relative tense, Frawley notes that it applies typically to events that are dependent on other events such as reported speech or indirect discourse. Frawley exemplifies with the Russian example in 3

3. Ja spros- il počemu u nego trjasutsja ruki
I ask past why to him tremble/pres hands
I asked him why his hands were shaking

Frawley asserts that in example 3, it is ungrammatical for *trjasutsja* ‘tremble’ to be assigned past tense. The verb rather inherits its tense from the first verb *spros* ‘ask’.

Dirven and Vespoor (2004:93) discuss tense with respect to what they termed the speech act time. According to them, tense is the grammatical category which relates an event in time with respect to the speech act time which is the moment of speaking. They further aver that events that take place at speech time act itself (present) and before the speech time (past tense) have reality status while events that take place after the speech act (future tense) have the status of potential reality. The authors opine that the category tense is one of the grounding elements of a sentence that aids to ensure successful communication.

Tense according to Viveka (2012:194) is the linguistic device used to show when an event took place. This device however excludes lexical items and expressions like yesterday, tomorrow though they indicate when an event occurred. The author also avers that expressing when something happened can be achieved in form of two conceptually diverse ways which are linking the event to a given reference point (relative tense) or to the moment of speech (absolute tense) (Viveka 2012: 195).

Viveka (2012:198) suggests various strategies that languages can employ to mark tense. These include synthetically with suffixes, analytically using auxiliaries or particles, non-linearly with stem or tone changes or by mixing strategies. The author cites the English language as a language that employs mixed strategies. According to him, the past is either marked synthetically as in I wash-ed/for you yesterday or through lexical suppletion as in go versus went.

Viveka (2012) observes that some languages lack grammatical marking for tense. That is, they appear to be without tense as seen in example 4 from the Julhoan language cited in Viveka (2012:196).

4. ha úa Tjùmlkúí
 3SG go tsumkwe
 He went/goes/will go to Tsumkwe

The English translation in the expression in 4 translates to past, future or present form except where further context is employed to achieve differentiation in the time of the event.

Another strategy pointed out by Viveka that can be used to mark a clearer grammatical distinction for time is by distinguishing between degrees of remoteness. Languages that employ this kind of difference code an event either having taken place in the near past or remote past and going to take place in the near immediate or remote future (Viveka 2012: 199). Furthermore, Viveka asserts that languages with remoteness in the past distinguish between today (hodiernal past) or not today (hesternal past).

The example in 5 below taken from Carlson (1994:329) in Viveka (2012:199) is an instance of a language with both hodiernal past and hesternal past.

5 a Mì nì mu pyi di ye?

ISG REC.PAST 2SG tell how question mark

What did I tell you (earlier today)?

b. Jò u ná sá lí iwó ye?

who 3SG REM past go it take Q

Who went and took it?

The examples in 5a and b are both in the past. However *nì* in 5a is used to show that the inquiry is with respect to the recent past while *ná* in 5b shows that the question being asked is with regard to a distant past.

Lyons (1977:67) notes that though some languages may lack tense as a clear verbal category, all languages have various deitic adverbs or particles of time that help to relate the time of a situation being described to the time of utterance.

Dixon (2013:9) agrees with Lyons (1977) on the use of particles by languages in tense distinction. Other means of tense distinction according to him include through an obligatory inflectional element that is closely associated with the verb and through a clitic.

Comparing tense in Mandarin and Tamil verb forms, Alloway and Corley (2004) opine that the difference between the two languages is that in Tamil tense changes are marked by adding suffixes to the verb root while in Mandarin, there is no explicit tense marker; rather adverbs like tomorrow, yesterday are included to situate an event within temporal parameters. Table 1 below demonstrates the present, past and future tense inflections of the verb ‘to eat’ in Tamil and Mandarin

Table 1 Tense inflection in Tamil and Mandarin.

Verb-to eat	Present	Past	Future
Tamil	Saapeda ran	Saapetaan	Saapedu Vaan
Mandarin	Chi’h	Chi’h	Chi’h
Gloss	Eats	Ate	Will eat

(Alloway and Corley 2004: 322)

From the table in 1, there are obvious morphological endings for the different tense forms in Tamil while in Mandarin the verb remains invariable. The view expressed by Lyons (1977) is important to the present study as the author’s claim appears to be the case in Ètùlo.

2.1.8 Aspect

Aspect is another grammatical category associated with the verb that has received attention from authors. Comrie (1978:3) views aspect as the different ways of viewing the internal temporal constituency of a situation.

Dirven and Verspoor (2004:94) explain aspect as a grounding element of a sentence, which represents how the speaker relates an event to what obtains at speech act time or at another specified time. For Crystal (1992:29) aspect is a grammatical category that marks duration or the type of temporal activity denoted by the verb.

Emenanjo (2015:447) submits that although both tense and aspect have to do with time, the former denotes static, atelic and definite time while the latter deals with dynamic, telic and extended time. Thus he opines that tense is the grammaticalization of location of time in terms

of past, present or future while aspect is the grammaticalization of duration in terms of inceptive, progressive, perfective etc.

Frawley (1992:294) sees aspect as a category, which shows that an event is distributed through the period in which the event occurs. Frawley distinguishes among aspectual types such as perfective/imperfective, telic /atelic, punctual/durative, iterative/semelfactive, progressive and habitual. Perfective aspect for Frawley (1992:297) is an event viewed as a complete unit irrespective of whether the event has itself ended while imperfective aspect sees “an event as non unitized whether or not the event is finished”. Frawley (1992:298) further asserts that in the interpretation of perfective events, the internal properties such as the beginning, the middle and the end are less relevant; hence the events are viewed from a distance while for the imperfective aspect, events are viewed from within and the internal properties are much relevant. The author exemplifies using the Kusaiean language in 6

6a. *Eltahl kang ik ah*
They eat/imper fish the
They are eating the fish (imperfective)

b. *Eltahl kang- lah ik ah*
They eat up -/ perf fish the
They ate up the fish (perfective)

(Culled from Frawley 1992:298)

A look at the instances in 6a and b shows that for the imperfective, there is no morpheme attached to the verb *kang* ‘eat’, whereas for the perfective form, the morpheme *-lah* is suffixed to *kang* ‘eat’

The distinction between telic and atelic is with respect to goal-directedness. Frawley (1992:302) opines that whereas telic events have built- in goal that must be reached, in order to be successfully affirmed, atelic events do not imply such goals. Punctual aspect denotes a momentous act while durative aspect denotes events that occupy time. For the semelfactive

aspect, the author states that it denotes events that consist of a single act but where the events have multiple acts, it is in the iterative or frequentative. The instance in 7 below distinguishes between the semelfactive and iterative aspects.

7a. Ada shrugged

7b. Ada wiggled

Example 7a is semelfactive while 7b is a case of frequentative.

The study shall describe aspect in Ètùlo based on these aspectual distinctions.

2.1.9 Aktionsart

The term aktionsart is from German and it means kind of action. Aktionsart can be used in two ways. On the one hand, it refers to the inherent (aspectual) meaning of verbs (Comrie 1976), while on the other hand, it refers to the use of derivational morphology to express temporal properties on the verb. The latter use is employed in the study of Slavic languages because they are morphologically rich.

Pollack (1967) in Kortmann (1991:12) views aktionsart as the manner in which events are integrated into the imagined stream of time. For Kortmann (1991:14), aktionsart is a non-deictic lexical category concerned with the temporal constitution inherent in the meaning of verbs.

Agrell (1908) first made the distinction between aspect and aktionsart in his doctoral thesis on Polish verbs. As noted by Agrell in Kortmann (1991:12), aspect has to do with the completion or incompleteness of an action while aktionsart stands for the semantic function of verbs. However, Kortmann (1991:13) explains that aspect is part of grammar and that it can be signalled through inflection while aktionsart is an aspect of the lexicon that indicates manner of action.

The study shall in chapter four group Ètùlo verbs based on their aktionsart, i.e their inherent temporal meanings.

2.2 Theoretical Review

This section is concerned with highlighting the views of authors concerning the verb and its characterization. In addition, some approaches that have been employed in discussing the verb and their basic assumptions will also be explored alongside some issues associated with the verb.

2.2.1 Properties and Characterization of Verbs

Aarts and Meyer (1995:4), posit that there are properties associated with the verb as a lexical category. The first property is that verbs “govern” the elements that succeed or precede them depending on whether the language is a headfirst or headlast language. This first property is morphologically visible in many languages. For instance, in German it is visible on the noun phrase through different case forms as seen in these examples.

8a. Ich sah den Mann

I saw the man

b. Ich sah der Mann

The man saw me

In example 8a, the definite article *den* bears the objective case. This is opposed to 8b, where the definite article *der* bears nominative case.

A second determining property pointed out by Aarts and Meyers(1995:4) is that verbs, depending on the language involved, can agree with either their subjects or objects in one or more features such as number, person and gender. They further observe that such notions as agreement and government do not exclusively concern verbs because other elements like noun can trigger agreement with (adjectives) while prepositions are also capable of governing their objects.

A third verbal property is that they are employed in licensing the presence of what Tesniere (1953, 1959) in Aarts and Meyer (1995:4) refers to as actants of preposition and by analogy to chemistry called valents, which is the number of performers a verb takes. For instance, in

example 9, the verb *told* is trivalent because it has a subject *Michael*, a direct object *Gabriel* and an indirect object *joke*.

9. Michael told Gabriel a joke.

Verb complementation for Aarts and Meyer (1995:6) subsumes the different types of relationship between verbs and their internal arguments. They also note that there is variance in the notion. The variance is with respect to the view of transformational generative grammar that sees verb complements as obligatory constituents following verbs, which are distinct from adjuncts that are considered optional and the position of the descriptive oriented grammars where verb complements are characterized as elements required to complete the meaning of the verb.

For Gardenfors (2014: 187), verbs are necessary components in the linguistic descriptions of events. Lenci (2014:17) however asserts that important generalizations about the behaviour of a verb can be stated by referring to its semantic class. The author posits two main approaches to semantic verb classification. The approaches are based on *ontology* and on *distribution*.

Lenci (2014: 19) claims that ontology-based classification relies on the features of the extra-linguistic event or situation expressed by a verb meaning rather than on its linguistic behaviour while distribution-based classification uses the range of syntactic alternations licensed by a verb, as a key aspect of its syntagmatic and distributional properties. Lenci therefore asserts that verbs that are classified into one group ontologically may functionally be separated if they exhibit disparate alternation patterns.

Based on the inherent semantics of verbs, Viveka (2012:208) claims that verbs can be dynamic or stative (non dynamic), punctual or durative and telic or atelic. The dynamic or stative class has an inherent semantics, which encodes whether their inner structure involves any form of change or not. Based on this view, Viveka notes that whereas the dynamic verbs have an inherent element of change, the stative verbs are always in a constant state.

For the punctual or durative class, their inherent meanings encode whether their inner structure allows for duration in time or not. Here, the author avers that the punctual verbs lack a real internal structure to the event while the durative verbs contain an inner structure that is

made up of series of phases, as is the case with the verb *freeze* and *burn*. The telic verbs have an inherent semantics that imply an endpoint (telic) while the atelic have no endpoint. Viveka (2012:209) further explains that such verbs as *to build*, *to make* and *to bake* designate action that will eventually end, while verbs such as *play*, *dance* and *sing* designate actions with no inherent finishing point. Following this classification by Viveka (2012), it is obvious that a verb can fall into more than one class based on its inherent semantics. If we look at the verbs *know* and *dwell*, though they are stative, they can also be durative because one may know (something) and dwell (somewhere) for some time.

According to Baker (2003) verbs are the nucleus around which sentences are built. The author further provides insights into the criteria for determining what a verb is. For him, x is a verb if and only if x is a lexical category and x has a specifier. The author's position with respect to his idea of designating verbs is that it is more explicit when compared to Jackendoff's (1977) and Croft's (1991) versions for designating verbs. Baker (2003:24) further argues that in the context of Chomsky's (1995) bare phrase structure, any category other than the verb can combine with a complement. He contends that the ability to take a specifier is an important characterizing feature for distinguishing functional categories, which can also distinguish lexical categories. The author explains that verbs have specifiers in a way that is different from the way most functional categories do because tenses and complementizers acquire their specifiers by movement (internal merge) while verbs get specifiers from external merge. Another difference between verbs and other lexical categories is that verbs can be inflected for tense, aspect and mood in many languages.

A property of the verb is its selectional restriction or sub categorization restriction. Sub categorization shows restrictions between predicates and the syntactic category of their complement while selectional restrictions refer to the ability of the verb to constrain meaning. Chomsky (1986) extensively discussed selectional restriction. Both selectional and sub categorization restrictions need to be accounted for in the analysis of the verb in any language.

In discussing the verb, it is important to note that there are categories associated with the verb. These are tense, aspect and mood usually referred to as TAM. Viveka (2012:193) opines

that the verb phrase minimally consists of a word, which is the verb. He further notes that the semantic content of the verb phrase, i.e the basic meaning of the event or action, is borne by the lexical verb. In addition, Fillmore (1970) in Levin (2013:1) claims that verb classes provide a device for capturing patterns of shared verb behaviour, including possible realizations of arguments and their associated interpretations. In addition, verb classes attest to be both a means of investigating the organization of the verb lexicon and a means of identifying grammatically relevant elements of meaning.

Tallerman (2011:33) observes that such methods as finding the distribution of each word through creating of gaps which can only be filled by a member of one word class, looking at the form the word takes in different contexts and based on the work performed by the word in a phrase or sentence can be used as procedures for identifying the verb. According to Tallerman (2011:39), a major function of verbs is to express 'predication'. A predicate expresses an event in the sentence and the event expressed could include actions, processes, situations, states etc. The author further notes that verbs fall into syntactic subclasses such as intransitive, transitive, ditransitive. An intransitive verb requires one argument (participant). This one argument can be a whole phrase or it can refer to many people as *John and Jane* slept, *All the children* slept etc. A ditransitive verb takes more than two arguments while transitive verbs take two arguments. Verbs can also be ambitransitive, which is either transitive or intransitive. In English verbs such as *sing, cook, read, eat* belong to this class (Tallerman 2011:41).

Givon (2001:48) notes that of the four classes of lexical words that appear most widely across languages, nouns and verbs are the major lexical categories in all languages. Adjectives and adverbs though part of the major categories may not appear in all languages as a distinct word class. Givon also observes that of the three criteria adopted in assigning lexical items to their categories, the semantic and syntactic are the most universally predictive. For him the use of morphological criterion usually displays a high degree of cross – language diversity. Furthermore, Givon (2001:105) is of the view that verbs are characterized semantically by the obligatory semantic roles of the participants in the state or event they code. He also notes that in addition to semantic roles, participants can assume grammatical roles such as subject, direct

object and indirect object. His classification of verbs recognizes a class referred to as Dummy-Subject verbs (2001:117). This class describes state and events, which involve mostly natural conditions or weather phenomena.

Dixon (2010: 39) posits that cross linguistically, verbs are characterized by function and semantics. Functionally, the verb occurs as the head of a predicate while semantically it includes words referring to actions such as jump, sit, burn etc. Dixon (2010:116) avers that transitivity is a syntactic matter and not a semantic specification. He however recognizes that semantic parameters underlie several aspects of transitivity but opines that rather than viewing a verb as semantically transitive or intransitive, it is more appropriate to describe verbs as having a semantic profile that is consistent with some transitivity profile at the syntactic level. The author outlines the semantic parameters that help to determine whether a verbal concept is to be expressed by a transitive or intransitive verb as follows:

- i. Whether the verb has two or more syntactic roles
- ii. Whether there is volitional control
- iii. Whether or not the verb describes an action
- iv. Whether the reference of one role is saliently affected.

The idea behind volitional control is the claim that if volitional control is involved in an activity, it is represented by a transitive verb while lack of volition makes an activity to be more coded by an intransitive verb. On whether the verb describes an action or not, Dixon submits that some languages have both the simple transitive and extended intransitive featuring two core arguments.

However, he notes that scoring a “no” for two out of the four semantic parameters listed above, makes a two role verb to be classified as extended intransitive. If one role is affected, based on the semantic parameter, the verb is likely to be transitive. Dixon (2010:141) sets out some parameters which underlie transitivity. These parameters underlying transitivity are regarded as “best indicators” for testing the transitivity of verbs in languages. He illustrates these parameters using six English verbs shown in Table 2

Table 2: Parameters underlying transitivity

	(i) two or roles	(ii) volitional	(iii) describing	(iv) one role saliently
			action	affected
hit	√	√	√	√
touch	√	√	√	√
follow	√	√	√	–
praise	√	√	(√)	–
like	√	–	–	–
hiccup	–	–	–	–

Culled from Dixon 2010:142

In Table 2 the verb *hit*, has two semantic roles which are the agent and patient roles, volitional control is involved in the activity expressed by the verb, it describes an action that affects one semantic role (the patient) saliently. For the verb *touch*, two semantic roles, namely the agent and the theme, are involved, it is volitional and describes an action in which an entity is saliently affected. Following Dixon’s claim, the verb *like* would be classified as an extended intransitive because even though it has two semantic roles, it is not volitional, does not describe any action and none of the roles is saliently affected.

A further study by Dixon (2013:103) shows that verbs are classified into five classes based on the clause type they occur in. These clause types that verbs can occur in, based on Dixon’s view, divide verbs into classes namely intransitive, transitive ambitransitives of type S = A, ambitransitives of type S = O and extended transitive. Transitive verbs occur as the predicate of a transitive clause while intransitive verbs occur as the predicate of an intransitive clause. Dixon’s ambitransitive verbs also known as labile verbs refer to verbs that occur as predicates in both transitive and intransitive clause. The type S = A depicts a transitive argument which corresponds to the intransitive argument, i.e where the subject argument retains its subject position in both clause types. The S = O ambitransitive type however lacks a correspondence in the argument structure, that is the intransitive subject argument becomes the object argument in a transitive clause. The examples below illustrate the two ambitransitive types :

10 a John has eaten

b John has eaten lunch

11 a Mary tripped

b John tripped Mary

In examples (10a & b) there is a correspondence between the subject of the intransitive clause and the subject of the transitive clause while in (11a and b), there is lack of such correspondence because the subject of the intransitive clause (in 11a which is Mary) corresponds to the object of the transitive clause.

Emenanjo (2015:413) likens the verbal system in a human language to the central nervous system in the human body. He observes that meaning in human language is usually derived from the networks of relationships between the verb and other categories/constituents within a sentence. Another point observed by Emenanjo (2015:413) which stresses the relevance of the verb and also distinguishes it from other categories is the fact the verb root alone can be used to communicate in most languages. For instance, the Igbo verb *bì á* 'come'.

According to Emenanjo (2015:416), finiteness is the first important factor in the classification of Igbo verbs, thus Igbo verbs are [\pm finite]. The [+ finite] verbs according to Emenanjo are the full verbs while those with [- finite] features are the defective verbs. The full verbs are characterized by such properties as having full and regular paradigms, a predictable syntactic behaviour, ability to take affixes and ability to have verbal derivatives. On the other hand, the defective verbs are defective in their morphological paradigms and possess irregular syntactic behaviour. Emenanjo further divides these defective verbs into four classes namely the verbids, preverbs, modals and auxiliaries. The verbids according to him comprise a class of Igbo fossilized verbal elements which are usually equivalent to prepositions in English. Other features identified for these verbids include their inability to take inflectional suffixes and their ability to combine with nominals instead of verbals.

Furthermore, Emenanjo (2015: 417) posits that the etymology of the verbids come from different Igbo dialects. He provides instances of the sources of verbids as follows;

- 12ai. bèsò - bè 'cut' + sò 'only' from sò sò 'only' 'except that/only'
- ii bèe lụ sò - bè 'cut', = lụ 'towards', sò < sòsò 'except that/only'
- bi { gbàsalụ - gba 'run' + - sa 'open' - lụ = rụ = 'towards' (extensional suffix) about something
 gbàsara
 gbhàsara

One of the verbids from Òwèrè dialect is used in the sentential construct in 12iv.

- ii Hé O kwúru gbhàsara yā arìhū urù ọ bhàrà [Òwèrè]

Thing he say about it NEG gain it enters

Culled from Emenanjo (2015:417).

For the preverbs, the following features pointed out by Emenanjo (2015:418) are noteworthy: they precede other verbs in the Igbo sentence, they cannot function alone as the only verb in sentences where they occur, they function as linkers of utterances in narratives and translate to conjunctions in English. He identifies two of such verbs in Onicha and Igbuzo dialects namely *wee* and *ba* shown in 13 below.

13...èwèè m̄ na àchọ a...

and then I DUR search for it...

'... and then I was looking for it.....

The example in 13 culled from Emenanjo (2015:418) shows the preverb *wèe* in occurrence with the verb *chọ*. It is also enclosed between E...m

A class of defective verbs referred to as the modals is assumed to be more verbal than the preverbs and the verbids. Emenanjo (2015:419) postulates two classes based on their structure namely the nuclear and the periphrastic modals. Part of the features of this class includes their lack of verbal derivatives and complementation by nomino – verbals like auxiliaries. These findings by Emenanjo are representative of the Igbo language due to the cross dialectal approach adopted in the study.

Having discussed the views of authors with respect the characterization of verbs, the next subsection shall look at some approaches that have been adopted by authors in the study of the verb.

2.2.2 Approaches in the study of Verbs

Cook (1989) in examining the approaches adopted in the investigation of the verb, notes that Chafe's approach to verb classification is verb centered as opposed to Fillmore's (1968) model which is noun centered. According to Cook, Chafe's system comprises seven cases namely Agent, Experiencer, Beneficiary, Instrument, Patient, Complement and Location and within this system, as noted by Cook (1989), the verb dictates the features of the noun while cases are defined in terms of the verbs with which they occur rather than in absolute terms.

With regard to the verb types identified by Chafe's model, the basic verb types include state, process action and action-process verbs. These verbs according to Cook (1989) are developed by Chafe's rules of semantic formation, which are

"A verb is a state or a non state, A non state verb is a process, an action or action and process". Cook (1989:73).

Continuing the discussion, Cook (1989:85) notes that the division of all verbs into four types by Dowty is an improvement over the state/action dichotomy in Fillmore's model. Cook (1989: 87) further observes that Chafe first proposed a bidirectional derivational system linking different verb types. He also notes that for the verb types which Chafe claims do not exist, evidence abound for their existence. Irrespective of this lapse, Cook (1989) submits that Chafe's (1970) system remains the most comprehensive model proposed for generative semantics.

Verbs have also been studied from the computational perspective, which is usually corpus-driven. The initial study within the computational perspective is attributed to Levin's (1993) classification of the English verb. Levin's classification comprises both semantic and syntactic profiles for verbs. The main assumption behind this classification is that verbs,

which exhibit the same argument alternation, also share the same semantics such that they can be classified into the same semantic class.

Levin's English verb classification involved 3,024 verbs, which were classified into 49 semantic classes based on 79 argument alternations observed. Kipper and his colleagues expanded Levin's classification to give a more formidable account of the English verb. Their verb net involved about 8,537 verbs grouped into 273 classes. The advantage of Kipper (2000), Kipper et al (2005) verb net is that the verbs are described in terms of traditional semantic information such as thematic roles, semantic predicates, selectional restrictions, etc.

From the perspective of argument structure, the study of verbs has also received attention. Explaining argument structure, Carnie (2007) opines that the term refers to the number of participants a particular predicate requires. Aarts (2001:93) posits that argument structures indicate not only the number of arguments taken by a predicate but also their categorical status. In other words, argument structures make explicit the argument positions and the exact number of arguments accruable to a verb alongside the implicit ones. The study of verbs based on its argument structure dates back to Tesnière's (1959) notion that every sentence is built around a verb and that the verb can exert force just like atoms to phrasal elements technically referred to as actants. Following this approach, four classes of verbs are posited as follows:

Avalent '0 argument' 'it snows a lot'

Mono valent '1 argument' it has spoilt'

Divalent '2 arguments' the woman hugged the child

Trivalent '3 arguments' He showed us the houses

Under this approach to the verb, it is recognized that verbs can sometimes have unexpressed arguments in addition to being accompanied by adjuncts, which occur as phrasal elements. Having pointed out some approaches adopted in the study of verbs, the next section and its succeeding sub-sections shall discuss the approach adopted in the present study.

2.3 Theoretical Framework

The theoretical framework adopted for this study is the Role and Reference Grammar (henceforth RRG). RRG is a theoretical approach first proposed by Foley and Van Valin

(1984). The theory was developed in Van Valin (1993) and further developed in Van Valin & La Polla (1997) and Van Valin (2005). RRG emphasizes the exploration of language systems based on their use in communication.

The RRG framework bears affinity to earlier approaches in diverse ways. With respect to its approach to the structure of the clause, it can be seen as an offshoot of Fillmore's (1968) case grammar while in its lexical decomposition, it implements a system of lexical decomposition based on Vendler's (1957) theory of Aktionsart. The term Aktionsart implies 'inherent temporal properties of verbs' (Van Valin and La Polla, 1997:92). The central assumption of RRG is that grammatical structure can only be explained and understood with reference to its semantics and communicative function. Following this view, syntax is not autonomous but motivated by semantic factors. RRG seeks to account for the structure of languages alongside the native speakers' knowledge of their language.

2.3.1 Layered Structure of the Clause

Within the RRG theoretical framework, the structure of the clause is captured in a model referred to as the Layered Structure of the Clause (henceforth LSC). According to Van Valin (2005), there are two aspects of clause structure and they are; relational and non-relational aspects. Whereas the relational aspect deals with the relations between predicate and its argument, the non-relational aspect deals with how phrases, clauses and sentences are organized in hierarchy.

As noted by VanValin and Lapolla (1997) and VanValin (2005), the clause primarily constitutes the nucleus, the core and the periphery. The nucleus contains the predicate (usually a verb), the core contains the nucleus and the arguments of the predicate while the periphery is made up of the non arguments of the predicate (peripheral adjuncts and modifiers of the clause). Figure 2 below is a formal representation of the LSC.

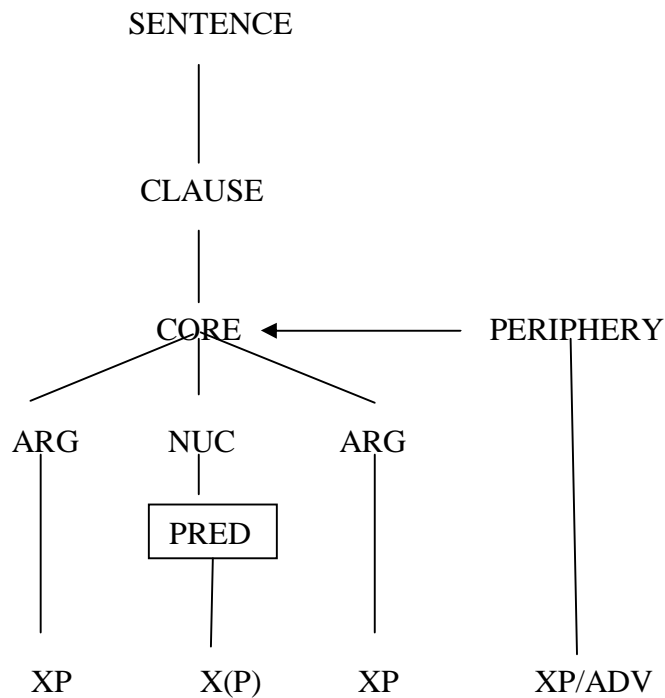


Figure 2 Formal representation of the LSC (Van Valin 1997:31)

Figure 2 above is an abstract schema of the LSC. The arrow pointing to the periphery represented on the margin indicates that it is an optional modifier of the core. The syntactic categories that realize the units in the clause are shown at the bottom. From the schema in figure 2, it is observed that the LSC has two components. These components are illustrated in figure 3

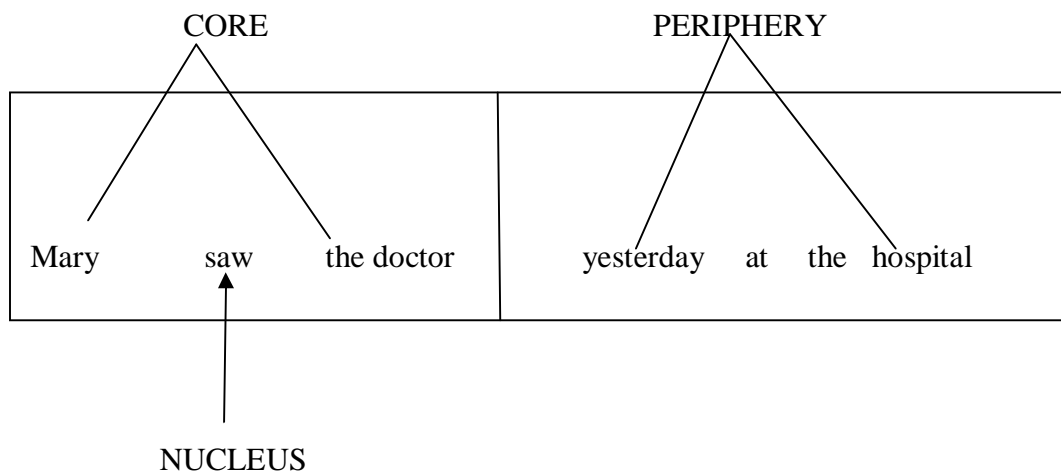


Figure 3: Components of the LSC

In figure 3, the LSC has two parts, the nucleus and its arguments constitute one part while the non-arguments constitute another part. The nucleus *saw* and its arguments *Mary* and *the doctor* represent the core of the clause. The non-arguments *yesterday at the hospital* make up the periphery of the clause. These components of the LSC are universal, i.e they exist in all languages.

There are components of the LSC, which are not considered universal. These aspects include the precore slot, the detached position and the post-core slot. For the non-universal aspects of the LSC Van Valin and La Polla (1997:35) note that, linear order is relevant to the determination of positions. For instance, WH words in English occupy the precore slot. In other words, they occur in the clause initial position, which is distinct from core initial position occupied by the subject.

Another component of RRG theory of clause structure is the theory of operators. Operators in RRG refer to such grammatical categories like aspect, tense, negation and illocutionary force. These operators modify specific layers of the clause. They represent grammatical categories, which are different from predicates and argument (Van Valin and Polla 1997:40). Illocutionary force is a universal operator that refers to whether an utterance is an assertion, a question, a command or an expression of a wish. Every language has illocutionary force as operator because it is possible to make statements, ask questions and give commands in all languages. Van Valin (1997:41).

Van Valin and La Polla (1997:45) also opine that different operators can modify different layers of the clause. Some modify the nucleus; some modify the core while some modify the whole clause. We shall illustrate the LSC in Etulo in Chapter Three.

RRG posits a single representation for each sentence and links the syntactic representation to the semantic representation by means of the linking algorithm. Van Valin posits that the link between syntax and semantics is governed by the completeness constraint, which states:

All the arguments explicitly specified in the semantic representation of a sentence must be realized syntactically in the sentence, and all of the referring expressions in syntactic representation of a sentence must be linked to an argument position in the logical structure in

the semantic representation of a sentence (Van Valin 2013:81). The linking algorithm is schematically shown in figure 4

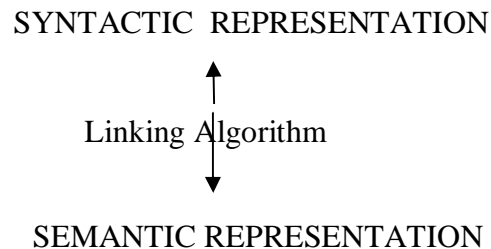


Figure 4 Linking Algorithm Schema

The bidirectional arrows pointing to two directions in figure 4 show that the link is between syntax and semantics.

2.3.2 Verb classes and Logical structure.

The RRG framework implements a system of lexical decomposition based on Vendler's theory of *Aktionsart*. The term *Aktionsart* implies 'inherent temporal properties of verbs' (Van Valin and La Polla, 1997:92). The initial verb classes recognized were *state*, *achievement*, *accomplishment* and *activity verb classes*. Van Valin (2005) proposes six classes of verbs, namely *state*, *achievement*, *accomplishment*, *activity*, *active accomplishment* and *semelfactives*.

Within the RRG framework, a system of lexical decomposition of verbs with state and activity predicates serves as basis. The lexical representation is known as the *logical structure (LS)* of the predicate. State predicates are represented as *predicate'* and activity predicates include *do'*. Accomplishment LS has the operator BECOME, while achievements LS have the operator INGR, which is short for 'ingressive'. Semelfactives include the operator SEML. The Logical Structures of *Aktionsart* classes of verbs are shown in Table 3

Table 3: Logical structure of verb classes

Verb class	Logical structure
State	pred' (x) or (x,y)
Activity	do' (x [pred' (x) or (x,y)])
Achievement	INGR pred' (x) or (x,y), or INGR do' (x, [pred' (x) or (x,y)])
Accomplishment	BECOME pred' (x) or (x,y), or BECOME do' (x, [pred' (x) or (x,y)])
Semelfactive	SEML predicate' (x) or (x, y), or SEML do' (x, [predicate' (x) or (x, y)])
Active accomplishment	do' (x, predicate 1' (x,(y))) and INGR predicate 2' (z,x) or (y)
Causative	α CAUSE β , α , β are logical structures of any type

The aktionsart features of the verb classes are presented in Table 4

Table 4 Aktionsart Features of Verb Classes

Verb Classes	Aktionsart Features			
State	- dynamic	+ static	- telic	- punctual
Activity	+ dynamic	- static	-telic	- punctual
Achievement	- dynamic	- static	+ telic	+ punctual
Accomplishment	+ dynamic	- static	+ telic	- punctual
Semelfactive	+ dynamic	- static	- telic	+punctual
Active Accomplishment	+ dynamic	- static	+ telic	- punctual

The feature static expresses whether the verb encodes a happening or not. Telic has to do with whether a verb encodes an event with an inherent terminal point or not. The feature punctual distinguishes events with internal duration from instantaneous ones. The feature dynamic refers to whether the event expressed involves action or not.

Van Valin (2005:28) explains that states depict static situations, which are inherently temporally unbounded (atelic). Achievements and active accomplishments express changes of states, which are inherently temporally bounded, hence telic. Achievements are punctual while accomplishments are not. Activities are dynamic inherently temporally unbounded state of affairs. Active accomplishments are telic uses of activity verbs while semelfactives are

punctual events with no result state. These distinctions according to Van Valin (2005:29) are the universal basis of the organization of verbal systems in the human language.

We shall draw examples from Etulo to demonstrate each of these verb classes in Chapter Four.

Van Valin avers that though the classification is based on Vendler's analysis of the English verb, it has cross linguistic validity following its application to such languages as Tagalog, Sama, Italian, Icelandic among others. Furthermore, the claim for cross-linguistic validity has also been validated by the application of the theory to languages like Edo (Iyamu 2016), Igbo (Agbo 2010), Qiang (Chenglong 2005) Hausa (Abdoulaye 1992) among others.

With regard to lexical representation, RRG has been criticized as having a system of lexical representation, which is limited to logical structures but fails to sufficiently explain the semantics of words. Despite this criticism, the fact remains that the interpretation of an argument is a function of the logical structure where it is found. The critics have not disputed this, thus we shall employ it in accounting for the argument structure of Etulo verbs.

2.3.3 Semantic macroroles

Another component of the RRG framework relevant to this study is that of semantic macroroles. Van Valin posits three different levels of semantic roles. The first is called 'verb-specific' semantic roles, e.g. runner, killer, hearer, broken, etc. The second are thematic relations, which are generalizations across the verb-specific roles. The third are generalized semantic roles, depicted with the terms actor and undergoer, which are generalizations across thematic relations.

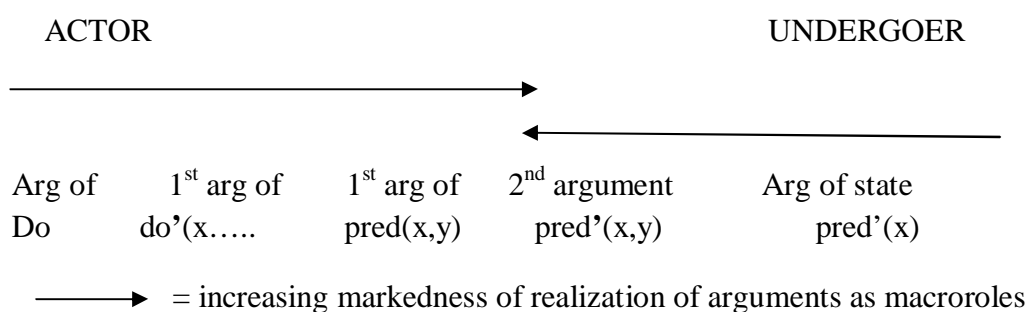
The semantic interpretation of an argument in RRG is a function of the logical structure in which it is found. The semantic relation between a predicate and its arguments is referred to as thematic relations. Semantic relations do not apply independently rather they are grouped into five namely: Experiencer, Agent, Theme, Patient and Recipient.

The terms (macrorole) proposed in RRG to be used for the two arguments of a transitive verb

are ‘Actor’ and ‘Undergoer’. Van Valin (2005:50) posits that the term “ macrorole” is used because it subsumes a number of thematic relations. The author asserts that *actor* is a generalization across agent, experiencer, instrument etc while *undergoer* subsumes patient, theme and recipient. The two semantic macro-roles namely *actor* and *undergoer*, are equivalent to the primary arguments of a transitive predication that are referred to as subject and object within earlier frameworks. Van Valin asserts that the choice of a macrorole is determined by the semantic structure of the verb and that the decisive feature is the presence of an activity predicate in the logical structure thus intransitive verbs such as *run* and *die* will be assigned different macroroles because of their logical structure. The logical structure of a verb aids in predicting the number of arguments, which the verb can take. It therefore follows that structure should result from meaning through the lexical decomposition of the verb.

The lexical decomposition of the verb is linked to the semantic macroroles of the verb. The link is expressed in the Actor- Undergoer Hierarchy (AUH). The relationship states that in a logical structure of the verb, the leftmost argument corresponds to the Actor while the rightmost argument is the undergoer. The AUH is illustrated below

Figure 5: Actor- Undergoer Hierarchy (Van Valin 2005:61)



In the diagram in figure 5 above, the arrows pointing to the left and right, signify the likelihood of a participant in a clause to be either the actor or the undergoer.

In RRG, there is no third macrorole rather the third macrorole in a construction is labelled the non macrorole direct core argument. For instance, in the expression *Marcus gave Magnus the money*, the non macrorole direct core argument is assigned to the third argument which is *the*

money. As earlier pointed out, RRG posits three different levels of semantic roles represented in figure 6

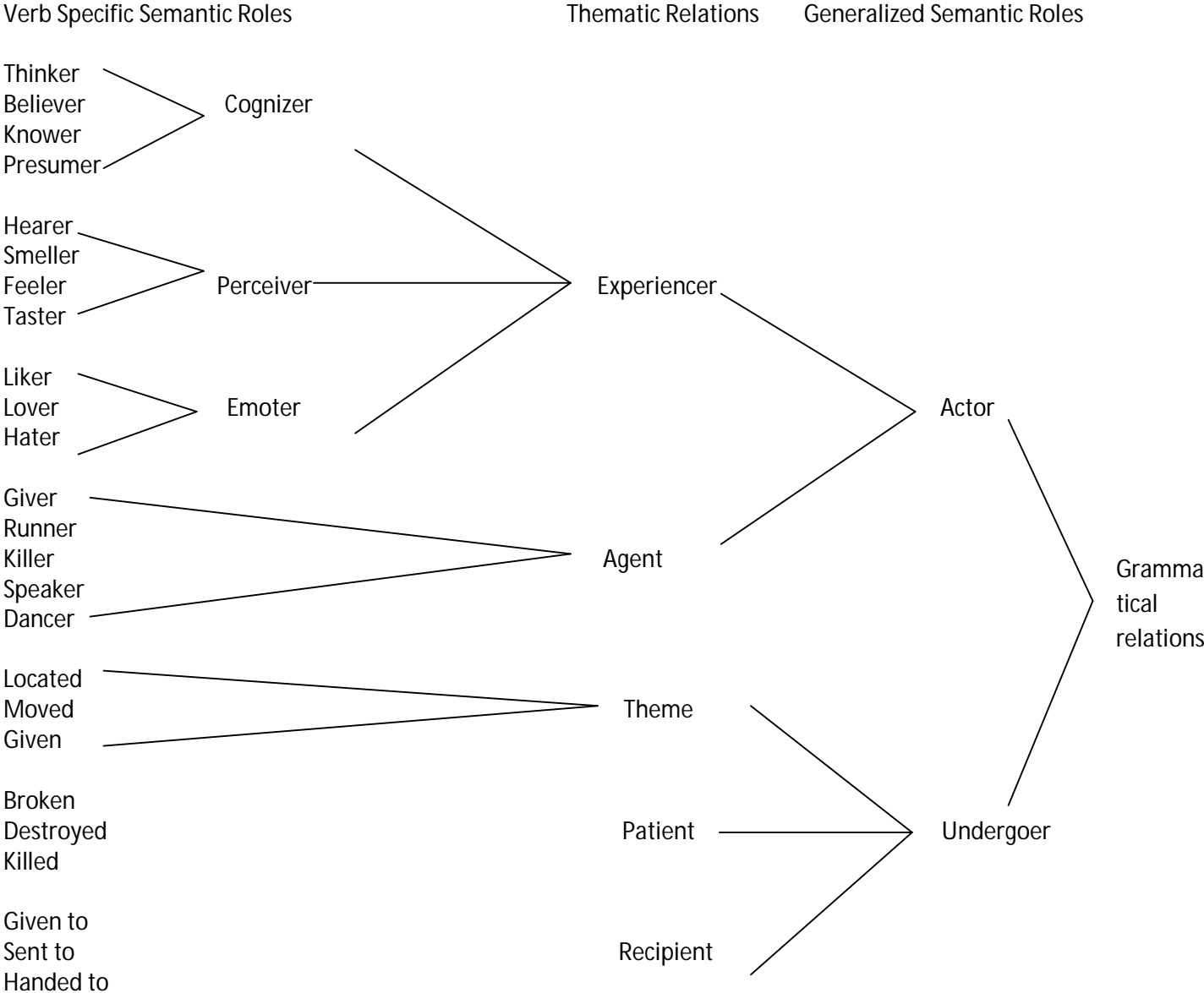


Figure 6. Generalized Semantic Roles in RRG: Van Valin 2001:2

The diagram in figure 6 is a continuum from verb specific semantic roles to grammatical relations. Thematic relations are defined in terms of the argument position in the logical

structures. Van Valin (2001:3) asserts that the motivation behind the postulation of generalized semantic role is that irrespective of the excessiveness of thematic relations that can be argued for, the fundamental conflict lies between the two arguments of a transitive predication namely an agent-like role and a patient-like role which the actor and undergoer rightly correspond to.

Explications of the participant roles are as follows:

Agent : A willful instigator of an action

Effector: The doer of an action which may or may not be purposeful

Experiencer: Sentient being that experiences internal states

Instrument: An inanimate entity manipulated by an agent in carrying out something

Force: Something like an instrument but which cannot be manipulated e.g. storms, flood etc

Patient: Things which are in a state or condition or things that undergo a change of state and condition

Theme: Things that are located or undergoing a change in location

Benefactive: A participant who benefits from an action that is performed

Recipient: Animate or quasi animate entity who gets something

Goal: Destination that is similar to recipient, except that it is inanimate

Source: The point of origin of a state of affairs

Location: A place or a spatial locus of a state of affairs

Path: A route

(Culled from Van Valin and Lapolla (1997:85-86)

2.3.4. Transitivity in RRG

According to Van Valin, RRG distinguishes two types of transitivity namely syntactic and semantic transitivity. Syntactic transitivity refers to the number of direct core arguments while the number of macro-roles a verb can take determines semantic transitivity. A transitive verb takes two macro-roles, an intransitive verb takes one macro-role while verbs with no argument have 0 macro role. These distinctions notwithstanding, transitivity in RRG is semantically based because it is usually defined in terms of the number of a verb's

macroroles. The principles determining the semantic transitivity of verbs are as follows:

- (a) Number: The number of macro roles a verb takes is equal to or less than the number of arguments in its logical structure.
 - i. If a verb has two or more macroroles in its logical structure, it will take two macroroles
 - ii. If a verb has one argument in its logical structure, it will take one argument.

- (b) Nature : This second principle is specifically for predicates with one macrorole. It states that if the verb with one macrorole contains an activity predicate in its logical structure, the macrorole is the actor whereas if the verb has no activity predicate in its logical structure, the macrorole is the undergoer.

We shall in chapter four, determine the transitivity of Etulo verbs following this assignment principle. For the transitive verb, one argument is the actor while the other is the undergoer while the intransitive verb has its only argument as either the actor or the undergoer.

2.4 Empirical Review

For the empirical review, works of authors on the verb in other languages especially studies based on languages that belong to the same phylum as Etulo are examined. The section shall further review studies carried out from the Role and Reference Grammar perspective in addition to works on aspects of Etulo language. The empirical review shall be divided into four subsections. Subsection 2.4.1 shall present studies on the features and structure of verbs, 2.4.2 will review studies on the semantics of verbs. In subsection 2.4.3, some studies carried out within the Role and Reference Grammar perspective shall be examined. Subsection 2.4.4 shall review previous studies carried out on the Etulo language while subsection 2.4.5 shall provide a summary of the chapter.

2.4.1 Review of Studies on the Features and Structure of the Verb.

Blench (2006:5) in a study of plural verb morphology in Eastern Berom, a language spoken in Jos, Nigeria notes that 213 out of the 579 primary verbs in Berom have plural forms. He notes that the main function of plural verbs in the language is to denote a plural subject or object as well as to indicate a plural action by an individual. He illustrates this function as shown below

14a. tut ‘to climb singular’

b. turus ‘to climb plural’

c. a tut era tin proat na a vos gwe

He climbed up an African olive tree to pick the fruits

d. Bemat ba se turus e raku woro

People are climbing that mountain

15a Kyé ‘to cook singular,

b. kyérés ‘to cook plural’

c. ma sé kye pye

I am cooking food

d. Yen ℓ kyeres pye na sɔŋ

They cook food using grass.

(Culled from Blench 2006: 4)

Blench also observes that verb plurals can be used to mark plural objects as shown in 16 below:

16a. Doyo ‘look-back, to turn, to translate’ singular

b. Sede hwci o ha se kyé, ha *dojó* ko had di vu wá sé raa hé

As the child was walking, he looked back and saw the dog following him

c. é rá fwôm *doysâ* be takada e ji balem

He is translating books into (different) languages

(Culled from Blench 2006:5)

In 16 a, we find the singular form of the verb *doyo* ‘look-back, to turn, to translate’. In 16 b, the object which is the dog agrees with the italicized verb while in 16 c, the plural object of the sentence which is *takada* ‘books’ is used to achieve agreement with the plural verb *doysâ*. The plural verbs in the examples by Blench indicate recursive /multiple actions.

Another interesting discovery by Blench is with regard to the synchronic processes involved in Berom plural verb morphology. These include suffixation, suppletion, and tone change among others. The following in 17 is a case of sV addition which is also a process associated with Berom plural verb morphology.

17 Singular	Plural	Gloss
bène	bèñse	rear animals
cuga	cugsa	incite
doyo	doysa	turn
gaba	gabsa	fall, fail
hala	halsa	leave, let escape, let go forgive
sila	silsa	fill
té	tésé	put
yɛnɛ	yɛnsɛ	finish
yila	yilsa	put in some place

In the examples in 17, there is usually an optional deletion of the second vowel (V2) and addition of -SV where the V corresponds to the same vowel in the singular base.

The addition –Vs suffix where the V corresponds to the vowel of the base is another process in the pluralization of Berom verbs. Examples of this process are seen in 18.

18 Singular	Plural	Gloss
-------------	--------	-------

Baŋ	baŋas	close, cover, pacify a sport
Bɛm	bɛmɛs	winnow, while grain is on ground
Ciŋ	ciŋis	dig
dàl	dàlas	surpass
noŋ	noŋos	give

One general feature of the Berom plural verb morphology is that irrespective of the suffix involved (-Vs, -sV), there is an identity between the vowel of the suffix and the that of the base.

Nwachukwu (1987:5) avers that the selectional restrictions of a verb determine the type of argument it can co-occur with while the subcategorization features are concerned with whether the verb is monadic (intransitive), dyadic (transitive) or triadic in which case it takes two internal arguments. Discussing the Igbo Bound Verb Complement (BVC), Nwachukwu (1987:18) claims that they fill the empty patient/theme slot with intransitive verbs while retaining their emphatic meaning. However while in occurrence with the object of a transitive verb, the BVC simply retains its emphatic meaning. His position is illustrated in the following examples

19a. Òbí jùrù àjù (BVC)

Obi refused emph

Obi certainly refused

b. Obi churu mmiri echu (BVC)

Obi fetched water emph

Obi certainly fetched water

The example in (19a) has the BVC functioning both as the emphatic marker and the theme of the intransitive verb *ijù* ‘to refuse’ while in (19b) the BVC occurs alongside *mmiri* which is the object of the transitive verb *chu* ‘fetch’ while also functioning as the emphatic marker. Nwachukwu (1987:21) further posits the following as characteristics of the Igbo BVC:

- (a) It is a bound verb form; it can be inflected
- (b) It is an emphatic particle and as such optional

- (c) It appears to be required with all intransitive verbs in the – rv form
- (d) It is obligatorily required in the rv form of all stative verbs, which perform the function of adjectives in Igbo.

An inherent complement verb (ICV) refers to those verbs whose citation form is obligatorily followed by a noun complement, which specifies meaning (Nwachukwu 1987)

With respect to the transitivity of the Igbo verb, Nwachukwu (1987:29) asserts that the Agent – Patient, Theme verbs are canonically transitive alongside verbs of killing, verbs of eating, verbs of hitting and contact, verbs of change of position, verbs of change of state and verbs of change of possession. On the other hand, for the intransitive verbs, he suggests that two classes of verbs are involved namely unergative verbs or canonical intransitive and unaccusative verbs.

Mmadike (2015) accounts for the grammatical features of Igbo verbs of speaking. The author provides the morphological structure of the verbs by grouping them into monosyllabic root verbs, disyllabic and inherent complement verbs of speaking. An instance showing the three morphological structures that this class of verbs can be composed of is shown in Table 5 below:

Table 5. Morphological structures of Igbo verbs of speaking.

(a)	(b)	(c)
si ‘say’	kowa ‘explain’	ta utā ‘blame’
sà ‘reply’	gbagha ‘dispute’	zì ozī ‘send message’
gọ ‘deny’	kèle ‘greet’	rụ ụkà ‘debate’
ju ‘ask’		
kọ ‘narrate’		

An important point in the study is the recognition of *si* ‘say’ as the archilexme of the verbs of speaking” (Mmadike 2015:124). Mmadike buttresses his claims for this recognition on the verb’s high degree of usage in speech and its preponderance in Ofomata’s (2003) storybook ‘*The onye metere*’ which formed the source of data for the study. One other feature of *si* is

also its ability to be used as a complementizer. Furthermore, Mmadike suggests that the syntactic frame associated with Igbo verbs of speaking is as follows;

Frame A : [NP [Sub] V [quotative] (intonational pause): [direct speech]

Frame B : NP [Sub] V₁ [speech act] V₂ [quotative] [indirect speech].

Examples showing the frames are shown in 20 and 21

20. Ude si` “m gà -àbja èleta unù”

Ude say I fut - come visit 3PL

‘Ude said: “ I will pay you a visit’

21. Ude si` , nà ọ gà -àbia èleta ānyī

Ude say COMP 3sgFut-come visit 3pl

‘Ude said that he would pay us a visit’

Example 20 corresponds to the frame A while 21 fits into frame B. According to Mmadike, 20 is a case of a direct quotation “where the undisclosed speaker reports from the perspective of the sayer” (Mmadike 2015:121) while with regard to 21, it is a case of an indirect speech that is based on the perspective of the speaker.

Viola (2013:29) rightly observes that in the study of verb, argument alternations are essential aspects that need investigation. Alternations concern verbs that can have both transitive and intransitive uses. According to Viola, the need for investigating alternations stems from the fact that “superficial and semantic similarities between two or more verbs cannot be taken as a criterion to establish or predict what alternations they might present” (Viola 2013:30). Based on this perceived need, Viola (2013) applies argument alternation to the study of Italian verbs. The aim of the study was to establish a lexical base that will serve as a basis for future research on Italian verbs. The study involved 1000 frequently used Italian verbs. Based on the argument alternations displayed by these verbs, Viola (2013) provides 37 argument alternations, which are further grouped into three classes based on the syntactic properties of the arguments involved. The three classes are argumental sentence alternations, alternations involving a noun or prepositional phrase and alternations involving an argumental sentence and a phrase complement. The instance in 22 exemplifies alternation involving an argumental sentence and phrase complement.

22a. Non mi presterei mai a queste cose

'I would never lend – pron to these things

b. Ti presteresti a sostenere le spese

Would you lend – pron to support the expenses

(Viola 2013: 93-94)

Though the author did not provide the morpheme-morpheme gloss of the data, in the alternation in 22, there is a change in the form of the word “presterei, presteresti” which ‘appears to be’ the alternating verb

Mbah (2015) re-investigates the Igbo verbs classified by Uwalaka (1988) as process verbs. His aim in the study is to identify the unique features shared by this group of process verbs, which has merited such classification. The study submits however that there is no unique syntactic or semantic feature characteristic of the so-called process verbs. Mbah (2015) rather asserts that the verbs should be reclassified as ergative verbs

Similarly, Umeodinka 2015 applies Emenanjo’s (1985) features of Igbo auxiliary verbs to Umuchu dialect of Igbo. The study identifies five auxiliaries in the dialect, namely *je* ‘future’, *ma* ‘future (conditional)’, *ma* ‘future’, *di* ‘habitual’ and *ga* ‘future’. His examples include:

23. Ada je ekwu ya

Ada Aux speak it

Ada will say it.

24. O di – ezu ohi

3SG Aux – steal theft

He usually steals

The auxiliary in example 23 indicates that the subject will engage in the act in future, hence it is a future auxiliary marker while the sentence in 24 is constructed with *di* which is a habitual

auxiliary marker. Umeodinka (2015) finally submits that there is disparity with regard to the number of Igbo auxiliary verbs because the manifestation is usually dialect based.

Finkel and Odejebi (2009) adopt the computational approach in the study of Yoruba verb morphology. They note that their approach gives a better appreciation of the structure of verbs and provides a technique for generating forms of any verb. The authors represented their analysis of standard Yoruba in KATR formalism, which they claim, is based on DATR, a formal language for representing lexical knowledge. KATR generates results upon queues, which are directed to nodes that represent individual lexemes. With respect to the verb node, they note that several auxiliary nodes are involved in the generation of surface forms.

They provide the instance of auxiliary nodes associated in the production of surface forms as follows:

- 25a (1 sg) = mo
- b (1 sg negative) = mi
- c (1 sg future) = m
- d (1 pl) = a (culled from Finkel and Odejebi (2009: 28)

This approach though quite complicating requires a computer background and cannot be said to be based on a particular tenet because of idiosyncracies associated with individual languages. The nodes instantiated in 25 a-d are associated with person. Their instance of tense auxiliary node is shown in the rules in 26 a through d.

- 26a Past = ti
- b Continuous positive = n -
- c Future positive = òó
- d Future 1 sg psotive = àá

Following from these rules, the authors note that the word ‘ti’ appears for positive and negative “past”. However, one wonders what they mean by negative and positive past because it was not clearly stated. A further problem with this approach especially with respect to the study on Yoruba verb is the inability of the authors to provide sentential constructs showing clearly the affixes as they attach to the verbs to make explicit their claims in the research.

Mbagwu (2013) examines locatum and location verbs in Igbo with the aim of determining the morphological features, role assignment to NP and the case assigned to NPs that co-occur in sentences of these verbs. The study was done within the Government and Binding theoretical framework and the findings of the study show that locatum verbs are marked by suppressive locative affixes while location verbs are marked by the illative locative affix, which is an affix that indicates movement into something. The author further observes that the argument structure of the verb is (AGENT, THEME) where the subject is assigned the agent while the object is assigned the theme.

Mbagwu distinguishes locatum from location verbs following Kiparsky's (1997) formalization rule which posits that locatum verbs express terminal coincidence as opposed to location verbs that express central coincidence. The author correlates Kiparsky's claim of terminal coincidence for locatum verbs using the following Igbo verbs.

- 27a dó ídō 'to place'
- b kò íkō 'to hang'
- c ghá íghā 'to spread'
- d mákù, ímákū 'to embrace'
- e sú ísū (ó nū) 'to kiss'

These verbs are used in the sentential constructs below

- 28a Obi mákù, rù, Ada
 Obi leap.against-pst Ada
 Obi embraced Ada.

- b Ada sùrù Obi ó, nū
 Ada punch pst Obi mouth
 Ada kissed Obi.

culled from Mbagwu (2013:61)

The interlinear glossing provided by the author with regard to the verb *sùrù* in 28b as ‘punch pst’ is not acceptable to the researcher, as it appears to depart from the fact that some Igbo verbs need complements to achieve meaning. *Sú* happens to belong to this group of verbs as evidenced in its co-occurrence with different noun complements in the instances below

- 29a. *sú ọ̀nụ̀* ‘kiss’
 b. *sú ọ̀kpọ̀* ‘hit blow’
 c. *sú ákā́* ‘hit with intensity’
 d. *sú ímī́* ‘betray’

With regard to the location verbs, the author claims that this class is delineated by emphasis on the location into which an entity is moved in contrast to *locatum*, which focuses on the entity that is located. His examples of location verbs include

- 30a. *tìnyé ítínyē* ‘to put into’
 b. *rụnye írụǹyè* ‘to push in’
 c. *bànyé íbànyè* ‘to soak in’ a liquid
 d. *wụnye íwụnyē* ‘to pour into’
 e. *dànyé ídànyè* ‘to fall into’

In sentencial constructs, these verbs are used as shown below:

- 31a. *Obi tìnyèrè ìkó n’ìtè*
 Obi put ILL-pst cup in pot
 Obi put a cup into a pot
- b. *Ọ̀ dányèrè n’àkpà*
 3CL fall-ILL-pst in bag
 She fell into a bag

culled from Mbagwu (2013: 63)

In their bare forms, the location verbs as presented by the author ,depict what obtains in the phonology of the Igbo language but in their infinitival forms, there seem to be doubts with respect to the tone ascribed to *ítínyē* ‘to put into’ and *íwínyē* ‘to pour into’

Yuka and Omoregbe (2010) examine the internal structure of Edo verbs. The aim of their study was to account for the morphology of Edo verbs. The study submits that two verb types can be confirmed in Edo namely the basic verb form and the complex verb form. The latter form comprises verbs with V+V, V+N, V+N+N and V+extension syllable structure while the former verb form consists of verbs with either CV or CVCV syllable structure. Instances of the basic verbs in Edo culled from the authors are shown below

32a. gbè ‘to dance’

b. sàà ‘to burst’

c. ògùè, ‘to kneel’

The verb in 32a has CV syllable structure; 32b is a case of CVV while 32c has a CVCV structure.

Yuka and Omoregbe further state that the feature specifications of some Edo verbs do not conform to Chomsky’s [+V-N] universal specification for verbs. Chomsky’s universal categorical distinction according to them assumes that a verb is void of any nominal trait. However, they observe that some Edo verbs have a combination that are not void of nominal traits yet the native speakers interpretation of such strings depicts a verb. They buttress their point with the examples in 33

V	V	N	
33a khò ó	mié	òtò	khònmìotò
to fight	to see	ground	to be victorious
b.rhiò	kpáá	egbe	rhiò, kpègbé
to rise	to lift	body	to resurrect

The authors note that the deep structure of the verbs (in 33a and b) negates Chomsky's universal [+V-N] specification for verbs.

2.4.2 Review of Studies on the Semantics of the Verb

Levin (2009) asserts that verbs are so important because they form the organizational core of the sentence through the naming of events or states. This function performed by verbs alongside their participants makes their meaning paramount to sentence meaning. He further posits that a strategy that is needful in the study of verb meanings involves exploiting the link between verb meaning and argument realization. Citing Fillmore (1970), Levin (2009) asserts that insight into the verb meaning can be gained by examining the behaviour of the verb. Using the English verbs *hit* and *break*, the patterns of the two verbs which are similar in certain but not in every way are shown as follows:

34a .The boy broke the glass with a stone

b. The boy hit the glass with a stone

c. The boy broke the glass

d. The glass broke

e. The boy hit the glass

*f.The glass hit

The two verbs can be transitive with phrasal instrument as seen in 34a and b. They can also take single objects as shown in 34 c and e. However, the verb 'break' can be used intransitively as seen in 34 d while 'hit' cannot pattern the same way, hence the ungrammaticality of 34 f.

The point to be understood from this is that a verb can show divergent behaviour. Furthermore, the issue of transitivity is not fixed but rather relative and context dependent.

Okorji and Nwankwegu (2009) examine the mechanisms that constrain the co-occurrence of the Igbo verb *zu* 'buy' with the articles that are bought. The study adopts the constraint based approach of the optimality theory and draws data from the Izhi dialect of Igbo. Based on the analysis, the study claims that the verb *zu* 'buy' has variants such as *màta*, *pàta*, *nàta*, *kpàta*

among others. The authors further posit that these variants apply to the objects that are bought and are based on some pragmatic considerations. For instance, the verb *màta*, which implies the buying of a few measures, applies to grains, edible and non liquids. The features for the Izhi verbs are shown in Table 6 below

Table 6. Table of features for Izhi buy – verbs

S/N	Verbs	Measure	Liquid	Grain	Edible	Heavy	Manuf/ Process	Craft	Paste	Portable	Animate	Birds
1	kpọ́ ta	-	-	-	-	+	+	+	-	+	-	
2	wùta	-	-	-	-	-	-	-	-	+	+	+
3	Zụ́ ta	+	+	+	+	+	+	+	+	+	+	+
		-	-	-	-	-	-	-	-	-	-	-
4	Màta	+	-	+	+	-	+	-	-	+	-	-
					-		-					
5	Kpàta	+	+	-	+	-	+	-	+	+	-	-
					-							
6	Gàta	+	+	-	+	+	+	-	-	+	-	-
						-						
7	Nàta	+	-	+	+	-	+	-	-	+	-	-
8	Wụ́ ta	+	-	+	+	-	-	-	-	+	-	-
				-								
9	Pàta	+	-	+	+	+	+	-	+	+	-	-
				-	-	-			-			
10	màta	+	-	-	-	-	+	+	-	+	-	-

Okorji and Nwankwegu (2009:82) conclude that employing the instrumentalities of optimality theory, the selection of the buy verbs is a reflection of conflicts resolved at the input level by means of a candidate's optimal satisfaction of highly ranked constraints.

From the descriptive perspective, Onumajuru (2005) examines the selectional restriction of verbs in Onicha Igbo using four verb clusters, which are buying, cooking, eating and washing verbs. For verbs of buying, the author identifies *go* as the only stem that governs all objects that can be bought in Onicha dialect. Other variants of *go* include *bu* ‘a verb glossed as buy but with another meaning of lifting or carrying. *Bú* is used when bulk items or equipment or machines such as cars are bought. Commodities like bags of rice, beans, maize are also bought employing this verb stem. Some of the author’s examples are shown below

35 Bùtè ñkàtà ósè isé
 Buy basket pepper five
 Buy five baskets of pepper

36 Bùtè òfū àkpà ñnū
 Buy one bag salt
 Buy one bag of salt

Comparing the study of buy verbs by Okorji and Nwankwegu (2009) with Onumajuru’s study, we notice that the verb *gata* subcategorizes for bulk and heavy object NPs in Izhi as opposed to *bute*, which subcategorizes for the same object NP in Onicha dialect.

Another verb of buying in Onicha is *mà* which collocates with items sold by measures using cigarette cups, tins and bowls as shown in 37 and 38

37 Mátá òfū ìkō àgwà
 Buy one cup beans
 Buy one cup of beans

38 Mátá ákwū
 Buy palm fruits

-*gba* as a variant of buy verbs goes with commodities measured in litres such as oil, kerosene, palm-wine etc. The following examples are illustrative:

39 Gbàtá ñkwú, éñū

Buy palmwine

40 Gbàtá òfū bó, tù, lù, ñmānū

Buy one bottle oil

Buy one bottle of oil

Onumajuru (2005) further notes that, commodities like snuff/tobacco and slave purchase select *gba* as the stem. The author asserts that the reason behind the selection of *gba* has to do with the body movement involved in discharging the commodity to the buyer.

Bè is another variant denoting buy, which collocates with all commodities that are sold by cutting either with knife or with a pair of scissors. Such commodities include meat and cloth.

Following from the data presented by Onumajuru, one observes that the suffix *ta* (and in some cases *te*) occurs with almost all the verbs of buying. Though, the author has not accounted for this, one can assert that *ta* is a directional suffix which harmonizes with the vowel of the verb root. (compare examples 35 and 36 with examples 37 - 40)

For the cooking verbs, Onumajuru (2005:84) identifies *si* as the nuclear verb of the cook cluster with other stems like *me*, *ye*, *ru*, *da*, *te*, *mì* etc.

me is used for food items that involves a process whereby hot water is poured into the item or an item is poured into hot water as involved in the preparation of pap and garri. *Ye* is equivalent to fry and is used for food items that are cooked in oil. These food items include potatoes, plantain, meat, fish, and stew. *Ru*, another verb of cooking is used for food items cooked in oven or in open fires without containers. The verb *ru* translates to *roast* in English as seen in the examples below;

41a Ànyì rù`lù` jì n' ọkù

Ipl roast-pst yam(s) in fire

We roasted yam in the fire

b. Ị rù`lù akwù n' ụ̀tù̀tù̀,

2sg roast(+pst) palm fruit in morning

You roasted palmfruit in the morning

Culled from Onumajuru 2005:84

Tɛ as noted by Onumajuru (2005: 86) has a fixed collocation with soup while *mì* applies to food items that are grilled by passing through intense heat to remove the liquid content, for instance meat.

Onumajuru’s study however, did not include the culinary verb that is peculiar to corn. This verb is *nà* ‘roast’ and it is associated with food item that is placed on fire and allowed to cook. An interesting thing about this food item is that its counterpart that is also placed in the same mild fire goes with another verb *lù* as shown in 41 and 42 below

41 Ọ́ nà nà ọ́ kà ná é lù ̀ ūbē

3sg prog roast corn conj simmer pear

He/She is roasting corn and roasting pear.

42 Nàá ọ́ kà b̀ ́ á nyé āf kà Í lù ̀ ọ́ úbé īsē nyé m̄

Roast corn two give them COMP 2sg simmer pear five give me

Give them two roasted corn, then give me five simmered pears.

(Researcher’s intuition)

What can be deciphered from the examples in 41 and 42 above is that given two food items prepared using the same method; the object NP selects the verb it co-occurs with.

Verbs of eating in Onicha according to Onumajuru (2005:89) have *li* as the nuclear verb with variants such as *ta*, *no*, *lacha*, *mìcha*. He provides the recapitulatory Table of the eating verbs in Table 7 below

Table 7 Table of verbs of eating

-	<i>li</i>	+	N
			+ edible + solid + soft

- ta +

N

edible hard dry as of nut

- no +

N

+ edible + soft/lumps/pulp + fruits

- lacha +

N

+edible + soup + fruits

- *mìcha* +

N

+ edible + bone marrow + items ingested by sucking
--

(Culled from Onumajuru 2005:91 – 92)

The last cluster examined by Onumajuru with regard to Onicha verb is the wash cluster. This cluster lacks a generic verb as opposed to previous clusters examined. Within this cluster such verbs as *su*, *sa*, *wu*, *fìḡ* and *kwḡ* occur as variants. The verbs *wu*, *fìḡ* and *kwḡ* have fixed collocation with the human body, human face and human hand as shown in 43-45.

43. Fa wùlù, àrụ n' ùtùtù,
They bath pst body in morning
They took their bath in the morning

44. Jee fịọ irū gī
Go wash face your
Go and wash your face

45. Ọ nà àkwọ akā
He/she PROG wash hand
He /She is washing his hand

Culled from Onumajuru (2005:93)

Uchechukwu (2011) examines the Igbo verb from the cognitive perspective with the intention of addressing some issues raised but not addressed, as well as those not raised at all in the previous approaches adopted in the treatment of the Igbo verb. The issues not raised are with respect to the productivity of the inherent complement verb structure and the compositionality of the meaning of the verbal complexes. With regard to the raised but unaddressed issues, the author posits two questions: firstly, is the sense in which an Igbo verbal complex is seen as an idiom and secondly, is the obvious way in which the verb root in Igbo is selective.

Using the image schema on the *tụ* verb root, Uchechukwu (2011) shows the different construals that can be confirmed for the *tụ* verb root from the Agent oriented and Patient oriented perspectives.

The study also shows the schema involved in the verb root '*tụ*' vis-à-vis the starting and ascent point and the descent and end point. For profiling involving the starting point and ascent, a movement away from the starting point is involved with a background knowledge that may involve an object that is being pointed out. The study also discusses the verb *ma* as a verb that is also glossed as 'throw' in Igbo and goes further to distinguish the two ways of throwing things, which are either conceived as *ma* or *tụ*, pointing out that whereas the latter

is conceived as an ‘arc shaped trail’, the former has a ‘horinzontal flat trail’ (Uchechukwu 2011: 109) . He illustrates the contrast between the two verbs (ma and tɔ) as follows

46a. úmùákā nà – àtú mángòrò

Children . AUX throw mango

[Literal: the children are throwing mangoes

‘The children are throwing mangoes

b. úmùákā nà – àmá mángòrò

Children . AUX throw mango

[Literal: the children are throwing mangoes

The children are knocking down mangoes’

Culled from Uchechukwu 2011: 110

Uchechukwu explains that the example in 46a could be interpreted as a case of the children throwing mango fruits at each other as a form of game or a case of the children throwing something at the mango fruit for it to land somewhere while in 46b, ‘there is a straight aim at the mango fruit’(Uchechukwu 2011: 111).

What can be inferred from the claim of Uchechukwu is that of the two ways of throwing things, one (tɔ) has a double meaning while the other (ma) has just one meaning when used in construction.

Onwukwe (2015) examines the hyponymous relationship of verbs of cooking in Igbo. She adopts the lexical semantic and relations theory, a theory which assumes that the actual value of a word is only affirmed by means of its relatedness with other items in a paradigm. Based on the findings of the study, the verb *isī* is the superordinate term with hyponyms that exhibit selectional restrictions with regard to the cooked item that collocate with them. She classifies the cooked items into four groups, which are solid, liquid, porridge food forms and sauce. She further posits that the verb *iwū* collocates with solid cooked forms such as cereals, root/tubers as shown below:

- 47a. iwū ji ‘to cook yam
 b.iwū ede ‘to cook cocoyam’
 c.iwū akpu ‘to cook cassava’
 d.iwū ọka ‘to cook maize’

The liquid food forms like pepper soup and soup collocate with such verbs as ité, igbú, ighā, ikére, ighē. Some liquid food forms and their collocates are shown below.

- 48a. ité ófé ‘to cook soup’
 b. Ígbú úgú ‘to cook pumpkim soup’
 c. ikērē ọgwụ ‘to cook medicinal soup’

The porridge food forms such as yam porridge employ *idā* and *itē* as collocates as seen in 49

49. Ịdā jī ‘to cook yam’
 Ite ipo ‘to cook yam/cocoyam/plantain porridge’

(culled from Onwukwe 2015: 67)

The above claim raises some issues. Firstly, if we base our assessment on the initial premise of the author which we believe is to give an account of Igbo verbs of cooking as opposed to earlier studies which are based on dialects, we are confronted with the question of representativeness. This is necessitated by some dialectal idiosyncrasies which are not reminiscent of the standard form which we believe the author wants to portray. Secondly, the verb *idā* which according to Onwukwe collocates with porridge in ‘Igbo’ entirely conveys a different notion in some parts of Igbo. The verb *idā* signals ‘to warm /making what has earlier been cooked hot’ as evident in these examples

- 50.a Ịdā jī ‘to warm yam’
 b.Idā ofe ‘to warm soup’
 c.Ịdā osikapa ‘to warm rice

(Researcher’s intuition)

2.4.3 Review of Studies on the Syntax and Semantics of the Verb

Anyanwu (2012) examines the syntax and semantics of inherent complement verbs in Igbo. The data for the study were drawn from Ngwa dialect and analyzed based on the principles and parameters framework. Justifying the need for inherent complements in Igbo, Anyanwu (2012: 1562) posits ‘that “the functional semantic load of an inherent complement verb rests solely on the inherent complement. Furthermore, Anyanwu explains that the verb root assumes a different meaning, when disassociated from its inherent complement.

Using the pronominalization test, Anyanwu argues that the object complement of a transitive verb cannot substitute the inherent complement position. Some of his examples are shown below

51a *Ézè ntùrù máí*
Eze pr. libate past drink Ic
Eze poured a libation i

*b. *Ézè ntùrù ya*
Eze libated past it

52a. *Ójî nà nkú ílú*
Kolanut this pr. be bitter bitter
This kolanut is bitter

*b. *Ójî nà nkú ya*
Kolanut this pr be bitter Ic
This kolanut is bitter.

Anyanwu (2012:1563)

The ungrammaticality signalled by the pronominalization of the ICV as exemplified in 51 and 52 b respectively (above) buttresses the fact that *tù máí* ‘pour libation’ and *kú ílú* ‘be bitter’ are ICVs’ in Igbo.

Using the same pronominalization test, Anyanwu (2012) explains that the direct object of a transitive verb can be substituted with a pronoun as shown in 53 (a) and (b).

53(a)Ada t̩r̩ ɓ̩ɓ̩l̩
Ada throw -pstball
Ada threw a ball

53(b)Ada t̩r̩ ya
Ada throw-pst it
Ada threw it

Anyanwu (2012:1565) further argues, contrary to Nwachukwu's (1987) claim, that adjectival inherent complement verbs can license, govern and theta-mark internal arguments in Ngwa Igbo without the applicative suffix as exemplified below

54. Ûwéí (n) à néhá Eze ùchá
cloth this pr be white Eze white IC.
This cloth makes Eze look bright

(culled from Anyanwu 2012:1565).

Employing the merge operation and feature checking of the minimalist program, Anyanwu submits that the inherent complement is within the Vp and not in adjunct position. In addition, the author avers that the bond between the inherent complement verb and its complement is based on meaning, hence they constitute a semantic unit and not a syntactic one. A further motivation for his claim is the fact that the internally licensed argument can break the syntactic link between the inherent complement verb and its complement.

Agbo and Yuka (2011) accounts for transitivity in Igbo adopting the transitivity hypothesis explored in Hopper and Thompson (1980). The study employed seven out of the ten components of transitivity in examining the transitivity of five classes of Igbo verbs namely: general complement verbs, inherent complement verbs, prepositional phrase complement verbs, bound complement verbs and ergative complement verbs. The authors claims that prepositional complement verbs have agents that lack the features of volitionality. They

exemplify as follows

55a. Ha kwu-ru n'efu

3Pl speak-IND in emptiness

They spoke nonsense

b. Ha me-re na-nkiti

3PL do-IND in vain

They acted in vain

(Agbo and Yuka 2011: 39-40)

The present study disagrees with the claim that the agents *ha* '3PL' in the expressions in 55a and b, lack volitionality. The submission of this study is that the agents are volitional actors with actions that eventually resulted in unproductivity.

Mahmoud (2003) examines the syntax and semantics of substance removing verbs (SRV) in English and Arabic. The aim of the study is to characterize the syntactic and semantic features of the substance-removing verbs in the two languages. A further motivation for the study is to verify the claim of lexical semanticists who have argued that there is a correlation between the semantic properties of verbs and their syntactic patterns such that most times the semantic properties of verbs can determine the verbs argument selection and organization within sentences. Mahmoud (2003:67) opines that English and Arabic substance removing verbs require three arguments, which are a subject (agent), a direct object (substance), and an object of a preposition (location). Clark and Clark (1979) in Mahmoud (2003:68) see the direct object (ie) the substance that is removed as the locatum while the object of the preposition (i.e.) the place from where the substance is removed is the location.

Mahmoud (2003) identifies two classes of the substance removing verbs in English and Arabic namely; the shave class and the remove class. The shave class allows for two alternations in the two languages while the remove class allows for one alternation in both languages. The shave class include such verbs as *wash* 'ghasala', *wipe* 'masatta' *filter* 'saffa', *clean* 'thafa', *rinse* 'shatafa', *mop* 'masatta'. Some examples from this class are shown below:

56ai. John washed the grease off his hands.

ii. John washed his hands of grease

56bi. Ghasalat Maryam-u dduhuun-a min yadaynaa

Washed Mary-Nom. the grease-Acc from her hands.

Mary washed the grease off her hands.

ii. Ghasalat Maryam-u yadayhaa min adduhuun-i

washed Mary-Nom. her hands of grease.

Mary washed the grease off her hands

From the examples above, the verb *wash*, which is a member of the *shave class* allows for the occurrence of the location argument as either the object of the preposition (as seen in 56ai and 56 bi) or as the direct object (as seen in 56aii and 56bii) . Verbs of the *remove class* allow for only one alternation in Arabic and English as shown in the examples below.

57a. John dismissed the people from the place

* b. John dismissed the place of the people

58a. Taraba attmad-u nnaas-a mina imakaan-I

dismissed Ahmad-Nom. The people acc from the place-gen

“Ahmad dismissed the people from the place”

* b. Taraba Ahmad-u imakaan-a mina nnaas-I

dismissed Ahmad-Nom. The place-Acc from the people-gen

*“Ahmad dismissed the place of the people”.

The ungrammaticality of 57b and 58b in the examples above shows that they are not permissible combinations in the two languages. Other members of the *remove class* include such verbs as delete and dismiss. These verbs allow the location argument to occur only as the object of a preposition and never as the direct object. Mahmoud concludes that the basic principle underlying the syntax and semantics of Substance Removing Verbs are the same in

Arabic and English. He further posits that to classify verbs into classes, the predicate argument structure, the lexical conceptual structure and semantic roles associated with them should be considered.

From the case grammar perspective, Uwalaka (1988) examines the Igbo verbs with the aim of classifying them systemically based on their semantic and syntactic features. The study identifies among other things the phenomenon of Subject Object Switching (SOS) which is usually common with some Igbo experiential and process verbs when used in a reflexive manner. Due to the exceptions with regard to the verbs that undergo SOS, Uwalaka (1988:48) submits that SOS rather than being used as a criterion for verb sub classification should be specially marked in the Igbo lexicon. Commenting on the semantic coordinates of SOS, Uwalaka notes that verbs that indulge in this phenomenon take animate participants and usually express unintentional events.

Examples of these verbs culled from Uwalaka (1988:49) are as follows

- | | |
|---|--|
| <p>59(a) Ada bara mamịrị
 Burst –rv past urine
 Ada produced urine involuntarily</p> | <p>(b) Mamịrị bara Ada
 Urine burst pst Ada
 Ada produced urine involuntarily</p> |
| <p>60(a) Adha nyurụ mamịrị
 Ada produce – rv (past)
 Ada produced urine</p> | <p>(b)* Mamịrị nyurụ Adha
 Urine produce –rv pst Ada
 Ada produced urine</p> |

We uphold the view of Uwalaka with respect to the blocking of SOS which is usually triggered by intentionality because the ungrammaticality of 60b is due to the fact that it is highly marked for the object NP to be switched to the subject position alongside the verb ‘nyù, rù’ which depicts a voluntary action.

Uwalaka’s study also claims that the Igbo –rv assertive suffix earlier referred to as the ‘-rv stative’ by Nwachukwu (1976) does not function as a present marker rather it affirms what is stated by the verb.

A further claim by Uwalaka with respect to why the –rv is not a present marker is the fact that

it does not occur with all the verb classes unlike the rv- past which occurs with almost all Igbo verb.

Uwalaka (1988) groups Igbo verbs into four major classes and two minor classes. The major classes include action verbs, verbs of occurrence, experiential verbs and verbs of quality, while the minor classes include locative verbs, identificatory and equative verbs. The major and minor classes are further subdivided to smaller groups on the basis of the “semantic-syntactic features running through each group” (Uwalaka 1988:56).

For the action verbs, Uwalaka notes that they are obligatorily associated with Agent case roles. This verb class is distinguished from the other major verb classes based on the ability to question them using the PRO-form. The subgroups of Igbo action verbs provided by Uwalaka (1988:60) include verbs of contact, motion verbs, reciprocal action verbs and reflexive action verbs.

For the verbs of contact, two subsets, namely action process verbs and surface – contact verbs are identified. With regard to the semantic difference between the two subsets, she observes that whereas, the action process verbs depict actions involving physical contact of the object with a resultant change in the state of the patient NP, surface process verbs do not involve any change in state of the patient NP.

2.4.4 Review of Studies within the RRG framework

Vendler (1959) in Viola (2013) analyzes the behaviour of verbs using the ‘time schemata’. The schema simply indicates the temporal structure of a verb without recourse to any other time, which is regarded as an external situation. Based on this ‘time schemata’, the following classes are distinguished:

State/stative : to believe, to own, to exist.

Achievement: to find, to become, to lose.

Accomplishment: to build, to heal, to cut.

Activity: to cook: to dance, to study,

(Viola 2013:13).

Vendler (1959) in (Viola 2013) further explains that for stative verbs, the event described

does not show further decomposition into smaller sub phases. The activity and accomplishment verbs both have duration. The difference between the two verb types however is that the activity verbs can be analyzed as sequences of different stages while the accomplishment verbs are characterized by actual accomplishment of what is claimed.

Agbo (2009) considers three semantic subclasses of Igbo verbs of cooking, namely the verbs of heating, mixing and parboiling. He adopts the Role and Reference Grammar theoretical framework and distinguished three subclasses of cooking verbs based on the information they encode. According to the author, verbs of heating encode direct application of heat, verbs of mixing encode that the meal being prepared involves a variety of ingredients while verbs of parboiling entail that the heat applied to the food item is controlled and kept at a certain temperature to achieve the desired effect on the food item. Agbo (2009:73) asserts that the verbs *ida* “heat”, *imi* “roast”, *ihu* “to roast” *inya* “to grill” and *ighe* “to fry” function syntactically and semantically as verbs of heating in Igbo . Agbo further classifies the verbs as accomplishment verbs. The classification follows from the procedure, which the object NPs of the verbs have to undergo to experience the desired change of state. For example:

61 Ada *miri* *azu/anu*

Ada roast-tns fish/meat

Ada roasted fish/meat

Agbo opines that in example 61, the object NP must be hung over the fire for a duration before it would change to another state. Agbo (2009:78) notes that four out of the five verbs of mixing are active accomplishment verbs. These verbs include “*igwō*” “to mix”, *isē* “to stir into a thick paste” *isū* “to pound” and *igbo* “to make”. The verb *isū* “to pound”(usually used for local condiments such as *ósè*, *ègúsí*, *ògbò nò*), is classified as an accomplishment verb on the note that the object NP usually associated with it does not undergo a heating process whereas the object NPs associated with other verbs undergo a heating process. Now consider the lexical representation of the active accomplishment verb *igwō* “to mix” and the accomplishment verb *isū* “to pound” in 62 and 63 respectively.

62. Ada gwọrọ isiewu

Ada mix-tns heat goat

Ada gwọrọ isi ewu

do' (Ada, [**steam'** (Ada, isi ewu)]) & INGR **mixed'** (isi ewu)

63. Ada suru ose

Ada pound-tns pepper

Ada pounded pepper

BECOME **pounded'** (ósè)

(Agbo 2009:74-75)

The lexical representation DO (Ada, [steam (Ada, isiewu)]) and **INGR** mixed (isiewu) denotes a process undergone by the object NP before the mixing in example 62 while in example 63, the lexical representation is **BECOME** pounded (ose) which means that there is no pre heating of the object NP.

Contrary to the claim by Agbo that the verb “*igwō*” “*to mix*” is an active accomplishment verb, this study argues that, it is not in all cases that “*igwō*” “*to mix*” is associated with object NPs that require pre-heating. One observes with respect to itinerant hawkers, who mix tapioca (African salad) that the verb “*igwō*” “*to mix*” is used yet, the object NP does not undergo pre-heating. Consider example 64 and its logical structure

64 Ada gwọrọ àbàchà

Ada mix-tns tapioca

Ada prepared tapioca

Become **mixed'** (tapioca)

The verbs of parboiling identified in Agbo’s study are *imachu* “*to parboil*”, *ighu* “*to heat or boil*”, *imā mmiri ọkū* “*to throw hot water*”, *idā mmiri ọkū* “*to burn with hot water*” (pg 78).

The finding of the author with regard to the verbs of parboiling is that they have different syntactic and semantic representation in addition to their co-occurrence with uncountable object NPs. The study agrees with the author's claim on this issue.

Chenglong (2005) employs lexical decomposition and aktionsart in the discussion of verbs in Qiang, a Chinese dialect. The author asserts that state or activity verbs in Qiang become achievement or accomplishment when they co-occur with a directional prefix. Furthermore, Chenglong (2005:3) avers that a causative suffix attached to the state or activity verbs yields a causative achievement or causative accomplishment verb. It follows therefore that state and activity verbs are basic in Qiang while the other aktionsart classes of verbs are derived by either prefixation or suffixation.

Similarly, Iyamu (2016) explores the morphosemantics of Edo verbs adopting the Role and Reference Grammar approach. The study specifically seeks to accommodate the semantic knowledge of the Edo native speaker in the classification and analysis of the Edo verb. The study also investigates the *lv* and *rv* suffixes in Edo with respect to their phonological, morphological, syntactic and semantic licensing constraint. Following from the data analysis, the author claims that the inherent temporal properties of verbs can serve as a classification tool for Edo verbs.

Iyamu (2016) classifies Edo verbs into states, achievement, activity, accomplishments, semelfacture and active accomplishment verbs. For the state verbs, the author distinguishes between attributive and predicate state verbs. The state verbs as noted by Iyamu depict situations that extend in time with no inherent end point and no action hence they are distinguished as [- telic, - punctual - dynamic]. Examples of these verbs in Edo are shown below.

65 Ómómó nì bẹ̀bẹ̀ gbẹ̀
Baby DEM stubborn ADV
This baby is very stubborn

66 Ékítà nà fú gbè
 Dog DEM docile ADV
 That dog is very docile

(Iyamu 2016 : 33)

The Edo verbs *bèbè* and *fú* in examples 65 and 66 are predicative state verbs. One of the findings of Iyamu with regard to Edo verbs is that the *lv* suffix extends events temporarily by imposing an atelic reading on inherently telic verbs. The author exemplifies as follows:

67a. Ìránmwè sá ómómó
 Black ant pst. bite baby
 A black ant bit the baby

b. Ìránmwè sà - ló ómómó
 Black ant pst bite - lv baby
 A black ant repeatedly bit the child

68a. Èkì bún èrhán
 Eki pst. break stick
 Eki broke a stick

b. Èkì bùún - nó èrhán
 PST break – lv stick

Èkì repeatedly broke a stick Culled from Iyamu 2016 :72 -73

In examples 67a and 68a, the verbs *sá* and *bún* have high tones. However in 67b, the tone of the verb becomes low following the suffixation of the *-lv* suffix. In 68b, though there is a change in the tone of the verb, what triggers the change is not clear because the suffix attached to the verb stem is not *lv*.

Agbo (2013) approaches the analysis of Igbo verbs from the Role and Reference Grammar

perspective. The study classifies Igbo verbs based on the events denoted by the action of the verb and not on the structure as earlier approaches have done. The study further aims to provide a novel analysis of transitivity in Igbo verbs. Agbo exemplifies the six verb classes espoused in RRG using the Igbo verbs shown below.

- 69a. ímā 'to know'
- b. ítō ógólógó 'to be tall'
- c. ígwù mímírī 'to swim'
- d. ígbā ósọ 'to run'
- e. ígbāzè 'to melt'
- f. íkpō nkú 'to dry'
- g. ísā áhú 'to bathe'
- h. íkọ ọrú 'to farm a piece of land'
- i. ímū nwa 'to give birth'
- j. ítābì anyá 'to blink'

(Agbo 2013: 65 – 66)

Examples 69a and b are state verbs, c and d are activity verbs. In 69e to f, we have accomplishment verbs while 69g and h instantiate active accomplishment verbs in Igbo. Example 69i is an achievement verb while 69j shows an instance of Igbo semelfactive verb.

With respect to the transitivity of Igbo verbs, Agbo (2013) following the macro assignment principle in Role and Reference Grammar distinguishes between transitive and intransitive Igbo verbs.

His examples are shown below:

- 70a. Òbì gò – rò éwu
Obi buy – Tns goat
Obi bought a goat
- á **dó** (buy '(éwú)
- b. Àdá mù- ù- rù Obi nwa
Ada born – BEN – IND Obi child
Ada had a child for Obi
- b' INGR **give -birth -for** (Àdá, Òbí)

Agbo argues that the example in 70a is an intransitive clause while example 70b is a transitive clause. This argument follows from the logical structure of the clauses showing their arguments labelled 70á and 70b. Agbo further explains that example 70a is an activity verb while 70b instantiates an Igbo achievement verb.

Abdoulaye (1992) employs Role and Reference Grammar in classifying Hausa verbs among the aspectual classes of state, activity, achievement and accomplishment verbs. The author notes that continuous aspect is an important device for distinguishing punctual and achievement verbs from other classes. According to Abdoulaye, the continuous aspects take two forms: the first form is the regular continuous form with the auxiliary *náa/kèe* ‘be’ followed by a gerundive form of the verb or the derived nominal. These forms based on the verb used can express an ongoing action, a habitual action or an intended action.

The author exemplifies as follows:

- 71a. *Yâara sunàa wankè raagunàa*
 Children 3p-CONT clean – IV ram
 ‘The children are cleaning the ram
- b. *A naniya nèe mutaanee sukee taaruwaa kullum*
 at here cop – m people 3P-REAL CONT gather – DN always
 It is here where people gather everyday
- c. *Nii maa inàa zuwaa Kandò*
 Is too IS-CONT go – DN Kano
 Me too I will go to Kano
 Me too I want to go to Kano
 Me too I usually go to Kano

(Abdoulaye 1992: 178-179)

The instance in 71a depicts an ongoing action, 71b has habitual reading while *reinforced* by *kullum* (everyday) while example 71c is ambiguous in the sense that it has three meanings.

In the aktionsart classification of Hausa verbs, Abdoulaye (1992) discovers that the verb *ruugàa* literally ‘start running’ is not an exact correspondent of the English activity verb ‘run’ and as such does not fall into the activity class as English ‘run’, rather it is better classified as an achievement verb. This discovery is pertinent in language analysis because despite the strength of any theory, there are language idiosyncrasies, which should be brought to bear in one’s effort to analyse language.

Igbo verbs with bodypart complement have also received attention from the Role and Reference Grammar perspective. These verbs are inherent complement verbs following Emenanjo (2005) and Nwachukwu (1989,1984). Agbo (2010) explores some subclasses of verbs with body-part complements shown below:

- 72a. *Íbū ó nū* ‘to fast’
 b. *ítù ó, nū* ‘to boast’
 c. *ígbā égbè ó, nū* ‘to exaggerate’
 d. *ínwē óbī* ‘to be persevering’
 e. *ígbāwā óbì* ‘to break someone’s heart’
 f. *ínwē ísí* ‘to be purposeful’
 g. *ínyà ísí* ‘to be arrogant’
 h. *ídò àhú,* ‘to be refreshed’
 i. *ífīā āhū* ‘to be difficult’
 j. *íwō ānyā* ‘to understand’

The verbs in 72a-c have *ó, nū* as their bodypart complement. The meanings of the verbs have a connotation of negativity. In 72d-e, *óbì* is the body-part complement and the meanings show the internal experience of the soul. The verb in 72g, also has a negative connotation.

Using the RRG lexical decomposition, Agbo shows that the verbs which take body part complements fall into state, activity and accomplishment verb classes. Some sentential constructs of Igbo verbs with body part complements and their lexical decomposition are shown in 73.

73a. Ha nà a sà n' ó, nū
3pl Prog AGR confess in mouth

They are confessing

a` **SEML do** (3PL [confess'(3PL)])

b. Uche nwe- re obi

Uche have IND heart

Uche is courageous

b`. **have** (Uche , obi)

c. Eke gbawa - ra m obi

Eke break IND 1SG heart

Eke broke my heart

c`. [**do`** Eke,] CAUSE [**BECOME broken'** [1SG, Obi]]

In 73a, the activity predicate *sà n' ó, nū* is an activity predicate that denotes a one off event hence the **SEML** in its logical structure. In 73b, the undergoer *Uche* possesses courage as depicted in the logical structure. 73b is an instance of a state verb. The *do* in the logical structure of 73c indicates the action linked to the predicate break. *Eke* in the logical structure is the actor while the first person pronoun is the undergoer of the action initiated by the actor. The example in 73c is an instance of accomplishment verb.

Agbo asserts that the verbs with *àhú* as their bodypart complements take only one argument, which corresponds, to the undergoer. The instances in 74 are suggestive of his claim

74a. *Òbí nwè -rè àhú,*

Obi have IND body

Obi is plump

a`. **be`** (Obi [plump])

b.Lingwistiks fià rà àhú,
Linguistics rub IND body
Linguistics is difficult

b`. **be`** (linguistics [difficult])

Agbo concludes that the Igbo speaker's lexical knowledge include the meaning of the verb, its complements and their interaction with the general principles of grammar.

Adopting the Role and Reference Grammar framework, Abedi (2014) examines the assignment of macrorole and participant roles in Persian causative and non-causative constructions. Abedi (2014:378) asserts that in non-causative constructions, the macrorole of actor is assigned to the doer of the action while the undergoer is the entity that undergoes the action. However, for causative constructions, the author avers that the undergoer is the doer of the action. Furthermore, Abedi claims that animacy features are key players in participant role assignment in Persian causative constructions. The author's examples are shown below

75a.Maryam tarsid
Maryam was afraid

a`.Hasan Maryam ra tarsand
Hasan caused Maryam to be frightened
Actor Undergoer
([do (Hasan, θ) CAUSE [feel (Maryam [afraid])

b.Bacce qaza ra mixorand
Baby is eating the food.

b`. Madar qaza ra be bacce mixorand
Mom is feeding the baby

[do (madar, θ)] CAUSE [do (bacce, [eat (bacce, qaza)) & BECOME eaten (qaza)]

Culled from Abedi (2014: 379)

In the causative construction in 75a`, the undergoer Maryam is the entity that is frightened while Hasan is the agent and ‘Cause’ that caused the undergoer to indulge in the act of being afraid. In 75b, *bacce* ‘baby’ is the agent whereas in 75b`, *bacce* ‘baby’ is the experiencer while *madar* ‘mother’ is the cause as well as the agent.

Examining a biclausal Persian causative construction, Abedi (2014) demonstrates that for such construction, the cause of the action is usually different from the agent. The example in 76 is indicative of this claim

76. Madar dad daye qaza ra be bacce xorand

Mom caused baby to be fed by nanny.

[do Madar, θ] CAUSE do (daye, θ) CAUSE [do (bacce, [eat (bacce, qaza)]

From the logical structure of 76, it is established that the construction is biclausal. The do in the logical structure of the verb indicates that the verb belongs to the class of activity verbs following the Role and Reference Grammar framework. Although the author failed to gloss the Persian data appropriately, the study shows the universality of the generalized semantic roles postulated in Role and Reference Grammar.

Subsection 2.4.5 following, attempts a review of some studies carried out on the Etulo language.

2.4.5 Review of some Studies on Etulo

A number of studies have been conducted on the Etulo language. We shall attempt a review of some of these works to enable us, situate the present study properly.

Armstrong (1964) presented some notes on the Etulo language. According to him, the notes will serve to arouse the interest of others to study the language deeply. Armstrong’s 1964 tentative notes on Etulo contained the phonemes, numerals, nouns and pronouns of Etulo.

Mmadike and Okoye (2015) account for the patterns of greetings in Etulo .The data for the study which consist of 28 greeting tokens based on live greeting events recorded in a number of field trips show that variables such as age, status, sex and context determine the type of

greeting employed in communication. Another finding of the study is that greeting is used to show solidarity. In addition, greetings form part of the socialization process and a manifestation of the communicative competence of the people.

Mmadike and Ezenwafor (2012) studied the syllable structure and tone of Etulo. The study claims the existence of three level tonemes in addition to a gliding tone. The level tonemes are the high, low and step tones while the gliding tone is the high falling tone. Furthermore, the study asserts that Etulo makes use of open syllable made up of onset which may be optional, an obligatory nucleus which could be a vowel or a syllabic nasal.

Okoye and Egenti (2015) explored the features of ideophones in Etulo. The study examines Etulo ideophones alongside the features identified for ideophones crosslinguistically. Following from the data analyzed, the study asserts that phonologically, Etulo ideophones adhere to the syllable structure of the language. Semantically, ideophones provide a lively way of expressing one's emotion or perception of the state or event. Morphologically, ideophones exhibit a high incidence of reduplication and triplication while with respect to syntax, ideophones function as verb or adjective modifiers.

The strategies employed in pluralization have also been examined. The study, carried out by Okoye and Onuh (2015), examine the various processes through which number distinction is achieved by Etulo native speakers. The study submits that zero affixation, vowel alternation, morpheme prefixation and affixation of an enclitic are employed by Etulo speakers in their number distinction.

A monograph for the reading and writing of Etulo contains a list of some verbs in Etulo and their English equivalent. However, there was no effort to discuss the verb or even group them descriptively. This also has motivated the present study, which attempts to systematically examine the Etulo verb.

In these works on Etulo, it is discovered that the focus is not on the verb; rather it is on other aspects of the language. Furthermore with the exception of the monograph on reading and

writing Etulo, which contains a list of some Etulo verbs, it appears that there has been no attempt to account for the Etulo verb in an essentially detailed way; hence the lacuna which this study attempts to fill.

2.5 Summary of Literature Review

In this chapter, we attempted a conceptual, theoretical and empirical review of related literature relevant to the study. Some works that have been done on the verb as a lexical category as well as the properties associated with the verbal category have been examined. Some approaches to the study of the verb were also discussed and research works on the behaviour of the verb in specific languages have been reviewed. From these reviews, it is obvious that the verb as a category has been studied in other languages but has received little attention in the Etulo language consequently, the present research attempts to study the Etulo verb using the RRG framework. RRG framework is appropriate because it perceives language as being made up of structures, which can only be explained and understood, with reference to their semantics and communicative functions. In the light of this, the centrality of the verb in predication and its crucial semantic role is seen to be analogous to RRG's theoretical assumptions.

CHAPTER THREE

AN OVERVIEW OF ÈTULÓ VERBS

3.0 Preamble

This chapter presents a discussion of the verb in Etulo. It looks at the syllable structure of the verbs and further provides their morphological classification. Four sets of inherent complement verbs identified in the study are also presented. In addition, it illustrates the LSC and operators in Etulo and accounts for SVCs as junctures. The chapter also highlights the realization of tense and aspect in Etulo. Furthermore, both complete and partial alternation of arguments as evidenced in Etulo verbs are discussed in this chapter.

3.1 The syllable structure of Etulo verbs.

The basic structure of the Etulo clause is SVO. The Etulo verb consists of a verb stem in combination with other optional constituents. The following syllable types are attested in Etulo:

- a. Monosyllabic verbs with CV structure
- b. Disyllabic verbs which have CV-CV and N-CV
- c. Trisyllabic verbs with CV-CV-V and CV-CV-CV structures

3.1.1 Monosyllabic Verbs

This syllable structure constitutes an onset and a nucleus without coda. The onset is usually a consonant while the nucleus is a vowel. The nucleus bears the tone that is either a high or a low tone. Etulo monosyllabic verbs are illustrated with the following examples

77a. tsà 'knock'	b. tsò 'teach'	c. sò 'pound'	d. sa 'wash'
CV	CV	CV	CV

g. tò ‘dig’	f. wa ‘drink’	g.nyà ‘tell’	h. nu ‘give’
CV	CV	CV	CV

The Etulo verbs in 77a-77h have a CV structure, which comprises an onset, a nucleus and no coda; hence, the syllable structure is said to be open. The verb *tsà* ‘knock’ in 77a and *tsò* ‘teach’ in 77b, *sɔ* ‘pound’ in 77c and *sa* ‘wash’ in 77d are minimal pairs while 77a, 77b and 77e instantiate a minimal set differing only on the vowel segments. Examples 77a, b, e and g instantiate Etulo monosyllabic verbs with low tone while 77 c, d, f and h are monosyllabic verbs with high tone.

3.1.2 Disyllabic Verbs

The disyllabic verbs comprise the CV-CV and N-CV syllable structures. The disyllabic verbs allow a combination of the high, low ,step tones and gliding tones

3.1.2.1 CV-CV Type

78a. fa- wa ‘tear’	b. gbi-li ‘scrub’	c. fu-lu ‘fold’	d. pi-li ‘rob’ (of pomade)
CV-CV	CV-CV	CV-CV	CV-CV
e. kà-kà	f. gà-dò	g. bù-lù ‘fly’	h. kpa-yī ‘learn’
CV-CV	CV-CV	CV-CV	CV-CV
i. tu-kû ‘close’	j. gbi-gbî	k. yì-dò ‘return’	l. gɛ-kè ‘lean’
CV-CV	CV-CV	CV-CV	CV-CV

The Etulo disyllabic verbs with CV-CV structure in 78a-d are high toned while 78e-g are low toned. The verb *kpa-yī* ‘learn’ comprises a high and steptone while the vowels of the disyllabic verbs in 78 i and j bear the high and rising-falling tones.

3.1.2.2. N-CV Type

Etulo verbs with N-CV structure begin with a syllabic nasal and end with a vowel. From the data collected for the present study, verbs with this syllable structure appear to be few.

3.2.1.1. Simple Monosyllabic Verbs

Simple monosyllabic verbs with a CV structure are shown in the example below

81a. ba ‘come’	b.di ‘see’	c.kpà ‘like’	d.fe ‘flow’
e.nu ‘give’	f.gya ‘buy’	g.wo ‘put’	h.gbò ‘speak’
i.wa ‘drink’	j. la ‘live’	k..fo ‘hear’	l.dzè ‘stay’

The simple CV structure verbs in sentential constructs can occur with or without an object complement as shown in the examples in 82:

82a.Èfu bā

Efu come

Efu came

b.Èyi di àbu

1PL see you

We saw you

c.Èfu kpà anî

Efu like 1SG

I like Efu

d.Èkyô fe ìkà lû

River flow axe go

The river carried the axe

e.Èfu nù anî àfɛ

Efu give me letter

Efu gave me a letter

f. Ani kà lu Àdì
 ISG fut go Adi
 I will go to Adi

g. Èfu gyā āngwō
 Efu buy yam
 Efu bought yam

From the examples, the simple verb *ba* ‘come’ lacks an object complement in 82a. In 82b, c, d, f and g the verbs *di* ‘see’, *kpa* ‘like’, *fε* ‘flow’, *lu* ‘go’ and *gya* ‘buy’ occur with object complements. In 82e, the simple verb *nù* ‘give’ has two object complements.

As earlier pointed out, Etulo has SVO word order. However, the expression *Èfu kpà anî* which translates to *I like Efu*’ in 82c demonstrates a hierarchy of argument in which the subject position is occupied by the Theme while the Experiencer occupies the object position. The same hierarchy of argument seems to apply to the Igbo expression *Agwa na amasi m*, ‘I like beans’. However, this is different from what obtains in the English language where the subject is the Experiencer while the object corresponds to the Theme.

3.2.1.2 Simple Disyllabic Verbs

The simple disyllabic verbs comprise verbs with CV-CV and N-CV structures.

Some Etulo disyllabic simple verbs are shown in 83

83a gbobū ‘break’ b. bità ‘ask’ c. kpayi ‘learn’ d. fawa ‘tear’
 e. gεkὲ ‘lean’ f. bεkὲ ‘lean’ g. ñdzì ‘bury’ h. mbe ‘build’

Some disyllabic verbs listed above are used in sentential constructs in 84 below

84a. O bità iyî mgbi anî
 3SG ask name POSS 1SG
 He asked me my name

b. Èfu fawā Àfè ànwutò wà
Efu tear Afe cloth perf
Efu has torn Afe's cloth

c. Àda lè kpayī Ètùlo
Ada PROG learn Ètulo
Ada is learning Etulo.

d. Ewe mbe òzu òngi èta
Ewe build house of three
Ewe built three houses

e. Ò gekè òzû/ èwishî
3SG lean house/wall
He/she leans on the house/wall

f. Ò bekè èwô
3SG lean body
He/she lean on the body

g. O òdzi àdishî
3SG bury yam seed
He/she planted yam

The data available to the study shows that most simple disyllabic verbs comprise CVCV syllable structure. The verbs *gekè* 'lean' in 84e and *bekè* 'lean' in 84f represent two ways of leaning in Etulo. The object complement determines the verb that is used in sentential construct. Based on selectional restriction, *gekè* occurs with –animate object complements while *bekè* occurs with + animate entities, for instance leaning on the human body.

We shall see more of these idiosyncracies of the language in the section where we shall

examine the semantic classes of Etulo verbs.

The verb *ndzi* ‘bury’ used in 84g can also take *ikwô* “corpse” as its object complement. The expression in 85 does not signify native-like competence in Etulo because *angwô* ‘yam’ can be harvested but not planted. This is different from what obtains in other languages, for instance the Igbo language would use the expression *so jī* “plant yam” as well as *gwu jī* “harvest yam” which implies that *ji* ‘yam’ can both be planted and harvested.

85 *O *ndzi angwô*
3SG bury yam
He planted yam

3.2.2 Complex Verbs

Under this category, we discuss the verbs that involve a combination of a verb and a noun. The verb and a noun when joined together usually yield a different meaning, which may or may not be linked to either of the component parts. Such verbs are shown in 86 below:

- | | | | |
|-----|---------------|-------------|-------------------|
| 86a | <i>ka</i> | <i>lû</i> | <i>kalu</i> |
| | fry | go | Squeeze |
| b. | <i>kwù</i> | <i>lû</i> | <i>kwùlû</i> |
| | Pronounce | go | open |
| c. | <i>gbé</i> | <i>elâ</i> | <i>gbélá</i> |
| | receive | voice | agree |
| d. | <i>gye</i> | <i>òla</i> | <i>gyòla</i> |
| | eat | fire | burn |
| e. | <i>gbógbū</i> | <i>akwô</i> | <i>gbogbuakwô</i> |
| | break | cry | Shout |

f. dzè òla dzòla
 stay fire hurt

g. nu mkà numkà
 give reply answer

h. nu òyèyè nuòyèyè
 give faith believe

Apart from examples 86a and 86b where two verbs are joined together to derive a single verb, other examples in 86 are compound verbs consisting of a verb and a noun. Examples 87 comprise sentences instantiating some of the nouns and verbs that make up the compound verbs in isolation. It is observed that they express events in isolation; hence, they have independent meanings.

87a Afe gbè ùdzà mi ota anî
 Afe receive money PREP father 1SG
 Afe received money from my father

b. ònwè kwu ìyi mgbanî
 child pronounce name POSS1SG
 The child pronounced my name

c. Anî dzè mi Àdì
 1SG stay PREP Adi
 I stay in Adi

d. Efu kyē àyàbà ka
 Efu take plantain fry
 Efu fried plantain.

Example 88 shows the combination of either two verbs or a verb and a noun in sentences.

88a Àbɔ mgbi ani lè dzòla

Hand POSS 1SG PROG stayfire

My hand is hurting me.

b. òdò nê gyòla

soup DEM eat/consume (by) fire

The soup got burnt

c. Efu kyē kalu udzà

Efu take squeeze money

Efu squeezed the money

d. O kwūlū ofè

3SG open door

He/She opened the door.

e. Èyi gbèlà òkwakyeē

1PL agree to meet

We agreed to meet.

f. Anì nuòyèyè mi Ìmgbigbàshò

1SG believe in God

I believe in God

In 88a, the verb *dzòla* 'hurt' is a compound verb, which consists of *dzè* 'stay' and *òla* 'fire'. In fast speech, the first vowel of the noun *òla* 'fire' assimilates the vowel of the verb *dzè* 'stay'. The verb burn '*gyòla*' in 87b is conceived by the native speakers as a case where the subject NP eats fire hence the concatenation of *gye* 'eat' and *òla* 'fire'.

3.3 Verbs with Inherent Complements

The class of verbs grouped as verbs with complements are those verbs, which derive their meanings from their subcategorized complements. The verbs under this category are made up of double units comprising of a verb and a nominal element. The first unit appears to be the verb while the second unit is the nominal element. The difference between the verbs seen as having inherent complements and those classified as compound verbs (Section 3.2.2) is with respect to meaning. The individual parts of a compound verb have meanings in isolation while the units in those seen as verbs with inherent complements do not have independent meanings. The present study identifies four different sets of this class of verbs. The sets include:

- | | |
|------------------|----------------|
| 89a. The shi set | b. The kwɔ set |
| c. The ta set | d. The wa set |

3.3.1 Shi set

This set comprises six verbs. Instances of the shi set of inherent complement verbs are shown in 90.

- 90a. shi ɔ̀dzè ‘make noise’
b. shi ashi ‘sing song’
c. shi ɔ̀shó ‘squat’
d. shi ɔ̀kwò ‘make ridge’
e. shi ishà ‘laugh laughter’
f. shi ifwe ‘dance dance’

The morpheme *shi* has an inherent high tone. The complements of the *shi* morpheme appear to be their objects. *Shi* in isolation cannot be said to have a fixed meaning. However, it serves to “signal the action” denoted by its rightmost complement such that neither *shi* nor its complement can function in isolation. Furthermore, the process associated with realizing these verbs is somehow tricky because due to some phonological processes, the verbs and their complements appear as single lexical units. Some instances of these verbs in sentential constructs are given in 91

91a. Ò lì shishà
 3SG AUX laugh laughter
 He/she is laughing

b. Èfu lì shifwe
 Efu AUX dance dance
 Efu is dancing

In 91a above, the verb consists of the verb *shi* ‘laugh’ and its noun complement *ishà* ‘laughter’ occurring together as a single unit due to the elision of ‘*i*’ the vowel of the verb. Usually the meaning of a verb root is derived from its complement since a verb root can occur with more than one noun complement. *Shishà* ‘laugh laughter’ is not recognized as a compound verb because the morpheme *shi* derives its meaning from *isha*. As earlier noted, this process of meaning derivation does not apply to compound verbs because in isolation, they express events unlike the morpheme *shi* which cannot express any event in isolation.

3.3.2 The kwɔ set

The present study identified the three verbs shown in 92 as members of the kwɔ set.

92a. kwɔ ìkwɔ̄ ‘make rough
 b. kwɔ ènì ‘fetch water’
 c. kwɔ nwogɛ̄ ‘get food’

But for 92a, it appears that the verb *kwɔ* translates to English *get*. However, the study asserts that the meanings of the verbs in 92a-c are derived from the rightmost elements.

3.3.3 The ta set

Eight verbs belong to the ta set. The verbs are listed in 93a-h following

93a. ta àfè ‘slap’
 b. ta àkì ‘lay egg’
 c. ta kama ‘lay block’

- d. ta angba ‘greet’
- e. ta udakâ ‘shoot gun’
- f. ta oshi ‘shoot arrow’
- g. ta elâ ‘shoot voice’ (scream)
- h. ta angwɔ ‘spit saliva’

The verbs are instantiated in the sentential constructs in 94

- 94a. O ta anî àfè
3SG hit 1SG slap
He slapped me.
- b. Ònwè ta anî angba
Child hit 1SG greeting
The child greeted me.
- c. Ògbi tā ākì
Hen lay egg
The hen layed egg
- d. Àjì ta kama
Àjì lay block
Aji layed block
- e. Èmumī ntōnāà ta òdakâ
Thief DEM PRON shoot gun
Those thieves shot gun
- f. ònwè nâ ta èlà
child DEM shoot voice
That child screamed

Following from the sentential constructs in 94a-f, *ta* appears to be polysemous. Though it serves to indicate the action denoted by its rightmost element, as is the case with *shi*, in 94a and b, it translates to hit. In 94c-d, it corresponds to lay while in 94e-f, it equals shoot and shout. Nevertheless, no matter the meaning ascribed to *ta*, it cannot be used without its complement. The instances in 94a and b have the patient occurring between the bound verb and its complement. There are also observed cases where verbs display the pattern in 94a and b. However, the verbs are not recognized as sets in this work. The reason for the non recognition stems from the fact that they do not appear repeatedly in the data available for the present study. An instance of such verb is *gbo ibe* ‘beat’ used in 95 below

95. Èfu gbō Àfè ibe
 Efu beat Afe beat
 Efu beat Afe.

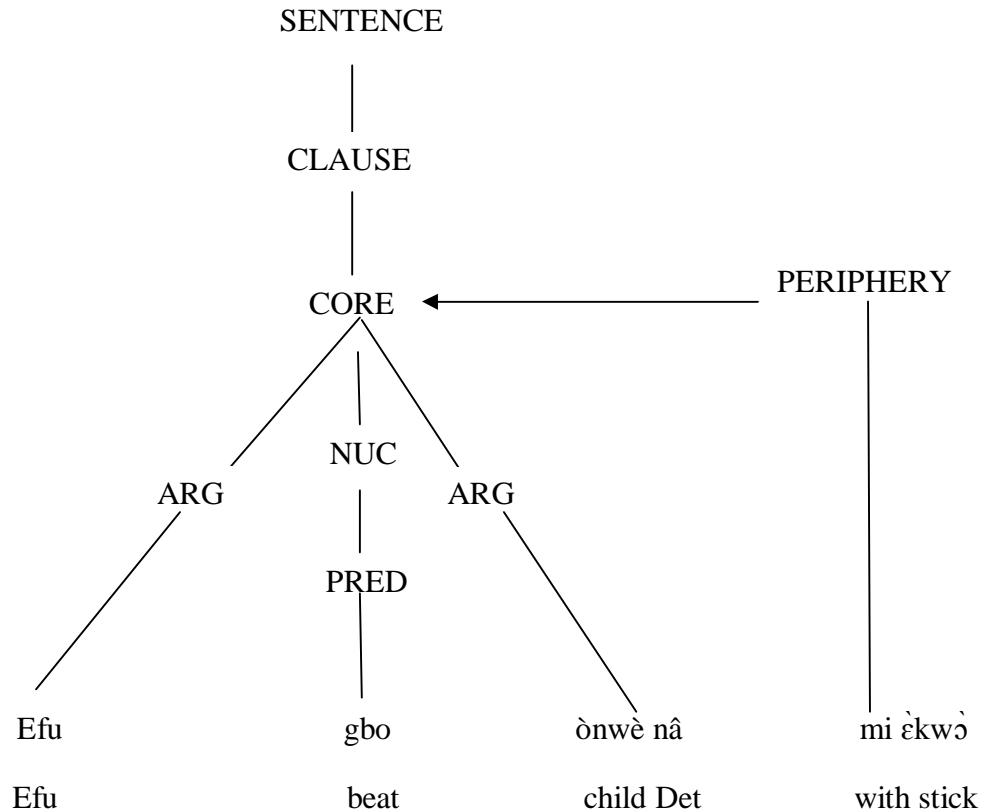
3.3.4 The wa set

This set comprises five bound verbs that derive their meanings from their complements. The verbs include:

- 96a. wa ènì ‘drink water’
- b. wa òsò ‘drink porridge’
- c. wa otse ‘take drug’
- d. wa òwà ‘bear fruit’
- e. wa ādī ‘chain somebody/something’

These verbs do not make meaning without their complements. In 96 a-c, *wa* translates to a verb of ingestion. However, the reason behind the recognition of *wa* as a set follows from the deviation observed in 96d and 96e. But for the deviations, it could have been concluded that *wa* translates to *drink* evidenced in examples 96a, b and c.

Having illustrated the syllable structure and morphological classification of Etulo verbs, in addition to accounting for Etulo inherent complement verbs, we demonstrate the structure of a simple Etulo clause in figure 7 below



Efu beat the child with a stick

Figure 7 Formal representation of the LSC in Etulo

The Etulo sentence represented graphically in figure 7 shows the core and the periphery of the clause in Etulo. The core is the unit containing the nucleus *gbo* ‘beat’ and the arguments in the semantic representation of the predicate *Efu* and *Ònwè nâ* ‘the child’. The periphery contains the prepositional phrase *mi èkwò* ‘with a stick’ which is not an argument of the predicate but an element of the clause that is left outside the core. Van Valin and La Polla assert that this distinction into the core and the periphery is a universal aspect of the LSC.

3.4 Argument Alternation in Etulo verbs

The study observed from available data, that some verbs modify positions in their occurrences as subject and objects in sentential constructs. The alternation however, following from our

informants' explanations still yield the same meaning to the Etulo native speaker. Verbs that manifest argument alternation appear as predicates of involuntarily activities. The verbs found to exhibit this pattern are shown in 97

97a. Èfu lè kyō itingā

Efu PROG do anger

Efu is angry

a` itinga lè kyō Èfu

anger PROG do Efu

Anger is doing Efu

b. Anî lè mwa mna

1SG PROG catch sleep

I am feeling sleepy

b` .Mnâ lè mwā anî

sleep PROG catch 1SG

Sleep is catching me

c . Anî lè wò imiyō

1SG PROG catch fear

I am afraid

c` . Ìmiyō lè wò anî

fear PROG catch 1SG

Fear is catching me

d .Anî lè yà àyibū

1SG PROG feel dizzy

I am feeling dizzy

d` .Àyibū lè yà anî
dizzy PROG feel 1SG
I am feeling dizzy

e .Anî lè kwu àyiwù
1SG PROG catch shame
I am ashamed

e` .Àyiwù lè kwu anî
shame PROG catch 1SG
Shame is catching me

f. Anî lè dɔ otsē
1SG PROG catch sickness
I am feeling sick.

f` .otse lè dɔ anî
sickness PROG catch 1SG
I am feeling sick

g. Anî lè kwɔ òkwò
1SG PROG cough cough
I am coughing

g` .òkwò lè kwɔ anî
cough PROG cough 1SG
I am coughing

h. Anî lè dò èmbwà
1SG PROG catch hunger
I am hungry

h`. Èmbwà lè dò anî
hunger PROG catch 1SG
Hunger is catching me

i. Anî lè wulu ìfu
1SG PROG pain stomach
I am having stomach ache

ì. Ìfu lè wulu anî
stomach PROG pain 1SG
I am having stomach ache

These examples are representative of the Etulo verbs that allow alternation of arguments without any corresponding change in meaning. The subject argument of the verb *kyɔ*, *Efu* in 97a changes to become the object argument in 97a`. Though the change does not affect the meaning, there is an observed change in the tone of the verb *kyɔ*. The instance in 97a is a psychic verb, which expresses reaction. Some verbs that exhibit this shared pattern also exist in other African languages. In Igbo for instance, Uwalaka (1988) posits the existence of this phenomenon and describes it as subject-object switching. However, Uchechukwu (2007) views the phenomenon from the cognitive grammar perspective and suggests that the alternation involves two orientations, which are the Agent-orientation and Patient-orientation

Within the RRG framework, this phenomenon is seen as an instance of Privileged Syntactic Argument. According to Van Valin (2005), privileged syntactic argument is a conception of grammatical relation, which is construction specific, that is, a privileged argument is identified for each construction such that if a single expression contains two different

constructions with distinct privileged syntactic argument, conflict need not arise. In examples 97a-i, the privileged argument is *anî* ‘1SG’ while 97a`-i` have *ìtingā* ‘anger’, *mnâ* ‘sleep’, *ìmiyō* ‘fear’, *àyibū* ‘dizzy’, *àyiwù* ‘shame’, *otse* ‘sickness’, *òkwò* ‘cough’, *èmbwà* ‘hunger’ and *ifu* ‘stomach’.

Yuka and Agbo (2016) also observe this same phenomenon in Lamnso! experiential verbs. According to them, it involves the swopping of syntactic positions between the subject and the object of a clause. They note that such verbs as *kiísi* ‘to cough’, *yar jíŋ* ‘to be affected by hunger’ and *shwiy kilon* ‘to be angry’ permit the swopping of arguments. Their examples are shown in 98

98a Kila Ø kiísi kighíísi
 Kila pres pro-cough cough
 Kila is coughing

b. Kighíísi ki Ø kiísi kila
 cough SM⁷ pres cough kila
 Kila is coughing.

Yuka and Agbo (2016:78)

As evident from the Etulo language examples and the example from Lamnso!, the two arguments of the verbs are retained in sentential construct. There are however some Etulo verbs that show evidence of alternation but in a rather partial way i.e, there is change in argument position but the two arguments are not retained in sentential construct. These verbs are discussed under ergative verbs in the next section.

3.5 Etulo Ergative Verbs

Etulo verbs described as ergative are those that can occur with or without an object argument without alteration in meaning. Ergative verbs behave transitively on one hand and intransitively on the other hand. A look at the examples provided under ergative verbs

confirms that there is a partial alternation where the transitive objects correspond to intransitive subjects in sentential constructs.

99a. Àwo mì èkwò nwutā

Wind give tree fall down

Wind fell the house

a`. èkwò nwutā

Tree fall down

Tree fell

b. eyε mi etò lumbyè

Soil do seed grow

The soil grew the seed

b`. etò lumbyè

Seed germinate

The seed germinated

c. mbwo gbobū òzû

Rain collapse house

The rain fell the house

c`. Òzû gbobū

House collapse

The house collapsed

d..Efu kye òfè tukwû

Efu take door close

Efu closed the door

d'.Òfè tukwù

Door closed

The door closed

e.Àfè gbobu tasā

Afe break plate

Afe broke the plate

e`.Tasa gbobū

Plate break

The plate broke

f.Èfu kadzēē ìbuga

Efu cracked wall

Efu cracked the wall

f'. Ìbuga kadzēē

wall cracked

The wall cracked

g. ònò nu ànwutò na ògwò

sun give cloth DET dry

The sun dried the cloth

g` Ànwútò ná ògwò

cloth DET dry

The cloth dried

h. Mbwo nu angwɔ na bwà
 Rain give yam DET decay
 Rain decayed the yam

h`. Angwɔ na bwà
 Yam DET decay
 The yam decayed

The basic clause structure for Etulo as earlier mentioned is SVO. In examples 99 a-h, the action depicted by the verb, which affect its internal argument, is instigated by the verb's external argument. However 99 a`-h` show that the action still affects the only argument of the verb without any agent. That is to say that there is a dethematization of the subjects in examples 99a` -h`

Within the RRG framework, examples 99a-h are causatives while 99a`-h` are their non causative counterparts. For instance in 99e Àfè` is the animate actor, which causes *tasā* 'plate' the undergoer, to break. It is also important to note that the difference between 99e and 99e` is in their logical structures shown in 100 and 100` below

100 Àfè gbobu tasā

Afe break plate

Afe broke the plate

[**do`** (Àfè, θ)] CAUSE [INGR **break`**(tasā)]

100` Tasa gbobū

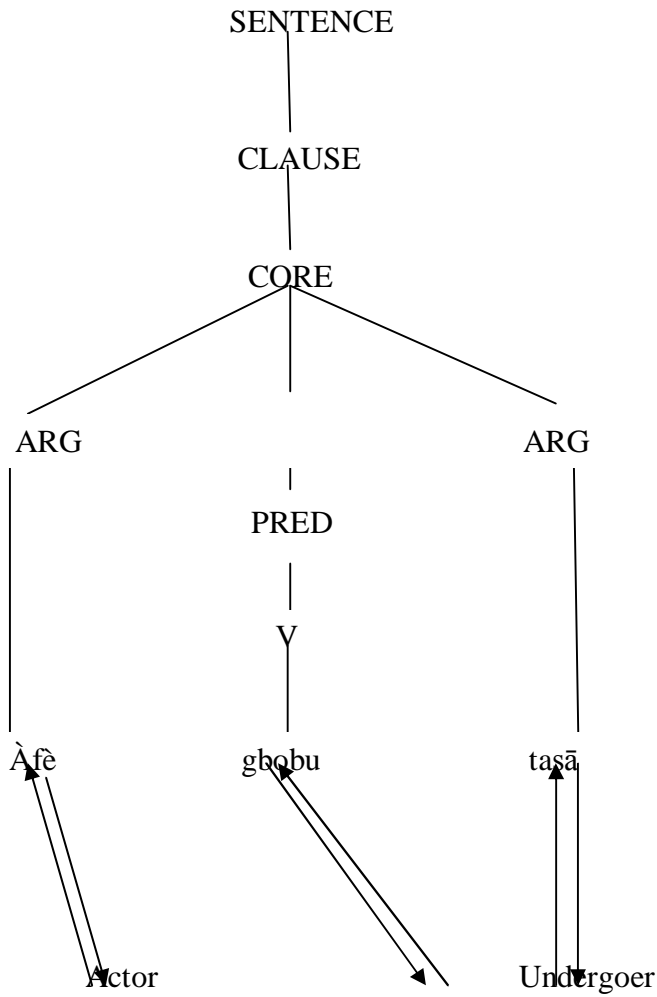
Plate break

The plate broke

INGR **break'** (tasā)

Example 100 has a causative achievement logical structure while 100` has an achievement logical structure. Furthermore, the logical structure in 100 reveals the two arguments of the verb while that of 100` shows the verb's single argument.

As earlier mentioned, RRG posits a bidirectional linking which, links the semantic representation of sentences to their syntactic representation and vice versa. We demonstrate bidirectional linking of the Etulo expressions in 100 and 100` in figures 8 and 8` below.



do` (Àfè, θ) CAUSE [INGR break` (tasā)]

Figure 8 Bidirectional linking in (100)

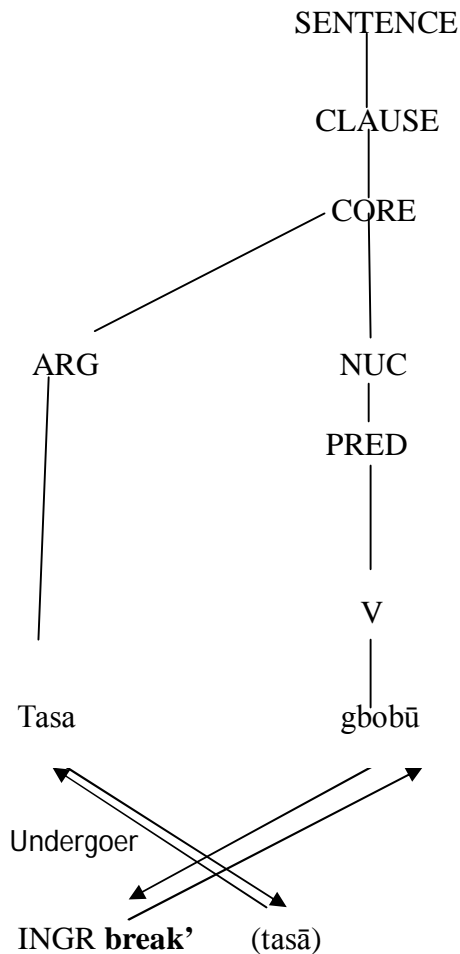


Figure 8` Bidirectional linking in (100`)

The figures above illustrate bidirectional linking of examples 100 and 100`. Linking the semantics to syntax involves constructing the semantic representation of the sentences based on their logical structures, determining the actor and undergoer assignments and then relating the core arguments to the syntactic representation of the sentences. In this case, the arrow moves from the semantic representation up to the syntactic representation. The syntax to semantics linking involves identifying the verb and its voice, determining the PSA, retrieving the logical structure of the verb, assigning macrorole, and then linking the arguments from the sentence to the logical structure arguments hence the arrow moves from the syntactic representation down to the semantic representation.

In both cases, the completeness constraint is satisfied because all of the arguments explicitly specified in the semantic representation of the sentence are realized syntactically in the

sentence and all of the referring expressions in the syntactic representation of the sentence are linked to an argument position in the logical structure in the semantic representation of the sentence.

3.6 Serial Verb Constructions in Etulo

As earlier mentioned, SVCs are constructions containing more than one verb with no intervening conjunction. Some expressions instantiating SVC in Etulo are shown in 101a-g. The verbs in series within the sentential constructs are rendered in italics

101aEfu *tsɛ ðnyà kàkà* òzú

Efu run race enter house

Efu ran into the house

b. ìkutsê na *mùnù kàkà* ìshe

stone DET roll enter hole

The stone rolled into the hole

c. Efu *wawā fa* òyombo èkyò

Efu swim cross across river

Efu swam across the river

d.Ènwè ònjá *gbe* ònòdzì *tsô* òtsètsê

Children woman park picture show teacher

The girls showed pictures to the teacher

e.O kà *kye* àwùyà mgban *nu* mā

3SG FUT take wealth his own give 3PL

He will take his wealth and give them

f. Efu *kyē* Afe *gya*

Efu take Afe sell

Efu betrayed Afe

g. Efu *kyé* *ùdzà* *désó* *nū* *óníkyṑn*

Efu take money send give grandmother 3SG

Efu sent money to his grandmother

The Etulo expressions in examples 101a-g comprise more than one verb. The verbs in series occur without any conjunction. Examples 101a-c, have multiple verbs that are adjacent to each other. The verbs share the same subject and object. In addition, the verbs indicate motion. Examples 101d-g, show verbs which are separated by their object Np, hence they share the same subject but not the same object. In all instances, the shared subject precedes the first verb.

In RRG, the examples in 101a-g are analyzed as junctures that is, based on the connection between the units. For Van Valin and La Polla (1997:442), examples 101a-c are instances of nuclear junctures because they represent cases of a single core containing multiple nuclei. Examples 101 d-f are clauses made up of multiple cores. Van Valin and La Polla (1997:445) note that it is impossible for two nuclei to be adjacent in a core juncture. The Etulo sentence in 101g comprises both core and nuclear junctures. The constituent projections for example 101a is shown in figure 9 below

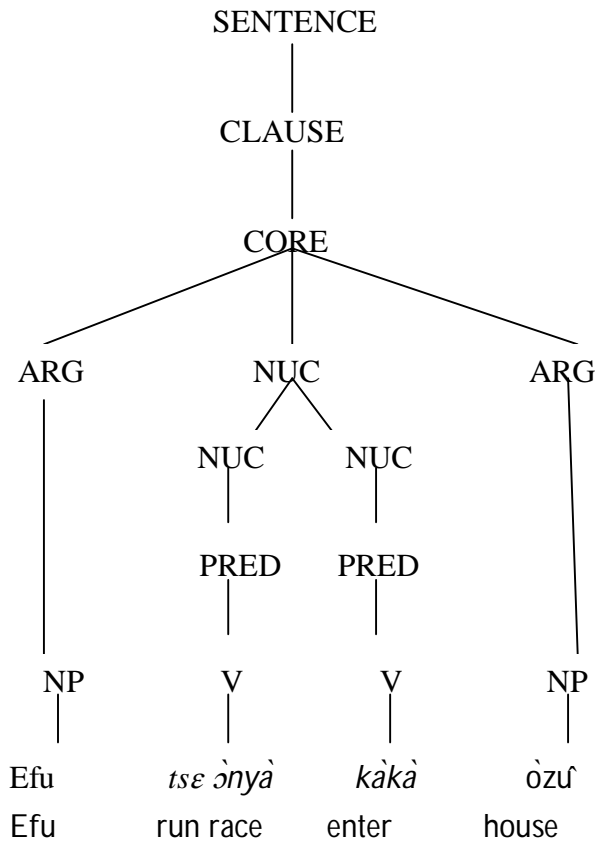


Figure 9 Nuclear juncture in Etulo

From the diagram in figure 9, one observes that the nuclei take up a single set of argument in the core. Thus, the constituent structure shows that both arguments (Efu and òzú) are shared. This is different from the constituent projections for examples 101d and 101 g. Both examples, contain two cores and instantiates three place predicates where the leftmost arguments (Ènwè̀njá ‘girls’ and Efu) are assigned actors, ò̀ndzì ‘picture’ and ùdzà ‘money’ are undergoers while ò̀tsè̀tsè ‘teacher’ and ó̀níkyò ‘grandmother’ are the non-macro role core arguments. The constituent projections for 101d and 101 g are illustrated on figures 10 and 11 below

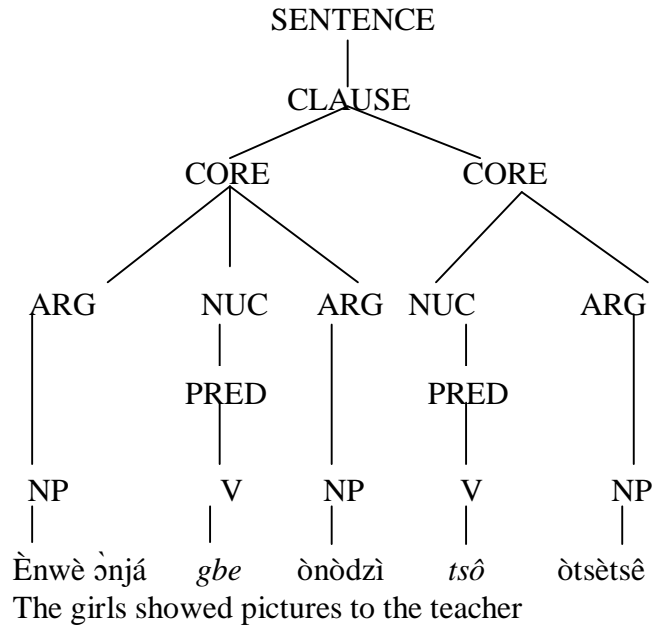
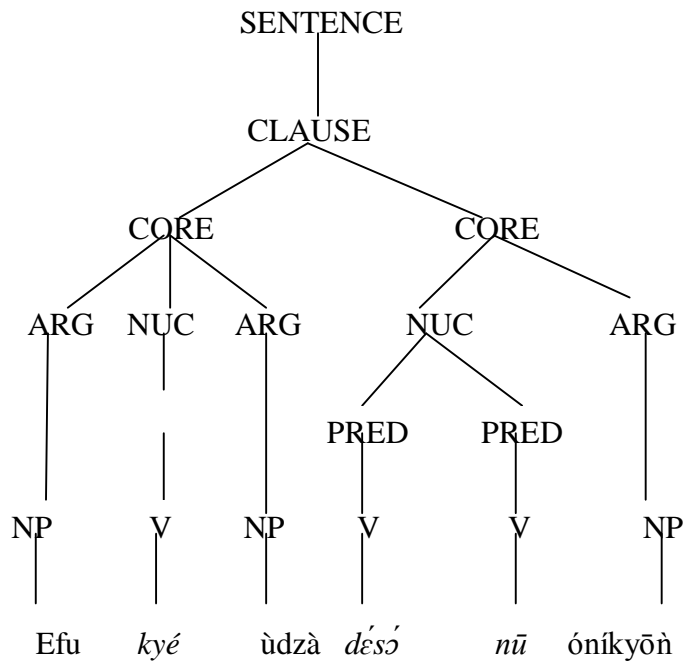


Figure 10 Core junctures in Etulo



Efu sent money to his grandmother

Figure 11 Etulo sentence containing core and nuclear junctures

3.6 Tense and the Etulo verb

With respect to tense in Etulo, data available to the present study show that the verbs manifest the same form for both the present and past tense form. This means that there is no change in the form of the verb that obviously distinguishes the present from the past form. Let's consider the instances in 102

102a. Àfè gya angwɔ

Afe buy yam

Afe bought yam

b. Èfu gbobū tasa

Efu break plate

Efu broke the plate

The sentences in 102a and b are appropriate expressions of both present and past in Etulo. The forms of the verbs remain invariant, as there is no morpheme attached to show time distinction with respect to the events being expressed.

However, sometimes in order to show that an event occurred prior to the time of speech, Etulo uses adverbials of time that are not attached to the verb to make the past very distinct. The words used to indicate past reference are as follows:

103a. teyī 'first /previously'

b. nosē 'before'

c. tsekise 'already'

d. zika 'earlier today'

104a. Efu teyī gyā mbwe mi idû

Efu first buy meat at market

Efu bought the meat at the market

- b. Èfu nosē gyā mbwe èni mì idù
 Efu before buy meat water at market
 Efu bought fish at the market before
- c. Èfu tsekise yē ungwō nwi Mfō kyō
 Efu already know thing which Mfo do
 Efu already knew what Mfo did
- d. Èfu zika gyā mbwe eba mì idù
 Efu earlier buy meat knife at market
 Efu earlier today bought meat at the market

The sentences in 104a –d are representative of past expressions in Etulo. In 104a, the word *teyi* ‘first’ precedes the verb to show that the action was carried out before the time of speech. Another word, *nosē* ‘before’ also performs that same function of indicating a past action. With respect to *zika*, which translates to English ‘earlier’, it is only used if the past action was carried out or indulged-in the same day and at an earlier time before the speech time. If the action was performed on preceding days, *zika* renders the sentence ungrammatical. The use of the words in 103a-d to signal the past in Etulo is in consonance with Lyons (1977:67) observation that though some languages may lack tense as a clear verbal category, all languages have various deitic adverbs or particles of time that help to relate the time of a situation being described to the time of utterance.

The future tense in Etulo is solely expressed using the auxiliary *ka* ‘will’. This obligatorily precedes the verb in utterances and bears a low tone. Instances showing future actions are shown below:

- 105a O kà kye àwùyà mgban nu mā
 3SG AUX take wealth Poss give 3PL
 He will take his wealth and give them.

b. Èfu kà kè

Efu AUX go

Efu will go

c. Èyi kà gye mi òkwò

1PL AUX eat at farm

We will eat at the farm

d. Èyi kà kyìdò yi èkà

1PL AUX do work with together

We will work together.

From the analysis of tense, one observes that although tense is not overtly marked as a verbal category, there are salient distinctions made for the past using time adverbials.

3.7 Aspect in Etulo

With regard to aspect, the data available to this study show that Etulo distinguishes between inceptive, progressive and perfective aspect. In the instances in 106, the particle *wà* is used to indicate an action that had already been completed. The particle occupies the sentence –final position. It cannot be said that the particle marking perfective aspect immediately follows the verb owing to the exceptions observed in 106c and 106g. In all instances, *wà* bears a low tone

106a. ònjà ná ba wà

Woman DEM come Perf

That woman has come

b. Ìngìsè ná kyé òzû mgbán gyā wà

Person DEM take house 3PLposs sell Perf

That person has sold his own house

c. Èfu fawā Mfo ànwutò wà.

Efu tear Afe cloth

Efu has torn Afe's cloth.

d. Èfu gbòze wà

Efu spoke Perf

Efu has spoken

e. Èyi kàkà wà

1PL arrive Perf

We have arrived.

f. A gyē wà

3Pl eat Perf

They have eaten.

g. Èyi gyē (ungwò) mí òkwò wà

1PL eat (food) PREP farm Perf

We have eaten at the farm

h. Èyi bā wà

1PL come perf

We have come

i. Anì gye wà

ISG eat perf

I have eaten

j. A ngyēlū wà

3PL finish perf

They have finished

Other distinctions observed with reference to the duration of events are shown in 107 following. Examples 107 a-h show that the event expressed by the verb persists as at the time of speech. This is marked by *lè*. Example 107i represents a case of an unfulfilled event as indicated by the morpheme *ki*

107a. Anì lè lu òkwò

ISG PROG go farm

I am going to the farm

b. Efú lè nunâ

Efu PROG sleep

Efu is sleeping

c. Ani lè kyìdò

ISG PROG do work

I am working

d. Èfú lè tse onyà kyè

Efu PROG run race about

Efu is running about

e. Á lè gbòdze

3PL PROG talk/speak

They are talking

f. Áni lè gye ungwogyē

ISG PROG eat food to eat

I am eating

- g. A lè shi ɔdzé
 1PL PROG make noise
 They are making noise
- h. Ani lè kyìdɔ ònò neni
 1SG PROG do work time now
 I am working now
- i. Eyi ki lè gye ungwogyē
 1PL PROG eat thing to eat
 We would have been eating

From the data available to the present study, one observes that the morpheme, which marks perfective aspect in Etulo, occupies the sentence final position while the morpheme that indicates progressive aspect occupies the clause medial position.

Within the RRG framework, aspect is a nuclear operator, which occupies the operator projection position in the LSC. Van Valin (2005: 8) posits that taking the nucleus as the reference point, the morphemes realizing nuclear operators should be closer to the nucleus than those expressing core and clausal operators. It therefore follows that the ordering of morphemes expressing operators with respect to the verb indicates their relative scope. In figure 12 below, we illustrate the LSC of the Etulo clause with its constituent and operator projections.

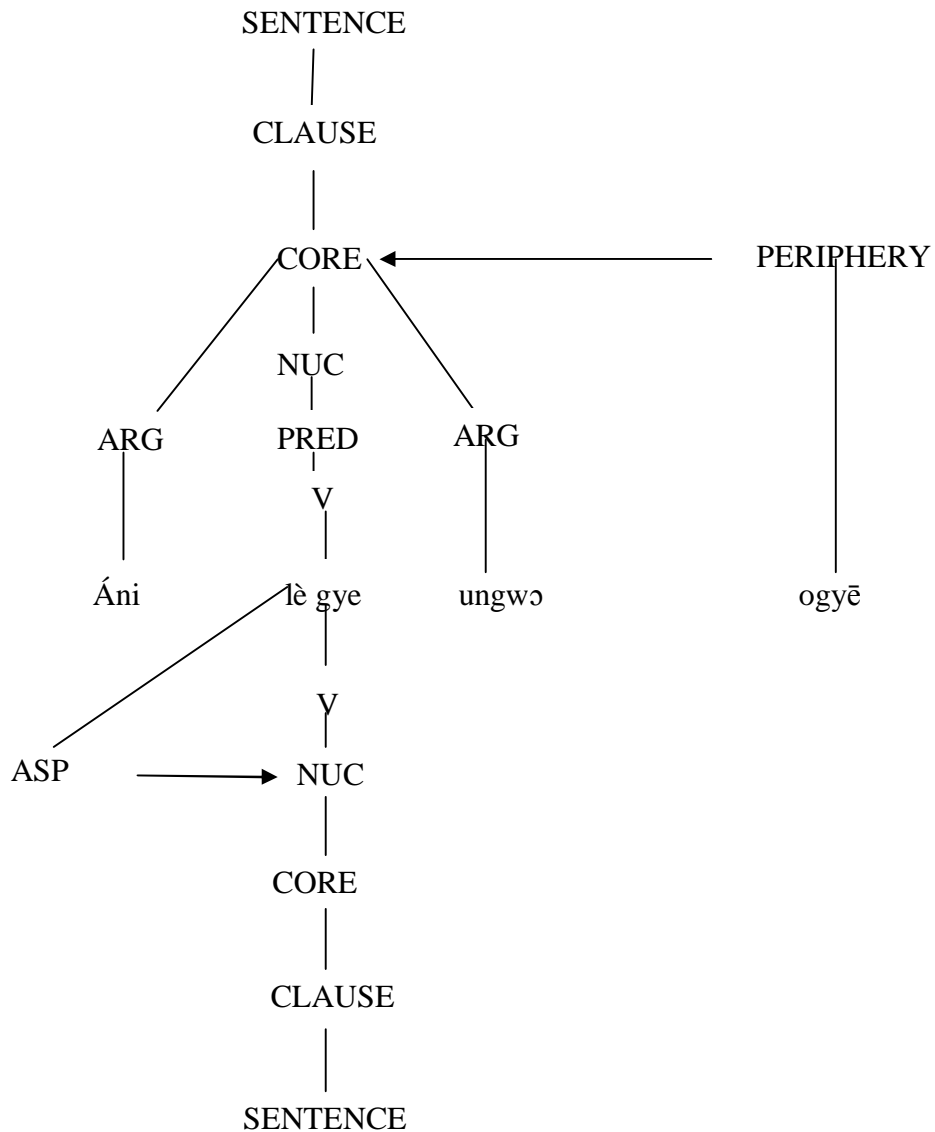


Figure 12 Etulo clause structure with constituent and operator projections.

The diagram in figure 12 has two projections. The top part is the constituent projection while the bottom part is the operator projection. The two projections are joined through the nucleus, which is the central element in the clause. The arrow indicates the scope of the operator. The diagram reveals that aspect is a nuclear operator in Etulo.

3.8 Summary

This chapter presented an overview of the Etulo verb. It illustrated both the phonological and morphological features of the verb in Etulo. The verbs were grouped into attested syllable patterns. In addition, the LSC in Etulo with its constituent and operator projections as well as junctures in SVCs were illustrated. The chapter also highlighted the combinations that result in compound verbs. Etulo verbs whose meanings fully emanate from their rightmost complements were also identified. Furthermore, in this chapter, certain verbs that exhibit alternation of arguments without a change in meaning were explored. The alternation was seen as a case of privileged syntactic argument. The realization of tense and aspect were also shown in the chapter.

CHAPTER FOUR

AKTIONSART AND LOGICAL STRUCTURES OF ETULO VERBS

4.0 Preamble

This chapter discusses the Etulo verb aktionsart and logical structures. Section 4.1 and its succeeding subsections apply the aktionsart classification to Etulo verbs. Both lexical and sentential illustrations of each aktionsart class is provided. In addition, the section accounts for the argument structure of Etulo verbs

4.1 Aktionsart classes of Etulo verbs

Aktionsart means the form of action depicted by a verb. The term aktionsart was used by Vendler (1967) in classifying English verbs. The term was later extended to RRG's approach to verb classification. Events denoted by verbs are referred to as state of affairs or situations. RRG distinguishes among six verb classes, which are the state, activity, achievement, accomplishment, semelfactive and the active accomplishment verb classes. State verbs are non dynamic. Activities are non static and code ongoing events that have no conceptual boundaries. Achievement verbs indicate instantaneous changes that have terminal points. The changes indicated by achievement verbs could be from state to activity or from one activity to another. Accomplishment verbs code events that have terminal points but are non instantaneous. Events classified as accomplishments extend longer than the achievement class. The semelfactive verb class codes one-off events while active accomplishments are activity verbs with a terminal point. For instance the phrase run (a mile) is an active accomplishment verb because the activity verb run has a terminal point. (Van Valin :2005)

Within the RRG framework, argument structure is accounted for in terms of the interaction between logical structures, semantic macro roles and Actor – Undergoer Hierarchy (AUH). Logical structures are lexical templates that link the semantics of verbs to their syntax. Thus it is used as a tool for describing the argument structure of the verb. The relationship between logical structure position and macro role assignment is captured in the Actor –Undergoer hierarchy. The basic idea of the AUH is that in a logical structure, the leftmost argument in

terms of hierarchy will be the Actor while the rightmost will be the undergoer.

Van Valin (2005) and Van Valin and La Polla (1997) utilize predicate decomposition in accounting for the argument structure of verbs. The argument structure of a verb is embedded in its logical structure. The reason behind the postulation of logical structure follows from the assumption that the combinatory possibilities and syntactic potentials of a verb are semantically induced.

In RRG, state and activity verbs are basic while other verb classes are derived from them. State verbs are represented as **predicate**, activity verbs contain the operator **do**, achievement verbs contain INGR (ingressive) in their logical structure, accomplishment verbs comprise BECOME, semelfactive verbs contain SEML in their logical structure.

In representing the logical structures, constants (verbs) appear in bold face followed by a prime ('). The prime indicates that the word is part of a semantic metalanguage and not a word in any particular language. The meta language for constants in RRG is English in spite of the language under study. However, arguments are particular to the language being investigated. Thematic relations are defined with respect to their argument position in the decomposed logical structure. With the exception of state and activity predicates that have argument position which defines thematic relations, the thematic relations of all other aktionsart classes are derived compositionally from the state and activity predicates that they constitute of.

The subsections following, provide lexical and sentential illustrations of aktionsart classes of Etulo verbs. It also accounts for the argument structure of the verbs. Van Valin (2005) suggests some tests that help to determine the aktionsart classes of verbs. Accordingly, the study first develops four syntactic tests for determining Etulo verb classes following Van Valin (2005) and Van Valin and La Polla (1997). One of the tests concerns the co-occurrence with the progressive marker 'le'. Two of the tests involve the co-occurrence of the verb classes with Etulo adverbial words while the last test concerns the co-occurrence of the verb classes with the causative marker kyɔ 'do/cause'. In addition, the study provides the basic

aktionsart classes before presenting sentential constructs to illustrate the various aktionsart classes.

Table 9 Aktionsart test for Etulo verbs

Test	Decisive Factor	State	Activity	Achievement	Accomplishment	Semelfactive	Active Accomplishment
1	Occurs with the progressive marker 'le'	No	Yes	Yes	Yes	No	Yes
2	Occurs with the adverb dumudumo	No	Yes	No	Yes	No	Yes
3	Occurs with the adverb saan	Yes	Yes	Yes	Yes	No	Yes
4	Occurs with the causative marker kyo	No	No	No	No	No	No

In the table above, four tests have been developed to determine the aktionsart of Etulo verbs. The first test concerns the verb co-occurrence with the progressive marker 'le'. From the test, state and semelfactive verb classes cannot occur with the progressive marker while activity, achievement, active accomplishment and achievement verb classes can occur with the progressive marker.

Test two involves the ability to co-occur with the adverb dumudumo. This test is incompatible with states and semelfactives but compatible with other verb classes.

Test three concerns the co-occurrence of the verb class with the adverbial saan. The test distinguishes attributive state verbs from predicative states. Whereas the test is compatible with the former, it is incompatible with the latter.

The fourth test checks the ability of the verb classes to co-occur with the causative marker kyo 'do/cause'. Apart from the achievement verb class, other verb classes are incompatible with the fourth test

4.1.1 State verbs in Etulo:

The verbs classified as state verbs are those that express situations.

The following features characterize these verbs: [+ static], [-dynamic] [- telic], [-punctual]. These features simply imply that these verbs code events that do not involve any action. Furthermore, this class of verbs does not necessitate change and the events expressed by the verbs lack internal duration. In the examples that follow, the infinitive verb form is marked by a low tone prefix. Examples of state verbs in Etulo are shown below:

- 108a. òlumà ‘to be fair complexioned’
- b. òmamā ‘to be bitter’
- c. òfùnfìà ‘to be sweet’
- d. òshìgbò ‘to be tall’
- e. òma ‘to be ripe’
- f. òmyē ‘to be mature’
- g. òlumbi ‘to be dark complexioned’
- h. òfunfu ‘to be fat’
- i. ɔgyèngyè ‘to be small’
- j. òkpilima ‘to be dumb’
- k. òshe ‘to be big’
- l. òyuyu ‘to be cool’
- m. òdzèàlùdù ‘to be rich’
- n. òtumya ‘to be deformed’
- o. òtsidzâ ‘to be dirty’
- p. òshimbi ‘to be rotten’
- q. ofùnfie ‘to be strong’

The state verbs are used in the sentential constructs shown below:

- 109a òdò ne mamà
 soup DEM bitter
 This soup is bitter
 a` **bitter**’ (òdò)
- b. ìmbè né yúyù
 Place DEM cool
 This place is cool

- b`. **cool'** (imbe)
- c. Èfu fùnfie ikye
Èfu strong head
He is stubborn
- c`. **stubborn'** (Èfu)
- d. ànwutò tsidzâ
cloth dirty
The cloth is dirty
- d`. **dirty'** (ànwutò)
- e. Adì tunto
Adì far
Adì is far
- e`. **far'** (Adì)
- f. Òlùmu shimbi
Orange rotten
The orange is rotten
- f`. **rotten'** (olumu)
- g. Èfu dzè àlùdù
Èfu stay wealth
Efu is rich
- g`. **rich'** (Efu)

The sentential constructs in 109a-g comprise verbs that encode situations which are non instantaneous as well as lack activity. The events denoted by the verbs do not involve change. This class of verbs in terms of logical structure takes one argument. 109 a`-g` illustrate the

logical structure of some Etulo state verbs.

State verbs do not usually imply a beginning or an end to the state; rather they describe a state of affair that is enduring. In 109a, the soup is attributed with the state of being bitter. The inanimate participant *òdò* 'soup' in 109a is assigned the UNDERGOER macrorole, which is the default choice for a single argument of a state verb as predicted by the Actor Undergoer Hierarchy. Each example of 109b-g has only a single argument in their logical structures and these arguments correspond to UNDERGOER. Notice also that the arguments do not volitionally direct the state of affair denoted by the verbs. The verbs also constrain the nature of arguments that collocate with them. For instance, the examples in 109c and g require animate arguments and are adjudged semantically ill-formed if the only argument is inanimate. For example if *Èfu* in 109c and g with the feature [+Animate, +Human] is replaced with *ikutsê* 'stone' [-Animate, -Human], the expression would be semantically deviant because *ikutsê* 'stone' lacks the capacity to be stubborn and to be rich. The expressions in 109a-g are grammatical.

In a bid to test for state verbs, let us consider the Etulo expressions below

110a **ekwɔ̀ lè shigbò*

Tree PROG tall

The tree is being tall

b. *Adi tunto saan*

Adi far very well

Adi is very far

c. **òdò ne kyɔ̀ mamà*

soup DEM cause bitter

This soup is cause bitter

The Etulo sentence in 110a is ungrammatical because state verbs do not occur with the progressive marker 'lè'. The adverbial *saan* 'very well' occurs with state verbs hence the grammaticality of 110b. The causative marker do not occur with state verbs and at such, 110c is ungrammatical.

4.1.2 Activity Verbs in Etulo

Activity verbs shown below are verbs that are characterized by such features as [- static] [- telic] [- punctual], [+ dynamic]. These verbs express actions; hence they are dynamic. The action expressed lacks inherent endpoint. Instances of Etulo activity verbs include:

- 111a. sa ‘wash’
- b. gya ‘buy’
- c. màkwò ‘cry’
- d. wa ‘drink’
- e. tsewε ‘think’
- f. gye ‘eat’
- g. gbɔ ‘say’
- h. lô ‘write’
- i. tse ònyà ‘run race’
- j. shìfwe ‘dance dance’
- k. kyìdɔ ‘do work’
- l. gbòdzε ‘talk’
- m. lelè ‘play’
- n. wà ‘sweep’
- o. fafa ‘drive’
- p. shishà ‘laugh laughter’

Activity verbs encode non-instantaneous events that are unbounded. In their logical structure, they are modified by the operator **do**. Within the RRG framework, activity verbs form one of the primitive verb classes from which other verb classes are derived. Examples 112 a-h below are illustrative of Etulo activity verbs and their logical structures.

112a. Àfè gyā mbwe èbà

Afe buy meat knife

Afe bought meat

a' **do'** (Àfè) , [**buy'** (Afe, mbwe èbà)]

b. Owaànî lè kyō ùngwoyē

wife1SG PROG cook thing to eat

My wife is cooking food

b'. **do'** (Owan) [**cook'** (Owan, ùngwoyē)]

c. O gbō èyî

3SG beat 1PL

He/She beat us

c'. **do'** (O) [**beat'** (O, èyî)]

d. ònjà na lè kyèmà

woman DEM PROG coming

That woman is coming

do' (òngyà) [**come'** (òngyà)]

e. Èfè lè shifwe

Èfè PROG dance dance

Èfè is dancing

e' **do'** (Èfè) [**dance'** (Èfè)]

f. Òshishe mgba anì dzè yì àtsà ònagbē anî

Life POSS 1SG stay with rejoice saviour 1SG

My spirit rejoices in my saviour

f'. **do'** (Òshishe mgba anì) [**rejoice'** (Òshishe mgba anì , ònagbē anî)]

g. Ìtukwū mgbà àní tṣe Òtṣe Ìmgbàshò
 Heart POSS 1SG glorify Lord God
 My soul glorifies the Lord.

g'. **do'** (Ìtukwū mgbà àní) [**glorify'** (Ìtukwū mgbà àní, Òtṣe Ìmgbàshò)]

h. Ònwè gbokòyeē lò n mi ìfū
 Child leap POSS 3SG in stomach
 The baby leaped in her stomach.

h'. **do'** (Ònwè) [**leap'** (Ònwè, ìfū)]

The examples of verbs in the sentential construct in 112a-h describe events that take time, without an inherent temporal endpoint, which could go on indefinitely. With the exception of static and dynamic features, these verbs are composed of the same features as state verbs. The features shared by both verb classes are [-telic] and [-punctual]

From the logical structures in 112a` to h`, it can be inferred that verbs belonging to the activity class can take either one or two arguments.

The activity verbs in examples 112d and 112 e take only one argument, which is the ACTOR. The actions denoted by activity verbs are volitional and directed by the participants involved. In examples 112a and 112c, the activity verbs take two arguments, which are assigned the macroroles of ACTOR and UNDERGOER.

In 112b, the ACTOR *Owanî* 'my wife' engages in an activity, which affects *ùngwoyē* 'food' however, *ùngwoyē* 'food' is not seen as a participant in the event denoted by the verb. Van Valin and La Polla (1997:123) observe that the second argument with an activity verb like *gye* 'eat' will be called an inherent argument because it serves to characterize the nature of the action rather than refer to any participant. It then follows that in Etulo, *lè kyɔ̄* 'cooking' in 112b obligatorily requires an inherent argument otherwise, it becomes semantically ill-formed. This is deviant from what obtains in the English language where the construction is acceptable. Consider the examples below.

113a. *Èfu lè gye
Efu PROG eat
Efu is eating.

a' . Èfu lè gye ùngwoyē
Efu PROG eat thing to eat
Efu is eating

b. *Èfu lè lô
Efu PROG write
Efu is writing

b'. Èfu lè lô takeràda
Efu PROG write book
Efu is writing book

Examples 113a and b are ill-formed because the inherent arguments are covert while 113a' and b' are well formed due to the explicitness of the inherent arguments. Following the Actor Undergoer Hierarchy, the ACTORS of activity verbs are high on the agentivity scale. This is evidenced in examples 112a-h and 113a' and b'. Notice also that the ACTORS have the capacity to perform the action specified by the verb. Thus, agreement between verbs and their external and internal arguments is achieved through restricting the class of arguments a verb selects to only arguments that have close semantic affinity with the verb. For instance the activity of buying requires an external argument which must be [+Animate, +Human], otherwise the construction becomes semantically deviant. The eating activity also requires an internal argument that is edible to maintain wellformedness. Also observable is the fact that arguments assigned the ACTOR macroles in examples 112a-h through 113a' - b' have the semantic feature [+Animate].

The Etulo sentences below reveal the result of the test for activity verbs

- 114a. Èfu lè gye mbwe
 Efu PROG eat meat
 Efu is eating meat
- b. Afe lo takeràda dumudumo
 Afe write book slowly
 Afe writes slowly
- c. Efu tse ònyà saan
 Efu run race very well
 Efu runs very well
- d. * Àfè kyò gyā mbwe èbà
 Afe cause buy meat knife
 Afe bought meat

The sentences in 114a-c are grammatical because they all pass the test for activity verbs. 114d fails the test for activity verbs because of its occurrence with the causative marker *kyò* 'cause'.

4.1.3 Achievement Verbs in Etulo

This class of verb is characterized by such features as [- static], [+ telic], [+punctual] and [-dynamic]. This simply means that these verbs do not code happenings rather they express events which are temporally bounded and at the same time instantaneous. Examples of Etulo achievement verbs include;

- 115a. gbóbū 'break' (in pieces)
 b. fāwā 'tear'
 c. gbèsé 'fall down'

- d. dī 'see'
- e. shɛ 'pluck'
- f. sulu 'sink'
- g. fashī 'roll'
- h. fwe 'throw'
- i. túkwù 'cover'
- j. tsìvû 'froth'
- k. dze 'cut'
- l. nyà 'win'
- m. fwalu 'split'
- n. gbíkyē 'break' (into two)
- o. che 'touch'
- p. dzàtá 'leave'
- q. tsô 'show'
- r. dɔ 'put'
- s. yawò 'pour'

This class of verbs is derived from either state or activity class which are the primitive verb classes in RRG. Thus, they are represented as a state or an activity predicate plus an INGR (ingressive) operator. The verbs in this class denote punctual change of state or onset of activity. The sentential constructs below illustrate this verb class and their logical structure.

- 116a. Ènì àde na tsìvû
 Water palm DEM froth
 That palmwine frothed
 a' INGR **froth'** (ènìàde)

- b. Tasa gbobū
 plate break
 The plate broke (break in pieces)

- b' INGR **break'** (tasa)
- c. èkwò gbikyē
Stick break
The stick broke
- c' INGR **break'** (èkwò)
- d. Anì dzàta imbe nâ
ISG leave place DEM
I left that place
- d'. INGR **leave'** (ání, imbe)
- e. Èfu she òlumu nwi ēfâ
Efu pluck orange of two
Efu pluck two oranges
- e'. INGR **pluck'** (Èfu, òlumu)
- f. O kyē ikutsê fwe ma
2SG take stone throw them
He throws stone at them
- f' INGR **throw'** (O, ikutsê)
- g. ùwà sulu
boat sink
The boat sank
- g' INGR **sink'** (uwa)

The achievement verbs in 116a – c take one argument, which translates to either the theme or patient. In 116a, the single argument of *tsivû* 'froth' is the theme and is assigned the

UNDERGOER macrorole whereas in 116b and c, the single arguments of the achievement verbs *gbóbū* and *gbíkyē* ‘break’ are the patients, which also correspond to the UNDERGOER. Consider examples 116 b and c where we have two forms of break. The verb *gbobū* in 116b can take only arguments that can break into pieces for instance *ibwe* ‘cup’ while *gbikyē* 116c can take arguments like *àbɔ̂* ‘hand’. Thus the forms in 117 below are semantically ill-formed.

117a *Tasa gbikyē

Plate break

The plate broke

b. *èkwò gbobū

Stick break

The stick broke

The achievement verbs in 116 d and e have two arguments. In 116d, *anî* ‘1SG is the agent and is assigned the ACTOR macrorole while *imbe* ‘place’ is the theme and corresponds to the UNDERGOER.

In example 116f, we have three nominals in the sentential construct. However only two, are seen as arguments. This is the case because throwing typically requires two participants the agent who throws, is assigned the ACTOR macrorole and the entity that is thrown is the theme, which corresponds to the UNDERGOER. Other information such as the owner of what is thrown, whom it is thrown at and where it landed are considered adjunct. Example 116f substantiates the first principle determining the semantic transitivity of verbs. (cf page 41)

The achievement verbs in 116 denote actions, which are instantaneous and cause a change of state, which has a terminal point. The action depicted by the verb affects the participant in a manner that the initial state is altered within a period that is short and imperceptible. In 116 g, for instance, the *ùwà* ‘boat’ changed instantly from floating on top of the water to being beneath the water. In 116b, *tasa* ‘plate’ that was not initially broken, instantly became broken. We now test achievement verbs using some Etulo sentences shown below

118a. èkwò lè gbikyē

Stick PROG break

The stick is breaking

b. Ènì àde na tsìvû saan

Water palm DEM froth very well

That palmwine frothed

c. *Ènì àde na kyò tsìvû

Water palm DEM cause froth

That palmwine cause frothed

d. *Èfu she òlùmu nwi ēfà dumodumo

Efu pluck orange of two slowly

Efu pluck two oranges slowly

The examples in 118a-b pass the test for achievement verb. 118c fails the test because of the causative marker which do not occur with the achievement verbs while 118d fails because achievement verbs denote instantaneous events and at such cannot occur with the adverb *dumodumo* ‘slowly’

4.1.4 Accomplishment Verbs in Etulo

Accomplishment verbs denote processes that culminate in a gradual endpoint. They are non instantaneous. The characteristic features of this verb class are [-static], [+telic], [-punctual] and [-dynamic].

119a. shakê ‘tie’

b. tètà ‘search’

c. do ‘boil’

- d. sha 'roast'
- e. ka 'fry'
- f. buwo 'mix'
- g. sho 'pound'
- h. she 'parboil'
- i. yile 'melt'
- j. mbe 'build'
- k. fwishê 'give birth'
- l. shù èwô 'wash body'
- m. kpáyī 'learn'
- n. yífù 'darken'
- o. fio 'peel'
- p. ta aki 'lay egg'
- q. fifi 'urinate'

Verbs under this class consist of those that denote change in state or onset of activities that are non-punctual. As earlier noted, state and activity predicates are the basis for deriving other classes. Accomplishment verbs consist of state/activity logical structures modified by the 'BECOME' operator. The 'become' operator depicts that the state and activities expressed by the verbs involve a process. In other words, they are not instantaneous. Examples 120 illustrate the logical structure of Etulo accomplishment verbs.

- 120a. A shake m̀myà
 3PL tie horse
 They tied the horse
- a'. BECOME **tied**' (A, m̀myà)

- b. Mary kyè òshàta ndìwo n
 Mary take towel wrap 3SG
 Mary wrapped him in towel
- b'. BECOME **wrapped**' (Mary, n)

- c. Àfè nu ènì dòla
 Afe give water boil fire
 Afe boiled water
 c'. BECOME **boiled'** (Afe, eni)
- d. èngyè yìle
 Oil melt
 The oil melted
 d'. BECOME **melt'** (èngyè)
- e. imbe yifù
 place darkened
 The place darkened
 e'. BECOME **dark'** (imbe)
- f. Àfè mbē òzû
 Afe build house
 Afe built a house
 f'. BECOME **built'** (Afe, òzû)
- g. Èfu kpayī Ètùlo
 Efu kpayi Etulo
 Efu learned Etulo
 g'. BECOME **learnt'** (Efu, Ètùlo)

The sentence examples in 120 a-g demonstrate events that involve a process that is gradual. The processes are not immediate. In 120a, m̀myà ‘horse’ is tied and the action of tying is not instantaneous. In 120c and d, the process of boiling ènì ‘water’ and the melting of èngyè ‘oil’ require sometime for the desired effect to be achieved. The act of building a house and learning a language in 120 f and g respectively are processes that take time to accomplish.

All the examples of accomplishment verbs in Etulo except for 120 d and g, have two arguments in their logical structure. These arguments are the agent, which corresponds to ACTOR in RRG, and the processes initiated by the ACTOR are volitional. For instance, Efu learning Etulo is a process, which the agent ‘Efu’ willingly engages in. The act of learning itself is a process that culminates in fluency. For the accomplishment verbs with one argument, for instance, *yìle* ‘melt’ in 120d and *yifu* ‘darkened’ in 120e, the single arguments are assigned the UNDERGOER macrorole. These single arguments are inanimate and do not initiate the process they undergo.

In the examples below, we apply the test for accomplishment verbs

- 121a *èngyè le yìle*
 Oil PROG melt
 The oil is melting
- b. *èngyè yìle saan*
 Oil melt very well
 The oil melted very well
- c. *Èfu kpayī Ètùlo dumodumo*
 Efu kpayi Etulo slowly
 Efu learned Etulo slowly
- d. * *Èfu kyɔ kpayī Ètùlo*
 Efu cause learn Etulo
 Efu cause learned Etulo

From the examples above, one observes that the Etulo expressions in 121a-c are grammatical while 121d is ungrammatical because accomplishment verbs do not occur with the causative marker.

4.1.5 Semelfactive Verbs in Etulo

This class of verbs constitutes verbs that encode ‘one-off’ events. The events are instantaneous and usually take very short duration. The features of semelfactives are [-static], [-telic], [+punctual] and [+dynamic]. Some verbs considered to belong to the semelfactive class are shown as follows:

122a. kwəkwo ‘cough’

b. gbε ‘flash’

c. bili(n e) ‘blink (eye)’

d. tì àtishōò ‘sneeze sneeze’

e. ngungā ‘yawn’

f. ta angwô ‘spit saliva’

From the examples in 122a-f, it is obvious the semelfactive class constitutes a small class compared to other verb classes. The lexical decomposition of the semelfactive class consists of SEML followed by an activity or state logical structure. The following in 123a-f are instances of semelfactives and their logical structures in Etulo.

123a. Àfè kwəkwo

Afe cough

Afe coughed

a`. SEML **do**’ (Àfè, [**coughed**’ (Àfè)])

b. Òla gbε

fire flash

Light flashed

b`. SEML **flashed**’ (Òlá)

c. Àfè tì àtishōò

Afe sneeze sneeze

Afe sneezed

c`. SEML **do'** (Àfè, [**sneezed'** (Àfè)])

d. O ngungā

3SG yawn

He yawned

d`. SEML **do'** (O, [**yawned'** (O)])

e. Èfu ta angwô

Efu spit saliva

Efu spat

e`. SEML **do'** (Èfu, [**spat'** (Èfu)])

f. Àfè bìlì inê

Àfè blink eye

Àfè blinked.

f`. SEML **do'**(Àfè, [**blink'** (Afe)])

The events encoded by the verbs in 123a-f above are events that occur swiftly. Some of these events are beyond the control of the participants hence they are involuntary. For instance, the blinking of eye and sneezing by Afe in c and f can be adjudged involuntary. Ngungā 'yawn' also share the same analysis. For gbe 'flash' and ta angwô 'spit saliva', though they may not be involuntary, they are punctual events that occur within a very short interval.

Apart from the instance in 123b, the activities denoted by the verbs are initiated by animate entities, which are human. The intransitivity displayed by the semelfactive class following from the logical structures in a` -f` shows that members of the verb class take only one argument which correspond to Actor. With the exception of 123b, which has the UNDERGOER macrorole assigned to the single argument of the verb, the actors in 123a, c, d and e translate to agents whose actions are volitional. For instance, in 123a, Àfè willingly coughs (kwəkwo). However, the action is instantaneous. The example in 123b has *òla* as its only argument. We assign the undergoer macrorole to this single argument because

thematically, this single argument is the theme, which corresponds to UNDERGOER following the Generalized Semantic Roles (GSR) of RRG.

We test some of the semelfactive verbs in the example below

- a. *Òla kyɔ gbɛ
fire cause flash
Light cause flash
- b. *O bìlì ìnê dumodumo
3SG blink eye slowly
She blink eye slowly

Example 124a is ungrammatical because the causative marker *kyɔ* do not occur with semelfactive verbs. In 124b, the occurrence of the semelfactive verb *bìlì* ‘blink’ with the adverb *dumodumo* ‘slowly’ is also incompatible.

4.1.6 Active Accomplishment Verbs in Etulo

The active accomplishment verb class is derived from the activity verbs.(cf.examples 111, p.120) Active accomplishment verbs are activity verbs with a terminal point. The feature combination of this verb class is [-static], [+telic], [-punctual] and [+dynamic]. Following from this feature combination, it is obvious that active accomplishment verbs share most features with activity verbs but differ only with respect to the feature [telic] (activity verbs are [-telic] while active accomplishment verbs are [+telic]. The instances in 125 below show the logical structures of Etulo active accomplishment verbs.

- 125a .Èfu gyē ìsikapa tasā èfā
Èfu eat rice plate two
Efu ate two plates of rice
- a`. **do'** (Efu, [**eat'** (Efu, ìsikapa)] & BECOME **consumed'** (ìsikapa)

b. Àfè tsē ònyà kàkà ifo òzû

Àfè run race enter inside house

Àfè ran into the house.

b`. **do'** (Àfè, [**run'**(Àfè, òzû)]) & BECOME **be-at'** (òzû, Àfè)

c. Èfu kyikye ké òpò àduwà

Èfu walk to tent worship

Èfu walked to the church

c`. **do'** (Èfu, [**walk'** (Èfu, òpò àduwà)]) & BECOME **be-at'** (òpò àduwà, Èfu)

d. O shifwē ké iwàshí ògi M̀gbàshò

3SG dance to altar of God

He danced to the altar

d`. **do'** (O, [**dance'** (O, altar)]) & BECOME **be-at'** (altar, O)

e. O wā èni ibwe ētā

3SG drink water cup three

He drank three cups of water

e`. **do'** (O, [**drink'** (O, èni)]) & BECOME **consumed'** (eni)

f. Inju wawā fa òyombo èkyò

Inju swim cross across river

Inju swam across the river

f`. **do'** (Inju, [**swim'** (Inju, èkyò)]) & BECOME **crossed'** (èkyò, Inju)

g. Èfu l̩ takeràda ògi èfà

Efu write book of two

Efu wrote two books

g`. **do'** (Efu, [**write'** (Efu, takeràda)]) & BECOME **exist'** (takeràda)

The active accomplishment verbs are telic uses of activity verbs, that is they have an inherent endpoint which is usually absent in activity verbs. For instance, the activity verbs like *gye* ‘eat’ and *tsɛ ɔnya* ‘run’ are inherently [-telic]. However, they can become [+telic] when temporal boundaries are introduced. The expression *ìsikapa tasa èfà* is an instance of a temporal boundary when associated with the verb *gye* ‘eat’.

In the logical structures presented in 125a` through 125g`, we observe that both activity and accomplishment logical structures are combined to derive the active accomplishment logical structures. Whereas the *do* in the activity logical structure reveals the initial atelic quality of the event expressed, the accomplishment logical structure specifies the telicity of the events by means of the *BECOME* in its logical structure.

According to Van Valin and La Polla (1997:111), active accomplishments are like plain accomplishments because they are telic and take place over time. On the other hand, they differ from them because they are more active. The examples under the active accomplishment verbs are verbs of motion and verbs of creation and consumption. For the motion verbs (125b,c,d and f), the motion plus the change of position are represented. 120g is an instance of a creation verb and from the logical structure, one observes that the result of the activity yields the existence of the entity *takeràda* ‘book’. Thus; active accomplishment verbs involve both an activity and a result state that is a function of the activity.

With respect to the macrorole assignment, it is observed that the verbs take two arguments. The external arguments are agent, which corresponds to ACTORS in RRG while there is variance with respect to the internal arguments. In 125 b` , c` f` and g`, the internal arguments are goals while 125a` and e` have themes as their internal arguments. However, following the ACTOR-UNDERGOER hierarchy, these internal arguments correspond to UNDERGOERS in RRG. In example 125d, we have the prepositional phrase *ngi Mgbàshò* which translates to ‘of God’ in English. This cannot be assigned a macrorole role because within RRG, it is considered an adjunct. Based on the principle of number in macrorole assignment, the macrorole of a verb is equal to or less than the number of arguments in its logical structure.

The logical structure of the Etulo active accomplishment verbs examined show that they are all transitive verbs.

The sentence examples in 125a-g are instances of telic uses of activity verbs, which are inherently atelic. The verbs *gye* ‘eat’ and *wa* ‘drink’ are activities that are unbounded, that is they can go on without ending. However, these activities are bounded in examples 125a and e because the eating event ends with the consumption of two plates of *isikapa* ‘rice while *wa* ‘drink’ ends with the consumption of three cups of water. These instances confirm the claim by Van Valin (1997:92) that interpretation of verbs in the context of the clause can result in a reading, which is different from the basic aktionsart of the verb.

4.2 Summary

This chapter classified Etulo verbs into six classes based on the events they denote. Four tests were developed to test the verb classes. One of the tests concerned co-occurrence with the progressive marker ‘le’ while two of the tests have to do with the ability of the verb classes to occur with words that express adverbial notions in Etulo. The last test involved the ability of the verb classes to occur with the causative marker ‘kyɔ’. It was observed that all the verb classes failed the last test. The chapter further examined the logical structure of the verb classes in a bid to reveal their transitivity and observed among others, that activity verbs exist essentially as transitive verbs while the state verbs are largely intransitive.

CHAPTER FIVE

SEMANTIC CLASSES OF ETULO VERBS

5.0 Preamble

In this chapter, the study examines four groups of verbs associated with the same semantic domain. The selected semantic classes of verbs are explored in a bid to determine the co-occurrence restriction of the Etulo verbs.

The verbs involved in the study are verbs of ingesting, verbs of planting and harvesting, verbs of buying, verbs of washing and verbs of communication. It is important to note that the verb classes studied in this section are not exhaustive. Furthermore, it is noteworthy that some constructions in the Leipzig questionnaire which form part of our research instrument in this study stimulated the verb classes selected.

5.1 Verbs of Consumption/ Ingesting

The verbs under this group are those that provide an idea about substances introduced or taken into the living body. These substances could be solid or liquid. Verbs of consumption comprise verbs of eating and verbs of drinking. The verb depicting consumption of food items in Etulo is *gye* 'eat' while the verb showing the consumption of liquids is *wa* 'drink' as seen in 126 below.

126a O le gyē mbwe
 3SG PROG eat meat
 She is eating meat.
do' (O), [**eat'** (O, mbwe)]

b. Èfu wā èni ìbwe efà
 Èfu drink water cup two
 Èfu drank two cups of water

do' (Èfu, [**drink'** (Èfu, èni)] & BECOME **consumed'** (eni))

In 126a, the verb *gye* 'eat' collocates with *m̀bwe* 'meat' which is solid as its object complement while 126b, has the verb *wa* 'drink' collocating with *èni* 'water' which is liquid. The logical structure in 126a is an activity logical structure. 126b has an active accomplishment logical structure. In this case, the activity of drinking terminates with the consumption of two cups hence, indicating that the telic nature of the event is expressed by the verb.

From the data available to this study, though the verb *wa* 'drink' co-occurs with +liquid, there are specific verbs that show how the liquid is consumed. Consider the instances in 127

127a. Àfè kpane tasā òdò òngì onyì

Afe lick plate soup of one

Afe licked a plate of soup

do' (Àfè [**lick'** (Afe , òdò) & BECOME **consumed'** (òdò))

b. ònwè nê lè òngà èni àbê

baby DET PROG suck water breast

This baby is sucking breastmilk.

do' (ònwè [**suck'** (ònwè, èniàbê))

c.* Inju lè kpane òlumu

Inju PROG lick orange

Inju is licking orange

do' (Inju [**lick'** (Inju, òlumu)])

d. Inju lè wa òlumu

Inju PROG drink orange

Inju is drinking orange

do' (Inju [**suck'** (Inju, òlumu)])

e. Èfu lè wa otse
 Efu PROG drink medicine
 Efu is on medication.

do' (Èfu [**drink'** (Èfu, otse)])

f. O mbè òtse òngì ènè
 3SG swallow medicine of four
 He swallowed four capsules

do' (O [**swallow'** (O, òtse) & BECOME **consumed'** (òtse)])

From 127a and b, it is observed that there are different verbs occurring with the +liquid object nouns. In 127a, the verb *kpane* 'lick' depicts a situation where one's fingers are used in consuming the liquid content. However, in 127b, the verb *nga* 'suck' co-occurs with *èniàbê* 'breastmilk' because the liquid is consumed by extraction through the exertion of suction. 127b suggests that the manner of consumption necessitated the selection of the verb *nga*, not the object NP. This is because in Etulo other liquid substances that are enclosed within some kind of containers are rendered ungrammatical in co-occurrence with *nga* 'suck' or *kpane* 'lick' as exemplified in 127c.

In the instance in 127e, the medicine taken is syrup while 127f represents a case where the medicine is a capsule hence the use of *mbè* 'swallow'.

With regard to the verbs of eating, apart from *gye* 'eat', the study observes that a specific verb is used when hard substances such as nuts are consumed. The inability to use this verb alongside an object complement (which is + solid) represents a display of non native-like competence and results in ungrammaticality. Let us demonstrate with the instances in 128 and 129 below

128a* Anî lè gye nàkà
 1SG PROG eat groundnut

I am eating groundnut

do' (anî [**eat'** (anî, nàkà)])

b.* Efu lè gye ìkeve

Efu PROG eat coconut

Efu is eating coconut.

do' (Èfu [**eat'** (Èfu, ìkeve)])

c.* O lè gye akpukpû

3SG PROG eat bone

He is eating bone

do' (O [**eat'** (O, akpukpû)])

129a Ani bukū nàkà ibwe onyī

1SG chew groundnut cup one

I ate one cup of groundnut

do' (Anî, [**chew'** (Anî, nàkà)]) & BECOME **consumed'** (nàkà)

b. Efu bukū ìkeve ògì onyī

Efu chew coconut of one

Efu ate one coconut.

do' (Èfu, [**chew'** (Èfu, ìkeve)]) & BECOME **consumed'** (ìkeve)

c. Efu lè bukù akpukpû

Efu PROG chew bone

Efu is chewing bone.

do' (Èfu, [**chew'** (Èfu, akpukpû)])

d. Inju lè la akpukpû àbâ

Inju PROG bite bone teeth

Inju is eating bone.

do' (Inju[**bite'** (Inju, akpukpû])

The sentential constructs in 128a-c are ungrammatical because the object NPs are hard in nature hence they require chewing. 129a-c represents a display of native-like competence because the verb *bukū* 'chew' co-occurs with edibles that are +solid. The verb *la* which translates to English 'bite' also occurs with hard edible substances. However it obligatorily occurs with *àbâ* 'teeth'

Apart from liquids, solids and semi solids that can be consumed, both air and smoke can also be ingested into the human body. These events are however, depicted with the verbs shown in 130 following.

130a. Àfè wo èkwò òtawā òngì ènè

Àfè smoke stick cigarette of four

Afe smoked four sticks of cigarette

do' (Àfè, [**smoke'** (Àfè, òtawā)] & BECOME **consumed'** (òtawā))

b. Aní lè mimīē awo òtsìtsè

1SG PROG breathe air good

I am breathing fresh air.

do' (Aní, [**breathe'** (Aní, awo)] & BECOME **ingested'** (awo))

From the verbs associated with consumption in Etulo, it can be inferred that both the substance consumed and the manner of consumption are considered in the co-occurrence of verbs with their object NP. Furthermore, following from the logical structures of the verbs of consumption in examples 126a through 130, it can be claimed that this semantic class of verbs falls into RRG's activity and active accomplishment verb classes respectively. One can assert that the verbs of consumption exist as activity verbs, which when telicized, occur as active accomplishment verbs.

5.2 Verbs of Planting & Harvesting

The verbs discussed in this subsection are those verbs that describe events associated with crop farming. The study identifies eleven verbs associated with planting and harvesting. Whereas four of these verbs have to do with planting, the other seven convey the notion of harvesting. The verbs of planting are *kyà*, *fwe*, *ye* and *ndzì* while the verbs of harvesting comprise *tò*, *shε*, *ka*, *gbo*, *dze*, *kwò* and *nwua*.

One observation with respect to this semantic class of verbs is that amidst the crops and plants grown in Etulo, the yam plant seem to have specific verbs, which serve to indicate its planting as well as its different stages of harvesting. For instance, the verb *ndzì* literally *bury* which is often used for *ikwò* ‘corpse’ is the appropriate verb used to indicate the planting of yam and cocoyam in Etulo. Let us demonstrate with the sentential constructs in 131 below

131a Anî kye àdishī /àgbàlikyè ndzì

ISG take seedyam / cocoyam bury

I planted yam /cocoyam

do' (Anî, [**take'** (Anî, àdishī àgbàlikyè)]) & INGR **buried'** (àdishī/àgbàlikyè)

b. * Èfú kye angwò ndzì

Efu take yam bury

Efu planted yam

do' (Èfu, [**take'** (Èfu ,angwò)]) & INGR **buried'** (angwò)

c. Àfè ka àdishī

Afe cut seed yam

Afe harvested seedyam.

INGR **cut'** (Afe ,adishi)

d.* Àfè ka angwò

Afe cut yam

Àfè harvested yam.

INGR **cut**' (Àfè, angwɔ)

e. Anî tò angwɔ

Ani dig yam

I harvested yam

do' (Anî, [**dig**' (Anî, angwɔ)]) & INGR **remove**' (angwɔ)

f. * Anî tò àdishī

Ani dig seedyam

I harvested yam

do' (Anî, [**dig**' (Anî, angwɔ)]) & INGR **remove**' (àdishī)

The example in 131a instantiates an incident where *àdishī* 'seedyam' and *àgbàlikyè* 'cocoyam' are planted. This is the initial planting and the appropriate verb used at this stage is *ndzi* 'bury'. This means that any other verb of planting cannot select *adishi* as the object complement. The ungrammaticality of 131b follows from the fact that the logical object (*angwɔ*) is wrong. The speakers of Etulo plant *adishi* 'yam seed' not *angwɔ* 'whole yam tuber'. *Angwɔ* is the product of *adishi* that can only be harvested or eaten but not planted. In examples 131 c through e, we find two distinct verbs of harvesting which apply to yam. In 131 c, the verb *ka* 'cut' is used alongside *àdishī* 'seed yam'. This usually applies to interim harvesting which is not the final harvest hence the co occurrence of the verb *ka* with *adishi* 'seedyam'. During this process, the seedyam is cut and the stem covered back with the soil to allow for the development of *angwɔ* 'yam', which is finally harvested employing the verb *to* 'dig' in 131 e. The examples in 131d and f are highly marked in Etulo because the verb *tò* 'dig' does not select *adishi* as object complement while *ka* does not co-occur with *angwɔ* 'yam'. The logical structure in 131c is an achievement logical structure because harvesting by cutting is conceptualized as an instantaneous event.

The verb *of* planting, *ye* is used if stem plant such as èkwò òlogò ‘cassava stem’ is the object complement. Furthermore, *ye* as a verb also translates to transplanting and is used where an earlier sprayed crop for instance ìsikapa ‘rice’ has germinated insitu, and is moved from its original site to another location .

Kya and *fwe* as verbs of planting collocate with object complements that are seeds. However, the latter is used when the seeds are sprayed on seed beds while the former is used where these seeds are put independently into the soil. Examples 132 following further demonstrate instances of verbs of planting and their acceptable object complements.

132a Anì fwe ìsikapa/ itomato/ olubese/ òlùmu mi eye
 ISG spray rice /tomatoes / pawpaw /oranges in soil
 I planted rice tomatoes , pawpaw, oranges in the soil
 INGR **spray’** (Anì, ìsikapa, itomato, òlùbesè ,òlùmu)

b. Anì kya ìsikapa/ itomato/ òlùbesè/òlùmu mi èkwò
 ISG put rice/ tomatoes / pawpaw /oranges in farm
 I plant rice tomatoes , pawpaw, oranges in the farm
 INGR **put’** (ìsikapa/ itomato/ òlùbesè/òlùmu)

c. Anì ye ìsikapa
 ISG transplant rice
 I planted rice.
do’ (Anì, [**uproot’** (Anì, ìsikapa)]) & INGR **plant’** (ìsikapa)

In 132a, *fwe* ‘spray’ collocates with such object complements that are usually sprayed during planting. 132b is used when the same object complements in 132a are planted by putting each seed into the soil. Example 132c represents a case of transplanting.

The verb *she* ‘pluck’ is a verb of harvesting used exclusively for crops and fruits that are removed either with the aid of a stick or by hand. The verb *dze* ‘cut’ is obligatorily used with

object complements that are leafy. The method of harvesting that permits *dze* involves partially cutting some leafy vegetables and allowing some to remain on the plant. However, the verb *kwɔ* ‘uproot’ entails total removal of the vegetable from the root. *Gbo* is a verb of harvesting that is used exclusively for *ìsikapa* ‘rice’. Examples 133 a-d below show these verbs occurring alongside the object complement that represents Etulo native like competence.

134a. Anî she òlùmu / òlùbésè / m̀tsà / itomato
 ISG pluck oranges/ pawpaw/ mango/ tomatoes
 I pluck oranges, pawpaw, mango, tomatoes.
 INGR **pluck**’ (Anî, òlùmu ,òlùbésè , m̀tsà , itomato)

b. Èfu dze ìsikapa
 Èfu cut rice
 Efu harvested rice
 INGR **cut**’ (Èfu, ìsikapa)

c. Anî gbo ìsikapa
 Ani beat ìsikapa
 I thresh rice
 INGR **beat**’ (Anî, ìsikapa)

d. Èfu kwɔ àleēfū
 Èfu uproot water leaf
 Èfu harvested waterleaf
 INGR **uproot**’ (Èfu, àleēfū)

Following from the logical structures of the verbs of planting and harvesting, the study claims that this semantic verb class falls mainly into achievement and active accomplishment verb classes.

5.3 Verbs of Buying

This semantic class involves verbs associated with all objects that can be bought from the market or even from individuals. The distinction concerning the item bought depends on the quantity. The generic verb is *gya* ‘buy’ while other verbs that have the connotation of buying are *mba* ‘measure’ and *dze* ‘cut’

If the item is to be measured in litres or cups, then the appropriate verb is *mba*. In a case where the object to be bought is to be separated from a larger part, the verb becomes *dze* ‘cut’. A situation where the whole item is bought, the verb *gya* ‘buy’ is used. The verb forms in sentential construct are shown below

135. Àfè mba ikerosene /ipetrol/ engyε / itsikapa/ inatse

Àfè measured kerosene/petrol/ oil/ rice/ beans

Àfè bought some kerosene, petrol, oil, rice, beans

do’ (Àfè) [**buy’** (Àfè, ikerosene /ipetrol/ engyε / itsikapa/ inatse)]

The noun complements of the verb *mba* ‘buy’ are all inanimate. They include liquid and cereals that can be measured in litres or with cups. It should also be noted that where some of the object NP in example 135 such as *engyε* ‘oil’, *itsikapa* ‘rice’ and *inatse* ‘beans’ are acquired in bags, *gya* ‘buy’ is the appropriate verb.

The verb *mba* cannot co-occur with an animate object. For instance, the construct in 136 below is semantically illformed.

136* Afe mba ndà

Afe mba cow

Afe bought cow

The unacceptability of example 136 follows from the fact that cow ‘an animate object NP cannot be measured in the sense used here. The appropriate verb is either *gya* ‘buy’ or *dze*

'cut' shown in 137 following:

137a Àfè gya òdà

Àfè buy cow

Àfè bought cow

do' (Àfè) [**buy'**(òdà)]

b. Afe dze òbwe òdà

Afe cut meat cow

Afe bought cow meat.

INGR **cut'** (Àfè, òbwe òdà)

The interpretation in 137a is that of a case where Afe buys a live cow while 137b represents a case where Afe buys a portion of meat from an already slaughtered cow. Consider the instance in 138 a and b below

138a Efu dze òsàpulù / ànwutò

Efu cut soap / cloth

Efu bought soap / cloth

INGR **cut'** (Efu, òsàpulù / ànwutò)

b.Efu gya òsàpulù / ànwutò

Efu buy soap / cloth

Efu bought soap / cloth

do' (Efu) **buy'** (Efu, òsàpulù / ànwutò)

The sentential constructs in 138 a and b are semantically well-formed Etulo sentences. The difference however is that the quantity of the items bought determines the verb that co-occurs with the object complements. The verb 'dze, is used when buying items that are detached from their major source by cutting with a scissor, knife or razor. It also applies to inanimate

object complements, which could be either edible or nonedible.

Gyá applies when the item to be bought is taken as a whole. The verb co-occurs with both animate and inanimate object NPs. The item, could also be bulky or light, movable, immovable, count, uncountable etc.

139a.Áni gya òzû

ISG buy house

I bought land

do' (ani) **buy'**[òzû]

b.Àfè gya àyàtù

Àfè buy ayatu

Àfè bought a car

do' (Àfè) **buy'**[òzû]

From the logical structures of Etulo verbs of buying, there is evidence that they belong to RRG's activity and achievement verb classes. *Gya* 'buy' and *mba* 'measure' have the reading of activity hence the **do'** in their logical structure while *dze* 'cut' depicts an action that is instant thus, the ingressive (INGR) contained in its logical structure.

5.4 Verbs of Communication

Verbs in this semantic class involve verbs generally employed in conversations. The verbs identified as verbs of communication involve transfer of information from an addressee to the addressee. Etulo verbs of communication are shown in 140 below

140a.gb̀

'speak'

b.mkà

'answer'

c.tangwe

'deny'

d.nyà

'tell, narrate'

e. bità	‘ask’
f. kwu	‘call’
g. ìbà	‘reveal’
h. usâ	‘explain’
i. kpage	‘lie’
j. kponya	‘discuss’
k. dzidzē	‘gossip’
l. gbòdzε	‘talk’

Some of the verbs are illustrated in examples 141 below

141a. Ònwè nâ gbò òtsítsí

Child Det speak truth

The child spoke the truth

do’ (Ońwè, [**speak’** (ònwè)]) & INGR **speak- truth** (Ońwè)

b. Efu nu ani mkà wà

Efu give ISG answer PERF

Efu answered me

do’ (Efu) [**speak’** (Efu)] & INGR **answer’** (Efu, ani)

c. Èfu tangwe ifū òbíbī

Èfu deny stomach carry carry

Èfu denied the pregnancy

do’ (Èfu) [**speak’** (Èfu)] & INGR **deny’** (Èfu, ifū òbíbī)

d. Anì nya ìpolice na òtsitsi

ISG tell police Det truth

I told the police the truth

do’ (ISG) [**speak’** (ISG, ipolice))] ^ [**tell’** (ìpolice, òtsitsi)

e. Ònwèònja na gbòdzε mgbī obwè mgban yì ònwèònjùlò nanì

child woman DET talk PREP dog 3SGPOSS PREP child man DET

The girl talked to the boy about her dog

do' (Ònwè̀̀n̄ja) [**speak'** (Ònwè̀̀n̄ja, ònwè̀̀n̄jù̀̀lò)] ^ **talk-about'** (Ònwè̀̀n̄ja, obwe)

f.Ònwè̀̀n̄jù̀̀lò na bità ma ótsó ñ ùdzà

Child man DET ask them parent POSS money

The boy asked his parents for money

do' (Ònwè̀̀n̄jù̀̀lò) [**speak'** (Ònwè̀̀n̄jù̀̀lò, ótsó)] ^ [**ask .for'** (Ònwè̀̀n̄jù̀̀lò, ùdzà)]

In examples 141, one observes transfer of message. The examples in 141 d,e and f have complex logical structures. For each of the examples two things are going on. In 141d, *Ani* 1SG is talking to the police as well as telling the truth. In 141e, the girl is speaking to the boys as well as speaking about her dog. Each of these can be represented by a single logical structure. For instance, the logical structure in 141f comprises two logical structures combined with the modifier up arrow ^. The first logical structure is **do'** (Ònwè̀̀n̄jù̀̀lò) [**speak'** (Ònwè̀̀n̄jù̀̀lò, ótsó)] which is the representation for the child speaking to the parents. **do'** (Ònwè̀̀n̄jù̀̀lò) [**ask.for'** (Ònwè̀̀n̄jù̀̀lò, ùdzà)] is the second logical structure and it is the semantic representation for the child asking for money. These logical structures are combined to simultaneously yield the complex logical structure in 141f. The verbs of communication examined have the active accomplishment logical structure. However, one observes that the logical structures are derived on one hand and complex on the other hand.

5.5 Summary

This chapter examined some semantic classes of Etulo verbs to ascertain the co-occurrence restriction among Etulo verbs. The semantic classes of Etulo verbs show that verbs within the same semantic class select the objects they co-occur with to reflect native speaker's competence. The analysis in this chapter has the advantage of considering the role of language in communication from the perspective of the Etulo native speaker.

CHAPTER SIX

SUMMARY AND CONCLUSION

This study examined Etulo verbs adopting a descriptive approach. Chapter one served as the introduction and provided the necessary background information that necessitated the study

Chapter two reviewed relevant works on the properties of the verb, its characterization and some studies carried out on the verb in other languages. The chapter also examined some studies on aspects of the Etulo language and discovered that the Etulo verb has received little or no attention.

In chapter three, an analysis of the structure of Etulo verbs was provided. The chapter highlighted the syllable structure of the verb, the morphology of the verb as well as the realization of tense and aspect in Etulo. Some verbs that exhibit argument alternation as well as SVCs were also discussed in this chapter.

Chapter four classified Etulo verbs based on the kind of events they denote. The argument structures of the verbs were also accounted for through lexical decomposition.

Chapter five examined some semantic classes of Etulo verbs and revealed co-occurrence restriction as it pertains to Etulo verbs. Agreement relation between verbs and their arguments (internal and external) was also highlighted in the chapter.

Some questions were addressed in the course of this work. The first question concern the classification of Etulo verbs. In addressing the question, the study revealed that the verbs in Etulo can be classified in two ways: based on the structure and based on the form of action denoted by the verb. The study provided an overview of the structure of Etulo verbs and further grouped the verbs into three attested syllable structures: namely monosyllabic verbs with a CV structure, disyllabic verbs which have CV-CV and N-CV structure and trisyllabic verbs with the CV-CV-CV and CV-CV-V structures. Morphologically, Etulo verbs were grouped into simple and compound verbs.

Based on the action denoted by the verb, the study grouped Etulo verbs into state, activity, achievement, accomplishment, semelfactive and active accomplishment verb classes.

Concerning the argument structure of Etulo verbs, the study, using RRG lexical decomposition approach, revealed the argument structure of the verbs via their logical structure. For instance, it was illustrated that the semelfactive verb class is largely intransitive while the activity verb class demonstrates evidence of transitivity

The study, based on the macrorole assignment principles stipulated in RRG, shows that the verb classes were largely coherent. For instance, the state verbs were all assigned the UNDERGOER macrorole that do not volitionally direct the state of affairs. The ACTORS of the activity verb class were shown to be high on the agentivity scale and the participants in the activity verb class volitionally direct state of affairs.

In order to describe co-occurrence restriction in Etulo verbs and further account for correlation between Etulo verbs within specific semantic classes, five semantic verb classes were examined. On this issue, it was observed that verbs that appear to have the same meaning could be restricted by their object complements; they result in semantic deviance when employed arbitrarily. On the other hand, the semantic verb classes displayed logical structures that revealed a combination of at least two verb classes.

In the course of this study, some residual issues arose. Future researchers can explore these issues. For instance, the study revealed that tense is not marked on Etulo verb but rather some particles are employed by the language speakers to relate events to the time of speech. The form *zika*, which translates to English 'earlier' is used if the past action was carried out or indulged-in the same day and at an earlier time before the speech time. The form *zika* could be a case of remoteness which may have existed in the language or which is still evident in the language. Further studies will however clarify this issue.

Certain observations with respect to verbs that cannot be categorized as 'sets' but show evidence of deriving their meanings from their rightmost complements verb were also encountered in the course of this work. For instance *yi ùmì* rendered *yimi* 'steal' and *tse ònyà*

pronounced *tɛnyà* 'run race' derive their meanings from their rightmost elements. Researchers may wish to explore further to ascertain the true status of such verbs.

In conclusion, the classification of Etulo verbs based on their inherent properties brings to bear, the semantic knowledge of the Etulo native speaker. In addition, this work is a contribution to the development of an aspect of a minority language. It is therefore, a reference material for researchers interested in other aspects of the Etulo language. Furthermore, the assumption and the framework of this study have cross-linguistic validity (Van Valin and La Polla 1997, Van Valin 2005). It therefore follows that this work is a contribution to cross-linguistic findings on verbs in African languages.

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